

TOOLKIT FOR SUPPORTING SOCIAL INNOVATION WITH THE EUROPEAN SOCIAL AND INVESTMENT FUNDS

Guiding the reflection on and implementation of social
innovation support measures by ESIF programme managers

Foreword

Article 9 of the European Social Fund regulation for the period 2014-2020 specifies that “The ESF shall promote social innovation within all areas falling under its scope, in particular with the aim of testing, evaluating and scaling up innovative solutions, including at the local or regional level, in order to address social needs ...”.

Yet what does “social innovation” really mean? And how to operationalize this in an ESIF (European Structural and Investment Funds, to which the European Social Fund belongs) context as well as any other social innovation funding programmes, be they oriented towards the public sector, social enterprise or civil society?

This publication aims to provide innovation funding programme managers, their beneficiaries, policy-makers and other relevant stakeholders with an answer to this question. It does this on the basis of a project (ESF project 4895 “Meer werk maken van innovatie voor werkgelegenheid en arbeidsmarkt”) carried out under the Flemish ESF programme by the Flemish ESF Agency, in collaboration with ESF Managing Authorities from Poland, Sweden and the Czech Republic.

We feel this publication presents the state of the art in terms of knowledge and practice regarding innovation oriented towards tackling the complex societal challenges we face today. It is practical (with many tools, including for fund managers) while at the same time building upon sound theoretical foundations.

We hope it will inspire our colleagues and will be a reference document for discussion and practical implementation. In Flanders, the European Social Fund programme has already embarked on the journey, putting many of the tools in practice and experimenting with others. We invite others to do the same and let us know so we can share our experiences and learn from each other.

Louis Vervloet

*General Director
ESF Agency Flanders*

Benedict Wauters

*Project manager and author
ESF Agency Flanders*

TABLE OF CONTENTS

Introduction	8
a) Intended audience	9
b) Structure of the guide	9
c) How to use this guide?	10
d) How was this guide constructed?	11
1. Social innovation and the EU	13
a) BEPA; Empowering people, driving change (2010)	13
b) DG Enterprise / Social innovation Europe (SIE); Systemic Innovation (2011)	14
c) DG Enterprise/Social Innovation Europe; Financing social impact (2012)	16
d) DG Enterprise / Social Innovation Europe; Strengthening social innovation in Europe (2012 b)	20
e) DG Research; Social Innovation Research in the EU (2013)	21
f) DG REGIO; Guide to social innovation (2013)	22
g) DG Enterprise; Public Sector Innovation (PSI) scoreboard (2013)	24
h) DG research; Powering European Public Sector Innovation (2013 b)	26
i) BEPA; Social innovation: a decade of changes (2014)	28
j) DG Employment; Social Policy Innovation (2015)	31
k) TEPSIE (2014)	31
l) Conclusions for the ESIF	35
2. The big picture: transitions in society, service innovation and the deeper dynamic of changemakers	38
a) Introduction	38
b) Capability approach	39
1. Introduction	39
2. Functionings: well-being as doings and beings that people have reason to value	40
3. Capabilities: opportunity freedom to engage in functionings	40
4. Agency: process freedom to create new capabilities	41
5. Social in means	44
6. Human development	44
7. Application of the concepts in practice	44
8. Relevance to ESIF	45
c) Service innovation	63
1. Introduction	64
2. Service as a journey	64
3. Design areas	66
4. User insights are a driver for innovation	67
5. Essential tools for service innovation	67
6. Organising for innovation	68
7. Measuring success	68
8. Protecting innovations from copying	68
9. Typology of service innovation	68
10. Service innovation as a process	69
11. ISO standard	71
12. Integrating “Nudging” into service design	95
13. Relevance to ESIF	112

d) Transition theory	112
1. Introduction	111
2. From sectoral innovation systems to socio-technical systems	111
3. Three interrelated dimension exist to analyse socio-technical systems	114
4. A multi-level perspective of transitions	117
5. Different transition pathways and the role of social innovation	124
6. Criticisms on transition theory	128
7. Practical tools for transitions: transition management	130
8. The link of transition theory with “systemic” innovation	154
9. Service innovation in a transition perspective	158
10. Relevance to ESIF	159
e) The deeper dynamic of changemakers: Theory U	159
1. Introduction	159
2. Short summary of Theory U	159
3. Practical tools for U-processes	164
4. Relevance to ESIF	172
f) A new synthesis	172
1. Introduction	172
2. Practical use via positioning	175
3. Practical use via leveraging	176
4. Practical use via engaging	177
5. Relevance to ESIF	187
3. Innovation strategy for ESIF programmes	189
4. The innovation process at the level of a project	195
a) Overall view of the process	196
b) Getting ideas	196
c) Prototyping and experimenting	198
d) Scaling, diffusion and dissemination of an innovation	199
5. Capacities required at the level of the project	228
a) Innovation team composition	229
b) Leadership involvement	232
c) Networks	233
6. Implications for processes of ESIF funding organizations	234
a) Appraising project proposals	235
b) Monitoring and evaluation, coaching and decision-making	248
7. Implications in terms of overall organization and staff requirements for an ESIF programme	265
a) Who does what in ESIF funded social innovation?	265
b) Levels of support	287
c) In a separate ESIF funded project or within the ESIF programme management organization?	290
8. Implementation plan	293
a) Step 1: establishing the rationale and starting point	293
b) Step 2: designing your team model	294
c) Step 3: building your team	295
d) Step 4: implementing and delivering	296
e) Step 5: measuring impact	297

ANNEXES 298

Annex 1:	societal trends as discussed by DG REGIO	299
Annex 2:	DG REGIO's action plan to a regional social innovation strategy	300
Annex 3:	societal trends as discussed by BEPA	304
Annex 4:	Theory U practical tools	306
Annex 5:	Guidance on transition management	309
Annex 6:	Guidance concerning impact evaluation methods	360
Annex 7:	content of training seminars in Flanders	390
Annex 8:	database of articles on innovation	391

LIST OF PRACTICAL TOOLS FOR ESIF PROGRAMME MANAGERS

TOOL 1:	descriptive part of a call for proposals on social innovation	192
TOOL 2:	manual for project promoters to move from ideas to scaling	202
TOOL 3:	LEGO SERIOUS PLAY®	214
TOOL 4:	creating and testing an experience map as a deliverable for phase 1 of an innovation project	216
TOOL 5:	business model canvas	218
TOOL 6:	guidance on how to organize challenge competitions / prizes	225
TOOL 7:	project proposal form	236
TOOL 8:	manual for completing the project proposal form	237
TOOL 9:	appraisal form for project evaluators of phase 1 proposals	245
TOOL 10:	appraisal form for project evaluators of a concept and phase 2 plan	250
TOOL 11:	coaching questions to support promoters by ESIF [region or country] during PHASE 2	257
TOOL 12:	guidance concerning methods for impact evaluation of innovations	263
TOOL 13:	innovation jam	270
TOOL 14:	Social impact bond (SIB)	276

VIDEOS ON KEY ASPECTS OF INNOVATION

Video 1:	Guy Kawasaki and the art of innovation	189
Video 2:	Marc Stickdorn and service design	195
Video 3:	Tom Kelley and unlocking creativity	228
Video 4:	Frans Johansson on diversity and perseverance	234

CASES OF SOCIAL INNOVATION

Case 1:	UK Life programme by Participle	52
Case 2:	Improving A&E in a UK hospital	73
Case 3:	dealing with low completion rates of postsecondary education in the US via nudging	102
Case 4:	PLAN C in Flanders: seeking a transition from waste to materials management in sustainable development	136
Case 5:	Living labs approach with example from Spain	148
Case 6:	U-lab in Scotland	167
Case 7:	reforming the Singapore Prison Service	179
Case 8 a:	Stichting MAAT: scope and situation analysis conclusions	319
Case 8 b:	Stichting MAAT: selection of participants	322
Case 8 c:	MAAT Stichting: problem structuring	325
Case 9 a:	Outcome mapping: background of the case and vision	329
Case 8 d:	MAAT Stichting: future images and future state characteristics	331

Case 9 b:	Outcome mapping mission, boundary partner challenges, progress markers, strategy map and organizational practices	336
Case 8 e:	MAAT Stichting: pathways to the future	338

LIST OF TABLES

Table 1:	stage-gate model for public funding of innovation	18
Table 2:	differences between private and public sector typologies of innovation	24
Table 3:	typology of nudges	95
Table 4:	causes of bottlenecks in decision processes	98
Table 5:	different kinds of rules and regimes	115
Table 6:	different stakeholder definitions of social innovation	127
Table 7:	criticism and responses in terms of transition theory	129
Table 8:	options for contributing to systemic innovation	157
Table 9:	transition of economic thought in history	163
Table 10:	types of funding for innovation	275
Table 11:	contrast between managerial and entrepreneurial thinking	282
Table 12:	types of call, type of innovation and risk governance approach	284
Table 13:	classification of innovation support teams	286
Table 14:	stock analysis	313
Table 15:	competences of front-runners	321
Table 16:	objectives arena meetings 1 and 2: problem structuring and selection of key priorities	324
Table 17:	objectives arena meeting 3: participatory vision building	327
Table 18:	objectives arena meeting 4: participatory back-casting	334
Table 19:	objectives agenda setting meeting	341
Table 20:	transition experiments versus classical experiments	342
Table 21:	application of difference between transition and traditional experiments	343
Table 22:	transitioning managerial guidelines	346
Table 23:	outcome monitoring journal	351
Table 24:	strategy journal	352
Table 25:	performance journal	352
Table 26:	CCTV CMO configurations	376
Table 27:	congruence analysis table	377
Table 28:	truth table in QCA	380
Table 29:	exploring cognitive frames and institutions in evaluation of social innovations	384
Table 30:	descriptive confirmative research questions for the capability approach	385
Table 31:	NESTA's standards of evidence	385

LIST OF FIGURES

Figure 1:	how to read this publication	10
Figure 2:	sources of social innovation	16
Figure 3:	integration of multiple theories of innovation	38
Figure 4:	OECD Better Life Index	38
Figure 5:	spider diagramme of achieved functionings and capability gaps	50
Figure 6:	customer journey map	65
Figure 7:	service blueprint	67
Figure 8:	design double diamond process	69
Figure 9:	key tools in the discover and define phases of the double diamond	70
Figure 10:	key tools on the develop and deliver phases of the double diamond	70
Figure 11:	different types of innovation	72

Figure 12:	designing a nudging strategy	97
Figure 13:	decision process map on poor saving for retirement problem	97
Figure 14:	supply and demand systemic perspective to societal functions	113
Figure 15:	actors on the supply and demand side of a system to provide a societal function	113
Figure 16:	interaction of rules, actors and systems	114
Figure 17:	different regimes making up the socio-technical regime	116
Figure 18:	dynamic stability of regimes	118
Figure 19:	multi-level perspective	119
Figure 20:	dynamic of change	120
Figure 21:	emerging niche trajectory carried by local projects	121
Figure 22:	the dynamics of niche development trajectories	122
Figure 23:	multi-level perspective on societal transitions	123
Figure 24:	multi-phase model of transitions	123
Figure 25:	complex systems analysis	155
Figure 26:	service innovation in a transition perspective	158
Figure 27:	theory U	161
Figure 28:	levels of listening	162
Figure 29:	New Synthesis framework	172
Figure 30:	positioning with the New Synthesis	176
Figure 31:	leveraging with the New Synthesis	176
Figure 32:	engaging with the New Synthesis	177
Figure 33:	the New Synthesis innovation dynamic	178
Figure 34:	different types of innovation	266
Figure 35:	managerial thinking versus strategic thinking	280
Figure 36:	entrepreneurial thinking	281
Figure 37:	innovation teams / labs as an environment	285
Figure 38:	phases in the Innovation through exploration call and support actions	289
Figure 39:	organizing innovation support within the ESIF Authority	291
Figure 40:	organizing innovation support as a project	291
Figure 41:	transition management cycle	309
Figure 42:	overview of stock indices	314
Figure 43:	influence matrix	314
Figure 44:	leverage points in the system	315
Figure 45:	causal loop analysis of city of Ghent	315
Figure 46:	social network analysis	316
Figure 47:	actor/system analysis	317
Figure 48:	actor force field	318
Figure 49:	Vision for Aberdeen	327
Figure 50:	stages in a system innovation project	356
Figure 51:	cause and effect relations in quantitative research	360
Figure 52:	observed progress	362
Figure 53:	counterfactual allows to estimate impact	362
Figure 54:	Nearest available matching of propensity scores	364
Figure 55:	difference-in-difference	366
Figure 56:	regression discontinuity	367
Figure 57:	instrumental variables	368
Figure 58:	unbroken chain of action and reaction	372
Figure 59:	difference between congruence analysis and process tracing	374
Figure 60:	budget support mechanism	375
Figure 61:	a theory of change for contribution analysis	378
Figure 62:	other explanatory factors in contribution analysis	378
Figure 63:	PDP as a theory of change	379
Figure 64:	OECD budget support “evaluation” framework	382

INTRODUCTION

A Intended audience

The audience for this document consists of European Structural and Investment Funds' Managing Authorities and other actors in charge of designing calls for proposals for social innovation projects (referred to as ESIF funding organizations). In addition, any actor that is looking for ways to allocate public resources to innovation may benefit from it.

Its goal is to help these actors to conceptualize and operationalize their ambitions in terms of supporting social innovation. It therefore contains not only "procedures" but also quite a lot of knowledge concerning social innovation.

The guide is designed to support ESIF (or other) funding organisations that want to focus mainly on service innovation (as opposed to systems innovation or internally oriented process innovation). But it also recognizes the idea of broader societal transitions and the need for changes in internal processes as a condition to make externally oriented innovative services tangible.

→ More information relating to ESIF can be found on http://ec.europa.eu/contracts_grants/funds_en.htm

B Structure of the guide

In part I (on foundations of social innovation) of the guide, chapter one gives some background regarding social innovation in general and more specifically how it has been discussed at the EU level.

The second chapter provides insights into cutting edge thinking concerning innovation at system, service and individual levels.

The second part of the guide (on how to implement in ESIF) describes a set of principles that can be used by ESIF programme managers to discuss how they approach social innovation.

The third chapter that starts this second part, discusses principles for defining an innovation strategy within ESIF programmes.

In the fourth chapter, principles are presented of what social innovation processes targeting services may look like at the level of a project.

A fifth chapter includes principles with requirements in terms of capacities of the project team, leadership involvement of the project organization and its partner and broader networks the team can draw on.

The sixth chapter concerns principles how to address the implications of the strategy and the envisaged social innovation processes from the point of view of the processes of the ESIF innovation funding organization (notably appraisal of projects, monitoring, decision-making, coaching, evaluation).

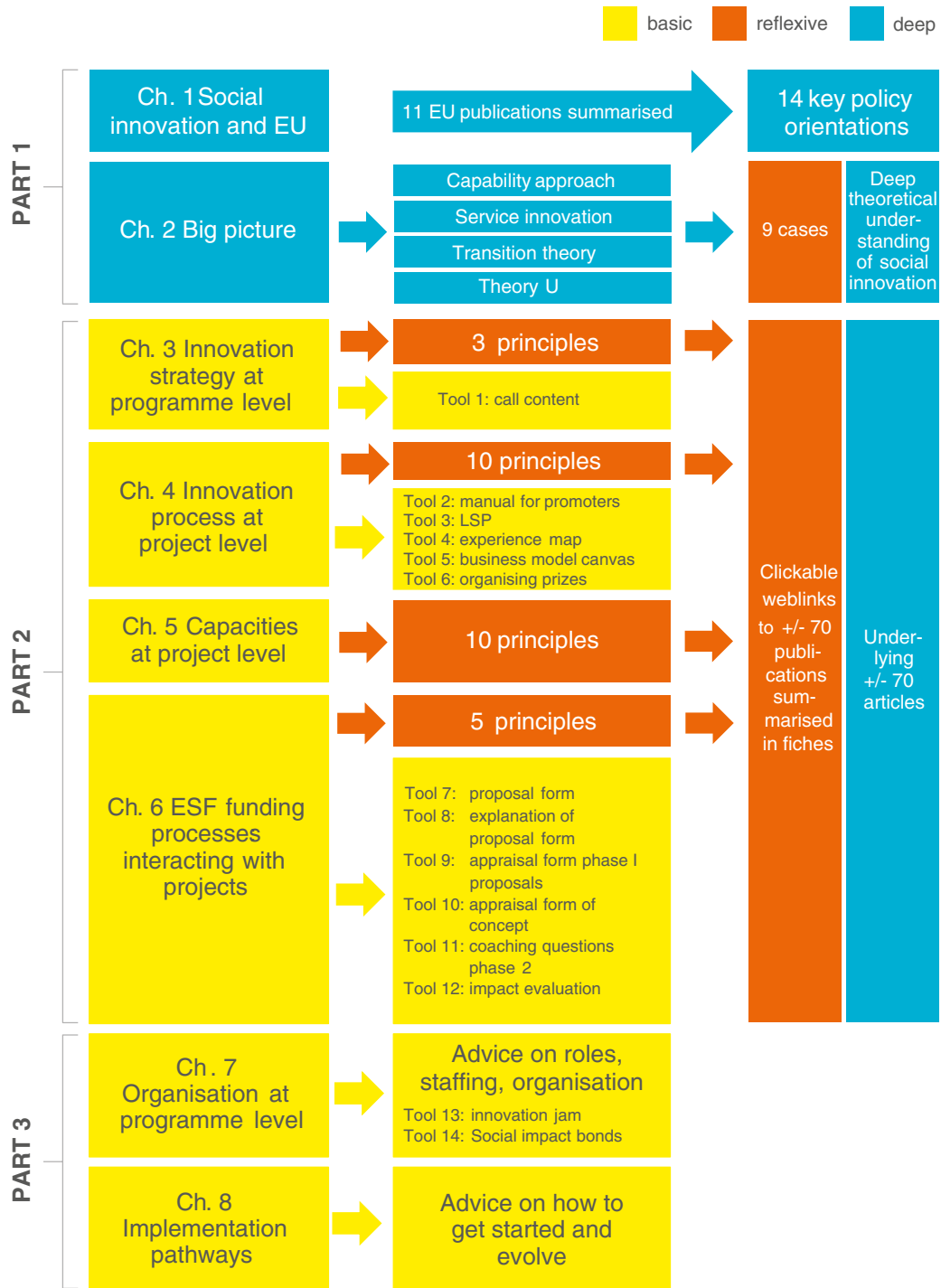
Finally, part III of the guide concern how to organise the ESIF innovation support function. It contains the seventh chapter of the guide which discuss the implications in terms of overall organisation of the work and staff requirements.

The eight chapter provides guidance on how to get started with implementation.

C How to use this guide?

The guide can be used in different ways as depicted in the figure below.

Figure 1: how to read this publication



The most basic way is to pull out the various practical tools that are provided in the guide in chapters three to seven. In addition, chapters 7 and 8 provide guidance on how to deploy these tools. Together, this represents a consistent system that covers the most important needs for an ESIF programme manager to set up its processes for funding social innovation in services. In addition, the four videos of innovation experts can be watched to hear and watch what innovation is all about.

A second, more reflexive, way is to use the principles as provided in part II of the guide as a basis for discussing the degree of shared (mis)understanding (within ESIF programme management as well as among the beneficiaries and stakeholders of ESIF), concerning the rationale and substance of the various tools.

A third, most demanding way, is to use the guide to gain a thorough grasp of what social innovation really entails. This involves not only reading and reflecting on the more theoretical parts set out in part I of the guide, but also consulting the literature that underpins the principles as set out in part II of the guide.

The colours in figure 1 are used throughout the book to make clear what the level of reading is.

D How was this guide constructed?

This document draws on an extensive review and synthesis of literature concerning innovation, a variety of training seminars and conferences as well as discussion with policy-makers, project promoters, experts and own experiences.

It represents the views of the author. It does not represent any official view. It was made possible by the Flemish European Social Fund programme in a transnational project named “Meer werk maken van innovatie voor werkgelegenheid en arbeidsmarkt - ESF project 4895”, involving Swedish, Polish and Czech ESF authority colleagues. This research and development project implemented by the Flemish ESF Agency ran from February 2014 until October 2015.

PART I
FOUNDATIONS FOR
SOCIAL INNOVATION

1. Social innovation and the EU

The following sections elaborate the perspectives of the EU concerning social innovation.

A BEPA; Empowering people, driving change (2010)

In 2010, BEPA (Bureau of Economic Policy Advisers) published an influential report on social innovation in the EU named “Empowering people, driving change”. This report also frequently mentions the EQUAL programme which was the EC’s programme for innovation within the context of the ESIF in the 1999-2006 programming period.

The report proposes the following working definition of social innovation:

“Social Innovation relates to the development of new forms of organisation and interactions to respond to social issues (the process dimension). It aims at addressing (the outcome dimension):

- *Social demands that are traditionally not addressed by the market or existing institutions and are directed towards vulnerable groups in society. Approach 1*
- *Societal challenges in which the boundary between ‘social’ and ‘economic’ blurs, and which are directed towards society as a whole. Approach 2*
- *The need to reform society in the direction of a more participative arena where empowerment and learning are sources and outcomes of well-being. Approach 3*

These approaches are not mutually exclusive, but rather interdependent: the first approach is the foundation for the second which creates the conditions for the third – an innovation that addresses a social demand (e.g. care of the elderly) contributes to addressing a societal challenge (ageing society) and, through its process dimension (e.g. the active engagement of the elderly), it contributes to reshape society in the direction of participation and empowerment.” (p. 31)

An example of approach 1, put forward as typically originating in grassroots organisations and social enterprise, is second chance schools for combating school drop-out. Approach 2 is exemplified by time banking that enables people to come together to help others and help themselves at the same time. Approach 3 is illustrated by the city of Amsterdam that provides local communities with information concerning greenhouse gas emissions. This concerns attitudinal change. Institutional changes are also mentioned such as participatory budgeting.

The publication also makes clear what social innovation is NOT:

- social innovation is NOT about privatizing social services. *“Indeed the core of social innovation remains to be oriented towards meeting social needs and the public sector plays a pivotal role in this.” (p. 29)*
- the social outcome is a necessary but not sufficient element for social innovation. The process aspect must be responsible for creating the outcome. For example, helping children succeed more at school is not a social innovation if it does not involve parents, teachers and other stakeholders in a different way.
- social innovation is not the same as a grass-roots or bottom-up initiative. It can for example exist in policy-making as well.

The publication makes clear that important actors in social innovation, next to the public sector, are civil society (cooperatives, NGOs, associations,...) as well as social enterprise / economy (linked to social service provision and work insertion, many times embedded within local communities and hence more attuned to local needs) and the private sector.

It also makes clear that measurement of innovation has progress through instruments such as the EU's innovation scoreboard but that there is a lack of agreed tools to measure social value and return on investment.

Finally, the publication provides an overview of "stages" of innovation:

- *"First the idea emerges, the problem is diagnosed and the question is framed in such a way that not only symptoms (e.g. battered women) but root causes (e.g. gender inequalities) are tackled.*
- *The second stage is to generate ideas on ways to deal with the identified problem (e.g. brainstorming with stakeholders, examples from other regions or sectors)*
- *The third stage involves trialling the ideas through pilot projects with feedback from users and experts (e.g. test integrated programmes for schooling assistance in a small number of schools with high rates of early school-leavers and for violence in classrooms in deprived neighbourhoods).*
- *The fourth stage is about moving from the pilot to a securely established social innovation by identifying a legal and fiscal form and income streams to ensure the long-term sustainability of the social enterprise, NGO, charity or community that will carry the innovation forward.*
- *The fifth stage concerns the spreading of the social innovation with documented results to a larger group or to other communities or countries.*
- *The sixth and last stage is when entirely new ways of thinking and doing are put in place. It usually involves many elements (social movements, business models, laws and regulations, data, research and infrastructures) and actors from all sectors (public, private, profit and non-profit, informal), e.g. the reduction of CO2 emissions has been driven by the green movement, upheld by politicians and governments through regulations and rules and the development of new services (e.g. bicycles in towns), research and development of clean technologies, the development of pilot projects, businesses measuring their carbon footprint and creating environmentally friendly products, and citizens changing their ways."* (p. 53)

The publication puts the European Structural and Investment Funds forward as a key EU tool to support social innovation. It explicitly refers to the support by the ESIF regarding institutional capacity building and transnational cooperation as well as for smart, sustainable and inclusive growth.

DG Enterprise / Social innovation Europe (SIE); Systemic Innovation (2011)

SIE was initiated and funded by DG Enterprise (now DG growth) to act as a hub (a network of networks) on social innovation in the EU.

It published a report on "Systemic Innovation" in 2011. The report points out that many social innovations have a limited overall impact, as they remain small and locally focused. However, even if scaled up, social enterprises on their own cannot effect the wide scale change that is needed. Rather profound innovation across entire systems is needed.

"Systemic social innovation involves the fundamental transformation of the systems of society on which we all depend – such as healthcare, housing, education or energy. This is rarely achieved through a

single organisation or sector, but involves a complex interaction of public policy and reforms to legislation, changes to business cultures and practices, as well as shifts in consumer attitudes and behaviour.” (p. 3)
A formal definition is put forward: *“A set of interconnected innovations, where each is dependent on the other, with innovation both in the parts of the system and in the ways that they interact.”* (p. 4)

The report explains that this definition derived from innovations that need complementary assets to be successful (e.g. electrical cars need charging stations). This normally requires co-operation between and across organisations and sectors as only in few cases are systems dominated by a few government and private actors (e.g. roll out of 4G mobile networks was such a case).

“Transforming the way we manage our waste requires a combination of new laws (for example, related to what retailers do with electrical waste, or the amount and type of packaging used by producers), new services (how recyclable waste is collected from homes and businesses), new technologies (turning recycled goods into new products or energy), as well as changes in behaviours and attitudes amongst consumers.” (p. 5)

However, change in such complex systems is very hard to achieve as changes in behaviors, processes and structures are needed. Systems are slow to shift as they are optimized around their current forms and powerful interests.

There are a number of common elements that are present:

- follows a crisis or period of upheaval;
- new ideas, concepts and paradigms;
- new laws and/or regulations across a broad area;
- coalitions for change of many actors and/or across more than one sector or scale;
- changed market metrics or measurement tools;
- changed power relationships and new types of power structures;
- widespread diffusion of technology and technology development;
- new skills or roles across many actors;
- new institutions;
- widespread changes in behaviour, structures and/or processes.

An example is illustrative: *“An early and powerful example of systemic innovation is the North Karelia Project in the 1970s. This region in the east of Finland was suffering very high cardiovascular disease levels, particularly amongst male residents. In response, the region developed a community based intervention strategy, the first of its kind to try to shift the risk factor profile of this area. A wide variety of programmes was established to tackle the issue of poor diet and lifestyle drawing on resources and expertise across sectors. These included: a programme in workplaces to help employees lose weight and stop smoking; media collaboration to produce a popular TV show following individuals losing weight; cholesterol lowering competitions organised between villages; strong anti-smoking legislation; collaboration with the food industry to reduce the salt content of products and with vegetable oil manufacturers to produce healthier spreads. As a result of these targeted interventions, the age-adjusted coronary heart disease mortality rate among the 30-64 year old male population reduced by a huge 73% between 1970 and 1995.”* (p. 5-6)

The report makes a reference to concepts such as “wicked problems” and to complexity theory. Complex problems do not have an “end” or final “solution” that has to be implemented. Tackling them requires rather a process that aims for coherent action, not final solution. This process is driven by a focus on outcomes (demonstrable even if only qualitatively), collaboration and coordination (across sectors, organisations, levels,...), co-production with users (who are best placed to think about their own needs and steps forward), decentralization and self-organisation supported by adaptive capacity, continuous improvement methods and learning organisations, often via reflective practice.

This has implications for policy-makers who become orchestrators and enablers of innovation, rather than act as innovators themselves. It requires the introduction of multiple complementary innovations with involvement of many actors across all sectors, within a confluence of social movements, new market creation, new rights, legal, fiscal and regulatory frameworks and behavioural change. It requires for this the backing of leaders with power and resources, holistic pilots / whole systems demonstrators, tapping into networks (e.g. using the European Network of Living Labs)...

DG Enterprise/Social Innovation Europe; Financing social impact (2012)

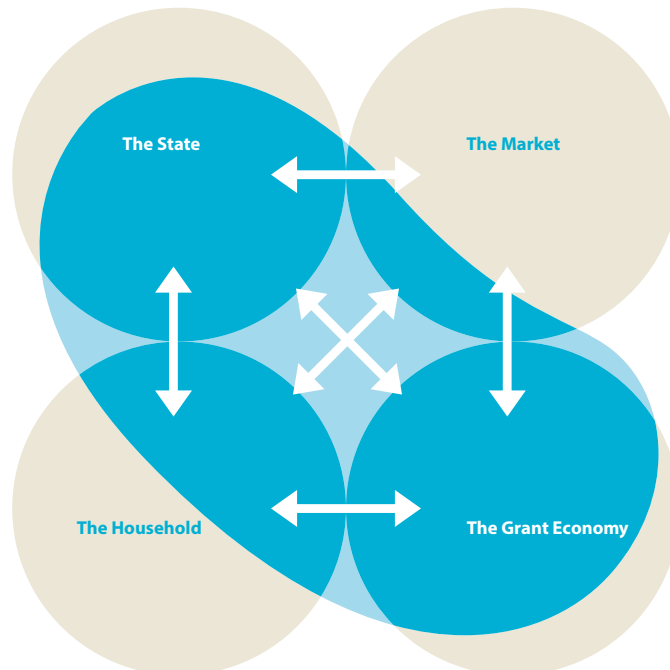
Another report by SIE, “Financing social impact: funding social innovation in Europe – mapping the way forward” was published by DG Enterprise in 2012.

This publication argues that social innovation can come from:

- the private market (for example, ethical finance or corporate social responsibility, or new models of collaborative business);
- the public sector (both in terms of policies and service models e.g. Flexicurity in Denmark and elsewhere which provides flexibility for employers and security for employees against labour market risks);
- the grant or social economy (for example Dialogue Social Enterprise which tackles issues of disability and marginalisation in Germany);
- the household (which plays a critical role in the creation of social movements such as the Slow Food movement which started in Italy but has swept across the European continent).

This is visualised in the image below.

Figure 2: sources of social innovation



The publication refers to MINDLAB in Denmark as an innovation incubator owned and hence funded (via staff costs and provision of a location) by Ministries (recently also joined by a municipality) since 2002. It works to create partnerships between these ministries, businesses and citizens to address entrepreneurship, climate change, digital self-service, citizens' rights, employment, workplace safety issues... Generally, a project is operated by a number of public servants seconded to Mindlab from the sponsoring ministry/ministries. Mindlab then augments their knowledge of the public sector issue with its own expertise in qualitative research and design thinking. Mindlab's approach is based on a process model which passes through seven phases: project focus, learning about users, analysis, idea and concept development, concept testing, the communication of results and impact measurement. Working in this way allows to break down silos between government departments and develop policies from a user perspective.

However, the report states that this kind of set-up is rare. Also, there are no forms of funding to allow groups of citizens or coalitions of service providers and users to apply for small sums of money to develop concepts. Many organization involved in social innovation are also highly dependent on grants, which, while fine for prototyping and start-up phases, poses a problem of reliability of funding for the longer term.

The report puts forward a process of social innovation that takes together some of the stages in BEPA (2010):

1. *“Ideas. This is the stage of ideas generation. This stage also includes all the factors which highlight the need for or possibility of an innovation – such as a crisis or poor performance – as well as the inspirations which spark it, from creative imagination to new evidence. The stage of ideas generation can involve formal methods – such as design creativity to widen the menu of options available. Many of the methods help to draw in insights and experiences from a wide range of sources.*
2. *Prototyping and piloting. The stage where ideas are tested and piloted in practice. This can be done through simply trying things out, or through more formal pilots, prototypes and randomised controlled trials. The process of refining and testing ideas is particularly important in for social innovation because it's through iteration, and trial and error, that coalitions gather strength (for example, linking users to professionals) and conflicts are resolved (including battles with entrenched interests). It is also through these processes that measures of success come to be agreed upon.*
3. *Implementation. The stage where the idea becomes everyday practice. It involves sharpening ideas and often streamlining them and identifying income streams to ensure the long term financial sustainability of the firm, social enterprise or charity that will carry the innovative forward. In the public sector this means identifying budgets, teams and other resources such as legislation.*
4. *Scaling. The stage when a range of strategies for growing and spreading an innovation – from organisational growth, through licensing and franchising to federations and looser diffusion. Demand matters as much as supply: how market demand, or demand from commissioners and policymakers is mobilised to spread a new and successful model. This process is often referred to as scaling and in some cases the word is appropriate, as the innovation is generalised within an organisation or the organisation itself expands. But scaling is a concept from the mass production age, and innovations take hold in the social economy in many other ways, whether through inspiration and emulation, or through the provision of support and know-how from one another in a more organic and adaptive way.” (p. 18)*

The report also puts forward that social innovation can take many forms:

- new service;
- new organization;
- new initiative;
- new delivery of an existing service.

In addition, it states that social innovation can spread via ideas, values, software, tools and habits. It usually involves experimentation, being cross-cutting, collaborative and engaging citizens as co-creators.

The European Structural and Investment Funds are once again put forward as a tool for funding social innovation, next to a variety of others sources incl. DG Research programmes and the European Investment Bank.

In terms of recommendations, the report offers guiding principles for financing social innovation as well as a stage-gate model for public funding.

The guiding principles are:

- to mitigate risk, funding should be organised in stages;
- funding should be adapted to each stage (e.g. grants, loans, equity);
- disruptive innovation should be encouraged;
- investment in early stages should be up-front;
- investments should aim to improve the effectiveness of services and/or make them more efficient;
- finance should be accompanied by other complementary actions;
- investments should encourage new partnerships that cut across existing professional, departmental or cultural boundaries;
- knowledge gains should openly shared;
- models for investing should be adapted to each Member State's specificities;
- wide access should be assured through open competitions, clear guidance, simple application processes, transparent selection methods.

The stage-gate model for public funding is as follows:

Table 1: stage-gate model for public funding of innovation

	1. Ideas fund	2. Prototype (or pilot) fund	3. Implementation fund	4. Scaling fund
Objective	To enable frontline staff and individuals in civil society to pursue a social innovation idea	To enable good ideas to be prototyped and road tested	To enable pilots to be scaled up and to explore how they can be sustained	To enable large-scale expansion
Nature of support	Micro-grants and loans from €5 000 to €25 000, with less 'red tape' involved in accessing them. Funding would be provided either to individuals or to organisations. Bursaries would allow staff within public and private-sector organisations and social entrepreneurs to buy out their time. It might be possible to theme them around challenges and sectors (e.g. education, health, ageing)	Grants of up to €300K over two years	Grants and DAF (Donor Advised Funds) of up to €30m (in accordance with state aid rules)	Bonds (quasi equity) – up to €100m

	1. Ideas fund	2. Prototype (or pilot) fund	3. Implementation fund	4. Scaling fund
Gateway to next stage	The successful ideas would be judged by external panels composed of experts and users, or by peers.	Pilot produces promise of better results than existing models based on sound evaluation techniques (e.g. social experimentation using control groups)	Mainstreamed pilot demonstrates superior results and value for money at significant scale	Scaling suggests systemic transformational potential of new paradigm
Description of terms	Either grant for three- to six-month staff release paid to public authorities or civil society organisations or a bursary to an individual to allow citizens to pursue a social innovation, from €4 000-€8 000	Taking known idea and working up a feasibility study/ business plan, then testing for 12 months	Something like EQUAL/urban programmes operating within the Structural Funds	Pay for results/SIB model (tax breaks, multi-level governance structure, virtuous circuits) and public/social, or public/partnerships (private/social)
Management at EU level & in Member States	Administered as EU challenge or at a national level by intermediaries. Possibly managed in portfolios where whole portfolio is fund at agreed level of risk	PROGRESS direct management fund at EU level, and support to national funds where these funds are set up	EU Structural Funds disbursed through national or regional managing authorities down to public, NGO or private organisations	Collaboration of EU with EIB wholesaler doing deals with national innovation agencies and financial institutions
Existing examples	Unltd, Ashoka Fellows, Kennisland digital pioneers fund	Unltd, Ashoka Fellows, Kennisland digital pioneers fund	Equal, URBAN	SIBS, Pay for Results (USA)

For those social innovations which are likely to generate returns, venture capital is required. This is states to be triggered by the European Investment Fund which is developing a European Social Impact facility.

Also for those social enterprises that would typically expect a sub-market return, there should be capital e.g. via Angels (driving funds in the 100 000 - 200 000 range for early stage ventures). Also, public service reforms where social enterprises take over should generate growth investment. Finally, investment should go to mutualisation of public services (civil servants turning part of the public sector into employee owned businesses and cooperatives).

The report also advocates funding innovation labs / incubators. These are centres of expertise in social innovation that work through partnerships across sectors to develop a portfolio of social innovations. Their focus is on services rather than on technology or science with the creation of intellectual property rights not being a major part of their role. Such an innovation lab would have to demonstrate willingness from both government as well as business to incorporate their insights. The outputs are new concepts or models developed, prototyped and and piloted either as projects with public sector partners or embedded in enterprises.

Also, innovation prizes are put forward as an option. The report points out the possibilities in the EU financial regulations to pay out up to 10000 EUR to a third party.

Finally, the report draws attention to procurement to stimulate innovation as well as the need to engage in randomized controlled trials to evaluate innovations. Payment by results in terms of commissioning

outcomes, social impact bonds and incentive top-up payments are also recommended. However the report cautions that in many cases results for first year cohorts may be disappointing due to project infrastructure not yet being fully in place and teething problems being ironed out. Also, it is important to ensure the right outcomes are being measured (e.g. cumulative sentence lengths rather than incidences of conviction in the case of prison programmes) and that top caps are put in place on results.

DG Enterprise / Social Innovation Europe; Strengthening social innovation in Europe (2012 b)

DG Enterprise produced a guide written by Social Innovation Europe on effective assessment and metrics (Strengthening social innovation in Europe, 2012) for social innovation. The publication contains ideas concerning policy level metrics as well criteria for investment in initiatives.

Concerning the latter, strategic fit, outcomes, efficiency / cost-effectiveness and implementation should be considered.

Three important issues to take into account to judge strategic fit are

- a) Aims of the funder, aims of the clients. For funders, a key question is: how well does the proposed project fit with our main aims? For clients, a key question is: will the project do what I need, want and prefer it to do?
- b) Connections to other projects. Some projects impede others, some provide key material that enables progress to be made on a range of agendas. For funders, a new approach that fills a 'gap' on a priority issue is far better than re-treading ground that is already well covered.
- c) Risk and return. A broad perspective by a decision-maker looks at a portfolio as a whole – and does not readily cast aside innovations of high potential, even if they do carry high risks.

As to outcomes, the report puts forwards the need for outcome indicators. A top down or bottom up approach can be taken. Also indicators can be of subjective states of well-being, objective conditions or of monetary values. It is also stated that assessing change is not just an issue of tracking these indicators. Counterfactuals (what would have happened without the intervention) are mentioned as are a large variety of other quantitative methods. The report recommends to be realistic and to also give due attention to qualitative techniques that can also be used while an intervention is taking place and hence can provide immediate feedback.

Regarding efficiency / cost-effectiveness the publication proposes two broad approaches:

- a) Savings as a proportion of initial costs;
- b) Return on investment.

The report advises against methods that attempt to summarise all information regarding the "value" of an initiative in one number. An example is given where strategic fit, outcomes, cost-effectiveness and implementation (incl. in terms of stakeholder engagement, implementation risk and management) are scored separately with specific sub-criteria.

With regards to evaluation, the report proposes to take a sharper perspective on what to evaluate (defined from a policy and stakeholder perspective), a broader perspective on who evaluates (involving more stakeholders in designing and conducting the evaluation), a joined up perspective (not evaluating each initiative separately but within a broader framework) and use of the principle of open data.

E DG Research; Social Innovation Research in the EU (2013)

DG Research has also been investing substantial funds in social innovation. In 2013 it published a publication entitled “Social Innovation Research in the EU”.

This publication provides a review of 17 projects funded under the 5th, 6th and 7th research framework programmes.

It confirms the process and outcome dimensions of a definition for social innovation. It also distinguishes social innovation from the actors that may carry it: social enterprise / economy in the form of NGOs, cooperatives, mutualities,... as well as the public sector. It makes clear that the public sector can be the place where innovations that emerged from social enterprise / economy, consolidate but that equally, the public sector can be the source of innovations, next to having a role in coordinating and facilitating others in developing innovations. Hence the report is in line with BEPA (2010) but expands on it.

According to the study, one aim of social innovation is to respond to long standing or new social needs or problems (where a need does not yet imply a problem, unless it remains unaddressed). Another aim is to deal with challenges as faced by vulnerable groups, at risk of social exclusion. This corresponds to approaches one and two in BEPA (2010). Systemic innovation, as put forward by SIE (2011) is not recognized.

Regarding “process”, the study points to the complexity of heterogeneous actors working together in finding answers to needs/problems. Linking those who have relatively little access to social capital, incl. power and influence, as well as to other resources, to those who do have this, is seen as a key element. Hence the importance of networks, ensuring better use of resources and fostering capabilities. Key is to create *“a permanent and flexible means of action bringing about different solutions to different problems. This allows social actors to be involved, empowered by promoting the behavioural change required to tackle social challenges”* (EC, 2013, p. 18).

The idea that “behavioural change” is necessary to tackle social challenges is new relative to BEPA (2010). This resonates strongly to the most recent World Development Report entitled “Mind, Society, and Behavior” (World Bank, 2015 see <http://www.worldbank.org/en/publication/wdr2015>) that focuses entirely on behaviour change. It states in its main messages (World Bank, 2015, p. 1) *“Novel policies based on a more accurate understanding of how people actually think and behave have shown great promise, especially for addressing some of the most difficult development challenges, such as increasing productivity, breaking the cycle of poverty from one generation to the next, and acting on climate change.”*

The study provides a number of recommendations regarding future (research) work on social innovation. These recommendations are therefore relevant also to ESIF Managing Authorities that also want to learn more about their social innovation projects via research:

- 1) Work on social innovation should be focused on the institutional or structured collectivities of enterprises, governments, civil society actors,... and the services they provide (meso) or the individual (micro) level of analysis, not on the macro (societal) because it is too difficult to operationalise concepts such as “good for society” or “society’s capacity”;
- 2) Cross-level (putting the micro into the context of the meso within the macro) discussions should be encouraged;
- 3) Social innovation is sometimes discussed as a cause of change (processes and practices that foster social innovation) and sometimes as a result (a socially innovative practice). It needs to be discussed in each project what the research focus is;

- 4) Researchers should be encouraged to include shareholders as co-producers of knowledge on social innovation. They should also design dissemination activities that include shareholders as main recipients of knowledge transfer and mobilization. Next to traditional means such as conferences, seminars, publications and newsletter, attention should be paid to newer tools such as online events, direct contact via networking, social media (e.g. blogs) and training (e.g. summer schools);
- 5) Include a historical perspective to determine what is really “new”;
- 6) Create a forum for cross-project assessment of commonalities and differences in the conceptualization of social innovation;
- 7) Create a mechanism for cross project work on the definition of the concept of social innovation that could be deployed in a consensual way;
- 8) Draw on philosophy and ethics to clarify what “good” and “new” are supposed to refer to.

F DG REGIO; Guide to social innovation (2013)

DG REGIO also published a “Guide to social innovation” in 2013.

Here the following definition is put forward (p. 6):

“development and implementation of new ideas (products, services and models) to meet social needs and create new social relationships or collaborations. It represents new responses to pressing social demands, which affect the process of social interactions. It is aimed at improving human well-being. Social innovations are innovations that are social in both their ends and their means. They are innovations that are not only good for society but also enhance individuals’ capacity to act.”

It should be noted that DG Research (2013) cautioned against including “macro” elements such as “good for society”.

DG REGIO (2013) distinguishes three approaches (p. 6-7):

- “Social demand innovations which respond to social demands that are traditionally not addressed by the market or existing institutions and are directed towards vulnerable groups in society. They have developed new approaches to tackling problems affecting youth, migrants, the elderly, socially excluded etc. The European Social Fund and initiatives like PROGRESS traditionally link to this;
- The societal challenge perspective focuses on innovations for society as a whole through the integration of the social, the economic and the environmental. Many of the integrated approaches seen in the ERDF’s URBAN programmes as well as the URBACT programme fall into this societal challenge approach;
- The systemic change focus, the most ambitious of the three and to an extent encompassing the other two, is achieved through a process of organizational development and changes in relations between institutions and stakeholders. Many EU approaches that involve ‘stakeholders’ are attempting to move in this direction such as was the case in the EQUAL programme (driven by the idea of changing the balance of power between users and providers) and LEADER”

These approaches are clearly a further elaboration of the BEPA (2010) approaches, with systemic innovation taking the lead from SIE (2011).

The guide further states that *“Many social innovations have to do with service innovation. This includes innovation in services and in service products, new or improved ways of designing and producing*

services, and Innovation in service firms, organisations, and industries – organisational innovations and the management of innovation processes, within service organisations. Social design is also used as a term to describe particular approaches to social innovation.” (p. 7).

This emphasis on “service innovation” is an important extra element relative to BEPA (2010) and DG Research (2013).

The publication also states that social innovation approaches are (p. 8):

- *“Open rather than closed when it comes to knowledge-sharing and the ownership of knowledge;*
- *Multi-disciplinary and more integrated to problem solving than the single department or single profession solutions of the past;*
- *Participative and empowering of citizens and users rather than ‘top down’ and expert-led;*
- *Demand-led rather than supply-driven;*
- *Tailored rather than mass-produced, as most solutions have to be adapted to local circumstances and personalised to individuals.”*

The guide also points to trends in demography, environment, community, poverty, health and well-being and ethical goods and services as opportunities for social innovation (see annex 1). Also, social innovation tends to derive from collaboration across sectors.

It provides the same four stage process as DG Enterprise / SIE (2012): ideas, prototyping and piloting, implementation as a new venture, new policy or within an existing institution and finally scaling (becoming part of the norm).

A key blockage for social innovation is that social policy in the EU is delivered by the public sector with taxation based finance. This leads to programmes being more focused on audit and reliability rather than innovation, change and value for money. Although there have been service improvements, the central basis of service design is rarely challenged. Reforms are made difficult by the involvement of multiple agencies and levels of government. This creates a problem as costs and benefits may accrue to different actors.

The publication defines the concepts of social economy and social enterprise, as key actors for social innovation. Social enterprise is part of the social economy which also comprises foundations, charities and cooperatives. A social enterprise is characterised by its trading activities, deployed with a social purpose in mind. Profits tend to be reinvested. The organizational form or ownership tends to reflect its mission.

The guide also discusses how to evaluate social innovation. Social experimentation (randomized controlled trials) is referred to (incl. a guide updated in 2014 by DG Employment).

In terms of questions to ask in project proposals, the guide puts forward the following:

a) Innovation:

- In terms of the needs addressed by the project. Does the project address a usually untreated issue?
- In terms of the solutions provided. Does the project address these needs in a more effective way than other methods?
- In terms of the implementation of the project. Is the project carried out through a novel cooperation or governance mechanism or with the participation of unusual actors?

b) Aim. What is the aim of the project? Does it address a social need or societal challenge?

- c) **Means.** What means are used to address these needs? Are the – human, financial, technical or administrative - resources ensured in a social way?
- d) **Involvement.** Is there a strong involvement of stakeholders and users?
- e) **Up-scaling.** Is the impact of the project or programme measured? Are evidences used within the project or for the benefit of other projects? Is there an up-scaling foreseen to regional, sector or national level?
- f) **Sustainability.** Is sustainability ensured?

The publication also provides a 10-step way to get social innovation going at a regional level (see annex 2).

G DG Enterprise; Public Sector Innovation (PSI) scoreboard (2013)

DG Enterprise piloted a Public Sector Innovation (PSI) scoreboard and published the results in 2013.

As the public sector concerns one of the key actors in terms of social innovation, this scoreboard is of some relevance. It does however not mention “social innovation” as such.

The report does point out differences between public and private sector innovation.

Table 2: differences between private and public sector typologies of innovation

Private sector	Public sector
▪ product innovation	▪ service innovation
▪ process innovation	▪ process innovation
▪ organisational innovation	▪ organisational innovation
▪ marketing innovation	▪ communication innovation

It hence defines innovation in the public sector as “a new or significantly improved service, communication method, process or organisational method.” (p. 9)

These are elaborated as follows:

- new or significantly improved methods of communicating activities to the public include:
 - new or improved methods of promoting an organisation or its services;
 - new or improved methods of influencing the behaviour of users, citizens or others;
 - first time commercialisation of services or goods.
- new or improved methods of providing services or interacting with users;
- new or significantly improved processes include:
 - new or improved delivery or logistics systems for an organisation’s inputs;
 - new or improved supporting activities such as maintenance systems, purchasing, accounting or computing systems;
- new or significantly improved organizational methods include:
 - new or improved management systems;
 - new or improved methods of organising work responsibilities or decision making.

Both services (as discussed earlier by DG REGIO, 2013) and behavioural change (as discussed by DG Research, 2013) are mentioned as targets for innovation.

Clearly, citizen and users should experience a difference in the cases of service and communication innovation as they have an external focus. They are distinguished from internal processes and organizational methods. Individual citizens and users would not necessarily see a difference in these types of innovation but staff and public finances may benefit certainly. In addition, it may well be that more citizens and users can be served if efficiencies are used to expand capacity. It should not be a surprise that the report also states that people find it difficult to distinguish between process, service and communication innovations.

Other definition efforts had also put forward as typical for the public sector:

- [systemic innovation](#): new or improved ways of interacting with other organisations or sources of knowledge;
- [conceptual innovation](#): new views and challenges to existing assumptions;
- [policy innovation](#): new thinking or behavioural intentions.

The report also lists several research insights:

- a majority of public sector innovations appears to be initiated by middle management and frontline staff (bottom-up) rather than via high level policy decisions coming from the political level via senior management (top-down) ;
- however, the former are mostly incremental innovations while the latter are larger in scale, possibly due to the bottom-up innovations being created to solve local issues and hence not being likely to diffuse easily;
- drivers of innovation are stated to be internal problems, followed by human resources themselves (recent university graduates in frontline or middle management positions who are both close to day to day operations as well as to cutting edge thinking from universities). Finally, external drivers such as new regulation and laws are listed;
- barriers to innovation are lack of human and financial resources, followed by regulatory impediments, lack of management support and lack of incentives for staff;
- in response to high barriers to innovation, some civil servants turn to sources outside their organization to develop innovation. Next to top down and bottom up innovation, this is a third strategy for innovation;
- procurement of creative solutions is seen as a key approach for inducing innovation, even though there is a tendency to focus more on cost than on innovation;

The Innobarometer 2010 on innovation in public administration and regulation (hence representing only a subsample of the entire public sector) shows some marked differences from the research insights concerning the public sector as a whole:

- the most important driver of innovation shifted to new laws and regulations, then new policy priorities and mandated implementations of online service provision;
- hence, to no surprise, a top down approach characterizes this sub-sample.

However, lack of human and financial resources was also the main barrier to innovation, similar to the broader public sector. Staff, management and clients or users are the major sources of information to support innovation.

The report also refers to a study entitled “Trends and challenges in public sector innovation in Europe” delivered to the EC in 2012 by Lorena Rivera León, Paul Simmonds and Laura Roman. Based on this

study, the report states: “... the Nordic countries are amongst the most advanced. The Netherlands and the UK are similarly seen by many to be at the forefront of efforts to make public sector innovation a universal imperative....For the countries at the leading edge, PSI has breadth and depth. It seems to comprise three things: (i) mega projects, that are concerned to transform the cost-performance of whole systems; (ii) inter-agency initiatives, to streamline overall service delivery through de-duplication, but also to add new functionality through new connections; (iii) increased bottom-up input, whether that is from junior staff or the public. EU MS ‘followers’ are at an earlier stage and continuing to focus on digitizing aspects of their public administration in the main.”

DG research; Powering European Public Sector Innovation (2013 b)

DG Research produced a report named “Powering European Public Sector Innovation” in 2013. Again, the report makes no mention of social innovation.

It distinguishes between PSI with an internal focus (efficiency) and an external focus (on improving services and outcomes for citizens and businesses) within the public sector. It also adds a focus on promoting innovation outside the public sector.

The reports states that PSI is best based on a combination of internal and external perspectives. The external perspective relates to the societal challenges that have to do with social and human behavior and are often so interdependent and complex that no single entity can tackle them. This is where public action is needed e.g. in health, safety, public transport, research, education, environment, social care... with their own type of solutions. The internal perspective in contrast is linked to solutions of a more general nature as they concern tools and approaches that generate higher performing and more efficient organisations.

It also states that the value of public sector innovation can be seen as follows:

- external focus via
 - “outcomes: better achievement of individual and societal outcomes such as increased health, learning, job creation, safety, sustainable environment, etc;
 - services: production of more meaningful, attractive and useful services as experienced by end users (citizens, businesses), including personalized tailor-made services to individual citizens and businesses;
- internal focus via productivity: enhancing the internal efficiency of how public organisations are managed;
- cross-cutting focus of democracy: strengthening democratic citizen engagement and participation; ensuring accountability, transparency and equality.” (p. 13)

This report presents a state of affairs first:

- the quest for more and better public sector innovation is hindered by several barriers, which fall into four major categories:
 1. [weak enabling factors or unfavourable framework conditions:](#)
 - weak links between innovation and a proliferation of public reform strategies: “While public sector reform cannot be considered innovation per se and does not necessarily translate into innovation, any reform process should seek to at least adopt successful innovation practices to

increase productivity and service quality and, at the same time, add public value for the common interest.... Member States should also pay attention to reforms.... such as strengthening the capacity for strategic and budgetary planning; and encouraging innovation, by introducing new organisational and communication models..." (p. 17-18);

- lack of mechanisms at EU and Member State level to link up and monitor innovation policies to concentrate innovation on pressing issues of common concern and encourage policy learning across the EU. This is coupled with "award" inflation (e.g. EPSA, PIPA, EU E-gov awards,...) where differences in evaluation criteria and processes limit comparability. Results are not systematically and widely used;
- diverse and unresponsive regulatory and legal frameworks (incl. from the EU) and administrative cultures hamper experimentation and variance;
- lack of awareness of the impact of technology (regarding transparency, privacy, participation for citizens,...) due to hierarchical silo thinking and rigid administrative practice;
- underutilization of the potential of procurement as a driver for innovation;
- resource constraints for staff and management to innovate: funding for innovation is coming pre-dominantly from departmental budgets (with markedly different availability across Member States) rather than from cross-departmental ones that would foster more radical innovation;
- lack of support for diversity and fear of mistakes (with incentives for staff preferring success) coupled with lack of skills and tools for staff to innovate;

2. lack of innovation leadership at all levels: innovation is not embedded organizationally and is not strategic and systematic enough. It mostly happens through uncoordinated initiatives rather than as a result of deliberate efforts. Barriers are:

- mindset: managers need to be serious about personal responsibility in doing better and testing the boundaries of current practice and thinking;
- lack of staff with formal skills in creativity and innovation;
- rigid organizational rules, high amounts of paper chasing, focus on being on time and budget, ...
- discouragement by superiors and colleagues to go for new ideas especially when outcomes are intangible or difficult to measure;
- lack of communication successes and failures;
- fear of failure and losing one's job reinforced by skepticism of public opinion and negative media;

3. limited knowledge and application of innovation processes and methods:

- lack of methods and tools and experience with them incl. with criteria for launching, implementing and evaluating innovations and the use of evidence;
- lack of collaboration incl. weak citizen focus and involvement, capacity to partner (including in public-private partnerships), inter-administrative collaboration, strong boundaries between administration levels and sectors and a limited and select circle of usual and regular partners in innovation projects, usually very similar to the lead organisation and all from the public sector;

4. insufficiently precise and systematic use of measurement and data.

The barriers must be overcome as the report states: "Governments have always faced pressures for increasing the productivity of the public sector while developing more citizen-centric services, better outcomes and enhanced democratic participation. However, the current and future environment is likely to more fundamentally challenge the role of the public sector in European societies. Trends such as increased globalisation and mobility of people, goods and services, new technologies, ageing, demographic change, changing lifestyle patterns, chronic disease and rising costs of health care all

contribute to a turbulent and complex environment for public sector organisations, their managers and staff. Public sector organisations must become much better equipped to deal with this more rapidly changing environment.” (p. 29)

The report then proposes a new innovation paradigm:

- co-design and co-creation of innovative solutions (with other Member States, other parts of government, businesses, the third sector and citizens);
- adopting new and collaborative service delivery models (across public, private and non-governmental actors, both within and across national borders) faced with the gap of affordability of public services and the need to tailor delivery more closely around the citizen as well as improving quality. This involves:
 - leveraging the voluntary sector, supported by new technologies, taxation law and social networks;
 - increasing autonomy from government with a focus on a robust business model and citizen centricity;
 - empowering employees (who are sometimes also co-owners of the service provider) to interpret demand and tailor services to the needs of citizens, looking for and introducing novel solutions when needed;
 - these new delivery models can novel funding mechanisms such as social impact bonds;
 - all of these elements are to be supported by relevant measurement tools that monitor and ensure performance;
- embracing creative disruption from technology (the pervasive use of social media, mobility, big data, cloud computing packaged in new digital government offerings). This poses a challenge in terms of combining equal service standards for all citizens with the drive for customization. When increased digitization is managed poorly it can create trust and legitimacy issues;
- adopting an attitude of experimentation and entrepreneurship (government itself needs to become bolder and more entrepreneurial): the innovation that is required is radical rather than incremental. For this, public entrepreneurs are required that a more pro-active in terms of unleashing new opportunities. This implies:
 - challenging assumptions;
 - starting with outcomes for citizens and society;
 - pro-actively launching iterative waves of small scale experiments;
 - using design methods to make new solutions and operating models tangible.

I BEPA; Social innovation: a decade of changes (2014)

BEPA published another publication in 2014 that takes stock of ten years of social innovation (“Social innovation: a decade of changes”).

It puts forwards a number of important statements:

- *“the idea that social innovation is about bringing solutions to some of the complex problems of today is seen as necessary” (p. 14);*
- *“social innovation is an asset to discover the future through action rather than believing it can be discovered solely through analysis” (p. 15);*

It also states that the rise of the hyperconnected society significantly affects social innovation triggering questions: how to leverage the power of social networks that operate under the radar? How to set up

an institutional framework to harness the collective intelligence of people to tackle major social issues? It then brings in the idea of ecosystems for social innovation. It is a response to the fact that social innovation promoters “... *must leverage complex systems of interacting players in rapidly evolving political, economic, physical and cultural environments. Moreover, the more innovative the initiative, the more likely it is to come up against the aversion to change of those who have stakes in the system as it is.*” (p. 20)

Indeed, traditionally, social issues have been tackled by charitable solutions that have immediate but unsustainable impact (e.g. give food to the poor). But social innovation has “*transformative ambition to create long-lasting changes to solve societal problems (e.g. homelessness, food disorders) that are engrained in behaviours and institutional and cultural context (laws, policies, social norms)*” (p. 20)

The report also states that systemic social innovation is based on “*fostering creative policy thinking at system level through forward-looking, inspiring and complementary strategic initiatives at grassroots level, and on encouraging sectoral stakeholder participation.*” (p. 120)

Hence, the idea of an “eco-system” as a friendly milieu to organize interactions and respond to needs for social innovation at every stage of their development (structuring, experimenting, nurturing, networking, supporting, scaling and transferring) is appealing.

The key components of such an ecosystem are stated to be supportive policies (identifying obstacles to working together and pooling resources such as conflicting objectives, differences in culture, and then creating spaces for collaboration and thinking out of the box), adequate governance (promoting a culture of trust and learning from failure, incl. by using digital tools), innovative finance (different forms at different times ranging from small grants for experiments to large projects when scaling; a key point is the ability to regroup funds from various sources), a variety of capacity building and recognition tools (e.g. hubs, incubators, forums, prizes, research in methods) and benchmarking and impact measurement and research.

One of two examples of an ecosystem mentioned in the publication is that of Oksigen in Belgium (p. 22).

Concerning measurement of social impact, the report makes a link to the work being done by e.g. the OECD, on measuring well-being. “*Many analysts around the world believe that it is necessary to measure wellbeing or quality of life in order to better respond to the needs of this century. As far as social innovation is concerned, this is likely to kick-start the systemic change mentioned inter alia in the first BEPA report, by bringing to the fore the value of non-tradeable goods and services that contribute to wellbeing.*” (p. 24)

It notes the take-off of the idea of social experiments to test a policy on a small scale. However, it also refers to the Commission’s consultative multi-stakeholder group on social enterprise (GECES) report of 2014 on social impact measurement that states “*...that no single set of indicators can be devised in a ‘top-down fashion’ to measure social impact in all cases....the number and range of indicators should be agreed between the social enterprise, beneficiaries or service users as well as investors, allowing for lighter and cheaper processes for small ventures.*” (p.27).

A next major section of the report is named “Leading by example: how the public sector supports social innovation.” (p. 31). It explicitly takes up DG research’s report (2013 b) on Public Sector Innovation as well as the European Public Sector Scoreboard (DG Enterprise 2013) and the Observatory on Public Sector Innovation managed by the OECD, as well as the PIPA (EU Prize for innovation in Public Administration) competition, firmly situating Public Sector Innovation within the broader concept of Social Innovation.

The report goes on to referring to Europe's main societal challenges as described in a report by RAND (see annex 3). It present also paradoxes that may occur in the future:

- in an increasingly complex world, there is also an increasing loss of confidence in institutions and aversion to risk;
- this can be reinforced by the role of technology and access to unverified information;
- this technology also may contribute to more individualistic tendencies and radicalization;
- the above tendencies may require greater social innovation but at the same time may also slow it down;
- the interaction of a widening skills gap, digital divide and unequal benefits of technological innovation could lead to a vicious cycle for vulnerable groups (young people, older poor, low skilled workers, migrants and their children).

The study suggests that the EU needs *“a new growth paradigm, focused on the well-being of citizens while offering opportunities for business to thrive...Instead of focusing efforts on creating wealth,... prioritise the health of societies...invest in human capital and avoid sluggish productivity growth...at the expense of social inclusion, public health, education and skills, security or freedom.”* (p. 53-54).

In the area of social policy, the report points to the importance of ESIF for the Social Investment Package (SIP). *“The SIP also stresses that the Commission will support Member States by providing ... funding opportunities through ... ESIF (i) to test new approaches to social policies and scale up the most effective innovations, (ii) to explore and develop innovative ways of securing additional private financing for social investment, (iii) to facilitate the exchange of experiences and support the exploration of new financing tools, new financial instruments and innovative financing mechanisms, such as Social Impact Bonds (SIBs) and (iv) to provide support services for social policy experimentation in the EU (communication, training tools, and tailor-made advice on social policy experimentation).”* (p.73) It refers also to the ESF ad hoc group on transnationality and social innovation as a forum for discussion on these matters between the ESF Managing Authorities and the Commission. In addition, other transnational learning networks of ESF Managing Authorities are stated to serve as *“a vehicle for supporting transnational and innovative actions”* (p. 95).

The report goes on to stress the importance of the European Structural and Investment Funds (ESIF) for social innovation:

- ESF: social innovation regarding employment, social inclusion, education and institutional capacity building;
- ERDF (European Regional Development Funds): development of ICT and social enterprises;
- EAFRD (European Agricultural Fund for Rural Development): community led local development will be important to develop new forms of collaboration and social innovation between local actors.

The reports also makes reference to networks across the EU that deal with social innovation. Notably the Social Innovation Europe Initiative mentioned earlier. Also, the SEE platform is mentioned, a network project on using design thinking for improving public policy, next to a recently launched network on design for innovation. Other mentioned platforms and networks focus more on ICT, Corporate Social Responsibility or on workplace innovation.

Also, next to the awards already mentioned relating to Public Sector Innovation , there is mention of awards oriented more to social entrepreneurs/ enterprises: the European Social Innovation Competition (operated by the Social Innovation Europe platform) and the Social Innovation Tournament (operated by the European Investment Bank).

Notably, in the area of research, research on behavior is recognized by the report as having potential for social innovation in a variety of policy domains.

J DG Employment; Social Policy Innovation (2015)

DG Employment published a communication on “Social Policy Innovation” in 2015. It stresses that *“Member States are facing the need to re-engineer their welfare systems to provide adequate support to citizens while being financially sustainable in ways that effectively cope with demographic and other social challenges. Social policy innovation helps to identify and promote new approaches.”* (p. 3)

It states the promotion of broader partnerships between public authorities, private sector, civil society and social economy as being key. It refers to organisations such as I-propellor in Belgium and Ashoka across the world as facilitators of social entrepreneurs to pursue social innovation. *“Social enterprises and entrepreneurs are pivotal for catalyzing innovative ideas and should complement public efforts in pursuing social policy objectives”* (p. 4).

Again, this publication puts forward the ESIF as a key tool in funding such innovation.

K TEPSIE (2014)

TEPSIE (Theoretical, Empirical and Policy Foundations for Building Social Innovation In Europe) is a 7th framework programme for research and innovation project that delivered its final outputs in December 2014. It is interesting as it is one of the first of a set of similar projects to be finalized. It's scope was also quite broad: to explore barriers to innovation as well structures and resources required to support social innovation at the EU level. The section below draws on the deliverables of the project as presented on <http://www.tepsie.eu/>.

TEPSIE states that social innovation is required as there is:

- an increasing disconnect between the needs and the services (e.g. in health most services are geared towards acute illness rather than the now becoming dominant chronic forms);
- a need to move from curative to preventative solutions;
- a growing demand exacerbated by reductions of investments.

TEPSIE provides an overview of main recent “streams” of thinking about innovation:

- Open innovation which relates to citizen engagement;
- Bottom of the pyramid innovation: going to resource constrained environments to innovate and then bring it back to “richer” environments which relates to inclusive innovation;
- Systems and design thinking notably as practiced by DRIFT (Dutch Research Institute for Transitions) and IDEO (a global consultancy company).

They then also cover very varied “definitions” of what social innovation may be. The issues are:

- What does “social” mean (well-being, impact compared with what exists, connected to needs, benefit to society as a whole,...)?
- What is the level (services, markets, movements, individuals, groups, local niches, regimes,...) at which we should look at the “innovation”?
- Is it about processes (“how” e.g. in terms of relations), outcomes (“what” e.g. achieving social goals) or both?
- Is it always good for everyone, everywhere? Or detrimental for some in some places?

TEPSIE offers a definition of their own with the following elements:

- New to the context;
- With the intention to address a social need or shape such a need in a positive way;
- Put into practice;
- Engaging those who are supposed to benefit (directly or via intermediaries that have legitimate knowledge of their needs) hence helping them to address and own their problems;
- Improving access to power and other resources of specific target groups.

In terms of types of innovation, several are proposed:

- New services/products to meet social needs e.g. car sharing;
- New practices that require new professional roles or relationships e.g. dispute resolution between the citizens and the state in the Netherland;
- New processes in terms of co-production e.g. participatory budgeting;
- New rules and regulations e.g. personal budgets that allow citizens to decide for themselves how to spend their support money.

As to the process of social innovation, it refers to similar steps as already elaborated by DG Enterprise (2012) and DG REGIO (2013).

TEPSIE also warns about confusing social enterprise / profit, social entrepreneurship and social innovation. It obscures contributions made by the public sector, civil society as made up by the informal community sector (of individuals, families and local communities working to meet social needs in civic, religious and other community groups as well as social movements) and non-profits (voluntary / third sector including associations, charities, foundations, ...). Social innovation is not necessarily market oriented while social entrepreneurship normally is. Also, entrepreneurship is often not sufficient for enduring social change which also requires political action and partnerships with broader social movements. It should not be underestimated that social change is accompanied by considerable debate, tension and social disharmony. What is a legitimate social need or in societies' interest is not something that can be defined by entrepreneurs. It is inherently a political question. Hence, support for social innovation should not focus solely on social enterprise.

In terms of finance, a distinction should be drawn again between social enterprise that is covering most of its own cost with an income generating activity derived from a user base and the traditional non-profit and community based sectors that rely more on grants and donations. It is the latter two that are usually dealing with more severe social problems and hence there is greater potential for social impact. However, this is also where market failure persists and hence these organisations cannot easily create incomes from users as the latter can ill afford it or because it is impossible / undesirable to commodify the innovation as is the case for many social services. According to TEPSIE, more intermediaries are needed that set up more suitable financing arrangements and also more non-financial support is required e.g. facilitating peer to peer exchanges of experience. For example, TEPSIE research shows that many social innovators could afford loans at 2-3% interest rates but not the usual 6-8%. Hence philanthropy and public support remain needed.

In terms of growing what works, TEPSIE finds the terms diffusion, adoption or replication more apt than "scaling" as the latter implies some sort of standardization that may not always be the best way forward. Of importance are groups that can spread information about and confidence in an innovation such as networks of key actors capable of establishing links to the communities in need. Also, intermediary organisations that can give support to facilitate the adoption process are important. They initially reduce barriers to adoption by providing tools and resources (training, manuals, coaching,...)

and afterwards facilitate connections and co-learning via networks. They must create a good balance between control (high quality replication) and speed and extent of diffusion. As social innovations are typically quite complex (changes in behaviour, routines, relations,...) it is not certain they can really be successfully replicated as such. Also, sometimes adaptations change the nature of the innovation. Innovations that spread can themselves also spark new innovation. This makes it hard to talk about ‘spread’ of a specific innovation.

The informal, community sector, while often generating ideas, lacks capital, time and organizational capacity as well as ambition to turn the ideas into social innovations and diffuse them. Likewise, many non-profits have pioneered new approaches through campaigns, advocacy and service provision but they tend to be small, dependent on grants and donations and hence limited in their ability to grow innovations.

So mainstreaming requires either 1) the market or 2) the state. In the former case, when an innovation is “marketable” only management and business skills are needed. However, it may still be hard to do, especially where state procurement is involved as this tends to set terms and conditions that are biased towards “old” solutions and incumbent capacity. Indeed, TEPSIE elaborates on the role of the social economy in social innovation. It is stated that this sector is well-placed to innovate as it is in close contact with communities where pressing social needs are evident. However, if the sector is dominated by state procurement then it seems to be less innovative, reacting only to conditions of procurement.

TEPSIE gives also a warning: social innovation by social enterprise, civil society and non-profits is not to become a justification for a reduction of state expenditure in disguise as it is neither capable of making up for all the budget cuts and welfare policy gaps, nor a silver bullet for complex and grave societal problems that have to be tackled by major and broad-scale public reforms.

TEPSIE also lists several challenges to social innovation specifically for the public sector to tackle as a facilitator of social innovation:

- Appropriate finance mechanisms such as could be provided by the European Social Fund, other grants and contracts, repayable investments such as Social Impact Bonds, but also favorable tax rates for returns on these social investments. Procurement should move away from favoring large contracts for established players with a short term focus or unrealistic low prices or cumbersome monitoring and evaluation requirements, placing excessive risk on providers;
- Sharing non-financial assets e.g. allowing ownership of public land and buildings to be transferred to communities for less than their market value (e.g as in the UK), allotments;
- Creation of new legal frameworks e.g. community right to challenge, tax relief for social investment, forcing public commissioners to consider how procurement can improve well-being in the area,...;
- Creation of networks: government is one of the few institutions that can put people from different sectors together as it is tapped into all of these;
- Capacity building: this can be tackled by dedicated support programmes of incubators (helping to turn ideas into business models) or of accelerators (helping to grow existing innovative services) that typically engage in coaching, matching with funders, skills development, mentoring, providing a co-working space, ...
- Next, the role of citizen engagement in social innovation should be supported in the following main functions:
 - Bringing specific knowledge of their own lives;
 - Being a source of innovative ideas;
 - Divergent thinking: e.g. they can bring other ways of looking at things and hence also solving them differently, especially when they are located at the margins and hence not bound by conventional thinking;

- Management of complex problems that do not have a single “end” or “solution” and than hence need to be continuously managed rather than resolved. This requires in many cases behavioral change, which requires itself participation, co-operation and “buy in” of users;
- Legitimacy of decisions;
- Care should be taken not to use words like empowerment or local control when all that is going on is consultation;
- Also care needs to be taken that the right people are engaged and that self-exclusion or co-option by vested interests and elites is prevented. Also, it may be that participation steers towards a different course than preferred by policy-makers, funders or practitioners;
- Government should also enable measurement of social innovation. TEPSIE provides a framework that consists of three levels, each with their own indicators:
 - Framework conditions;
 - Organizational outputs and societal outcomes;
 - Entrepreneurial activities;
 - It cites a whole range of existing measurement systems focusing on innovation (e.g. Innovation union Scoreboard) or on social outcomes (e.g. OECD Better Life Index). At the micro level, SROI (social return on investment), SCBA (social cost benefit analysis), SRS (social reporting standard) and RCT’s (randomised control trials) are mentioned.
- Finally, government should stimulate the use of digital technology.

TEPSIE states that most technology used for social innovation is relatively standard and inexpensive ICT including web portals, mobile apps and social media. Other related, promising technologies are 3D printers (for cheap and local production for people who would otherwise have no chance of being helped e.g. with prosthetic limbs), scanning tools and the internet of things.

TEPSIE recommends that it be used to directly address a clear social need of users rather than to enhance an existing solution e.g. as in the case of the Kenyan money transfer mobile phone application that does not require a bank account at all. Hence, this is not banking that was put online. However, it can also be used in parts of the process chain before beneficiaries are involved e.g. when civil society uses open / big data to better target pockets of social needs. Indeed, it is stated that social innovation can emerge from open data combined with people’s skills and dedication (e.g. to develop apps).

In many cases technology is used only in the early parts of the chain, in terms of identifying a need, matching assets to needs or identifying solutions to address a need, with most of the rest delivered with traditional and physical activity. The sharing economy provides many such examples (e.g. car sharing). However, in education and health examples exist where the whole chain is based on ICT (e.g. massive online learning).

ICT usually takes care of parts of a process that are standard rule driven and codifiable tasks and where high speed and global reach matter. People on the other hand seem best suited to carry out care, teaching, counseling, advising, advocacy, managing and undertaking tasks that are hard to codify. Between these two a proper symbiosis is sought.

Finally, the importance of stimulating innovation by the public sector itself is also stressed by:

- Open assets: sharing data, people, facilities, tools, networks, etc.;
- Open services: enabling others to co-create and innovate public services;
- Open engagement: ensuing that others can participate in decision-making.

Of course, there are instances where full transparency and engagement is inappropriate.

Examples like Mindlab in Denmark and the Behavioural Insights Team in the UK are mentioned.

L Conclusions for the ESIF

The further contents of the guide for ESIF Managing Authorities are to be fully in line with the main orientations present in the wide range of EC's social innovation publications since the seminal BEPA report "Empowering people, driving change" was published in 2010.

1. It should take as its point of entry and rationale that *"the core of social innovation remains to be oriented towards meeting social needs and the public sector plays a pivotal role in this."* (BEPA, 2010, p. 29). In addition, it should recognize that *"Governments have always faced pressures for increasing the productivity of the public sector while developing more citizen-centric services, better outcomes and enhanced democratic participation. However, the current and future environment is likely to more fundamentally challenge the role of the public sector in European societies. Trends such as increased globalisation and mobility of people, goods and services, new technologies, ageing, demographic change, changing lifestyle patterns, chronic disease and rising costs of health care all contribute to a turbulent and complex environment for public sector organisations, their managers and staff. Public sector organisations must become much better equipped to deal with this more rapidly changing environment."* (DG Research, 2013b, p. 29);
2. it should follow the idea that public sector innovation is to be seen as an integral part of the broader concept of social innovation as stated by DG Research (2013) and confirmed by BEPA (2014);
3. it however should acknowledge the importance of involving actors across the public and private sector as well as the grant/social economy and citizens (households, businesses, ...) as put forward by DG Enterprise (2012);
4. connected to this, as put forward by TEPSIE (2014), it should be acknowledged that, while great generators of ideas and innovations, civil society as well as the non-profit sector are too small, too dependent on grants and donations and often lacking in time, organisational capacity as well as the ambition to grow innovations beyond their immediate scope. This leaves mainstreaming social innovation to the state and social enterprise (market);
5. it should take as a working definition of social innovation the one proposed by DG REGIO (2013) as a basis: *"development and implementation of new ideas to meet social needs and create new social relationships or collaborations. It is aimed at improving human well-being. Social innovations are innovations that are social in both their ends and their means. They are innovations that are not only good for society but also enhance individuals' capacity to act."* This makes sense as it is then derived from an official EC Structural Funds source;
6. it should be interested in the concept of systemic social innovation defined as *"A set of interconnected innovations, where each is dependent on the other, with innovation both in the parts of the system and in the ways that they interact... involves a complex interaction of public policy and reforms to legislation, changes to business cultures and practices, as well as shifts in consumer attitudes and behaviour."* (DG Enterprise, 2011, p. 3-4) and the fact that this encompasses other, more narrow views of social innovation as stated by DG REGIO (2013, p. 7) where *"...systemic change focus, the most ambitious..., is achieved through a process of organizational development and changes in relations between institu-*

tions and stakeholders.” Also BEPA (2014, p. 120) states that systemic social innovation is based on “fostering creative policy thinking at system level through forward-looking, inspiring and complementary strategic initiatives at grassroots level, and on encouraging sectoral stakeholder participation.”;

7. however, it also should recognise the importance of services as well as communication innovation as a focal point for social innovation as put forward by DG REGIO (2013) and DG Enterprise (2013);
8. as a consequence it also should devote due attention to “promoting the behavioural change required to tackle social challenges” as suggested by DG Research (2013), DG Enterprise (2013) and BEPA (2014) as well the use of social design methods (DG REGIO, 2013 and DG Research, 2013b);
9. it should follow the idea that innovation is best based on a combination of external and internal perspectives (DG Research, 2013b) with the former oriented to innovation in services and communication and the latter to processes and organizational methods. The focus of the externally oriented forms of innovation is on improved outcomes (health, learning, safety, ...) and the quality of services (being more attractive, meaningful, useful, tailor-made) while the internal orientation is concerned with efficiency of how organizations are managed (DG Research, 2013b);
10. it should support the four stage social innovation process model (ideas, prototyping/piloting, implementation, scaling) as proposed by DG Enterprise (2012) and DG REGIO (2013) as well as the idea of a broader social innovation ecosystem (BEPA, 2014);
11. it should pay explicit attention to measurement by integrating rigorous research, including qualitative techniques that allow also for feed-back during an intervention. Related to this it also should pay special attention to operationalizing the concept of “well-being” as well as “savings as a proportion to initial costs”. These points have all been stated by DG Enterprise (2012b). “Well-being” is also part of the working definition of social innovation adopted above. The most recent BEPA report (2014, p. 24) further emphasises that *“Many analysts around the world believe that it is necessary to measure wellbeing or quality of life in order to better respond to the needs of this century. As far as social innovation is concerned, this is likely to kick-start the systemic change mentioned inter alia in the first BEPA report, by bringing to the fore the value of non-tradeable goods and services that contribute to wellbeing.”;*
12. it should recognize the frequent references to the role of European Structural and Investment Funds –ESIF (in terms of funding but also in terms of transnational cooperation between ESIF Managing Authorities on a variety of themes) in promoting social innovation in BEPA (2010), DG Enterprise (2012), DG REGIO (2013), BEPA (2014) and DG Employment (2015). In connection to this, it is aware of the barriers to social innovation in the public sector due to (scarce) funding coming from departmental budgets rather than cutting across sectors which would facilitate more radical innovation as put forward by DG Research (2013b) as well as DG Enterprise (2012) and the role the ESIF can play in this.
13. it should endorse, as does DG REGIO (2013), the nature of social innovation processes as:
 - “Open rather than closed when it comes to knowledge-sharing and the ownership of knowledge;
 - Multi-disciplinary and more integrated to problem solving than the single department or single profession solutions of the past;

- Participative and empowering of citizens and users rather than ‘top down’ and expert-led;
- Demand-led rather than supply-driven;
- Tailored rather than mass-produced, as most solutions have to be adapted to local circumstances and personalised to individuals.”

These points also closely mirror the recommendation of DG Research (2013b) to adopt a new innovation paradigm based on co-design and co-creation, collaborative service delivery models (incl. empowering employees to tailor solutions to needs of citizens), an attitude of experimentation and entrepreneurship (incl. a focus on outcomes for citizens and challenging assumptions);

14. Finally, following TEPsIE (2014), it should be clear that social innovation as carried by social enterprise, civil society and non-profits is not to be used as a quick way to reduce state expenditure as it is neither capable of making up for all the budget cuts and welfare policy gaps, nor a silver bullet for complex and grave societal problems that have to be tackled by major and broad-scale public reforms.

2. The big picture: transitions in society, service innovation and the deeper dynamic of changemakers

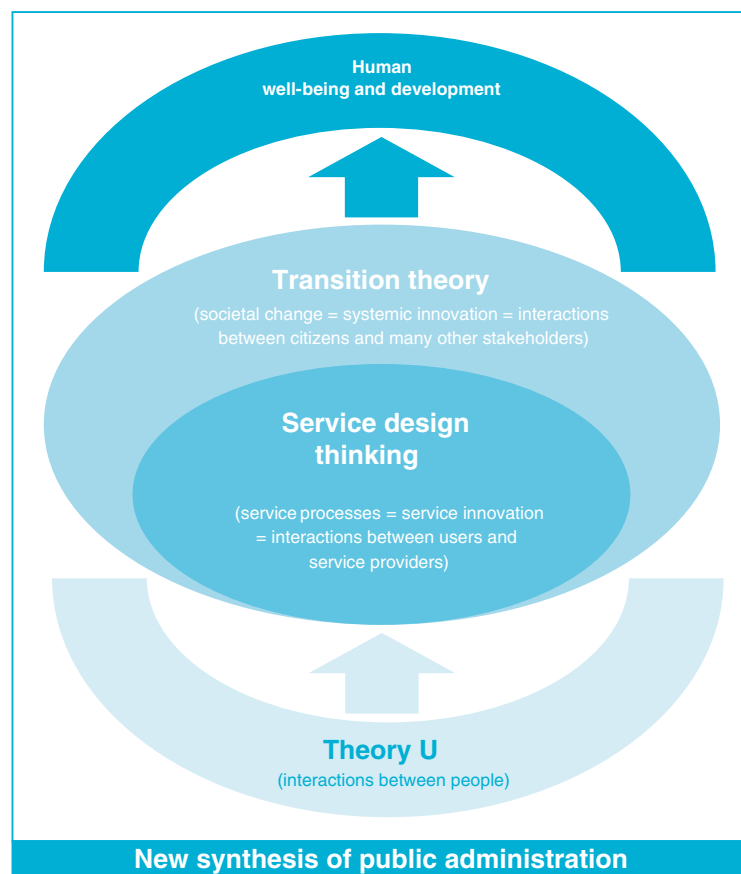
A Introduction

While the EU orientations of chapter 2 provide some foundations for elaborating how social innovation should be funded by the ESIF, it does not provide sufficient, evidence-based, insights into the nature of innovation. To enable this deeper insight, we draw on four distinct theories:

- Capability approach which concerns defining the purpose of social innovation ;
- Transition theory which concerns changes in the systems that deliver societal functions;
- Service innovation research that elaborates on the nature of innovation in services;
- Theory U that elaborates on how individuals together with others can create more radical innovation.

The relationship between these theories is depicted below.

Figure 3: integration of multiple theories of innovation



These theories fit together as follows. To improve human well-being and development as defined by the capability approach of nobel prize winning economist Amartya Sen, it is necessary to exhibit empathy (looking at reality via the perspective of others) as this allows to uncover what individuals really value and what is constraining them (leading to a lack of real opportunities to pursue what they value). At the same time, this needs to be embedded in an ongoing deliberative participation process to ensure that

people do not pursue what they value at the expense of others (incl. future generations) and to also enable a varied collection of actors to help each other to tackle complex issues.

Empathy is at the core of theory U as is engaging others collectively to create common visions based on this empathy.

This U-process can take place at the level of services (between a user and service provider) – the field of service design – as well as that of societal transformation (between those whose well-being and development is at stake and many other stakeholders) – the field of transition theory.

Finally, we will situate innovation based in these four theories within the broader thinking on the nature of government as elaborated in the New Synthesis of public administration.

B Capability approach

1. Introduction

The definition of social innovation as used by DG REGIO (2013, Guide for social innovation) is that it concerns the *“development and implementation of new ideas to meet social needs and create new social relationships or collaborations. It is aimed at improving human well-being. Social innovations are innovations that are social in both their ends and their means. They are innovations that are not only good for society but also enhance individuals’ capacity to act.”*

However, improving “well-being”, “social in means” and enhancing “individual’s capacity to act” are concepts that require some elaboration to be useful in practice. They draw directly on the work of Nobel prize winning development economist Amartya Sen regarding his “capability approach”. The following section is largely Based on Wauters, B. (2015), “Where did the well-being go in ESIF?”, a paper delivered for the 2nd joint EU Cohesion Policy Conference: Challenges for the New Cohesion Policy 2014-2020: an Academic and Policy Debate.

This is a highly sophisticated approach that is best explained with an example.

Imagine you are a young person dreaming of becoming an excellent architect ... (functioning)

But do you have the real choice (capability) to be one?

There needs to be a university that offers the study ...

You need to be able to pay the fees ...

You need approval from your parents ...

You may have a handicap that makes it challenging ...

Realising your dream may involve “sacrificing” other choices for doings/beings you have reason to value e.g. ...

... to enjoy your family (the nearest university may be far away)

... to enjoy the natural environment of your rural village

... to have an unstressful life ...

... to support your younger sister going to secondary school by taking a job ...

If your dream is not a real choice, you may want to strive (agency) towards making it real e.g ...

... by organising a public movement to lower school fees

... by creating a public debate concerning the right to pursue another career than your parents ...

...

The example contains several elements that require explanation.

2. Functionings: well-being as doings and beings that people have reason to value

Sen would call “being an excellent architect” a “functioning” or a “doing/being” you have reason to value. It is important to understand that for Sen, functionings are what constitutes well-being. If someone does not value a particular doing or being, then there is no well-being to be derived from engaging in it. For example, if someone does not dream of becoming an architect yet is forced to become one, then, for this person, well-being is not enhanced.

Also, an activity or being that people may want to engage in “counts” as a functioning for a person only if that person values it intrinsically as an “end”, not a “means”. Of course the functioning could also “serve” (it has instrumental value) to cause other positive changes in a person’s life but even if this would not be the case, the person would still value the activity.

Finally, a functioning is defined as what someone has “reason” to value. This relates to the issue that what one person deems of value should not impede what another deems of value. Establishing what is “reasonable”, needs to happen through a social process for which there are two viable options:

- public consensus building at one point in time concerning functionings that are expected to be stable for some time and hence do not require ongoing debate. However, this list may become quite inflexible and hence not incorporate dissenting views that may arise. It is also far from likely that such big debates can be joined adequately by the most disadvantaged;
- ongoing deliberative participation for situations where what is valued may be shifting frequently and rapidly: here value judgments can be made and revised directly by concerned constituents. Also, understanding the give and takes of views and reasons can be quite useful for improving the dialogue about what is valued. This approach can also be used at various levels (from local to national including at the level of concrete service provision) and hence is able to interact with the most disadvantaged.

The latter option is clearly superior to the first one when considering social innovation. However, it needs to deal with the issue that power imbalances may derail the discussions between users and service designers/providers and that it may not be possible in situations of low trust or conflict. Great attention therefore must be devoted to the attitudes and competences of service providers and to establishing trust.

3. Capabilities: opportunity freedom to engage in functionings

Sen would talk of a “capability” if, when we experience an intrinsic need, such as excelling at being an architect, we also have the actual freedom (real possibility) to become one. For Sen, if we want to increase well-being in terms of functionings, we need to expand people’s capabilities: what choices do they actually have to engage in what they value? Capabilities then lead to functionings which may themselves create more capabilities.

Sen is here concerned with the deliberate pursuit of human flourishing, not the largely unconscious drivers of mundane behavior that for example the behavioural sciences take an interest in. Satisfying an urge is not to be confused with the pursuit of human development in terms of fulfilling our potential. However, behavioral sciences (as will be elaborated below in the section on “nudging”) are of great value as “urges” can get in the way of developing our potential and hence knowing how to deal with this is quite useful.

It is also key in Sen's view to understand that having the same resources at their disposal (e.g. the existence of a university degree in architecture) does not mean they will be able to convert resources into the same level of capabilities (real choice) as others could. What he refers to as differing conversion factors creates a considerable degree of variety in outcomes. Internal conversion factors are individual ones (physical, mental) while external ones relate to constraints deriving from social or family dynamics, formal rules or informal regulations (culture) as well as our physical environment. In all cases, their variety explains why similar resources (endowments such as income, wealth, physical assets, public goods and services, ...) do not translate into similar outcomes in terms of functionings for each person.

This means that when we understand equality as treating people equally by giving everyone the same resource, then this actually results in inequality (Chiappero-Martinetti, E. and Venkatapuram, S., 2014, "The capability approach: a framework for population studies", in *African Population Studies* vol 28, p. 708-720).

Similarly, CRESSI (Creating Economic Space for Social Innovation), a 7th EU framework programme for research and innovation, states that internal conversion factors (intersections of various characteristics of people, e.g. their age and gender) can be factors of marginalization if they locate individuals into a position where they cannot equally convert even equally distributed resources. Of course, unequal distribution of resources do then also NOT imply marginalization if the position of people can compensate for this (they can convert the resources better). CRESSI deliverables can be found via <http://www.sbs.ox.ac.uk/faculty-research/research-projects/cressi>.

The "position" people have is determined by "social structures" which are regarded as external conversion factors. Three "structures" are referred to:

- network position of interconnected actors (individuals, organisations...) which refers to how central actors are (e.g. measured via centrality measures in social network analysis);
- cognitive frames (culturally shared meaning) which affect how we perceive reality (like filters);
- institutions (systems of formal rules like regulations or informal ones like prevalent behavioural patterns and norms). Formal rules can exist de jure (on paper), but not de facto or have a very different form de facto. Differences are usually revealed by studying the enforcement mechanisms in place and their (lack of) success.

These are irreducible (they cannot substitute for each other).

Apart from being conversion factors, they can also be seen as an endowment, something people can use. They influence decision-making by their effect on reasons and resources.

4. Agency: process freedom to create new capabilities

For Sen, it is also crucial that people are able to exert "agency", or, the freedom to create new freedoms, hence expand our capabilities, ourselves. This allows to tackle some of the conversion factors. In fact, what happens is that extra resources are mobilized to modify conversion factors. For example, for a young person with a learning disability, several extra resources such as giving extra time, assigning a mentor etc. may help equalize the conversion of an available resource such as access to a university degree into the desired functioning of obtaining the degree (or rather the knowledge the degree symbolises). Agency is also referred to as "process freedom".

Agency is important for two reasons. First, a mere focus on expanding people's functionings would allow someone to do this by force. From this point of view it would, for example, be acceptable to coerce people into a job e.g. by threatening to take away benefits or harassing them constantly, because work is something people generally would agree to value. Furthermore, people should be free to refrain from a functioning for good reasons if and when they so choose. In the example provided, the young person may choose to refrain from becoming an architect because he or she values also to care for a younger sister.

This has implications for public interventions: imagine the public service uses narrow service protocols that force people into a limited set of standard "solutions" that they can take or leave (and sometimes not even leave). In addition, they say to the "target" group that they should comply because it is "for their own good" and "we know best what is good for you".

This would NOT qualify as a social innovation given that the definition of social innovation focuses NOT only on "improving human well-being" but ALSO on "enhancing individual's capacity to act".

Agency is also closely connected to empowerment. For Sen agency is intrinsically valued as "self-direction". From the perspective of its instrumental value "empowerment" is actually to be defined as a sub-set of agency that can be exercised through e.g.:

- access to information;
- participation/inclusion (allows people to express themselves to have influence incl. via democracy as a political process, via local decision-making);
- local organization capacity;
- social mobilization that gives people voice and allows to demand change (e.g. strengthening of grass-roots organisations, and civil society);
- accountability.

Empowerment (Ibrahim, S. and Alkire, S., 2007; Agency and Empowerment, OPHI Working Paper Series) is essentially about increasing power as "control" or real ability to effect change, in other words, about increasing agency. There are four kinds of power for Ibrahim and Alkire:

- **Power over:** ability to resist manipulation i.e. control over personal decisions rather than be controlled by local power relations and hierarchies;
- **Power to:** create new possibilities i.e.
 - via household decision-making (who usually decides in the household and can this person be influenced "if one wants to" – respecting that one may not actually want to and delegates one's power to someone else freely)
 - sometimes constraints originate outside of the household and household decision-making, while reflecting choice, does not reveal what is driving this choice; hence power to create also derives from domain specific autonomy (why do you do things – is it out of desire to avoid punishments or to gain a reward, avoid blame or receive praise or rather based on your own values and interests);
- **Power with:** to act in groups i.e. changing aspects in one's life at the communal level in terms of ability to change things together if people actually want to;
- **Power from within:** to enhance self-respect and self-acceptance i.e. changing aspects in one's life at the individual level, in terms of willingness and ability to contribute to this change.

Similarly for CRESSI, agency and social innovation aim at changing social structures (external conversion factors and endowments) rather than to attempt to directly (if possible) change people's internal characteristics. However, this happens only in the longer term for institutions and cognitive frames and in the mid-term for network positions.

Change of structures happens via policy-induced (top-down) or citizen-induced (bottom-up) forces. Of course, for the latter, a relevant amount of individuals (marginalised and their supporters) need to group together (form a network) and structure their goals (share a cognitive frame) to create the power to exert pressure for change e.g. in institutions.

Social networks such as advocacy groups, intellectuals, experts or social movements indeed establish the collective power to influence an institution such as market participation e.g. on the supply side of market power in the case of cooperatives, community based enterprise, mobilizing stakeholders, sharing infrastructures and knowledge, ... so they can compete with other actors. Also, the demand side can be strengthened e.g. as in the Grameen Bank micro-credit model where lenders from a community are responsible for each other. But it is also possible to establish common power to span supply and demand such as in local, alternative currencies or in fair trade.

Social innovation can also target at weakening or dissolving networks that are responsible for marginalization, e.g. via transparency initiatives.

Dominance of power of some relative to others, is established on the basis of institutionalization i.e. by the extent that the control by "those in charge" is embedded in laws and norms of the overall social group. Social innovation may then attempt to create new institutions (e.g. especially when there is a void that keeps marginalization in place like a law that creates discrimination) or support enforcement / access to existing ones (e.g. protecting property of the marginalised).

Social innovation may also attempt to influence cognitive frames at the level of the marginalized themselves (as certain frames may actually lead to being more marginalized), groups that influence external conversion factors of the marginalised or cognitive frames that span both of these actors (e.g. as in the case of a shared conception between employers and mentally disabled persons that the latter cannot function in regular companies, which has been disproved by private ICT companies who massively employ persons on the autism spectrum). Some cognitive frames may actually affect the legitimacy of social innovation as a process, e.g. via the human rights movement.

When one of the three structures is altered, this can result in an alteration of power relations between agents and subsequently to actions that alter the other structures. Change in the connection between structures represent the moment in which new spaces for opportunities open up and hence for a social innovation to take root. For example, community led organizations (network) also spread cognitive frames as they organize around shared ideas. Advocacy movements (network) also aim at changing institutions which gain legitimacy from cognitive frameworks. Also, institutions (e.g. a law) influence who can participate in networks and make cognitive frames relevant. Cognitive frames from their side also determine network participation (who is supposed to be in or out).

Social innovation is therefore always a contested struggle of power or a process of empowerment. To the extent that social innovation can create more agency by "empowerment" however, it may directly decrease marginalization. Change then derives from shifts of power.

CRESSI further states that simply participating in a social innovation process from the bottom-up may enhance/change the agency of individuals, because motivation, sense of belonging and taking on responsibility for a greater cause affect internal conversion factors like personal skills. Also, through the social network and the access to personal contacts, increased social interaction, common experience and the ensuing imitation of peers' divergent social behaviour, people's personal values, beliefs, perspectives and informal institutions can evolve more easily towards a different, common set.

However, it is possible that marginalized populations are also excluded from social innovation itself. This then perpetuates the marginalization. This also applies to the nature of their participation in networks. If people are stuck in tight social bonds that prevent upward mobility or that are used to promote the exclusion of others. Trust, cohesion and participation within a network may actually be used to reproduce the relative positions of advantage and exclusion. In this sense, knowing how many contacts, of which different kinds, with whom and of what quality and how this is changing is an interesting way to observe if social innovation is creating a dynamic.

When looking at social innovators rather than the people they are innovating for, these appear to have originated both from highly cohesive networks of people with similar characteristics and interests (with the most weight on “bonding” social capital) as well as more varied ones (e.g. via links to politicians or local entrepreneurs). While such “bridging” social capital embedded in the latter and the closeness to other power centres may imply greater impact, it may actually also imply greater compromise.

Still, the role of “institutional entrepreneurs” should not be underestimated. These actors bridge diverse stakeholders by establishing a certain position within a field, they theorise new practices, they institutionalise them by connecting them to actor’s routines and values and they create visions and mobilise allies.

5. Social in means

The capability approach also needs to be supported by a set of principles. It is these principles that give meaning to social innovation being social in “means”.

Equity, participation and empowerment and sustainability are such frequently mentioned key principles:

- Equity draws attention to those who have unequal opportunities due to various disadvantages and may require preferential treatment or affirmative action;
- Participation and empowerment imply that people need to be involved at every stage, not merely as beneficiaries. Equity and participation/empowerment are important to ensure that there is not only human development but also greater equality in it.

Sustainability is also a key principle which refers to advancing human development such that outcomes progress in all spheres – social, political and financial – endures over time. This principle is needed to ensure that there is also development and equality over time for future generations. These cannot participate in today’s decision-making hence safeguards are required.

6. Human development

Human development then refers to an expansion of people’s real freedoms (capabilities / opportunity freedom), enabling them to flourish and at the same time, supporting people and groups to help themselves (agency / process freedom). This development respects the principles of equity, empowerment and participations, as well as sustainability.

7. Application of the concepts in practice

Social innovators should be guided by these concepts when thinking about whether or not, they are developing a truly “social” innovation. This would imply that whatever service they conceive, should NOT only improve well-being in terms of functioning but at the same time increase opportunity and process freedom for those who participate in it.

Two key questions help ensure this in practice:

- [Are initiatives designed in a way that increases capability as well as well-being?](#)

As a core principle, the ongoing deliberative participation process mentioned above should be conducted locally with the users of the service by frontline staff, as a normal part of their work in providing their service. What the exact outcome(s) of engaging with a service should be, should NOT be determined by policy-makers (incl. ESIF programme managers) who are far removed from the daily realities of the users of the service. What matters and what can be done about these realities has to be co-determined by service providers and users.

This is a social process that ensures that the functionings that users value are also reasonable. Hence, the task of the service provider is not to “please” the user of the service at all costs but to help make sure they also understand the give and takes of their and other’s views and reasons. In order for frontline staff to be able to conduct such a social process, they must therefore have suitable competences and attitudes.

When designing initiatives the same social process that helps identify what people have reason to value should be placed centrally. Empathy, understood as taking the perspective of the users, is a first step in determining what range of actions can be undertaken with a diverse base of potential users of the service. Actively inquiring about variations in their conversion factors is key. This is done by asking what held people back in the past to make the progress in their lives they wanted to make as well as understanding in detail why existing services fail to deliver equally well in terms of well-being for all users (even leading to negative outcomes for some of their users).

Next, possible actions are always tested in practice first with some of the users, to see if they work to improve the situation. In this way, an appropriate understanding arises also of the different conversion factors of different individuals when offered resources (e.g. a repair service, a social service) that lead to different levels of capabilities (opportunity) unless they are taken into account.

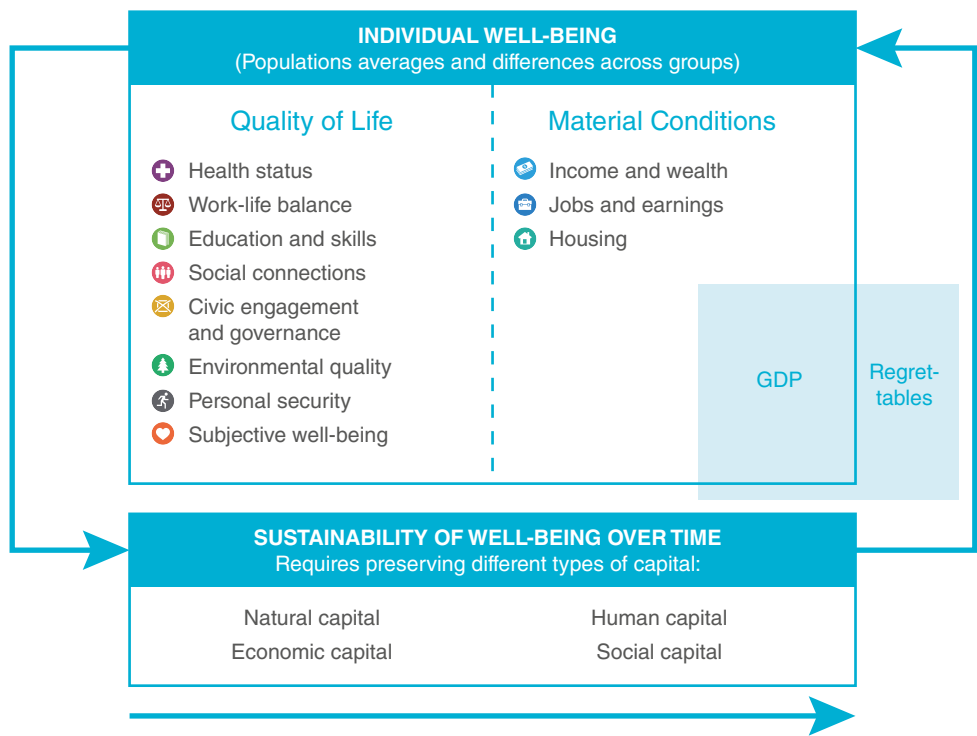
In fact, in true social innovations, this initial design process continues within the ensuing implementations process. Frontline service providers continuously exhibit empathy and question if the actions they propose lead all of their users to progress sufficiently towards their desired functionings. If not, then, a (re)design of the service is again needed. Measurement is a key element in guiding these in-service reflections (see the next point below).

This way of thinking of intervention design in no way means that policy-makers have no role. In fact, they still play a crucial role in trying to generate public debate and foster consensus as to the key societal challenges that need to be addressed. But they should not determine exactly how to these are to be tackled in practice for any given time.

- Are both improved functionings measured in terms of the well-being they generate as well as capabilities?

When discussing how to measure functionings stock should be taken of work done by the OECD regarding the concept of well-being for the “Better Life index” (see <http://www.oecdbetterlifeindex.org/>). This contains the following dimensions and measures:

Figure 4: OECD Better Life Index



Source: OECD, 2013

The Better Life index contains mostly what are called “objective indicators” of well-being: what can be seen by others (the only exception is satisfaction with water quality as an objective measure would be e.g. a scientific measure of purity of water).

As of 2011 (see OECD, 2011, Compendium of OECD well-being indicators):

Material conditions:

- Income and wealth:
 - Net adjusted disposable income per person
 - Household financial net wealth per person
- Jobs and earnings:
 - Employment rate
 - Long-term unemployment rate
- Housing:
 - Number of rooms per person
 - Dwelling with basic facilities
- Health:
 - Life expectancy at birth
 - Self-reported health status

- **Work and life:**
 - Employees working very long hours
 - Time devoted to leisure and personal care
 - Employment rate of women with children of compulsory school age
- **Education and skills:**
 - Educational attainment
 - Students' cognitive skills
- **Social connections:**
 - Contacts with others
 - Social network support
- **Civic engagement and governance:**
 - Voter Turn-out
 - Consultation on rule-making
- **Environmental quality:**
 - Air pollution
- **Personal security:**
 - Intentional homicides
 - Self-reported victimisation

As of 2013 several extra measures were integrated into the index:

- Housing costs (affordability)
- Education expectancy (educational opportunity for children who are in school today)
- Satisfaction with water quality
- Short job tenure (job insecurity)
- Adult competencies (cognitive skills)

While objective measures deliver some information, they are not very useful as such for the capability approach as the same objective condition can be assessed subjectively in a very different way from individual to individual. The capability approach assumes this and hence requires a different method of measuring.

Fortunately, the OECD also discusses measuring subjective well-being. This captures a valuation people make internally and hence this is subjective. The object of the subjective valuation are the same broad dimensions that the objective measures attempt to measure (e.g. health, housing, ...).

Subjective well-being can be approached in three different ways:

- "Hedonic" measures:
 - Measures of life satisfaction;
 - Measures of affect;
- "Eudaimonic" measures of self-actualisation, vitality (feeling alive and alert, having energy available to the self), mental health, meaning in life ...

The OECD (2013, OECD Guidelines on measuring subjective well-being) provides the following examples:

Life satisfaction:

Please imagine a ladder with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you.

B1. On which step of the ladder would you say you personally feel you stand at this time? [0-10]
The following question asks how happy you feel, on a scale from 0 to 10. Zero means you feel “not at all happy” and 10 means “completely happy”.

B2. Taking all things together, how happy would you say you are? [0-10]

The following questions ask how satisfied you feel, on a scale from 0 to 10. Zero means you feel “not at all satisfied” and 10 means “completely satisfied”.

B3. Overall, how satisfied with your life were you 5 years ago? [0-10]

B4. As your best guess, overall how satisfied with your life do you expect to feel in 5 years time? [0-10]

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item. Please be open and honest in your responding. The 7 point scale is as follows:

1. Strongly disagree.
2. Disagree.
3. Slightly agree.
4. Neither agree nor disagree.
5. Slightly agree.
6. Agree.
7. Strongly agree.

B5. In most ways my life is close to my ideal [1-7]

B6. The conditions of my life are excellent [1-7]

B7. I am satisfied with my life [1-7]

B8. So far I have gotten the important things I want in life [1-7]

B9. If I could live my life over, I would change almost nothing [1-7]

More specific “domain” related questions are:

The following questions ask how satisfied you feel about specific aspects of your life, on a scale from 0 to 10. Zero means you feel “not at all satisfied” and 10 means “completely satisfied”.

E1. How satisfied are you with your standard of living? [0-10]

E2. How satisfied are you with your health? [0-10]

E3. How satisfied are you with what you are achieving in life? [0-10]

E4. How satisfied are you with your personal relationships? [0-10]

E5. How satisfied are you with how safe you feel? [0-10]

E6. How satisfied are you with feeling part of your community? [0-10]

E7. How satisfied are you with your future security? [0-10]

E8. How satisfied are you with the amount of time you have to do the things that you like doing? [0-10]

E9. How satisfied are you with the quality of your local environment? [0-10]

For respondents who are employed only:

E10. How satisfied are you with your job? [0-10]

Affect:

The following questions ask about how you felt yesterday on a scale from 0 to 10. Zero means you did not experience the emotion “at all” yesterday while 10 means you experienced the emotion “all of the time” yesterday. I will now read out a list of ways you might have felt yesterday.

C1. How about enjoyment? [0-10]

C2. How about calm? [0-10]

C3. How about worried? [0-10]

C4. How about sadness? [0-10]

C5. How about happy? [0-10]

C6. How about depressed? [0-10]

C7. How about anger? [0-10]

C8. How about stress? [0-10]

C9. How about tired? [0-10]

C10. Did you smile or laugh a lot yesterday? [0-10]

Another, more refined, way to measure affect is the “day reconstruction method”. The questions should be used together in the manner described below, and in conjunction with a time-use diary. The questions are repeated for three randomly selected time-use diary episodes.

I now want to ask you some questions about how you felt yesterday.

The computer has selected three time intervals from your diary that I will ask you about.

[For each episode:]

Between [start time of episode] and [end time of episode] yesterday, you said you were doing [activity]. The next set of questions asks you how you felt during this particular time.

The following questions ask how you feel about yourself and your life, on a scale from 0 to 10. Zero means you did not experience the emotion “at all” at that time while 10 means you experienced the emotion “a lot” at that time.

F1. Overall, how happy did you feel during this time? [0-10]

F2. Overall, how calm did you feel during this time? [0-10]

F3. Overall, how angry did you feel during this time? [0-10]

F4. Overall, how sad did you feel during this time? [0-10]

F5. Overall, how much pain did you feel during this time? [0-10]

F6. Overall, how tired did you feel during this time? [0-10]

F7. Were you interacting with anyone during this time, including over the phone? [yes/no]

If yes, with whom were you interacting? [include people on the telephone/online chat, etc.]

Note: [Activity] refers to the respondent’s primary activity for the episode being discussed.

Eudaimonic measures:

I now want to ask you some questions about how you feel about yourself and your life.

Please use a scale from 0 to 10 to indicate how you felt. Zero means you “disagree completely” and 10 means “agree completely”.

D1. In general, I feel very positive about myself [0-10]

D2. I’m always optimistic about my future [0-10]

D3. I am free to decide for myself how to live my life [0-10]

D4. I generally feel that what I do in my life is worthwhile [0-10]

D5. Most days I get a sense of accomplishment from what I do [0-10]

D6. When things go wrong in my life it generally takes me a long time to get back to normal [0-10]

I am now going to read out a list of ways you might have felt during the past week. On a scale from 0 to 10, where zero means you felt that way “not at all” during the past week and 10 means you felt that way “all the time” yesterday, can you please tell me how much of the time yesterday...

D7. ... you had a lot of energy? [0-10]

D8. ... you felt calm? [0-10]

D9. ... you felt lonely?

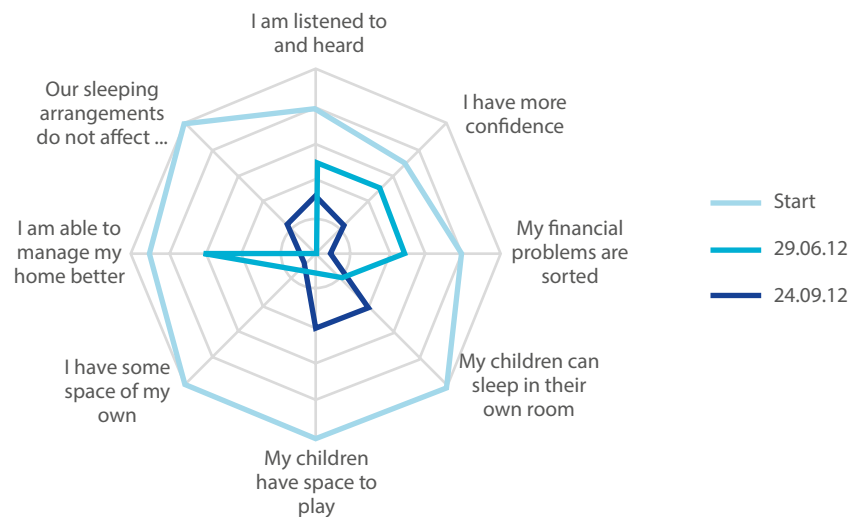
Of course, all of these measures (and there are many more such scales) can be targeted not at life in general but at specific domains of life (for Sen these should be domains of “functionings”) such as for example reflected in the topics of the OECD Better Life index.

However, for measurement to be in compliance with the capability approach, the measures (be they about affect, satisfaction, meaning, etc.) should be applied to functionings that are put forward by the users of service themselves and that hence can be completely heterogeneous. There is no point in as-

king subjective valuations of beings and doings that people do not consider very relevant at the specific point in their life when they are asked about it (e.g. imagine asking the young person who wants to be an architect whether he/she is satisfied with housing conditions. They may not be but it may not matter to them as they chose to live in poorer accommodation in order to be able to pay for the studies).

Such examples of fully customized ways of measuring exist. Below we show such a method, courtesy of Vanguard consulting (<https://www.vanguard-method.com/>).

Figure 5: spider diagramme of achieved functionings and capability gaps



This tool requires asking a user of a service what really matters to them when starting: this inquires about their functionings. Over time, the users are asked to assess subjectively where they stand relatively to where they want to be. This can be asked in hedonic or eudaimonic terms, preferably both. Hence, this show some kind of gap: being halfway between 0 (the starting moment) and 10 really does represent that someone has only travelled half of the road toward being where they want to be in terms of various kinds of functioning (fully realizing a being or doing they value). This gap represents their capability: can they truly enjoy the level of functioning they desire? Or not fully? Progress on the grid reflect an increase in capability until the outer edge is reached and opportunity freedom is 100%. Of course, in objective terms, there is no way to say what a 50% increase means.

Variations of this method exist but they all share that whatever items are put forward as “objectives” or the “purpose” of engaging with the service should be derived from a dialogue between frontline service providers and service users themselves in words that are meaningful for them. This means this is to be co-created, hence avoiding that users put forward destructive goals, because service providers would discuss why this would not be acceptable. At the same time, service providers would engage with users to think about broader capability areas that they might be overlooking.

Hence this approach is completely at odds with measurement efforts that are top down, set by a central policy-maker and force everyone to be judged by these policy-makers in the same way on the same measures rather than allowing them to judge themselves where they are in terms of where they want to be, of course within the scope of the broad rationale that the service was set up for.

Next to inquiring about the capability gap, service providers should also inquire actively about constraints and reasons for (not) engaging in the desired level of particular functionings. This reveals conversion factors that may have to be dealt with by helping users exert their agency (process freedom).

Finally, frontline services providers should inquire about whether the user is exerting and increasing agency (process freedom). This can be done by drawing on psychologists Ryan and Deci's self-determination theory and a variety of scales they have developed to measure the degree of autonomy people experience (see e.g. <http://www.selfdeterminationtheory.org/basic-psychological-needs-scale/>). For example, one such scale, in relation to specific practices, feelings and belief, asks "Why do you or would you do [feel, believe] this?". Four possible reasons reflecting the different types of internalization can be provided, and participants rate each reason in terms of the degree to which it applies for them, using a 5-point scale from not at all because of this reason (1) to completely because of this reason (5). Specifically, each practice is rated with the following definitions in mind:

- **A) External Regulation:** Because of external pressures (to get rewards or avoid punishments). I would engage in this behavior because someone insists on my doing this, or I expect to get some kind of reward, or avoid some punishment for behaving this way.
- **B) Introjected Regulation:** To get approval or avoid guilt. I would engage in this behavior because people around me would approve of me for doing so, or because I think I should do it. If I didn't do this I might feel guilty, ashamed, or anxious.
- **C) Identified Regulation:** Because it is important. I would engage in this behavior because I personally believe that it is important and worthwhile to behave this way.
- **D) Integrated Regulation:** Because I have thoughtfully considered and fully chosen this. I have thought about this behavior and fully considered alternatives. It makes good sense to me to act this way. I feel free in choosing and doing it, and feel responsible for the outcomes.

The scores need to be compiled into an index. This is usually done by attaching a weight of -2 and -1 to resp. A and B and 1 and 2 to resp. C and D and then creating a weighted average of all responses. In addition, Ibrahim, S. and Alkire, S. (2007; Agency and Empowerment, OPHI Working Paper Series) also propose to measure empowerment, as distinct from agency in terms of the four different kinds of "power" as listed above.

- **Power over:** Q(uestion) How much control do you feel you have in making personal decisions that affect your everyday activities? (5= control over all decisions- 0=control over very few);
- **Power to:**
 - Household: Q1 When decisions are made regarding the following aspects of household life, who is it that normally takes the decision (respondent / spouse / jointly / someone else / jointly with someone else / other); aspects are e.g. minor household expenditure, what kinds of tasks you will do etc. Q2 If the answer to Q1 is different to "respondent", to what extent do you feel you can make your own personal decisions regarding those issues if you want to? (4= to a high extent- 1=not at all);
 - Domain specific autonomy: for the various domains of activity, Q1 how true would it be to say that your actions with respect to (domain) are motivated by a desire to avoid punishment or gain reward; Q2 idem to avoid blame, or so that other people speak well of you?; Q3 motivated by and reflect your own values and / or interests. It should be clear that this scale is almost identical to the scale mentioned above for measuring agency;
- **Power from within:** Q1 Would you like to change anything in your life? Q2 What three things would you most like to change? Q3 Who do you think will contribute most to any change in your own life? (list up to 2 from: myself / my family / our group / our community / local government / state government / other (specify);
- **Power with:** Q Do you feel that people like yourself can generally change things in your community if they want to? (5=Yes, very easily – 1= No, not at all).

The case which is presented below embodies explicitly the capability approach, both in terms of the nature of the service as well as in measurement.

CASE 1: UK LIFE PROGRAMME BY PARTICIPLE

Background of the case

The UK troubled families agenda started under the Labour government in 2008 when Gordon Brown, following a visit to the Dundee Project (one of the first interventions in the UK to focus on parenting skills with what were then termed 'chaotic' families), declared that: *"most mums and dads do a great job – but there are those who let their kids run riot and I'm not prepared to accept it as simply part of life"*. Brown was echoing a widely held belief that family breakdown lies behind a wider sense of social breakdown and that something needed to be done.

The Labour government declared there to be in excess of 100,000 families in need of intervention and estimated that each family cost the tax payer £250k a year.

In 2012 the Troubled Families Unit (TFU) and the Department of Communities and Local Government defined a troubled family as having three of the following criteria:

- Involved in youth crime or anti-social behavior;
- Children who are regularly truanting or not in school;
- An adult on out-of-work benefits;
- Cause high costs to the taxpayer.

The Life Programme defines families in chronic crisis as having the following characteristics:

- Current and historical experience of multiple and entrenched risk factors such as domestic violence, substance misuse, housing issues, mental ill-health, child protection concerns, anti-social/offending behaviour and children with school attendance issues;
- Particularly costly to the public purse as a result of long-term engagement with services, especially social services and police; often recipients of intensive but ineffective single-focused interventions and considered 'stuck' in the system;
- Family members at risk of losing their home, children, or liberty.

The Life Programme was designed in partnership with Swindon to work with such families in entrenched social, economic and emotional crisis. Life has continued to evolve through practice and partnership with Wigan, Lewisham and Colchester. Life is focused on supporting families to independence (as opposed to managing immediate crises). The programme's approach is developmental: sustained, high trust relationships with the Life Team support the development of new capabilities within each family to lead the independent lives they truly want. Most of the information is drawn from a report published by Participle in 2014 (see sources below).

Innovation process

The whole process to develop Life at Swindon took 18 months and is described below.

a) Immersion

Members of the Participle team first spent eight weeks alongside a number of families that the Swindon Partners identified as most problematic, experiencing the lived reality of the families' lives.

They also gave families cameras to film 'things we wouldn't know about them'.

Simultaneously they began to map the State's interventions in these families' lives.

b) Insights

In Swindon it was found that there were 73 services on offer for families in crisis, run from 24 departments. Unable to identify any family that had been successfully transitioned out of social services, they began making visual maps with front line workers of the families' history with these services. The pattern was for repeated interventions driven by crisis. Once an immediate crisis was managed, hard pressed front-line workers would divert their attention elsewhere.

Another insight was that typically, front-line workers spent 74% of their time on administration, 12% on liaison and just 14% of their time on work with family members. Most of this 14% face-to-face time was spent on data collection, to fulfil the remaining 74% (the demands of the forms), rather than in relationship-building and engaging in people's lives to find out how they could best serve them.

Also, families were quite vocal about this confused system and its inability to support them: "We'd have 17 people at these meetings. They'd start by saying I'm from such a place, I'm from here and by the time they got to the end I hadn't got a clue who the second person was, and they wouldn't be talking to me, they'd talk about me, or if someone dropped out, their fill in would have to read from a piece of paper what had happened at the last meeting. I'd just be sat there listening to it."

Frontline workers are all too aware of the problems and many feel demoralised and constrained by the services and systems they work within.

Nevertheless, both sides feel at once judged by, and judgemental of, the other, without trust, exhausted and in many cases hopeless, having lost sight that any change might be possible.

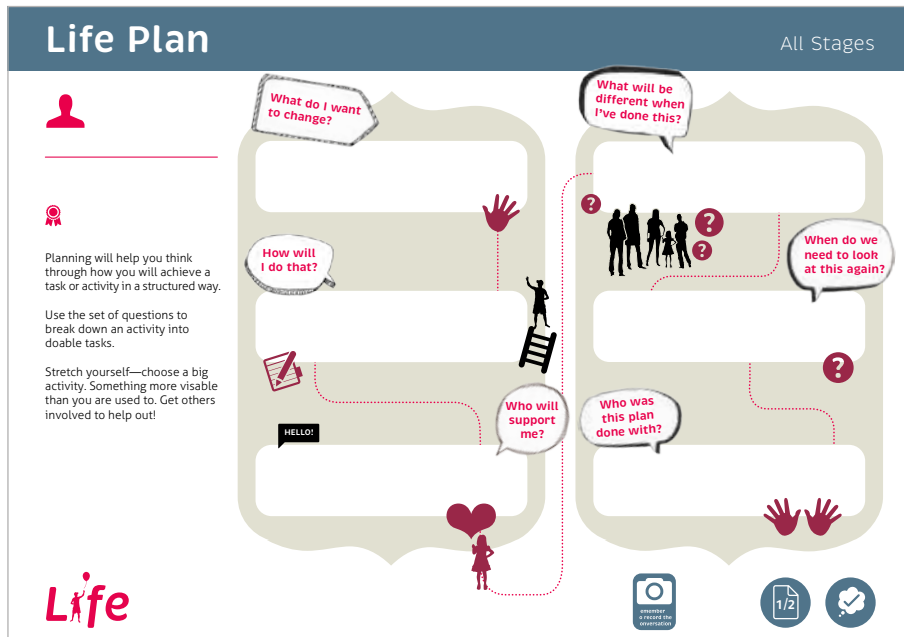
c) Prototyping

Working with a smaller group of four families, Participle began to create a different approach, based on the fundamental premise that families needed to develop their own solutions and that, in order to do this, they needed to develop high trust relationships with those working with them and repair relationships within their own family. In addition, crises facing the should not be seen as individual problems, but needed to be seen in the wider context of a society that has winners and losers and where social inequalities were widening.

A first prototype was putting together a team of front line workers. Those who volunteered were interviewed by the Participle team AND family members. The involvement of family members in the selection process is still core to the Life programme. The families were looking for individuals who would talk to them 'without a script'. They were looking for honesty, for conversations that would be free of jargon and condescension. Designing the interview format, families chose real life examples – 'what would you do when my son starts kicking off?'

Other prototyping concerned activities with families and workers. With parents and children, the team went paintballing, ate together at McDonalds, started to repair homes and gardens and wherever possible we involved others in the community. Many were successful in reaching out to other members of the community and challenging the stereotypes that neighbours held, which, in turn, gave families who felt ostracised and socially isolated, the courage to take further steps.

Practical activities built trust within families. Key was asking the families to decide how they wanted to use the team's support and what they wanted to change. By not bringing an agenda, encouraging families to talk about their own aspirations and making them feel those aspirations were valid, the families defences started to fall away and they went into action. This turned into the Life Plan tool depicted below.



Around these core activities Participle tried numerous other community-based experiments to create local opportunities: groups to do up the neighbourhood, to share child-care, to go out in the evening, even a small fund to support community enterprises with some success. Some of these experiments were abandoned over time (the enterprise scheme was not legal for those on benefits), others were folded into what became the Life programme.

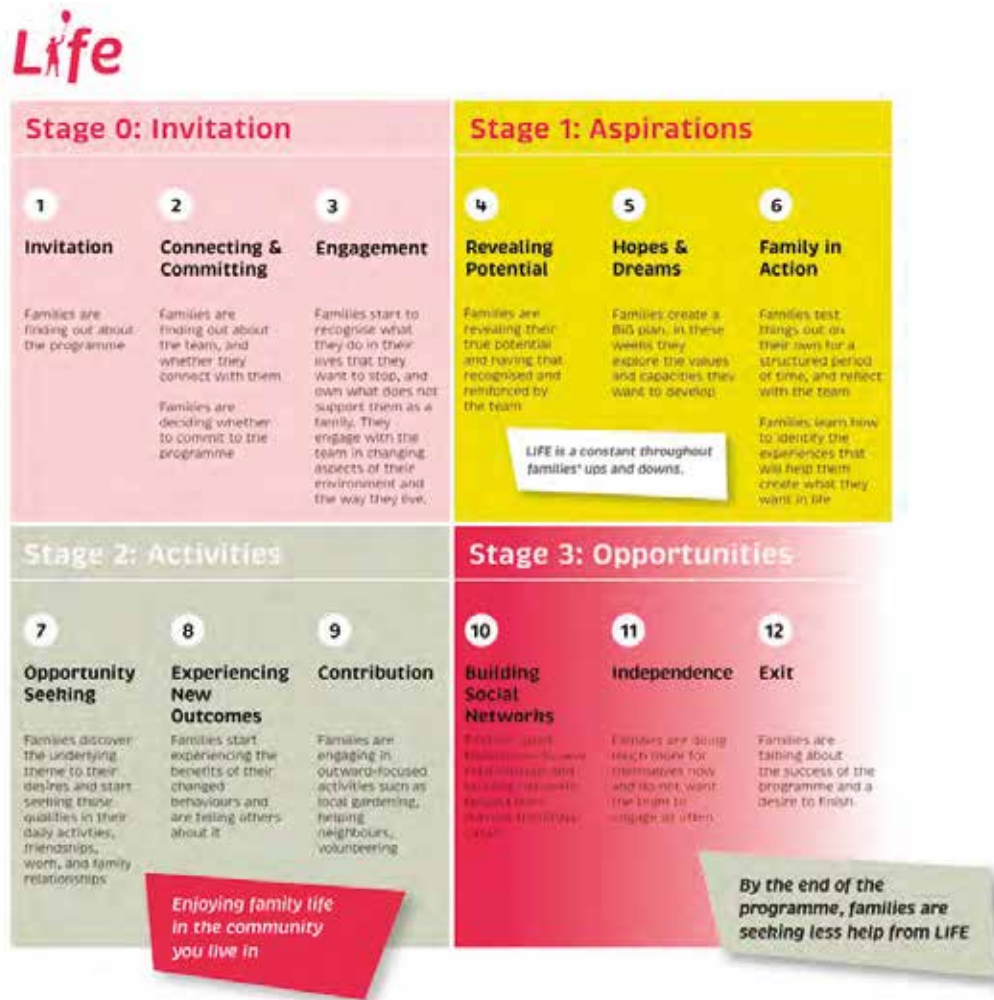
d) Evaluating

Within 12 weeks the team had saved Swindon an estimated £250k through the prevention of eviction orders, two children no longer needing protection plans and attending school, the reduction in anti-social behaviour and, in one case, a child who was about to be taken into care was able to stay with their family. Families who had previously been considered too recalcitrant to engage with social services were taking the important steps to change their own lives and were recommending the Life programme to other families and to their wider family members.

At the same time the systemic barriers to change and the importance of leadership were becoming increasingly evident. The reality of the challenges facing families at times led to tension in the relationship between Life and other services. Families who needed another chance to remain in their homes, or who were ready to return to school, despite their reputation made visible the fault lines between the targets and demands on hard pressed services and the needs of vulnerable families who had been opened to change. The creation of a Life Forum where professionals and leaders could share and resolve these tensions was important in moving forward.

e) Synthesising

By 2010 the core of the current Life programme was in place at Swindon. Life is a developmental programme, based around 4 broad stages: Invitation, Aspirations, Activities and Opportunities (see figure below).



a) Invitation

Most public service interventions happen at a time of crisis. Once the risk is over, the intervention ends. Evidence shows that families need to be open to change for it to succeed. The invitation approach has engaged families who had been previously resistant to statutory service intervention.

In the first instance, the Life Team manager travels to a family’s home, explains the programme, shares an invitation pack and a DVD made by other families. The family are invited to meet members of the Life Team informally – there are no assessments or forms at this stage. Families are encouraged to identify and plan an activity for the whole family and team to do together and then family members can choose who they would like to work with one-to-one.

b) Aspirations

This stage marks the beginning of the ‘real work’ of the Life Programme. While the Invitation stage is about building a foundation of authentic relationships, trust and commitment, the Aspirations stage is about encouraging families to think about the life they want to lead. The Life Programme looks at each member of the family as an individual with their own needs, interests and aspirations and also the constraints they have. This starts with each family member being supported to identify their hopes and dreams, build their confidence and start to reveal potential.

The three core Life Tools of the Life Star, Talking Triangle (see below) and Life Plan assist this process but they are always adapted to the context – it could be drawing with young children or a kick around with a teenager.

c) Activities

The next phase supports family members to move into action and start to explore new activities, relationships and routines. The Invitation and Aspirations stages mainly focus on the families' relationships with the Life Team and with each other, but the Activities stage supports families to seek out new opportunities and experiences. This could be starting a training course, undertaking voluntary work, trying out a new hobby, making amends with a neighbour and making new friends in the local community.

Family members can have a high dependency on the Life Team at this stage as they find their feet. Supporting families to establish new ways of doing things can often involve setbacks and is likely to last a number of months. The Life Team walks alongside families and also, crucially, stays there when they inevitably have challenges along the way. This stage is about supporting families to plan and make changes with support as individuals and as a whole family. It focuses on building resilience and capabilities.

d) Opportunities

The final stage of the programme is about supporting families to sustain the changes they have made and embedding new relationships and activities in their community as part of a family-led exit from the Life Programme. The aim is that activities and experiences that family members tried out in the Activities stage become a new routine and way of life – families have found what works and are supported to stick with it. Families can often struggle when services close creating the paradoxical incentive to reverse the improvements that have been made, so Life Teams stay alongside but gradually reduce their involvement as families become more independent and capable.

This is likely to still mean maintaining some kind of contact but focusing on families as 'graduates' of the Life Programme. Many family members want to come back and support the Life Programme through volunteering, running activities or peer support groups – a developmental opportunity for them but also valuable for other Life families.

e) Team and resources

The programme is team based – a team rather than a key worker engages with families, working to a core set of principles called the Fundamentals and in possession of key competencies.

The Fundamentals of the Life Programme are:

- Offering an Open Invitation
 - Inviting families to change rather than coercion and sanctions to do so;
 - But being persistent in that offer;
- Being Family Led
 - Life teams start where families are at and help them identify what they want to change and how – being open to change is a core criteria as Life believes that sustainable change is only possible if it is identified and committed to by families themselves.
- Development not Just Fixing
 - Life teams aim to equip families with the tools they need to develop their capabilities to live healthier, happier, lives in the long-term, as well as supporting them to resolve practical problems in the short-term.

- Co-building Capabilities
 - The Life Programme aims to help families discover and develop they capabilities – the ability to value themselves, design a life they value, to have meaningful relationships and live in their community.
- A Team, Not a Key Worker
 - Life Teams work as a reflective unit around families as well as building one to one relationships between individual team and family members.
- Being The Change
 - Team members bring themselves to their work and share personal experiences as part of their professional role.
- Being Authentic
 - Teams act with compassion and are open and honest in order to build and model real relationships of trust with families – relationships that involve challenge as well as support. This Fundamental was originally “Being Loving”.

These fundamentals require team members that have certain characteristics and capabilities as depicted below.

Fundamentals	Characteristics	Capabilities
Being loving	<ul style="list-style-type: none"> • Nurturing • Caring • Compassionate 	<ul style="list-style-type: none"> • Ability to build real relationships based on trust and mutual respect • Ability to model loving relationships • Ability to understand importance of family relationships and dynamics
Being The Change	<ul style="list-style-type: none"> • Self-aware • Authentic • Perceptive 	<ul style="list-style-type: none"> • Ability to share their own experiences, have insight into their own needs and manage the impact of work on them • Ability to use self professionally
Team not a Key Worker	<ul style="list-style-type: none"> • Collaborative • Communicative • Insightful 	<ul style="list-style-type: none"> • Ability to work closely and collaboratively with families, Life Team colleagues and professionals in the wider system
Co-building capabilities	<ul style="list-style-type: none"> • Positive • Empowering • Reflective 	<ul style="list-style-type: none"> • Ability to help people discover and develop their strengths, overcome barriers and learn from setbacks
Development not fixing	<ul style="list-style-type: none"> • Curious • Patient • Perceptive 	<ul style="list-style-type: none"> • Ability to reflect, generate insights and support families to do the same • Ability to hold close relationships with families but still ‘see the bigger picture’
Offering an open invitation	<ul style="list-style-type: none"> • Resilient • Persistent • Supportive • Challenging 	<ul style="list-style-type: none"> • Ability to reflect, generate insights and support families to do the same • Ability to hold close relationships with families but still ‘see the bigger picture’
Being Family-Led	<ul style="list-style-type: none"> • Creative • Flexible 	<ul style="list-style-type: none"> • Ability to encourage and support decision-making and planning in others

The team around the family approach is unusual in the UK context, but feedback from families and teams is that it is hugely beneficial. It enables the benefits of a key worker model to be maintained, with one to one ‘key worker’ relationships between individual family and team members but within a framework of a whole family, whole team relationship.

Life HQ provides initial training of new Life Teams. The training is highly experiential demonstrating the Life principles and tools through people’s own personal and professional experience and examples from Life. Where possible members of families that have “graduated” or are part of the Life programme attend.

Life also developed a simple but effective set of core tools: beside the already mentioned Life Plan, the Talking Triangle and the Life Star (depicted below) are other tools that support family members to talk about different aspects of their life, identify their aspirations and make realistic short and long-term plans to achieve them. The core tools help people visualise their own progress, reflect on setbacks and support the team and families to have difficult conversations.

The Life Star, depicted below, is derived from the “Warwick-Edinburgh Mental Well-being Scale” and hence provides a measure of subjective well-being (see Tennant R, Hiller L, Fishwick R, Platt P, Joseph S, Weich S, Parkinson J, Secker J, Stewart-Brown S, 2007, The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation, Health and Quality of Life Outcome; 5:63).

Life Star

All Stages

Statements	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5

Step 1 of 2:
On the right are some statements about feelings and thoughts. Please tick the box that best describes your experience of each over the last 2 weeks.

Life

The talking triangle, depicted below, also is part of the tools that are assessing subjective well-being.

Talking Triangle

All Stages

Family Life

Life Outside Home

My Life

How do you feel about?

How supported am I by the rest of the family?

How able do I feel to make my own choices?

Tip: With a colourful marker or pen, for each arm of the triangle shade in up to the number that represents how you feel about that area of your life.

Life

Finally, there is also the Life board, an online platform, that was to be shared between team and family members. Team members could record their interaction with family members in daily logs, ensuring a clear audit trail of work and time spent with families. Family members could work on their own digital planning and progress tools.

Beyond the core tools, there is a broad and flexible toolkit of bespoke resources for families and teams. In addition, there are also tools to support the development of the Life teams themselves.

In addition, while the relationship between family members and the Life Team provided a safe, trusting space for sensitive, challenging and deep-rooted issues concerning substance misuse, domestic abuse and mental ill-health to emerge, dealing with these requires high-level therapeutic expertise. Through a relationship with the Tavistock and Portman NHS Trust, Participle has developed a model whereby this expertise directly supports the Life Team and families in their own space. 'Live Supervisors' are therapeutically trained professionals (usually psychotherapists or family therapists) with extensive experience of child and family work. Their role has been designed as a flexible but tailored therapeutic resource for Life Teams, which provides Life Team members, who do not usually have backgrounds in mental health, the supervision to guide their very difficult work. This may be through holding reflective team discussions on family work, providing training on a particular mental health issue or visiting a family directly with a team member.

Finally, where possible Life Teams have worked out of a 'home' in the locality, which has provided a safe space for families to be, to cook, for children to play, and for families to meet team members and each other. Being able to take family members out of their homes to experience different ways of being as well as continuing to work within homes and community spaces has proved extremely beneficial in helping families open up, reflect and get a different perspective on their lives. This home is referred to as the "Life Hut".

Scaling Life

Life was replicated in Wigan, Lewisham and Colchester. The Life report provides accounts of how replication worked with these local authorities.

The capability approach and the Life programme

It is the fourth fundamental mentioned above that refers explicitly to Sen's capability approach. But the whole approach in effect is founded on it. The Life report quotes the United Nations as defining development as a process of enlarging people's capabilities, acknowledging there are two sides to capabilities: their formation and the use people make of them.

Life focused on supporting families to independence, as opposed to fixing a crisis or managing a risk. The programme supported a shift from intensive involvement with re-active, costly, enforcement based interventions to pro-active use of universal and preventative services. For some families, being fully independent from services might not be realistic but a 'healthier interdependence' with services was the goal. However, it was deemed important not to underestimate what people can achieve – some family members have astonished everyone with changes they have so far been able to make in their lives.

In order to achieve healthy independence, both the aspirations and activity phases of Life are focused on building a set of core capabilities:

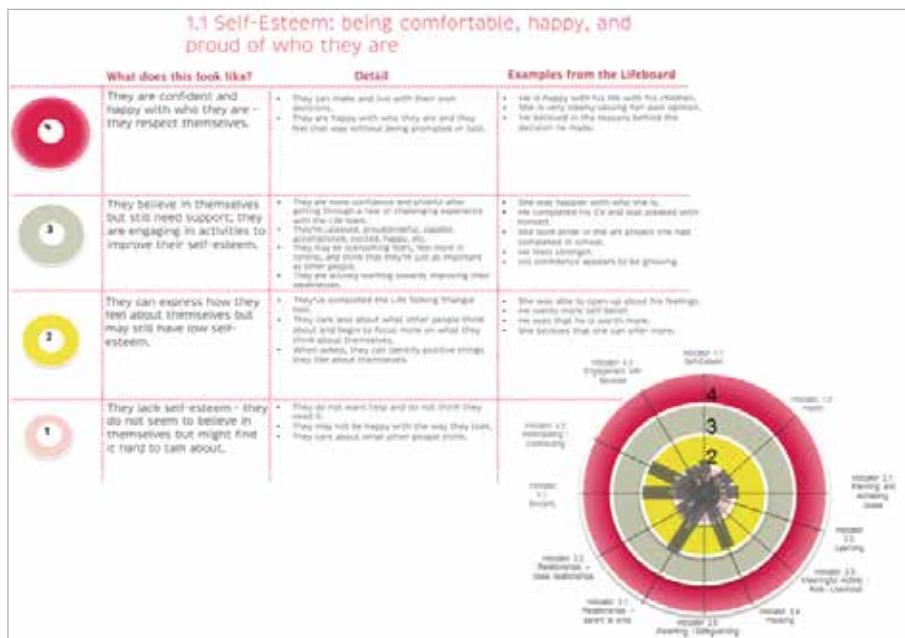
- inner confidence and self-esteem (health and vitality)
- the development and sustaining of healthy relationships;
- working and learning;
- wider community participation/integration.

It is through the Life Board that team members keep track of the four capabilities (which are broken down to a total of 10 “indicators”).

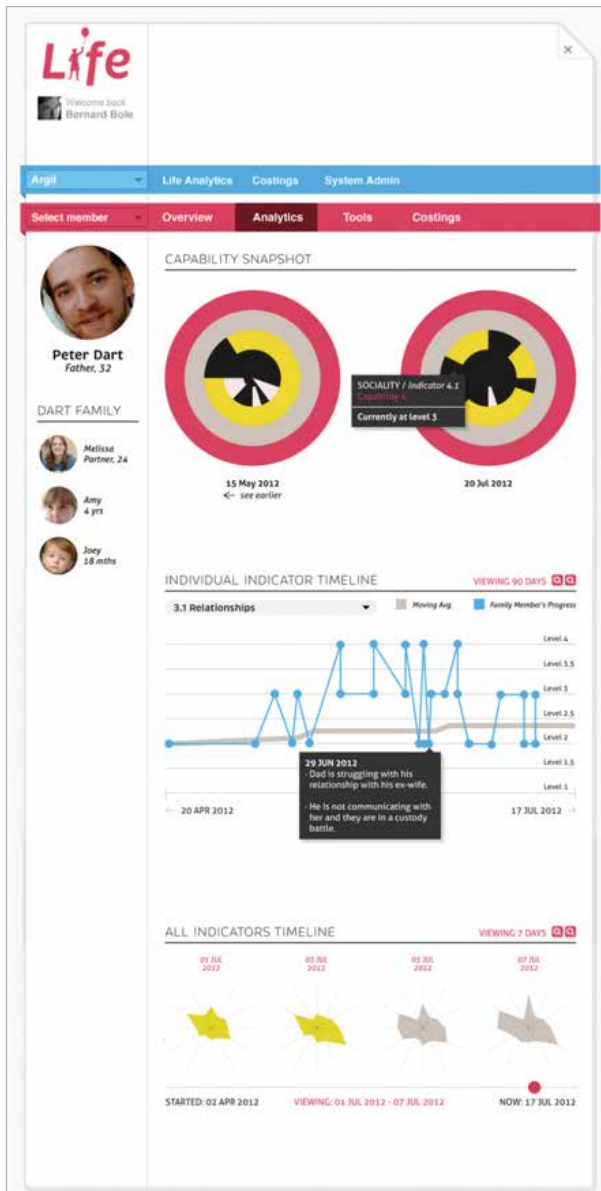
Keeping track of capabilities is fundamentally different from merely assessing subjective well-being. The foundation for measurement is a conversation between a Life programme team member and a participant. The subjective well-being tools, such as the Life Star, discussed earlier help to get the conversation started, but the team member should move beyond just asking “how are you feeling” and move to “what is happening that makes you feel like that”. This should reveal the real constraints that people are encountering (not just their own perception of these constraints). These constraints describe what in the capability approach are referred to as “conversion factors”. They explain why the same “resource” put at the disposal of different persons does not lead to the same outcome. This is because people have different initial internal endowments (physical, mental abilities, other resources) as well as a different external environment (constraints deriving from social or family dynamics, formal rules or informal regulations as well as our physical environment).

The team member records on the Lifeboard Daily Log the insights they gathered from the conversation. Based on these insights, the team member then “grades” the capability of the participant for each of the 10 indicators behind the 4 capabilities on a scale of 1 to 4, using a table that describes what a 1, 2, 3 or a 4 really means. Also, the tool provides some real life examples of this “level” to help recognize the level in the conversation.

For example, inner confidence and self-esteem has an indicator referred to as “self-esteem” for which level 1 is described as “confident and happy with who they are, they respect themselves” with examples provided like “he/she believes in the reasons behind the decisions he/she made”. Level 2, for example, is described as “they can express how they feel about themselves but may still have low self-esteem” with examples such as “He/she sees that he/she is worth more”.



The scores can then be tracked over time with a simple line diagram (see below). They can also be aggregated e.g. at the level of a local authority.



What the Life programme attempts to do, is to help participants tackle the constraints that limit their effective opportunities and hence also affect the outcomes they can achieve. The focus is therefore not so much on changing themselves as persons, but on tackling what is holding them back.

Results of the Life Programme

The Life report draws lessons from the programme across the various sites. It looks at “success” from the perspective of families, team members and local authorities. While the Life report contains data for all involved local authorities only the data for Swindon is depicted to get an idea.

In total, the Swindon Life Programme worked with 16 families and 80 family members between 2009 and 2012 (38 adults and 42 children). Five families exited the Life Programme, one because the children became looked after by the Local Authority, another because a parent and child needed to be assessed in a residential placement and three families ‘graduated’ from the programme, having made significant positive and sustained changes with the following outcomes achieved:

- **Family 1:** Parent found employment and children’s school attendance increased to 95% with rent arrears being paid
- **Family 2:** Children attending school and nursery and parent in college placement whilst living independently with no rent arrears
- **Family 3:** Parent attending university course and children’s attendance 90%.

The outcome data presented below is for 2011/2012 and is based on measurement from a baseline for each family covering the six months prior to them joining the Life Programme. This baseline data is compared with data extracted for each family within the last 6 months. The data only includes those families currently on the programme who have completed a full six-month period, comprising 12 families (including an exited family who has returned, measured from original baseline) with 48 family members (22 adults and 26 children).

Education – relating to children/young people aged 5-16

- **Attending mainstream education:**
 - There has been an overall increase of 19% of young people attending mainstream education (This is an increase of four young people);
 - At baseline 52% of children/young people were attending mainstream education (11 out of 21);
 - By 31st March 2012 71% of children/young people were attending mainstream education (15 out of 21);
- **Children not in any form of education:**
 - There has been a reduction of 24% of children/young people not in any form of education (5 out of 21);
 - At baseline 29% of children/young people were not in any education (6 out of 21) and this reduced to 5% (one child) by March 2012;
 - The figures account for three young people who turned 16 and were therefore no longer statutory school age;
- **School attendance:**
 - Attendance is shown only for those children/young people in mainstream education (16 of 21, of which two are now beyond school age);
 - 38% children/young people improved school attendance (6 out of 16 have an improved school attendance against the baseline);
 - There has been an increase of 25% children with attendance above 85% (4 out of 16);
- **Offending and re-offending:**
 - There has been a 16% decrease in young people cautioned or convicted of an offence for the first time (data based on 19 people aged 10-18 years);
 - At baseline 16% of young people were cautioned or convicted of an offence for the first time but none of the young people were cautioned or convicted for the first time by 31st March 2012;
 - At baseline 21% of young people were convicted of a subsequent offence and this has decreased to 16% of young people convicted of a subsequent offence;
 - There has been a 63% reduction in police call outs compared to the baseline (59 call outs compared with 158 at baseline);
- **Employment – young people (16-18) and adults**
 - 9% of family members sustained employment throughout the six month period (2 out of 22 compared with 0 at baseline)
 - 21% of family members are attached with the Work Programme or with DWP Families with Multiple Problems (not in place at the time baseline)
- **Safeguarding**
 - There was a decrease of 31% for children with a child protection plan by March 2012
 - There has been an increase of 35% of children assessed as Children in Need by March 2012
 - One child was taken into care in 2011/12 Housing
 - There has been a 60% decrease in notice to seek possession (from 5 to 3)
 - 1 of 13 families was evicted
- **Health**
 - 93% of family members (26 out of 28) are registered with a GP compared with 75% at baseline
 - 71% of family members have increased scores for well-being as determined by the Life Star Well-being score
- **Cost savings: the programme calculated that it created cost savings of 510 000 GBP on a yearly basis (year 2011-2012).**

Concluding remarks

The Life programme addressed newly conceptualised need in this project namely the need for families to take charge of their lives and become part of society again. While this need may seem obvious, it is clear from the background of the case that existing service provision was not recognizing this need. In fact, it was addressing the need to safeguard children, to keep other members of the community safe, to reduce the burden on other members of the community etc., depending on whatever service was approaching these families. The way it approached this need was also fundamentally different from the incumbent service provision.

Sources

- Participle (2014), The life programme: a report on our work.
- Additional materials obtained from Participle directly (Life star, Life plan, Talking Triangle) or from experts that were involved such as Sridhar Venkatapuram (lecturer at King's College London).
- Presentation downloaded from Slideshare entitled "Running on empathy".

See also:

- On Life:
vimeo.com/album/3420276/video/95504481
<https://vimeo.com/album/3420276/video/95504479>
<https://vimeo.com/album/3420276/video/95508344>
- On capabilities and Life: <https://player.vimeo.com/video/111538571>

8. Relevance to ESIF

It may be that ESIF programme managers do not want to incorporate the capability approach into their operations that aim to support social innovation. However, then they should modify the definition of social innovation as follows: "development and implementation of new ideas to meet social needs and create new social relationships or collaborations. It is aimed at improving human well-being." They should be conscious that under this definition there is nothing that inhibits service providers to force target groups into narrow kinds of activities, by default (because they offer nothing else) or by applying pressure.

C Service innovation

1. Introduction

Within a transition theory perspective, radical service innovation should be positioned at the level of “niches”. But the nature of “services” and innovation in them should be further clarified.

Research from DTI (UK Department of Trade and Industry, 2007, Innovation in service, Occasional paper nr 9), argues that service innovation research has proved an elusive area due to the intangibility of services, their heterogeneity, the focus of innovation research on products and a lack of identifiable R&D function. Most research hence focused on the kind of services where products can be clearly defined and technology is being used to change the nature of the service (e.g. financial services).

However, rather than try to conceptualise services to be as similar as possible to products so we can try to use the tools and approaches that were design for products, a better approach may be to recognize what is different about services and to focus on that. The research, carried out as part of a bigger programme at the London Business School, drew on the experience of 17 leading organizations involved in services (either as consultancies or as service providers).

Services are characterised by intangibility, dependence on people and high levels of interaction. A useful perspective is to think about services as “experiences” users are having. Every touch point a person has with a service provider is an experience, no matter how mundane or the service is. Designing an experience is about creating an emotional connection with users through careful planning of tangible and intangible events. The report puts forward that experiential services occur in any sector, both good or service based.

The report does not mention the concept of “communication innovation” (as elaborated earlier by DG Enterprise, 2013). However, the notion of services as experience subsumes the idea of communication innovation as new or improved methods of promoting an organisation or its services or for influencing the behaviour of users, citizens or others. In essence, services as experiences are about interaction between service providers (incl. their communications) and users. Hence, this perspective also encompasses “nudging”, the use of insights from the behavioral sciences to affect people’s behavior.

A number of elements are put forward by the research concerning the process and content of service innovation.

2. Service as a journey

As opposed to a single transaction or purchase experience, services are seen as a journey that spans a longer time period and consists of multiple components and touchpoints. The total user experience is the result of every element in this journey. It can be thought of as a film that consists of multiple scenes. Typically, this journey is thought of as starting long before the actual transaction starts and also end long after it is completed. Each touchpoint has the potential for innovation.

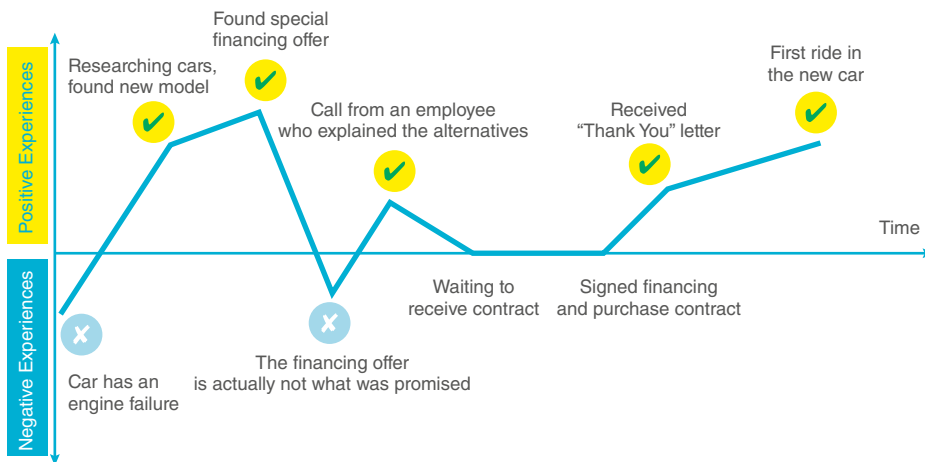
However, innovation can happen at the level of

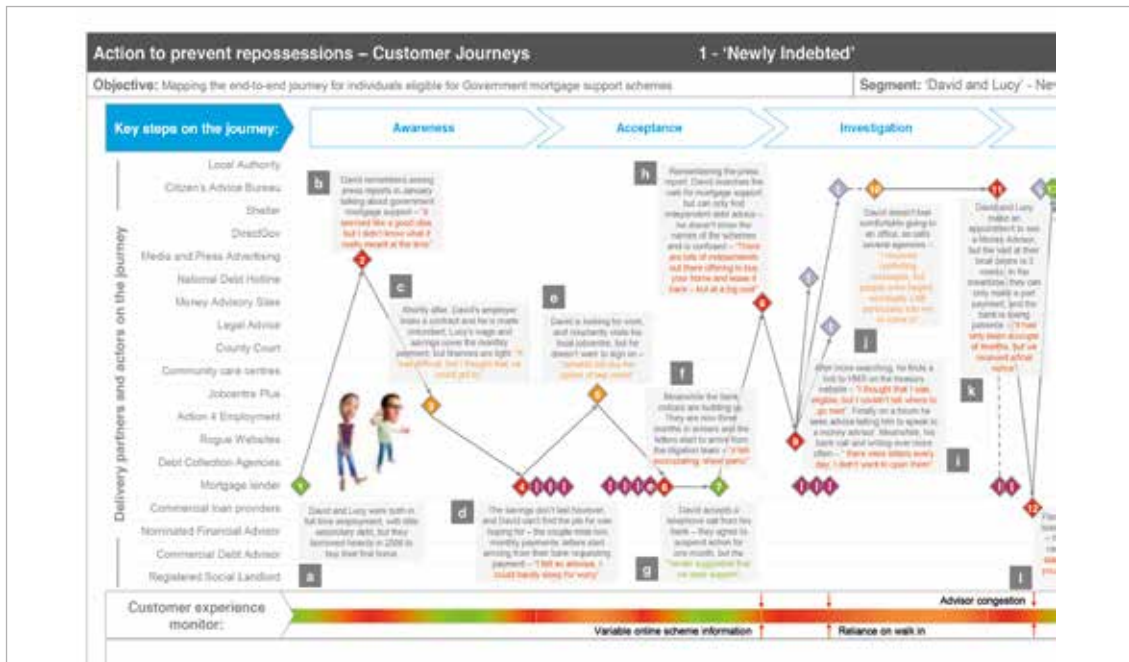
- creating entirely new journeys;
- changing or adding elements in the journey;
- making existing journeys more comfortable or efficient for users.

Service as a journey is made visible in the figures below. First a simple example is given for the experience of purchasing a car. Next, more elaborate examples are given from the public sector (as presented at the OECD Senior Budget Officials Network meeting of December 2009 by the UK prime minister delivery unit).

Figure 6: customer journey map

Customer Journey Example: Car Purchase





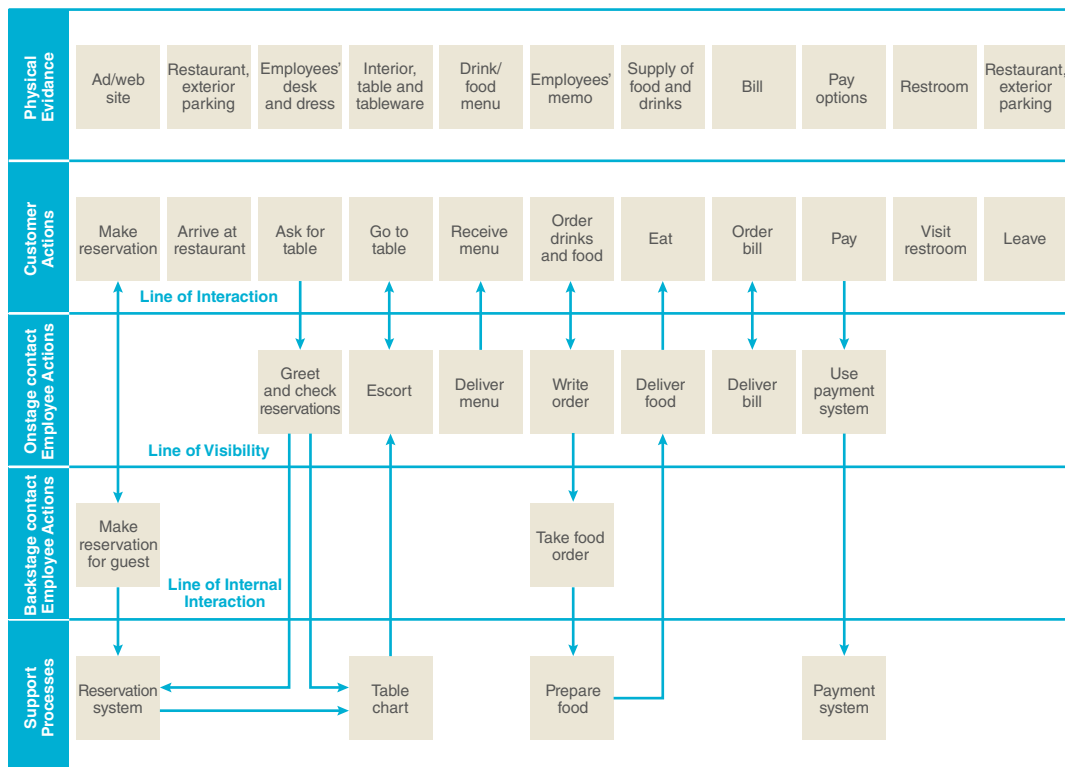
3. Design areas

Five design areas were identified by the research which provided various insights:

- Physical environment (stage) which plays a role in accommodating users and staff, guiding behavioural actions (e.g. where to queue), providing cue about the kind of service to expect. Innovation focuses on the ease of getting in and out of a place, how people move around to avoid crowding and on making strong first impressions. Also affecting all five senses can provides a focus for innovation (e.g. what you smell when you enter a place next to what you see);
- Service employees (actors) are a major factor in terms of the user experience. If staff truly engage with users and create emotional connections, this makes the experience more personal, positive and memorable. To achieve this, it is important to pay attention to how employees can be motivated and satisfied themselves.
- Service delivery process (script): users do not generally remember every moment of an experience. Instead they remember the trend in the sequence of pleasure and pain as well as the highs and lows and the ending. A positive trend as well as positive peaks and ends lead to better evaluations.
- Fellow users (audience): crowding, unruly or anticipated behaviour of other users can destroy the experience of service. Socialising or bonding with other users makes it better e.g. via the creation of a community. This particularly applies to services where other users indeed set the scene (e.g. restaurant).
- Back office support (back stage): many things that go on back stage influence the front end. The focus of innovation here is on how to connect back office staff to the front stage experience.

All of these design areas are exemplified in the figure below (adapted from Chesbrough, H., 2011, Open Service Innovation):

Figure 7: service blueprint



4. User insights are a driver for innovation

- Focus groups and surveys are used to find out what users want and expect; user demographics and psychographics were used for segmentation;
- Empathic research (shadowing users, investigating extreme users, drawing experiences visually) is used not to find out what users want/expect but how they “work” (not just what they say and do but also what they think and feel). This helps to identify latent needs and what makes users tick;
- Trend watching (long range forecasts, by talking to experts, reading magazines, using third party research,...) about user behavior, needs and preferences is also used. This gives lead time for innovating and staying relevant to users;
- Learning from others was also important e.g. looking outside one’s own industry for inspiration.

5. Essential tools for service innovation

- Prototyping: while more difficult for experiences (due to their intangible and personal, unique nature), this is still useful in the beginning to try things out and at a later stage to communicate ideas to an audience. This can be done with 3D digital demonstrations or with role plays. It is important prototypes have physical aspects. It is also possible to run simulations (e.g. sensory, with software,...)
- Experimentation: trying out what was developed on a smaller scale but in a realistic way;
- Knowledge transfer: being able to draw on networks where a lot of experience is already present and can serve as inspiration and for advice.

6. Organising for innovation

- designing the intangible parts of a service (interaction with staff and other users, the process as a whole,...) is done usually by the operations department because that is where the people are that understand best the user's needs. However, tangible elements often have dedicated design and product development departments involved;
- most service experience innovation projects are cross-functional, requiring contributions from people in operations, marketing, branding, business and technology;
- the creative part is not done by dedicated "creatives". Anyone can and should be involved in the creative parts.

7. Measuring success

Because of their intangibility and heterogeneity, the quality of services is often difficult to establish. The SERVQUAL framework for example embraces five dimensions of performance:

- **Tangibles:** appearance of physical facilities, equipment, personnel and communication materials;
- **Reliability:** ability to perform the service dependably and accurately;
- **Responsiveness:** willingness to help and provide prompt service;
- **Assurance:** knowledge, courtesy, ability to inspire trust and confidence;
- **Empathy:** caring, individualized attention.

This is clearly different from measuring manufacturing quality. Information in services is often gained via exit surveys for staff and continuous measurement of large numbers of users.

It was considered difficult to estimate the impact of a service innovation in financial terms. If the innovation is part of an entire experience, it is not easy to link it to a specific financial measure. Hence, other performance indicators are used such as loyalty, dwelling time, footfall, satisfaction, ...

8. Protecting innovations from copying

Most service innovators are not overly concerned with protecting their intellectual property. They assert that it is very hard to copy an entire service experience. This depends on how well different elements fit together and are adapted in continuing interaction with users. Hence, while it may be possible to copy a part of a service, this may not turn out useful.

Also, the innovators engage in continuous innovation, based on a thorough understanding of the importance of user experiences, as strong dedication to innovation and support in terms of resources needed for research, design and development.

9. Typology of service innovation

Service innovation can be:

- New business models;
- New user / service interfaces (process innovation or adding parts to or modifying parts of existing journeys): changes in the way information is exchanged between a user and service provider; this takes place primarily in operations not in R&D meaning innovation activity and expenditure are hard to measure. These innovations are also difficult to measure because they are embedded in a wider

- operational process and other incremental rather than radical;
- New service offerings (new service journeys).

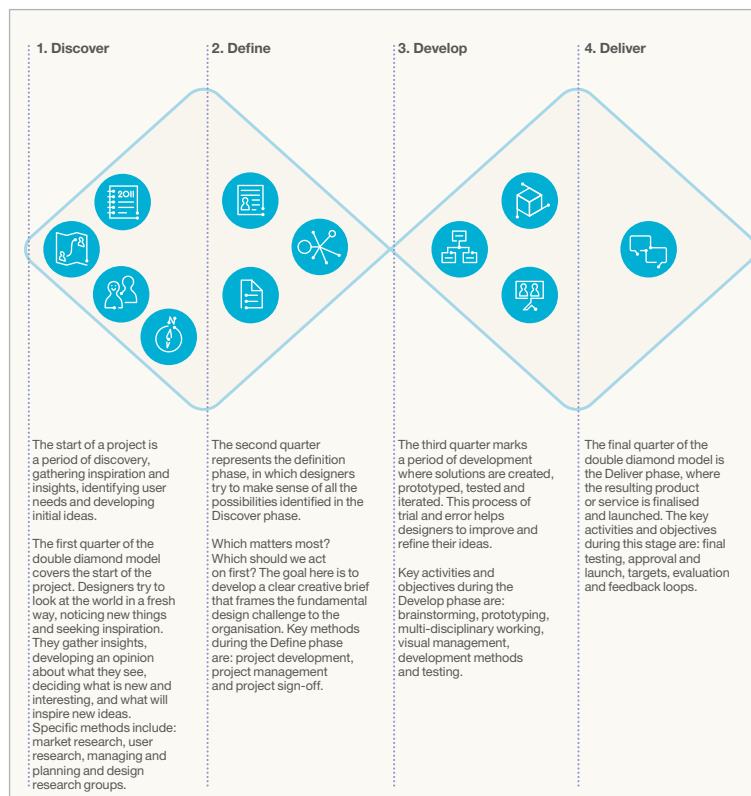
The study puts forward that these kinds of innovation are frequently linked to each other. In many cases, to make a service innovation possible required also substantial business model innovation. Indeed, much of the impact of innovation in services comes from exploiting new ideas to create innovation in the business model. Also, new service offerings also require new user/service interfaces. The study also asserts that technology played a much less important role than commonly assumed.

10. Service innovation as a process

While the DTI research reveals much about the elements of the service innovation process, research from the UK Design Council throws some light on the process as a whole and its historical and conceptual foundations. Especially the notions of iteration (instead of linearity), user participation and the role of the designers (and their way of thinking) are highlighted.

The Design Council process model depicted below (Design Council 2007, Desk research report of Eleven lessons: managing design in eleven global companies and Design Council, 2012 Design methods for developing services.) is stated to be in line with these foundations. It maps how the design process passes points where thinking and possibilities are as broad as possible to situations where they are deliberately narrowed down and focused.

Figure 8: design double diamond process



The model depicts a number of key tools that are not to be seen as a rigid protocol to be followed unthinkingly.

Figure 9: key tools in the discover and define phases of the double diamond

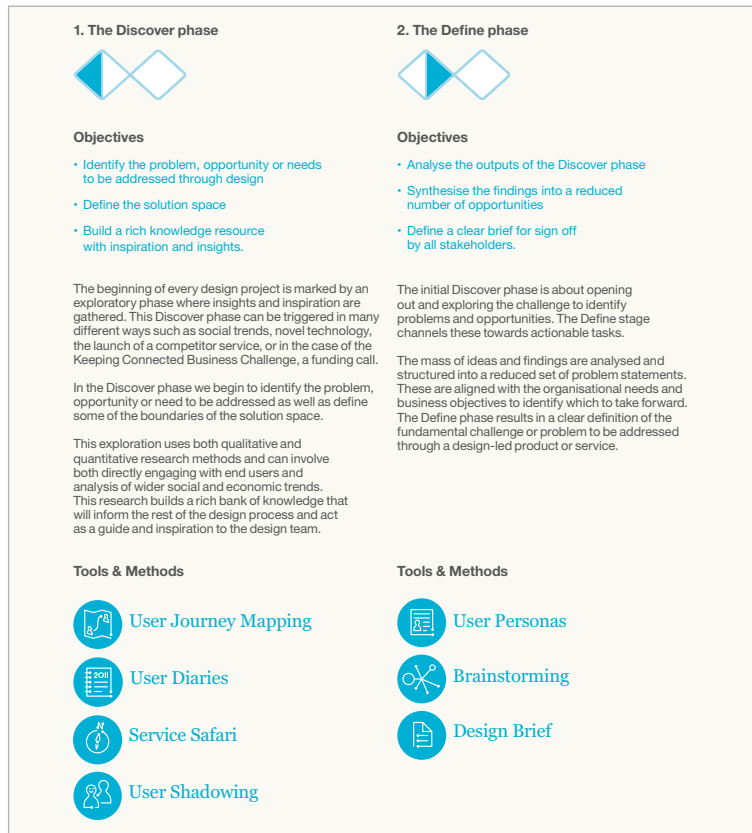


Figure 10: key tools on the develop and deliver phases of the double diamond



11. ISO standard

A publication for Flanders InShape (the Flemish competence centre for user centered design) notes that there is even an ISO standard for the human/user centered design process (ISO 9204-210) (A. Beyesen et al, 2011, Cecilia's keuze). It states that a design should respect the following norms:

- It is based on an explicit understanding of users, tasks and context;
- Users have been engaged throughout the entire process;
- User centred evaluations have been used to refine the design;
- The process was iterative;
- The design is oriented toward the entire user experience;
- The design team was multi-disciplinary in expertise and skills.

It notes that every contact point with a user is an opportunity to strengthen or weaken the relation with this user. However, no one seems to be responsible for the entire range of interfaces with users.

It is also noted that there are really two pillars for user centered design: observation and empathy.

Observation should not just be of "average" users. That will tell us mostly what we already know. It should also look at "extreme" users (the most extreme being non-users who do not even see the point of the service). This delivers more surprising insights. Some insights will lead to quick wins but many will have longer term, even strategic implications. Nevertheless, one should also draw on external experts as these are more objective and can see the bigger picture, unconstrained by an organisation's existing processes and ways of doing things.

Empathy refers to the ability to take the perspective of a user, to put on their shoes and look through their eyes. It should not be confused with being "sensitive". This happens in several layers:

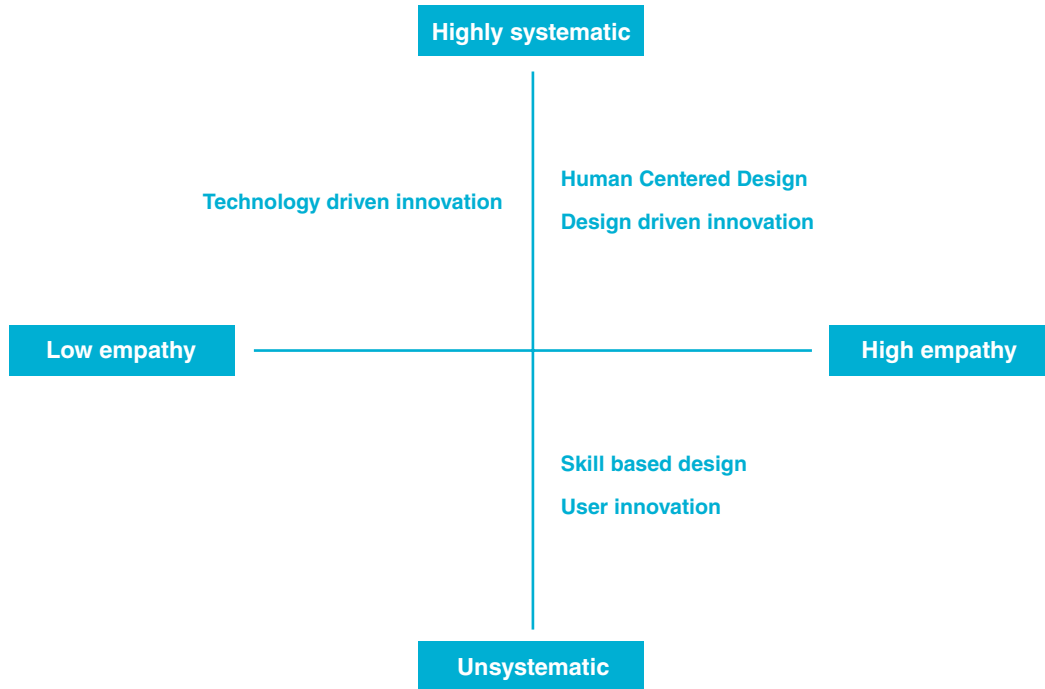
- **Physical:** experience first hand what users experience;
- **Cognitive:** understand why users do what they do (unconsciously);
- **Emotional:** understand what users feel when they do what they do (not feel what they feel, that is sympathy).

Empathy and observation give a response to the famous slogan by Henry Ford that if he had asked users what they wanted they would have said a faster horse. Indeed, users often cannot say when asked outright what would serve them best as they reason from situations they know. However, observation and empathy are the key to discovering latent needs.

Empathy and observation are used not only in the beginning of the service design process to gain insights as anchors for generating ideas. They are also used when developing (via prototyping) and evaluating. This means that by definition, we engage in a process of co-creation with the user. Where marketeers would ask a user how the experience was and how it should have been, designers will actively design the experience in a creative process, based on empathy and observation. This happens with rather than for the user. Hence it requires new skills for the designer who has to be a facilitator, coach, prototyper (visualizer) in open and multi-disciplinary networks.

Finally, different types of innovation are situated in the framework below with empathy constituting one axis.

Figure 11: different types of innovation



Technology driven innovation speaks for itself. It is not driven primarily by users or their needs. It is however highly systematic (with technology agenda's spanning sometimes a very long time period).

However, on the high empathy side, we find more than just HCD. There is also design driven innovation which is suitable when the users are also the designers (an example is Apple and the I-phone). Essentially, the services that are being designed are for themselves. It is done in a very systematic way.

Next there is also skill based design. This is applicable when a designer has acquired very deep experience concerning a specific challenge and the challenge at hand is similar to earlier ones. Essentially, they work on the basis of intuition. Hence, it is not very systematic.

Then there is also user innovation where users design services themselves to suit their own needs, without necessarily thinking about a broader user base. This is very unsystematic but has a very high degree of empathy. It occurs frequently also in a business to business environment.

The publication also states that the most successful innovation can be a mix of types of innovation process.

The case below exemplifies what service design is about.

CASE 2: IMPROVING A&E IN A UK HOSPITAL

Background of the case

Violence and aggression presents a serious problem for the NHS. Every year, more than 55,000 physical assaults (155 per day) are reported against NHS staff across the UK. 1 More than 20 per cent of these occur in hospitals managed by Acute Trusts, which include A&E departments and employ a large part of the total NHS workforce.

The precise level of physical and verbal assaults is even higher than these figures, however. Research conducted by Ipsos MORI for the NHS Counter Fraud and Security Management Service (now NHS Protect) shows that two-thirds of staff who are physically abused do not typically report the attacks, while just over half do not report incidents of verbal abuse.

A&E departments in England dealt with more than 21 million attendances last year. The pressures on A&E departments can lead to negative experiences for both patients and staff. Patients, who are already feeling vulnerable, can become frustrated and hostilities can easily arise. With A&E staff bearing the brunt of these tensions, well-being in A&E departments can be particularly low.

There is a lack of official data about levels of violence specifically within A&E departments, but it is clear that verbal abuse within A&E departments occurs frequently. Physical violence is less prevalent, but it is still relatively frequent with the average A&E department experiencing incidents on a regular basis.

In this context, the UK Design Council, in collaboration with the Department of Health (DH), has looked at how design can alleviate tensions in A&E departments, with the objective of improving both patient and staff experience and thereby reducing triggers of violence and aggression.

They did not attempt to address all the reasons why violent or aggressive incidents take place or seek to present a total solution to the problem. Rather, it looks specifically at how design can make improvements to A&E environments, systems and services so that the likelihood of violence and aggression occurring is reduced. Crucially, these improvements do not mean creating physical barriers, but offer more sophisticated design solutions which are focused on preventing incidents of violence and aggression from arising in the first place.

It is important to recognise that the wider issue of violence and aggression in society does not start or end in a healthcare setting. A comprehensive approach to this subject would consider the numerous social and environmental catalysts for violence and aggression outside of A&E. Within the A&E environment, violence and aggression may occur as a result of these wider social factors. For example, acts of violence and aggression occurring as a result of – or that are directly related to – drug and alcohol consumption or mental health.

In 2011, a nationwide design Challenge competition called for solutions aimed at tackling violence and aggression in A&E departments through improved patient experience, with an emphasis on understanding how processes and systems could be easily and cost-effectively retrofitted into existing A&Es. The winning design team, led by PearsonLloyd, worked with the Design Council and three partner NHS Trusts to examine the typical patient journey through A&E, identifying major areas of frustration and potential triggers of violence and aggression. They were supported by an independent Advisory Board of key health, education and industry stakeholders.

Innovation process

a) Exploring the issues

The Reducing violence and aggression in A&E programme began with a review of existing reports on the violent and aggressive incidents that have happened in A&E departments in the UK in recent years and at previous attempts to control and reduce this type of behaviour in the health service, as well as in other public-facing services. The Design Council's in-depth desk research examined a number of sectors and organisations:

- Birmingham Heartlands Hospital
- King's College Hospital
- The Royal London Hospital
- St Helier Hospital (Epsom and St Helier University Hospitals NHS Trust)
- Northwick Park Hospitals
- HMP Grendon
- Mobilong Prison, Australia
- National Offender Management Service (NOMS)
- London Underground Workplace Violence Unit
- Transport for London (TfL)
- The police service
- Airports
- Bars, pubs and clubs
- Co-operative Group

To understand how frontline staff and patients experience violence and aggression in A&E, and what leads to such behaviour, ethnographic researchers also spent more than 300 hours doing stakeholder interviews, direct observation, study visits, analysis of past incidents and interviews with the people involved. The majority of this research was conducted during the peak periods of violence and aggression, incl. Christmas and New Year. They collected a huge amount of data, including more than 60 staff and patient interviews and over 80 documented incidents of violence and aggression.

Insights gained from this are documented in the report under four themes relating to:

- the waiting experience;
- managing expectations and acknowledging pain;
- valuing and empowering staff;
- "other".

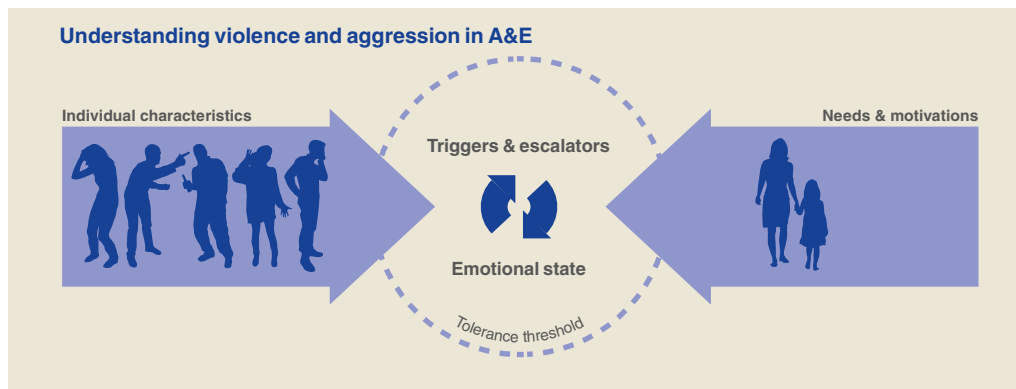
As an example, the insights relating to "waiting" are given. For example, it was found that patients and other service users arriving in A&E do expect to wait. However, they noted that people's waiting experience is often uncomfortable and boring, and there is a strong urge to leave the environment as soon as possible. Coupled with various stresses – ranging from a traumatic experience prior to their visit, to difficulties with parking, confusion about the patient processing system, and worries about how to get home after treatment – this can make patients and other service users anxious.

This anxiety can then develop into aggression, particularly if the patient is suffering from other concerns that are sometimes clinical, such as muscle tension, hormonal problems, head injury, shock or intoxication. Their anger may be ignited by various triggers, from clashes with other people to being in an uncomfortable environment or feeling that staff are being inefficient or uncaring. Most frequently, this results in 'low level' aggression, mainly involving swearing or verbal hostility towards staff or other

visitors, which is more common than serious violence. It is noteworthy that staff are often desensitised to this kind of aggression. As this behaviour is commonplace and staff are busy and prefer to just “get on with caring for patients”, they do not tend to report these low-level incidents.

b) Defining the problem

A principal ambition of the research was to understand more about how visitors to A&E can become violent or aggressive. The research pointed out that there are common characteristics and triggers that, in conjunction with people’s behavioural patterns as well as the reasons why they are coming to A&E, lead to increased likelihoods of violence and aggression, as depicted below.



Analysis of the reported incidents of violence and aggression in A&E showed there are a number of recurring patterns relating to individuals’ personalities and their prevailing physical and emotional states. Well-documented factors that affect one’s behavior and render one more likely to be short-tempered or aggressive include:

- Muscle tension
- Lack of sleep (e.g. looking after a newborn child, long shifts at work, etc.)
- Long-term illness
- Hormonal problems
- Drug or alcohol abuse
- Too much caffeine and other endocrine disrupting drugs
- Certain medications
- Too much sugar or preservatives in food
- A painful injury
- Head injury or shock (e.g. a car accident where the individual has suffered damage to the pre-frontal cortex).

Many of these factors correlate with the very reasons why an individual may be attending A&E in the first place. However, the documented incidents enabled the research team to identify a set of six perpetrator characteristics that cluster different factors pertaining to individuals who commit acts of aggression or violence, as well as nine triggers that often lead to acts of violence and aggression.

In creating these perpetrator profiles, the aim was not to stereotype or pigeonhole, or to presume the guilt of innocent people; rather, it was intended to highlight (albeit not exhaustively) distinct challenges and ‘aggression pathways’ that can be used to focus or test design ideas. It is also noteworthy that many of the perpetrators of violence and aggression exhibit two or more of the characteristics identified above. These kinds of overlaps were deliberately ignored in the interests of clarity, but in practice make

managing perpetrators and reducing acts of violence and aggression far more complex and difficult. Most patients were united by the belief that their condition was urgent and important. This was often accompanied by feelings of anxiety, stress and discomfort – compounded by the fact that their visit to A&E is typically for most people an unusual event and a deviation from their routine.

The six perpetrator characteristics are:

- Clinically confused
- Frustrated
- Intoxicated
- Anti-social/angry
- Distressed/frightened
- Socially isolated

Full details are given for the clinically confused with other persons described in the report “Reducing violence and aggression in A&E: through a better experience” by the Design Council (2011):

- *Clinically confused? Medical staff make a distinction between incidents with clear intent and those which, lacking intent, may have occurred as a direct result of the patient’s illness or medical condition, particularly where that condition results in impaired cognition. Hypoxic pain can lead to all manner of severe confusion, for example, while a head injury can result in an individual behaving ‘out of sorts’, or dementia lead to disorientation and child-like behaviour. In practice, a fuzzy distinction and judgement is often made about whether the person would ‘normally’ conduct themselves in this way, and allowances are often made for extenuating circumstances (grief, pain, anxiety, fear).*
- *How can we spot them? More often found in the ‘majors’ side of A&E, these individuals may either be in an unresponsive state or behaving oddly.*
- *How will they behave? For whatever reason, these individuals may not be in control of their behaviour or their reaction to stimulus. Behaviour is most likely to be directed towards nurses or other clinicians who are trying to assess or treat them.*

Beyond individual characteristics that may make an individual more or less likely to be violent or aggressive, researchers documented a number of factors that can become escalators of violence or aggression. While these triggers are noted separately, they are typically experienced in tandem, and affect almost any type of visitor. These triggers often lead to the endemic culture of low level acts of aggression. This behaviour is largely unreported, but is equally – if not more damaging and corroding – to staff welfare and their ability to deliver high quality healthcare.

1. Clash of people: Many areas in A&E departments are crowded with a range of different people, forced together by difficult circumstances – each undergoing their own stresses and dealing with their own complex mix of clinical and non-clinical needs.
2. Lack of progression: While all Trusts aim to treat 95 per cent of patients within four hours, waiting for any length of time can be a difficult experience. There are few situations in our lives when we are forced to wait for such lengths of time without any sense of progression.
3. Inhospitable environments: Many people describe a dislike of hospitals, not least because they are full of sick people. Beyond the patients, hospitals can be uncomfortable places which are not pleasant to spend time in.
4. Dehumanising environments: When arriving at A&E people can feel ‘out of sorts’ for a large number of reasons. Sometimes the way patients are managed can further lead to a loss of perspective.
5. Intense emotions: A&E is a place where people may be experiencing extreme life events, suffering with pain or stress, or having to witness how other people are coping (or not) with their own stressful experiences.

6. Unsafe environments: A&E is typically a very busy environment, with considerable amounts of equipment and large numbers of people using the space. Sometimes these factors can help to trigger or worsen violence and aggression.
7. Perceived inefficiency: From a patient's perspective it can sometimes feel as if staff in A&E environments are disorganised and lacking focus. Patients observe themselves and others seemingly waiting for hours, while staff 'busy themselves' with perceived non-essential tasks.
8. Inconsistent response: Hospital environments are often tightly controlled by policies, guidance, rules and regulations, much of which is difficult to decipher, inconsistently applied, and can be contrary to what happens in practice.
9. Staff fatigue: Working in an A&E department is highly demanding on staff, many of whom work 12-hour shifts. Over time, staff can become both physically and emotionally tired, struggling to find the energy to deal with the constant flow of patients.

Much more detail is provided in the report. For example for clash of people, the complete description of insights is given below:

- ***Vulnerability:** hospitals are public spaces and people roam around freely. Vulnerable individuals, such as people in pain, older people, children and pregnant women, often try to find places to sit that offer more privacy, attempting to create divisions and boundaries between themselves and others.*
- ***Children:** when there are long waits, the waiting room is a very 'still' environment. People sit for hours without moving. With a lack of things to do, children (both healthy and sick) are left to run around the waiting area. In some hospitals there are no separate waiting facilities for children, which means that adults and children all share the same area. In others, such facilities do exist, but this is not always clearly explained to adult patients accompanied by younger relatives.*
- ***Urgency:** sometimes the people sitting in the waiting room look far 'sicker' or more 'urgent' than they are. A person covered in blood may only have a small cut while a person with a lifethreatening condition may look completely healthy. Many people experience a sense of disgust and fear at the sight of blood and broken bones.*
- ***Contamination:** hospitals are inevitably full of sick people. The reality of walking into a 'place of illness' can make people feel tense and anxious. Individuals can feel over-exposed to others' perceived illnesses, making them feel stressed and defenceless. A&E environments also quickly get dirty, with people constantly arriving from outside, often dripping with blood or discharging other bodily fluids. The longer the stay, the more that some people perceive that they are likely to catch someone else's illness.*
- ***Focus of attention:** hospitals cater for everyone in the local community, from the general public to prisoners at the local prison and people spending time in police custody. It is a fairly frequent occurrence for a handcuffed prisoner to be seated in the waiting room with other patients. For many people, this may be the closest they have come to meeting a 'violent criminal' – both exciting in some senses and also fear-inducing.*
- ***Crowding:** at busy times, the waiting area can become crowded. Sometimes there aren't enough chairs and people are forced to stand for hours on end. Chairs are also often small and placed very close together, reinforcing feelings of being too close to people with whom you'd rather not be spending time.*

c) Design briefs

To check, challenge and validate the research findings, the Design Council convened an Expert Reference Group (ERG) workshop, which brought together frontline NHS clinicians, NHS operational managers and NHS security managers, police staff, prison staff, academics, patients and designers.

This full-day ERG workshop attended by 36 experts, gave the research teams an opportunity to present their findings and methods of interpretation for both the triggers and escalators of violence.

Using the research data as a starting point, the ERG workshop participants came up with over 50 'wouldn't it be great if' scenarios for the future of A&E and identified 31 challenges where design could help develop a solution. A list of six important considerations for designers when trying to design safer and calmer departments was compiled:

1. [Safety and security](#): how organisations respond to perceived problems.
2. [Flexible spaces](#): how the architecture contributes to aggression.
3. [Efficiency](#): why stays in A&E are often as long as they are.
4. [Front of house](#): the experience of being in A&E/the patient journey.
5. [Information](#): the information needs at various stages of the patient journey.
6. [Care](#): how the process can dehumanise and disempower people.

The final group exercise developed draft design briefs, which were prioritised by voting, and provided a number of validated design themes which could be developed and refined into national design challenge briefs.

The briefs were:

1. [User-centred process](#): redesign the A&E process so that it better meets the needs of patients and other service users from start to finish.
2. [Versatile spaces](#): consider how spaces in A&E can be made more versatile and better able to deal with diverse client groups and unpredictable workloads.
3. [A good wait](#): improve the waiting experience for patients and other service users to ensure that both clinical and non-clinical needs are better met.
4. [Perceptions of A&E](#): identify ways to use communication and design to reinforce positive behaviour and avoid aggression and violence.
5. [Making safe](#): consider how design could be used to minimise both perceived and actual vulnerability and risk throughout the A&E environment for staff, patients and other service users.
6. [Place and process clarity](#): identify ways to make A&E processes and patient pathways more transparent and easier to understand.

The detail for the first brief is given below (the other ones can be found in the report):

Many visitors find the experience of visiting an A&E department disorientating. It can be difficult to understand the process of admission, waiting for and receiving treatment, and being discharged. Added to this, technical, medical and over-assertive language can make patients feel patronised and out of control. As a result, many perceive their A&E experience to be undignified. This can lead to a sense of frustration and a perception that the service is poor. In turn, this may escalate into violent or aggressive behaviour.

We want you to redesign the A&E process so that it better meets the needs of patients, while still supporting the needs of clinicians. Please create a new blueprint for A&E service concepts, and come up with user-centred prototypes.

Issues to consider include:

- *The needs of patients and other service users during their time in A&E;*
- *The effect of waiting times on patients' and other service users' attitudes and behavior;*

- *How the design of space could help A&E staff to segregate offenders, notwithstanding their human rights;*
- *The ease with which patients and other service users can travel to A&E departments.*

The design challenge asked applicants to find innovative ways to reduce violence and aggression in A&E. Their responses could include new systems, processes, interior layouts, furniture, equipment, communications and/or services. The Design Council invited multi-disciplinary design teams to pitch for the work, offering a prize fund of £150,000 to cover the cost of research, design and prototyping.

In the call for partners, it was also stipulated that the successful team(s) needed to:

- demonstrate that they are capable of designing interiors, communications and services that will protect staff from violence and aggression;
- improve the A&E experience so that fewer patients and other service users behave aggressively.

Design teams had to submit proposals detailing their credentials, case studies of their work, a statement of intent and a short business case.

The Design Council project team offered matchmaking support and assistance to interested parties who were seeking additional skill sets to join their consortia, or who were looking to join an existing consortia. 47 submissions were received in the end.

Each suitable application entered into a two-stage judging process with an independent panel, composed principally of the programme's Advisory Board and supplemented with additional judges to ensure that all relevant design disciplines were represented. A judging panel, chaired by the Advisory Board Chair then shortlisted six entrants for interview.

The design team, led by PearsonLloyd, included a consortium of specialists from the medical, psychological and social design fields. More details on the winning team can be found in the report. Over a four-month period the design team worked closely with the partner Trusts to research, develop and refine their concepts to ensure the design solutions addressed the right issues and would create a positive impact. After various workshops, interviews, prototypes and testing, the design team arrived at three distinct outputs: the Guidance solution, the People solution and an online design toolkit.

d) The double diamond process: explore and define revisited

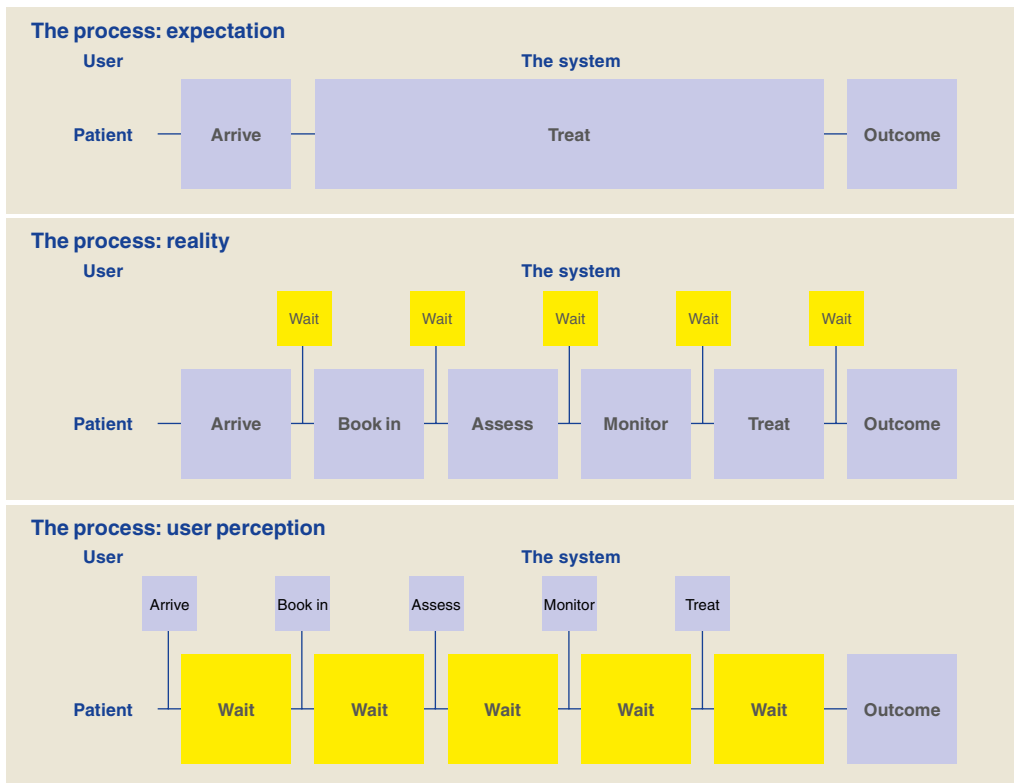
While the research provided a very thorough background document for the commissioned design team, to familiarise themselves with A&E departments, it was also essential for them to experience the departments in person, understanding the environments and processes in place, as well as witnessing the aggression and violence in the department first-hand. The design team visited several NHS Trusts and conducted workshops with a range of staff. These helped them to learn from each other's thoughts and encourage a multidisciplinary approach. Their findings gave the design team a valuable grounding in the issue of violence and aggression in A&E and helped to inform their approach and eventual solutions.

In essence, the design team revisited the explore phase of the "design double diamond" (see above).

For example, they gained insights around what they referred to as "de-humanising experience". The realities of A&E mean that patients will encounter a number of stages to being treated. Patients first need to be registered at reception. Following registration, a nurse will assess (triage) their illness or injury in order to establish the urgency of their treatment. The patient may then need to go for some medical

tests if further information is required, the results of which must then be processed and analysed. Only then can treatment finally occur. The whole process is considerably more complex than many people might expect. Visitors often were feeling forgotten, neglected or frustrated, which they may perceive as a dehumanising experience. Compounding this problem is the fact that the time spent with a member of staff at each stage is rather short, and unavoidably often preceded by a rather long wait. The result is that many patients perceive the experience as a series of long waits.

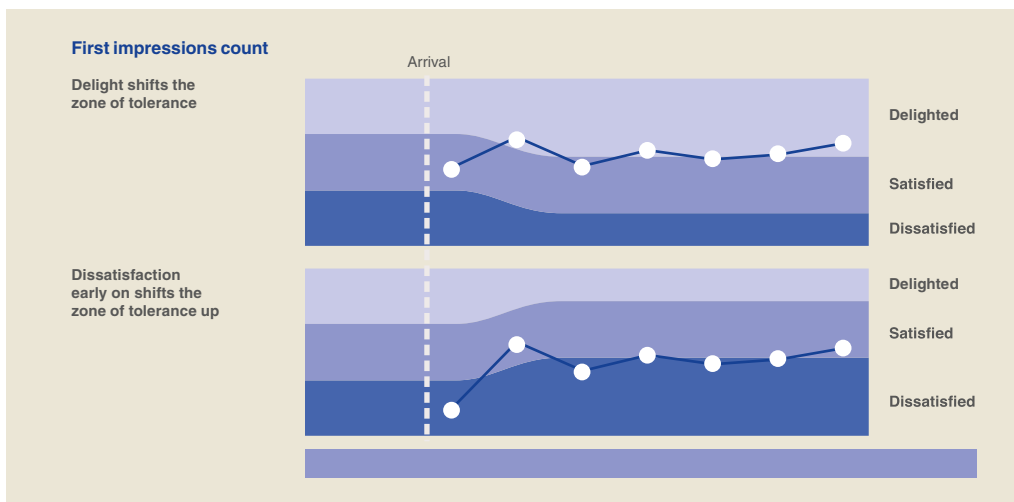
What users expect, get and perceive is depicted below.



Through the visits to A&E departments, incl. shadowing staff, the team gained a better understanding of patients' expectations of the A&E process and how their perception of the service differed from expectations and reality. One of the key issues identified is the lack of knowledge patients and other service users have about how the A&E system works. Once they have been processed into the system, they often don't know how long they are going to wait. Furthermore, throughout this time they are likely to be in pain or distress. It can end up feeling like "me versus the system", which can then result in built up frustration leading to aggression or violence. By identifying this, the team was better able to understand why the service was seemingly failing users and where there was room for improvement.

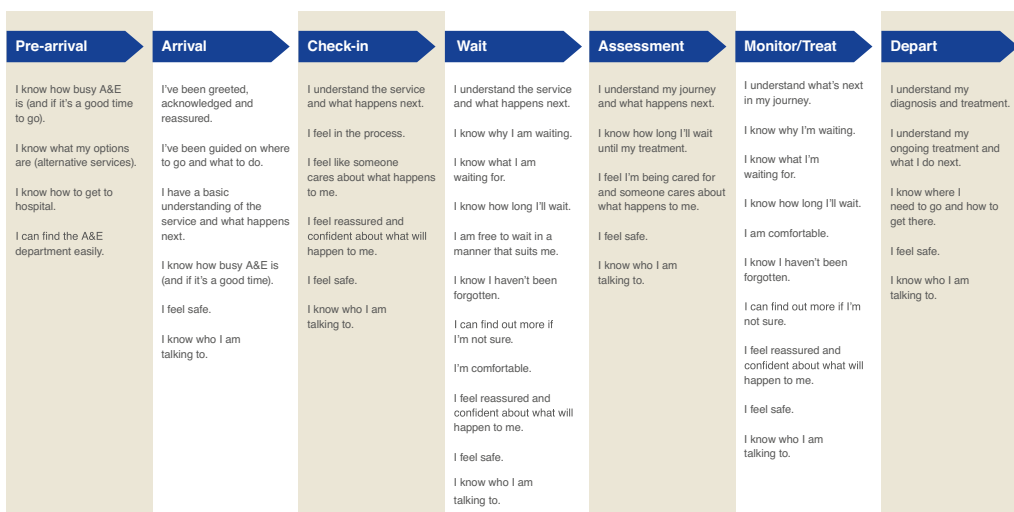
Based on mapping customer journeys they found users were informed very well throughout the treatment and outcome stages, but that there was room for improvement in the arrival stage, and that patients and other service users could be kept better informed throughout their visit.

As first impressions count, a positive initial point of contact will set expectations and result in far more favourable perceptions throughout every stage of the visit, and vice versa as the patterns below, based on the customer journey mapping, show.



It is worth noting that a person's experience of A&E often starts before they even enter the A&E department. For example, if a patient or service user has had difficulty finding a parking space, they will already be stressed and more likely to become aggressive.

In order to understand how the existing service could be improved, the design team needed to clearly understand what patients expect from the journey. Each step of the journey was broken down and expanded upon to depict the ideal one.



This led them to review the six national design challenge briefs, in effect, revisiting the "define" phase of the double diamond, and distil these into four overarching themes for their design solutions:

- **The arrival experience:** creating positive first impressions and managing expectations for patients and other service users. This plays into the following design opportunities:
 - The pre-arrival and arrival experiences are two different stages in the service user's journey, and therefore represent distinct opportunities for improvement.
 - A pre-arrival intervention would allow patients and other service users to self-triage and identify the appropriate care pathway. They may benefit from direction to alternative care

pathways when A&E is not appropriate. When A&E is the right place, however, they need to be guided towards the correct destination, while actively managing their expectations of the service.

- Upon arrival, the opportunities lie in reassuring, managing expectations and creating the best possible first impression. The ideal case scenario would be a personal greeting, delivered as early as possible within a welcoming space that creates a sense of mutual respect between the user and the service.
- **The waiting experience:** how to intervene before frustrations accumulate:
 - **Understanding:** the patient and service user may lack an understanding of why they are waiting, and of how the waiting process and prioritisation of treatment is organised.
 - **Social experience:** the waiting space is shared by disparate groups and individuals, a proportion of whom may be intoxicated, antisocial, or in significant distress. As a result, a negative or positive interaction can quickly result in a similar atmosphere being spread throughout the space.
 - **Environment:** the ambient environment can give the patient and service user prompts as to how to behave and what to expect. In the same way that a library promotes a hushed environment, an appropriately designed A&E environment could promote a sense of calm and respect.
 - **Empowerment:** providing the right information at the right time can help to alleviate the stress of the unknown and manage patients' and service users' expectations of the A&E service. This may cover information about how the A&E department works, where the patient or service user is in the process, or even just how to find their way around the department. Empowering people with knowledge can also reduce the time spent by clinical staff responding to general queries.
- **Guidance:** providing information to patients and other service users to alleviate the stress of the unknown.
- **People:** building a healthy mutual relationship between the user and the system. The NHS Constitution cites compassion, dignity and respect among its core values. The realities of working 12-hour shifts in a pressured and stressful environment, however will inevitably have an impact upon the ability of staff to uphold these values. Indeed, ethnographic research conducted as part of this project identified staff fatigue as one of the key triggers for patient and service user aggression. Staff fatigue is inevitable, so there is an opportunity to explore how the system can mitigate its effects. The proposed design solutions should provide the necessary support to ensure that good 'customer service' is delivered throughout, and be able to withstand the stresses and strains of working in an A&E department.

To validate these themes, an online patient survey was conducted through the team's personal network. This received a strong response: 117 people completed the survey, reporting on experiences relating to 58 different NHS hospitals across the country.

The survey responses backed up the team's own experiences, and revealed a number of insights.

- While clinical care was rated good or exceptional by the majority of people (67%), the non-clinical element of their care was rated good/exceptional by less than half of people (48%);
- A third of people did not understand the process for being treated, and two-thirds of people (63%) did not always know what was happening;
- While most people (87%) expected to wait for their treatment, two-thirds (67%) expected the wait to be shorter than it was, with over half of the survey population (51%) not always understanding the reasons for their wait;
- Two-fifths of people (42%) felt unable to talk to staff, with a similar number not knowing who they were talking to.

The team then produced three “solutions” (concepts) as a response to an “how to” statement.

1. [How to improve the patient experience through better communication and guidance?](#)

[Proposed solution:](#) an intuitive modular information and communication system – in the form of large scale environmental signage and live digital platforms – designed to be deployed on-site to empower patients with key information and reduce anxiety levels. In summary: provides a need-to-know package of information about the department, waiting times and treatment practices to patients. It includes integral on-site signage, patient leaflet, interactive media digital systems and touch screen applications. This is complemented by a live digital screen welcoming patients, coupled with a large process map of a patient’s pathway through the respective A&E department.

- [What:](#) A communication package to create a transparent process, providing basic information about the department, waiting and treatment.
- [Why:](#) By giving visitors to A&E a better understanding of how the department works, and a sense that their human as well as clinical needs are being attended to, they are less likely to become confused, frustrated and potentially aggressive as they progress through the system.
- [How:](#) Retrofittable environmental graphics, complemented by a live digital system and welcoming arrival process.

2. [How frontline NHS staff can be better supported to manage and learn from incidents of violence and aggression?](#)

[Proposed solution:](#) new staff-centred reflective practice designed to develop and duly safeguard frontline staff – through cognitive learning – to support their interface with potentially aggressive and violent patients. In summary: this provides concepts for staff to recover from the stresses of the workplace, promoting staff engagement, boosting morale and reducing staff sickness/ absence through learning and development tools. It will support staff to develop and/or regain their compassion in difficult circumstances through learning and development via practical, people-centred training programmes and other in-house inductions or reflective sessions.

- [What:](#) A programme that enables staff to help fulfil the core values of the NHS and engage directly with the issues around violence and aggression.
- [Why:](#) To promote staff engagement, boost morale and reduce staff absenteeism, with the goal of helping staff develop enhanced techniques to care for different types of patient and visitor.
- [How:](#) An induction programme for new staff members including trainee nurses, junior doctors, agency staff, receptionists and security. A cyclical programme of staff engagement around a format of reporting and review.

3. [How the outputs from this project can better inform and inspire A&E commissioners and decision-makers in the NHS?](#)

[Proposed solution:](#) a design toolkit, which offers concise design-led recommendations – inclusive of process, information and environmental spheres – to help improve patient experience and reduce violence and aggression. In summary: the production of a toolkit which provides management with a full spectrum of the causes of violence and aggression in A&E departments and design recommendations which could be made to help combat or solve them. Examples could include environmental layout and atmospheric recommendations to areas such as reception, triage, minors, majors, cubicles, etc. This will educate decision-makers on how the designs of various elements can positively impact reduction of violence and aggression.

- [What:](#) A guide for NHS frontline, management, estates and industry that provides guidelines on the built environment, relevant to each area of A&E.
- [Why:](#) Educate decision-makers on how the design of various elements can positively impact upon levels of aggression and violence, and recommend best practice solutions.
- [How:](#) Illustrated publication and online website.

e) The double diamond process: Develop

The development stage was crucial for the project, in terms of the designers to understand how the output would best serve the users. This required an iterative process with multiple versions and revisions based on feedback from the team, partner Trusts and users.

Solution 1: Guidance

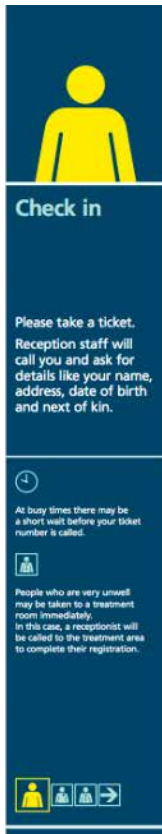


The design team's primary solution for providing essential guidance to patients and service users was to develop a series of static, fixed format signs.

Such panels were linked to the patient journey depicted as a series of steps moving towards the goal of treatment, with a pause (or wait) before moving onto each step. The steps were categorised into the four larger stages of check-in, assessment, treatment and outcome (or further treatment).

It was important to illustrate each wait as being purposeful and another step in the journey towards treatment in order to readdress perceptions around waiting in A&E. The process map is intended to be displayed in full size in the waiting room, but the information should also be available in a portable format as a patient leaflet.

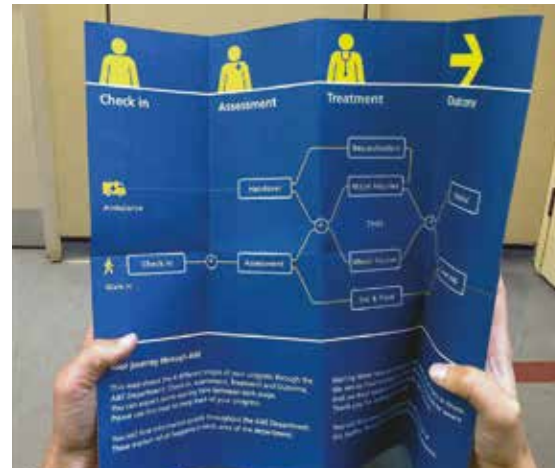
Each panel contains specific information relevant to the patient's current stage in the process. This solution meant that rather than redesigning the whole department, or refitting each and every room, a panel could be inserted, which would gently guide the patient or other service user along their journey through A&E. The flexibility of the panel system means it can be inserted into any room, space, or corridor, creating an instantly recognisable point for information and communication throughout the department.



- 1 Where am I?
What stage am I at?
- 2 What's the most important thing I need to know?
- 3 Why am I waiting?
How long will I wait?
What impacts on waiting times?
- 4 (optional) What happens at this stage?
What happens after this stage?
- 5 Where am I in the process?

The visual language was deliberately developed to reference a journey map, with each step represented as a 'stop'. The stop names can be read from a distance, and the overall process can be quickly understood. If the reader moves closer, they can read the explanatory text and learn more about each step.

Patients also received a leaflet with a map.



The Guidance Solution initially started from the design team's desire as non-clinicians, to understand the A&E process. After visiting A&E departments and shadowing staff to experience the patient journey, the design team noted each stage of the process in order to map the user experience. Whilst trying to map the patient flow through the department, the design team realised that this would be very useful information for everyone visiting the department, which then led to the creation of the process map. It began with visualising the two ways patients arrive at A&E: ambulance and walk-in. From there the team needed to understand the various treatment routes people take from check in to leaving.

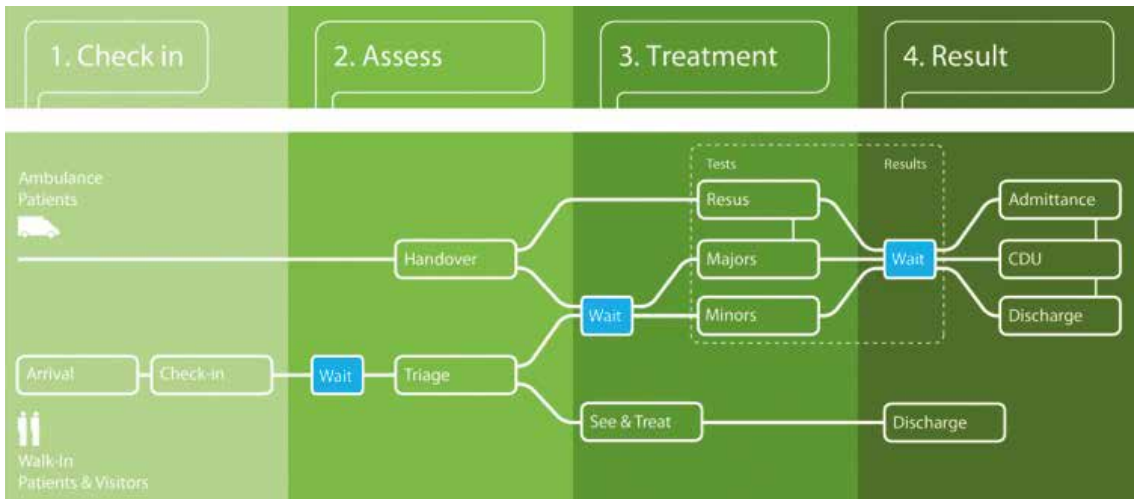
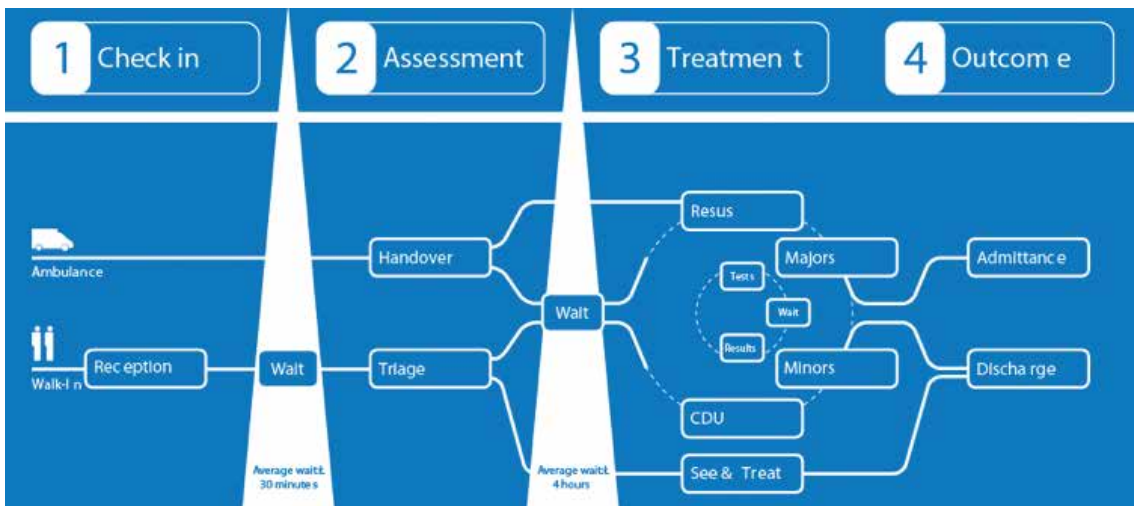
The process map underwent many iterations to ensure it accurately reflected the patient journey as a clear progression through the department. One important aspect was to ensure that waiting was communicated as an important and necessary aspect of the process. Initial versions highlighted the waiting times, which made treatment almost appear secondary. Therefore, the team had to revise in order to ensure that waiting did not overpower the rest of the process. With each iteration of the process map, the design team had to consider how easy the maps were to read, the graphical hierarchy, colours and font choices and ensure they all worked together. This was done digitally as well as with full-scale physical mockups.

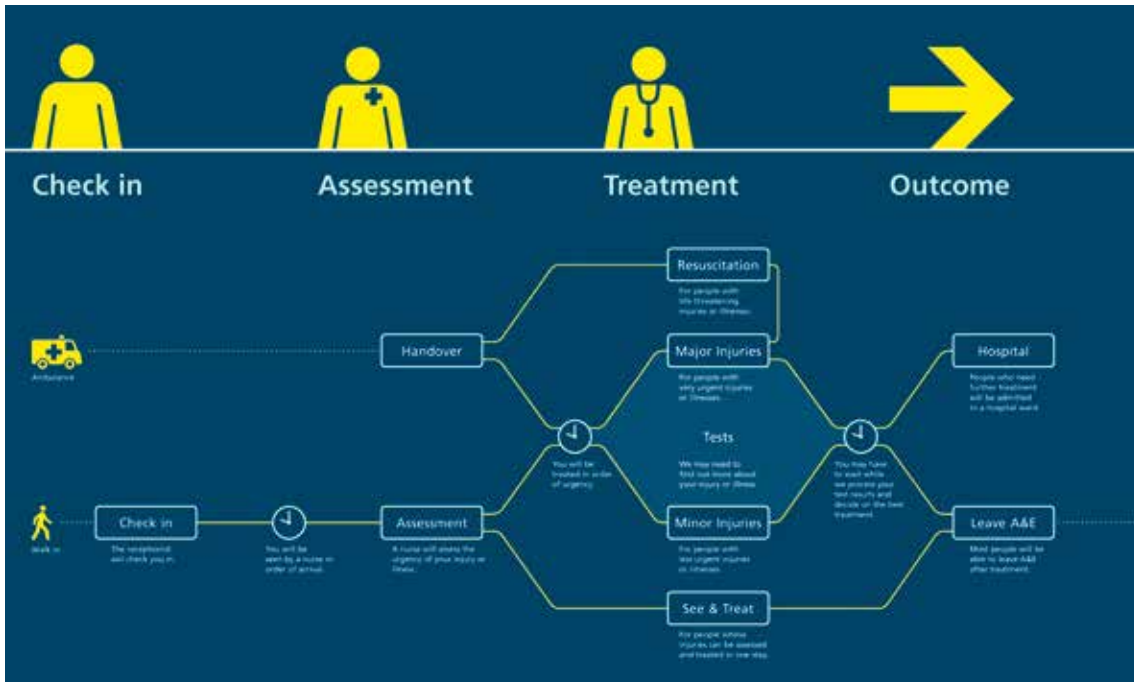
When designing the graphics, the team was very careful to steer clear of a medical aesthetic. The signage needed to look fresh and inviting, drawing patients in to read the information. Initially the signs were envisaged as being a 'slice' of a room, where the walls, floor and ceiling would be treated in a coloured wrap, that could be seen from afar and easily identified as an information point. The background colours were consequently chosen from a palette that were very 'un-hospital'.

A lot of time was also spent on developing the icons, to ensure they were simple, easy to understand, and communicated the right message. Once the designs had undergone various iterations in-house, the designers needed feedback from the public, who are all potential users of the A&E service. Using a

format called voxpops, the designers randomly approached members of the public to rate the different designs. This feedback informed the designers where confusion may occur and gave them a better understanding of how users would perceive the designs.

To contextualise the development process several versions of the process map can be seen below.





Lessons from prototyping regarding the panels were:

- When creating the colour scheme for the Guidance solution, the design team recognised that each A&E department is different and that it was necessary to provide more than one colour option for the panels and panel variations. As a result, the design team created a palette of three different colours, allowing each NHS Trust to choose the most suitable option for its respective A&E environment(s);
- The realities of retrofitting these panels into existing departments with very little spare wall space meant that the width had to be quite constrained, and that crash bumpers would run through the middle of each panel;
- It is important to ensure that the information can be read by everyone coming through the door, so the graphics took into account the need to use a clear font and font size, colour contrast, readability and pictograms;
- A ceiling panel was also incorporated for patients arriving on stretchers. These were intended for the ambulance entrance, as well as being above the bed for resuscitation and major wards.



In addition to the static content on the panels and in the brochure, more dynamic and real-time information can be presented digitally.

The purpose of the digital displays is to give patients an indication as to how busy the department currently is, which helps people better gauge waiting times. The displays intentionally don't give each patient a waiting time, but rather the average wait time for each department. Displaying real-time information enables people to relax while waiting, rather than having the anxiety of constantly wondering when their names will be called. It would also encourage people to decide whether to come back to A&E at a less busy time for faster treatment.

Future opportunities for development were also prototyped:

- A touchscreen facility within A&E departments. In particular, a bar-code-enabled touchscreen can enable patients to access their own records and view the waiting times particular to their own personal treatment. The touchscreens could also display information in multiple languages, and provide an audio channel for those with impaired vision.
- Smartphones are becoming ever more prevalent, with one in three people now owning a smartphone in the UK. This medium provides the greatest scope for information personalisation and breadth of information. It is anticipated that in future, phone apps would enable users to self triage, find their least busy local urgent care centres, and check-in before arriving at the centre.



Solution 2: people



A two-pronged solution was proposed. The first was an induction pack for staff new to A&E, and the other was a system for more established staff members to promote reflection on managing violence and aggression.

The induction pack was designed to help individuals joining the department understand the culture of the hospital they are entering. This pack would need to be developed with the A&E department to tailor it to their needs and dovetail it into their existing induction processes. It could contain information on patient types likely to become aggressive or violent, guidance on how best to respond, and indicate ‘flashpoint’ times when aggression is most likely to occur.

Current working patterns within A&E also support the concept of an induction pack. While all staff working in an A&E department should receive training to develop the necessary skills, there are many staff who may regularly work within the department but do not qualify for training. At university hospitals, for example, there are also many trainee nurses and junior medics in the department who may be there for only a few months at a time and therefore miss out on training. The induction pack therefore helps to resolve this problem, so that all staff have the requisite knowledge.

The other part of the solution was the reflective programme. The design team proposed an 8-week programme, consisting of 8-10 people and conducted twice a year. During the programme, they recommend that participants – representing a vertical cross-section of staff across the A&E department – meet once a week for an hour.

Noticing incident levels is important in helping staff understand the potential perpetrators of violence and aggression



and to reflect on the reasons for this behaviour. The design team developed a 'noticing pack', which is a series of posters for staff to customise. Each week, a poster would be put up in the staff room to establish where the aggression and violence lies within a set of parameters. Staff would then make a mark in the appropriate place every time they experience aggression or violence – and a visual map would gradually develop of the spread of incidents.

Each week, these parameters would be changed and different variables noticed. This information would help to shine a spotlight on the issue of violence and aggression within the department, so that staff can become aware of where, when and from whom it is occurring.

This observation work then feeds into a weekly discussion forum, where staff can reflect upon their experiences, and deal with the day-to-day problems of working in this environment, as well

as how to respond to the findings they have collected. It would need to be conducted by an external facilitator who is able to question and confront the issues at hand.

Discussing these problems as a group is important as it facilitates learning from other people's experiences and then enables everyone to proactively deal with the issues as a group, as well as feeling less isolated in dealing with these experiences. A similar initiative in the USA found that staff were able to better respond to patients' social and emotional needs and improve their interactions with patients and other staff, while feeling less stressed and isolated.

Initially, the discussion forum would focus on the results from the noticing pack. Staff could then move on to explore how these findings can be used proactively to prevent violence and aggression occurring in future.

Solution 3: Design toolkit

To enable any NHS Trust to implement changes to improve safety in their A&E departments, instead of redesigning just one specific waiting room or department, the designers worked on producing guidance to inspire and enable NHS Trusts to implement these changes within their A&E departments.

The toolkit is a guidance document that compiles all the high level design recommendations that can help to reduce aggression and violence in A&E. These are not design solutions in themselves, but may be specifications or service changes. The toolkit breaks the patient journey down into its different stages of the A&E process and presents case studies of best practice that are in place at other NHS Trusts.

The toolkit is intended to be used by all NHS staff, while also providing a reference source for architects or interior designers working on new-build projects. It is also available in greater detail as an online resource: http://www.designcouncil.org.uk/sites/default/files/asset/document/a%26e_8steps.pdf

f) The double diamond process: deliver / evaluate

An independent evaluation was commissioned from Frontier Economics / ESRO (Reducing violence and aggression in A&E: an impact evaluation for the Design Council, November 2013). To understand whether the design solutions would be successful at improving the patient experience and reducing tensions, they were installed and piloted at two A&E departments: Southampton General Hospital (University Hospital Southampton NHS Foundation Trust) and St George's Hospital, London (St George's Healthcare NHS Trust). Comparator control sites, with similar characteristics to the two pilot sites, were also selected for the respective pilot hospitals: Oxford John Radcliffe Hospital (Oxford University Hospitals NHS Trust) as the comparator site for Southampton General; and King's College Hospital, London (King's College Hospital NHS Foundation Trust) as the comparator site for St George's.

Both pilot sites implemented the Guidance solution in Autumn 2012. This comprised the upfront process map, a full set of Guidance panels ('slices') for each area of A&E (including triage, xrays, resuscitation, majors, minors etc.), and information leaflets for patients and visitors. However, although both sites intended to display the digital information systems (TV screens showing information such as patient numbers etc.) as part of the Guidance solution, to-date neither site has consistently displayed the digital information as planned.

St George's had screens installed in their waiting area as part of another pre-planned initiative – an advertising promotion. This restricted the use of the screens so that it was not possible to integrate the digital information displays within this system. Additionally, the Trust was unable to gain the necessary support from their IT team in order to align the Trust's existing system with the planned solutions. Consequently, it has not been possible to test the digital element of the Guidance solution at St George's.

Southampton installed hardware specifically for the project which has since been used intermittently. The main challenge has been in ensuring that electronic patient records are updated in real time, so that the screens display correct information. During the pilot the department tested a number of ways to effectively calibrate the Trust's data with the information displayed on screen in a way that was useful and accessible to patients.

For the People solution, each site appointed staff 'facilitators' from their A&E team who undertook 2 days of facilitator training. Each Trust adapted the People solution and its schedule to reflect their needs. Consequently the content and format of the project was delivered differently at each site.

At St George's, the People solution began in March 2013 and ran over four months, until June. In order to create a programme that was manageable within the context of an extremely busy department, the Trust held sessions that were more open and flexible than originally outlined in the design package – both in terms of the number of people attending and the frequency of the sessions. The programme began by discussing staff's personal experiences of workplace violence and aggression. As sessions progressed, staff were able to identify and define typical perpetrators of hostility as well as categorising the nature of incidents, including when incidents were most likely to happen. The tally charts helped to identify which areas of the department were experiencing the highest levels of violent and aggressive incidents, leading to insightful discussions about how these could be better managed.

The People solution also began in March 2013 at Southampton, but here regular sessions were held with one group of eight participants, who were chosen to represent a cross section of staff. Again, flexibility was key to ensuring staff participation, with sessions scheduled around staff rotas. However,

despite careful planning, staff still found that on occasion they had to stay on after a night shift or come in on off duty days in order to participate.

Over the course of eight sessions, the group explored the issues that caused the most irritation and impacted the ability to deliver care. This led to a number of unexpected findings, and empowered staff to begin conversations with management. Ultimately, the People solution provided the Trust with an opportunity to engage with staff, emphasising that their needs were heard and considered important. Southampton also used the People solution to open a dialogue about key operational issues affecting staff, as a way of relieving pressure and deflecting some of the challenges they were facing.

Piloting the design solutions within working A&E departments has presented inevitable challenges and provided a host of valuable learnings which will be applied to future implementations. This study has further emphasised the complexity and competing pressures on A&E staff with multiple initiatives and an unpredictable case load. It has also emphasised the need for design solutions to be sufficiently flexible to meet the specific needs of individual A&Es.

The evaluation showed:

- Patients' complaints relating to their 'wait/delay' and to 'poor information and communication' fell by 21% and 57%. Only 9% of patients in the post-implementation stage felt they had been forgotten by staff compared with 17% in the pre-implementation stage. Only 11% of patients felt that other patients were frustrated post-implementation compared with 16% in the pre-implementation. There was a 5% improvement in patients reporting their waiting experience to be 'very good' or 'excellent' (8-10 on a 10 point scale).
- The design solutions set out to address non-physical aggressive behaviour – a daily occurrence in A&E. While severe aggressive and violent acts, such as punching and kicking of staff, are extremely detrimental when they occur, the number of reported incidents are notoriously low. Reduced non-physical aggression experienced by both staff and patients, particularly around threatening behavior, see table below. Important to realize is that this percentage fall is based on a staff survey 8 months after implementation at the pilot site comparative to control sites (where the pilot was NOT executed). Hence, the absolute drop could be even more but only the percentage indicated can be attributed to the pilot.

Incident type	Percentage fall in incidents
Threatening body language or behaviour (including offensive gestures and unsuccessful physical assault)	-50%
Raised voice or being shouted at (including hostile or aggressive tone)	-25%
Offensive language or swearing	-23%
Uncooperative behaviour	-2%

- Qualitatively, staff also reported that the People solution had positive impacts in catalysing a cultural change for A&E staff, in terms of prioritising and formalising initiatives to learn from and improve staff experience; and empowering staff to challenge aggressive behaviour.
- Good value for money: the benefits of the solutions far outweighed their costs by a ratio of 3:1. In other words, for every £1 spent on implementing the design solutions, £3 was generated in benefits.

How value for money was calculated requires some explanation. The fall in number of incidents as reported above was monetarised in the following way: data existed already at the UK Home Office on the probability of an "average" aggressive act leading to acute stress disorder, mild post traumatic stress disorder (PTSD) or severe PTSD. The World Health Organisation also provides data on average

losses of quality adjusted life years and the average duration of this loss in quality due to those three outcomes. However, the research wanted to be as conservative as possible and hence assumed that repeated incidents on the same persons would have a diminishing impact. Under this assumption, the second and third aggressive acts assumed to have 33% of the impact of the first act, the fourth and fifth aggressive acts 20% of the first act, and all subsequent acts 8% of the impact of first act of aggression.

The monetary value of a year of full health (no loss) was based on estimates of the National Institute for Clinical Excellence.

This was then set off against the costs of the programme (based on the real costs of the two pilots with cost of implementation based on the first year and assumed to be annual after that and the cost of development assumed to be 0 after the first year) which were calculated to be as follows:

Project Planning	£7,000
Guidance project Development	£12,500
Implementation	£20,000
People Project Development	£5,500
Implementation	£11,000
Expenses	£4,000
Total	£60,000

In addition, for the guidance solution, the following investments have to be made.

Equipment	Lifespan in years	cost
Signage	2	£15,000
Digital equipment (indicator of activity)	3	£2,000
Leaflets	1	£3,000

All costs and benefits were discounted to take account of the time value of money.

Indicators of improvements in patient experience, staff wellbeing and productivity among A&E staff have been captured by the patient and staff surveys as well as the PALS records. Yet these improvements have not been incorporated into the value for money framework, largely because any improvements in staff and patient wellbeing may overlap with reductions in aggression. As the research is valuing the benefits of reduced aggression, calculated by comparing the change in reported incidents pre- and post- implementation, any measurement that captures improvements in staff or patient wellbeing risks overlapping with the benefits calculated from reduced aggression. As such, it is impossible to record both reduced aggressive acts and improvements in wellbeing without potential double-counting.

Other potential benefits, such as reductions in stress-related absences, increased staff turnover and changes in litigation costs, were not included in the VFM assessment as they cannot be reliably measured due to the short time span that has elapsed since implementation.

Much more detail is provided in the evaluation report.

Concluding remarks

This case shows how a newly emerging need in the hospital context – the need for enhanced security and reduced anxiety on the A&E workflow for staff – was addressed with new solutions. It is important to see that the need that was being addressed was not the need for health for the patients. While that is what hospitals are there for, this was not the targeted need in this case. In fact, the solution for this need for health, namely medical treatment, is not affected by the project.

Sources

- Frontier Economics, 2013, Reducing violence and aggression in A&E: through a better experience – an impact evaluation for the Design Council.
- Design Council, 2011, Reducing violence and aggression in A&E: through a better experience
- <http://www.designcouncil.org.uk/projects/reducing-violence-and-aggression-ae>
- <http://www.abetteraande.com/>

12. Integrating “Nudging” into service design

This chapter draws on “A Practitioner’s Guide To Nudging” by Kim Ly, Nina Mažar, Min Zhao and Dilip Soman (2013) to explain the concept of “nudging”. When other sources are drawn upon, these will be referred to explicitly.

“Nudge: Improving Decisions about Health, Wealth, and Happiness” is the title of a 2008 book written by Professors Richard Thaler and Cass Sunstein. The book introduces the notion of choice architecture and draws on findings from behavioural economics which show that changes in the environment disproportionately influence behaviour.

Rather than placing restrictions (e.g. with laws) or changing economic incentives (fines and rewards), “nudges” influence behaviour by changing the way choices are presented in the environment. While a significant change in economic outcome or incentives is not a nudge, a nudge may serve to highlight an economic incentive. For instance, members of a gym may be nudged to exercise more frequently by framing their 600 EUR annual membership fee as 50 EUR a month or approximately 12 EUR a week.

Another example: many people support the idea of organ donations but fail to follow through with their intentions. In many countries, potential donors need to sign up to be an organ donor at the department of vehicles and licensing, but the burden of asking for the forms to indicate that choice rests with the potential donor. In a “prompted choice” system, applicants for licenses are actively asked whether they would like to donate organs. This simple nudge has increased organ donation rates from 38% to 60% in the U.S. state of Illinois.

The table below gives an overview of different types of “nudges”.

Table 3: typology of nudges

		MINDFUL		MINDLESS	
		ENCOURAGE	DISCOURAGE	ENCOURAGE	DISCOURAGE
Activating a desired behaviour	EXTERNALLY-IMPOSED	Simplifying tax rules to make tax filing easier.	Placing signs to remind people not to litter.	Advertising that most people are recycling to increase recycling efforts.	Using fake speed bumps to discourage speeding.
Boosting self control	EXTERNALLY-IMPOSED	Simplifying application processes for college grants to encourage higher-level education.	Installing car dashboards that track mileage to reduce gas usage.	Automatically enrolling for prescription refills to encourage taking medication.	Placing unhealthy foods in harder to reach places.
	SELF-IMPOSED	Maintaining an exercise routine by agreeing to pay a small penalty if a gym session is missed.	Avoiding drunk driving by hiring a limo service before-hand.	Joining a peer savings group to encourage saving money.	Channelling money into a separate account to reduce the likelihood of it being spent.

The first dimension looks at whether a nudge is designed to boost self-control and help individuals follow through with a decision (such as contributing to a retirement plan). With certain behaviours, such as saving money or exercising, there is a discrepancy between what people would like to do and what people end up doing. Nudges that help boost self-control will correct for this discrepancy.

In other domains such as littering, individuals might not always actively consider what the right behaviour should be. In this case, nudges are designed to activate a desired behaviour or norm and influence a decision that an individual is indifferent or inattentive to. These behaviours are not at the top-of-mind for the majority of people; hence people are unlikely to impose nudges that influence these behaviours upon themselves. Therefore, nudges that seek to activate latent or non-existent behavioural standards in people rely on exposing them to conditions in which those standards become more salient.

The second dimension considers whether a nudge will be voluntarily adopted. Self-imposed nudges are voluntarily adopted by people who wish to enact a behavioural standard that they feel is important. Such nudges may include using products or practices such as voluntarily asking for a reduction on one's credit limit.

Externally-imposed nudges do not require people to voluntarily seek them out. Rather they passively shape behaviour because of the way they present available options without constraining them.

The third dimension considers whether a nudge will guide the individual to take a more cognitive, deliberate approach to decision-making and remove some of the effects of the often unconscious behavioural influences present in the context; or whether it will guide them towards a more automatic, implicit approach that utilizes well-established behavioural influences or heuristics.

Mindful nudges guide individuals towards a more controlled state and help people follow through with a behavioural standard that they would like to accomplish but have trouble enacting. Such nudges influence the intention to eat healthier, stop smoking, exercise and save more. Mostly, these nudges help people make better intertemporal choices so that their behaviour in the present better reflects their wishes for the future.

Mindless nudges include the use of emotion, framing, or anchoring to sway the decisions that people make.

The fourth dimension considers whether a nudge encourages or discourages behaviour. Encouraging nudges facilitate the implementation or continuation of a particular behaviour. Discouraging nudges on the other hand, hinder or prevent behaviour that is believed to be undesirable.

Datta S. and Mullainathan S. (2012, Behavioral design: a new approach to development policy, CDG Policy paper 016) provide a related, although differently structured framework by drawing attention to four "scarce" resources. The authors are linked to IDEAS 42, the organization responsible for the cases that are elaborated below.

First comes "scarcity of self-control": self-control is very hard and we should view ourselves as having a limited stock of this "psychic commodity". Hence, we end often up doing less of what we actually really want to do.

A next scarce resource is attention. People tend not to pay attention to features or aspects of a practice or technology that they think are unimportant. However, if key aspects are not paid attention to, the effectiveness of the practice or technology may be greatly reduced. For example, people tend not to take their medicine in exactly the way that was prescribed. The issue is not that they think it is unimportant to take the medicine or that they do not want to take it. The issue is that they are not attentive to the fact that the exact timing and dose matters.

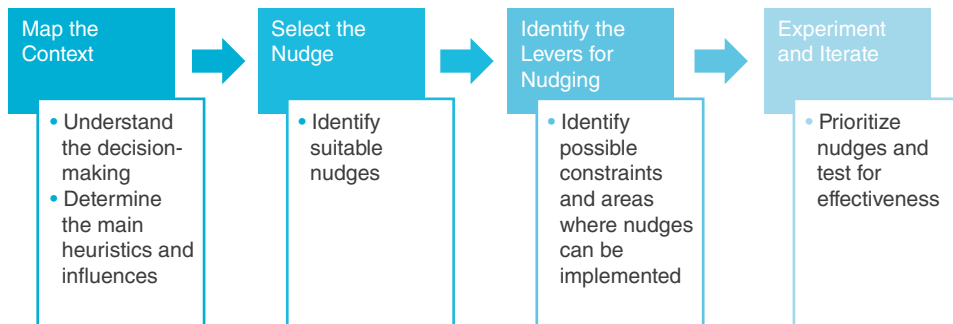
Next, cognitive capacity is scarce. People get overwhelmed easily with too much information (e.g. comprehensive financial literacy programmes). The same goes for too much choice (e.g. many variations in pension plans).

Another scarce resource is understanding. Many people may have a wrong "mental model" in their heads, where they are seeing cause and effect relations, based on their experience, that simply are

incorrect. For example, in some developing countries, people believe there is no point in going to school, unless kids can go all the way through to high school. However, this is not the case.

The process of designing an effective nudging strategy is depicted below, based on Rotman et al (2013).

Figure 12: designing a nudging strategy



The first step is to audit the decision-making process of the end user. This requires an analysis of the context and the task (how do people make decisions, what are the typical circumstances in which they do that, etc.) followed by identifying the key heuristics and influences that may affect the decision outcome.

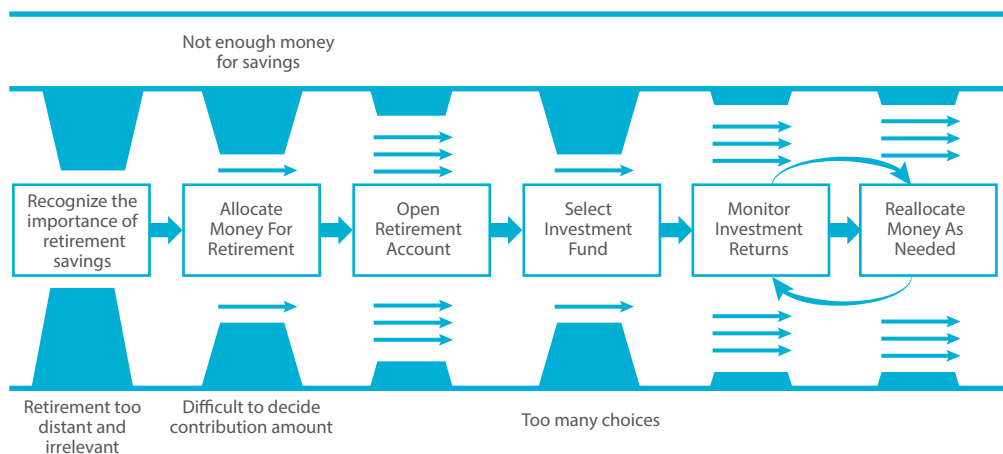
Auditing the decision-making process will identify factors that prevent individuals from following through with their intentions. These factors (bottlenecks) represent areas where a nudging strategy might yield quick dividends.

Four different aspects of the decision-making process need to be checked:

- The properties of the decision including understanding the incentives and motivations associated with the decision, and how much attention the decision receives. It also includes identifying the choices presented to the individual, especially the default option;
- Information sources and how information related to the decision is gathered and presented;
- Features of the individual’s mindset and whether emotions influence the outcome of the decision;
- Environmental and social factors such as peer pressure and lengthy application processes.

On this basis a map outlining the critical actions involved with following through with a decision can be constructed as well as bottlenecks occurring with these actions. An example is given below, related to the decision to contribute to a pension plan.

Figure 13: decision process map on poor saving for retirement problem



The desire to achieve an outcome that may still be very distant (e.g. savings for retirement, children's education expenses) could be the result of a life event (e.g., marriage, birth of a child) that motivates an individual to complete the needed actions (e.g., open an account, purchase a fund). These life events are good moments to nudge people to action.

The next step is to select a nudge. Bottlenecks in the process are good starting places to implement a nudge and are revealed by these questions:

- Is the individual aware of what they need to do but are unable to accomplish it, or does a desired behaviour / action need to be activated?
- Are they motivated enough to impose a nudge on themselves?
- Is the action more likely to be taken with increased cognition, or are individuals currently hampered by cognitive overload?
- Is the desired action not being accomplished because of a competing action, or due to inertia? Consequently, should we aim to discourage the competing action or encourage the target action?

The table below shows the main causes of bottlenecks.

Table 4: causes of bottlenecks in decision processes

BEHAVIOURAL INFLUENCES	
Status Quo	An individual's preference to maintain their current state even if a change in their circumstances would provide better options.
Endowment Effect	The inclination to value and pay more for an item that is already in possession than for an item that has yet to be attained.
Loss Aversion	A tendency of individuals to be more attuned to losses than to gains.
Confirmation Bias	A predisposition to accepting information that confirms one's opinions or conclusions rather than information that is contradictory.
Mental Accounting	Money is mentally allocated to several "accounts" such as clothing or entertainment rather than being perceived as fungible.
Willpower	The fact that individuals only have a certain amount of will-power at any given time and that willpower needs to be replenished periodically.
Hyperbolic Discounting	To value benefits that are reaped now more than benefits reaped in the future. Consequently, costs that are paid in the future are not felt as deeply as costs that are paid now.
Choice Overload	The presence of too many choices for a particular decision, making it difficult to evaluate and decide.
Information Overload	The presence of too much information in the environment, preventing the individual from evaluating and making a good decision.
HEURISTICS	
Availability Bias	Information that readily comes to mind is used to make a decision rather than using a comprehensive set of facts that evaluates all options.
Representativeness	The use of similar attributes to judge the likelihood of an event occurring. This is in contrast to using a more comprehensive approach that would utilize statistics (e.g., base rates) to determine likelihood.
Anchoring and Adjustment	To make an estimate by applying adjustments to a particular reference value (i.e., the "anchor").
Social Proof	When an individual looks to the behaviour of their peers to inform their decision-making, and their tendency to conform to the same behaviour their peers are engaged in.

Perhaps the biggest bottleneck in solving the retirement savings problem is the need recognition – the fact that people seem to believe that retirement is still some time away and that it is too early to start thinking about it. Other bottlenecks might include cognitive difficulties, ability to get things done (e.g., open the relevant accounts) or be dazed by too many options.

Next the levers for nudging are identified. Here it is useful to determine whether the following options are available:

- Implementing an automatic enrolment process;
- Offering a default option or changing the current default option;
- Modifying or changing the current choices that are available to the individual;
- Simplifying the process that facilitates the decision-making process;
- Using technology to reduce the cost (per individual) or improve scalability.

Moreover, the responses to the four questions posed earlier will allow the choice architect to check with Table 3 which type of nudge can be used.

Datta S. and Mullainathan S. (2012) also list strategies to address the four scarce resources mentioned above:

- commitment devices that facilitate self-control (e.g. an alarm clock that jumps into the corner of the room when it goes off, forcing a person to get out of bed);
- reducing the need for self-control in the first place (e.g. instead of asking to pay a school fee all at once in the beginning of the year, necessitating saving up for it, asking for it in small installments across the year);
- removing snags to choosing by having a “default” option (that most people tend to go for anyway) or by making things automatic (e.g. automatic monthly transfers into savings accounts);
- using micro-incentives e.g. giving small reward for bringing a child for vaccination;
- reducing inattention via reminders (in person, via phone, via text messages) and formulating implementation intentions focused on the various steps people need to take to follow through on an intention. Also, people can be encouraged to make specific plans about when and how they will do something;
- use simple rules of thumb to help people execute key aspects of a practice;
- maximizing the impact of messaging:
 - linking money with specific goals;
 - being informed of what they will lose by inaction rather than what they will gain;
 - comparing with peers, neighbours, friends, etc. as people tend to conform to social norms but may be unaware of the norm or have inaccurate perceptions of it (because less common behaviours might be more visible);
 - making a feature of a person (e.g. an aspect of their identity that fits into a stereotype makes people behave more like the stereotype), their environment or a product/service more salient;
- frame messages to match mental models:
 - people disregard information that does not fit with their beliefs, hence telling people in a general way their beliefs are inaccurate will not work, however, targeting the belief at the core of the mental model has a better chance
 - for example, in Kenya, it was attempted to reduce teenage pregnancy by older men by telling teenage girls they should shun pre-marital sex. This only encouraged them to see marriage as a desirable goal and hence unprotected sex as a way to get into marriage. However, by telling them older men were more likely to be HIV infected, the number of girls getting pregnant by older men dropped by two thirds.

Similarly, the UK behavioural insights team uses the “EAST” framework (2014):

- [make it Easy](#):
 - Harness the power of defaults;
 - Reduce the ‘hassle factor’ of taking up a service;
 - Simplify messages: in particular, it’s useful to identify how a complex goal can be broken down into simpler, easier actions;
- [make it Attractive](#):
 - Attract attention including via the use of images, colour or personalization;
 - Design rewards and sanctions for maximum effect where financial incentives are often highly effective, but alternative incentive designs – such as lotteries – also work well and often cost less;
- [make it Social](#):
 - Show that most people perform the desired behavior and similarly, refrain from inadvertently reinforcing a problematic behaviour by emphasising its high prevalence;
 - Use the power of networks: we are embedded in a network of social relationships, and those we come into contact with shape our actions;
 - Encourage people to make a commitment to others: we often use commitment devices to voluntarily ‘lock ourselves’ into doing something in advance and a social aspect reinforces this;
- [make it Timely](#):
 - Prompt people when they are likely to be most receptive as the same offer made at different times can have drastically different levels of success;
 - Behaviour is generally easier to change when habits are already disrupted, such as around major life events;
 - We are more influenced by costs and benefits that take effect immediately than those delivered later hence consider whether the immediate costs or benefits can be adjusted (even slightly);
 - Help people plan their response to events in advance.

While it is always possible to combine nudges, it is useful to prioritize. One factor that needs to be considered is the operational costs associated with implementation. In addition to the operational costs, one should consider the following points:

- Nudges should be prioritized based on where the bottlenecks lie in the decision-making process: choose nudges upstream;
- Self-imposed nudges such as pre-commitment may not reach as many people compared to defaults or automatic enrolment;
- Interventions like automatic enrolment have a high adoption rate but lead everyone to accepting the same terms and benefits which requires determining whether segments of the target audience have different behavioural preferences e.g. in the pension fund example, what may be preferable is to allow everyone to determine their own contribution amount and select from a small assortment of investment funds;
- The long-term effectiveness of the nudge and whether the intervention could lead to the development of new, more beneficial habits.

Finally, it is important to test and document the effectiveness of nudging strategies. This brings us to impact evaluation which will be elaborated further in TOOL 14.

It should be clear that the method as described is perfectly compatible with the service design approach as depicted by the “double diamond” in chapter 2 c) 10). Indeed, reframing societal challenges in terms of desired behavioural change will help integrate into the “discover” phase the necessary data gathering activities to be able to get some insight in the decision-making process of the targeted groups, while

taking into account that there are different actors (e.g. the challenge may relate to ex-offenders but the behavior that is targeted is that of potential employers) whose behavior may be targeted and also a variety of “segments” within each broad actor group (e.g. different kinds of employers).

The define phase then brings clarity about the kinds of bottlenecks that are present (in terms of heuristics or behavioural influences) and what combination of nudges may have potential to be used to affect them. The develop phase then corresponds to experimenting/testing in the nudging approach (a form of rapid prototyping).

Finally, those nudges that have been demonstrated to have potential need to be integrated into a service design and then piloted as a whole.

CASE 3: DEALING WITH LOW COMPLETION RATES OF POSTSECONDARY EDUCATION IN THE US VIA NUDGING

Background of the case

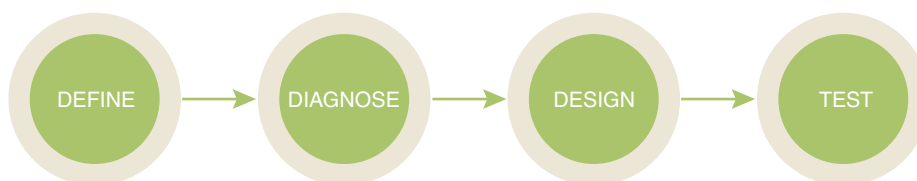
A postsecondary degree – either bachelor’s or associate’s – is incredibly beneficial for American adults. People with advanced degrees are more engaged with their jobs, earn 20% to 70% more annually, and score higher on multiple measures of life satisfaction than those with just high school diplomas. Yet in 2014, only 29% of students at two-year institutions completed a two-year degree within three years. At four-year institutions, only 59% of students graduated within six years.

These low completion rates are driven in part by a number of individually small behaviors with large consequences. These include high rates of failing or withdrawing from classes, failing to apply for or maintain eligibility for financial aid, not making sufficient use of available academic or support resources (e.g., tutoring or counseling), sub-optimal course selection, etc. Each of these may in themselves be relatively trivial, but have outsize consequences in themselves or in concert with other problems they may trigger. For example, failing or withdrawing threatens students’ academic progress directly, but also affects their financial well-being because the majority of federal and state financial aid programs have strict academic requirements related to GPA and course completion. Students that fail or withdraw may become ineligible for financial aid and therefore unable to pay for college.

ideas42 is a behavioral design organization bringing together highly creative practitioners, industry leaders, and policy experts with world-renowned economists and psychologists from top-tier universities. Its mission is to apply our expertise in behavioral science to invent fresh solutions to the world’s toughest social problems with the goal of improving tens of millions of lives. Its work draws upon decades of experimental scientific research in decision-making and the most rigorous methods in program and policy evaluation.

Innovation process

Since 2013, ideas42 has been engaged in a portfolio of projects that apply its four-stage behavioral design methodology (Define, Diagnose, Design and Test) to problems around postsecondary enrollment, retention, performance and completion. Results from these projects are discussed below.



Example 1: Increasing Use of On-Campus Tutoring at West Kentucky Community and Technical College

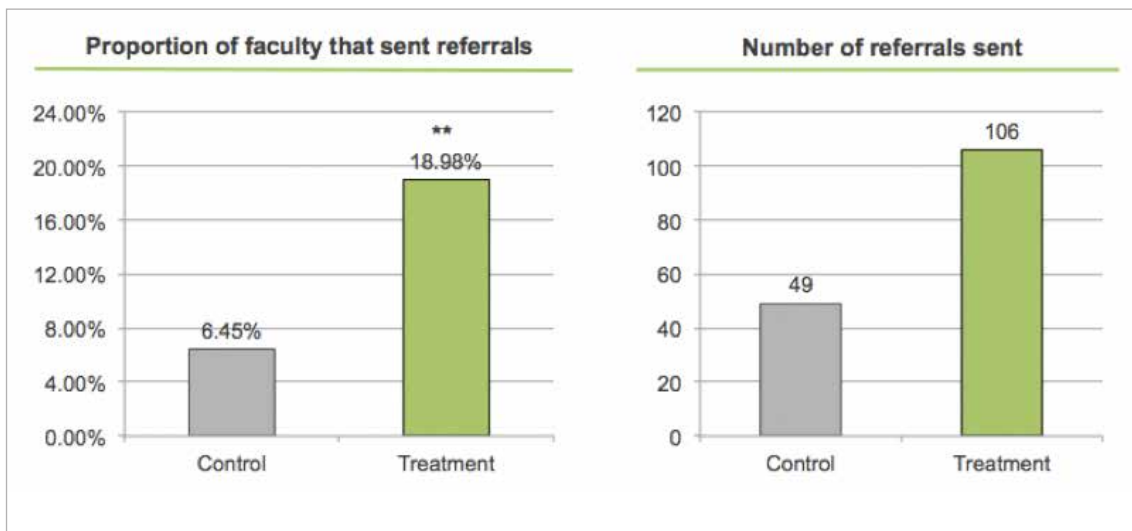
At West Kentucky Community and Technical College (WKCTC), course failure and withdrawal are frequent events for many students. Although WKCTC students have free access to a Tutoring Center to help them with their coursework, very few students use these tutoring services. WKCTC has tried to address this problem by providing students with information about the services available through

their website and during new student orientation. Yet, this solution has not brought about the results WKCTC had hoped for. To address students' limited use of academic support services, the college engaged ideas42 to design potential solutions.

Ideas42's diagnostic work found that while many students were aware of the Tutoring Center, they were not necessarily thinking about tutoring at the times when they may need it most. Furthermore, the timing of feedback on coursework is not optimized in order to encourage use of tutoring. For example, the first graded assignments are generally not returned until mid-way through the semester, at which point visiting the Tutoring Center may feel difficult and overwhelming for students. Even for students who do choose to seek tutoring, the steps associated with scheduling an appointment create hassles and may cause students to procrastinate on completing the task. Finally, faculty at the college play a large role in guiding students toward support services and students that are struggling will often turn to their instructors first for help. Yet, faculty at WKCTC were not getting involved enough (for example, by suggesting tutoring, or offering help accessing it) to successfully bridge the gap between students and the Tutoring Center.

Based on these insights, Ideas 42 designed an intervention consisting of two sets of behaviorally-informed emails: one from the college to students, aimed at making the tutoring center more salient and accessible early on in the semester, and one from the college to faculty, discussing how and when to best encourage students to use tutoring. It tested these emails in a randomized controlled trial (RCT) in order to measure their impact.

The results showed that our interventions successfully encouraged students to make better use of tutoring services available and prompted faculty to connect students with tutoring. The student emails made students 34% more likely to go to tutoring, and they attended 53% more tutoring sessions overall. The faculty emails tripled the number of faculty who sent tutoring referrals to students as depicted below.



In addition, students and faculty alike appreciated and responded to positive and motivational messages, which can otherwise be hard to find in the typically stressful college experience (especially for students who are struggling). Fostering personal connection through individualized outreach and encouragement proved a powerful tool to motivate both faculty and students to actively engage in the types of behaviors that lead to student persistence, academic success, and eventually graduation.

Example 2: Increasing FAFSA Applications and Making College More Affordable at Arizona State University

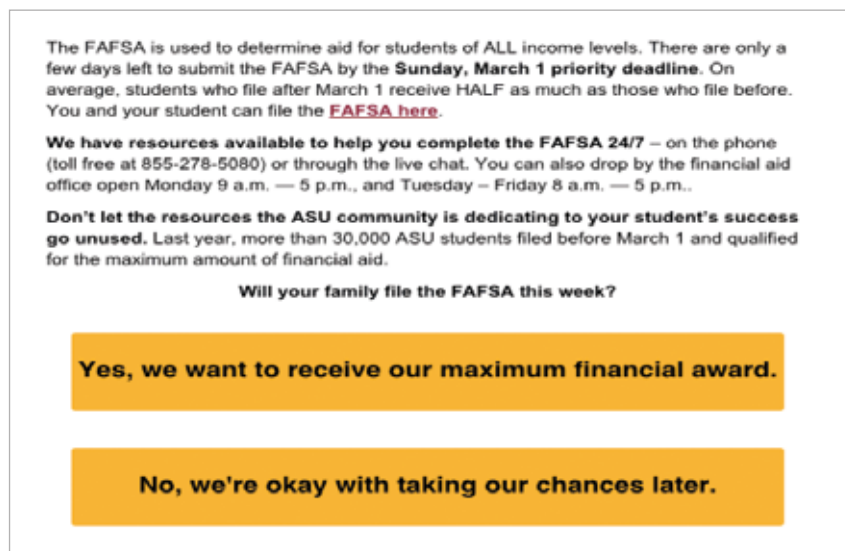
Skyrocketing college costs in the United States are leading to many students taking on unsustainable amounts of student loan debt, with negative financial consequences that plague Americans for the rest of their lives. Students with large amounts of debt are less likely to finish school, and drop-outs are more likely to take low-paying jobs. Those who do graduate still face dire outcomes – having worse credit scores over 10 years after graduation, being more likely to rent rather than own their own homes, and being less likely to open their own businesses.

Rationally, it seems like students and their families would take any action necessary to make college more affordable. Yet national statistics show each year students leave more than \$2.9 billion dollars in free federal grants on the table simply because they do not apply for them. Traditional programs have used financial incentives or in-person coaching to increase application rates, but even the best of these programs cost over \$90 per student.

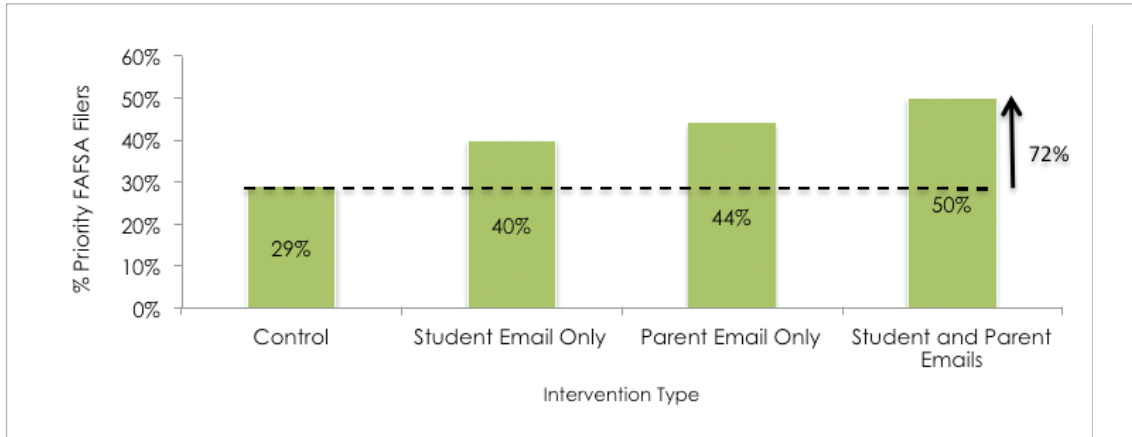
Working with Arizona State University (ASU), Ideas42 sought to develop a more cost-effective and scalable intervention to increase Free Application for Federal Student Aid (FAFSA) submissions. They prioritized increasing the number of current ASU students who complete the FAFSA before the university's March 1 priority deadline. Applying before the deadline ensures students receive their maximum financial aid package, whereas applying after the deadline puts the student at risk of missing out on institutional aid. In 2014, just 18% of ASU students submitted the FAFSA before the university's priority deadline.

Ideas 42 identified several challenges that contribute to the low FAFSA submission rate and created an intervention to help students overcome them. Among the bottlenecks diagnosed, it was found that students do not understand what information they will need to fill out the FAFSA form, do not adequately plan to collect the information, experience delays in gathering requisite financial information from parents, and do not remember the priority deadline at the right time. Ideas42 designed an email-based intervention to clearly articulate the information students need to gather, encourage plan-making, help students and parents coordinate their information gathering, provide timely reminders, increase the salience of the deadline, and employ other behavioral science best practices (e.g., social norms, loss aversion) in order to boost early filing. For a subset of undergraduates, they also sent emails directly to parents.

Screen grab from the email-based intervention to encourage plan-making and, ultimately, FAFSA submission by families.



A randomized-controlled trial (RCT) showed a dramatic increase in FAFSA submissions ahead of the priority deadline. Compared to students receiving the standard communication, students receiving behaviorally-informed emails were 10 percentage points more likely to submit the FAFSA before the priority deadline (39% vs. 29%). Among the subset of the sample in which both students and parents received emails, the filing rate increased by about two-thirds, with 49% submitting the FAFSA before the deadline. As depicted below.



Finally the emails increased financial aid award offers: students receiving our emails were offered \$528 more in financial aid on average.

Example 3. Choosing Courses to Stay Eligible for Financial Aid at Valencia College

Hundreds of thousands of American community college students drop out for financial reasons. Federal financial aid promises vital support for these students in the form of grants and loans, so long as students meet certain eligibility requirements. But the “shapeless river” of the community college experience, as Judith Scott-Clayton has termed it, means that students often lack structured assistance to overcome obstacles that, if ignored, can scuttle needed aid.

At many community colleges – including Valencia College in Orlando, FL, recent winner of the Aspen Prize for Community College Excellence – the challenge of registering for courses represents one such obstacle. Under federal regulation, students’ financial aid may be reduced if they select courses defined by the school as outside their declared course of study. About one in seven Valencia students is at risk of losing some aid for this reason in any given semester.

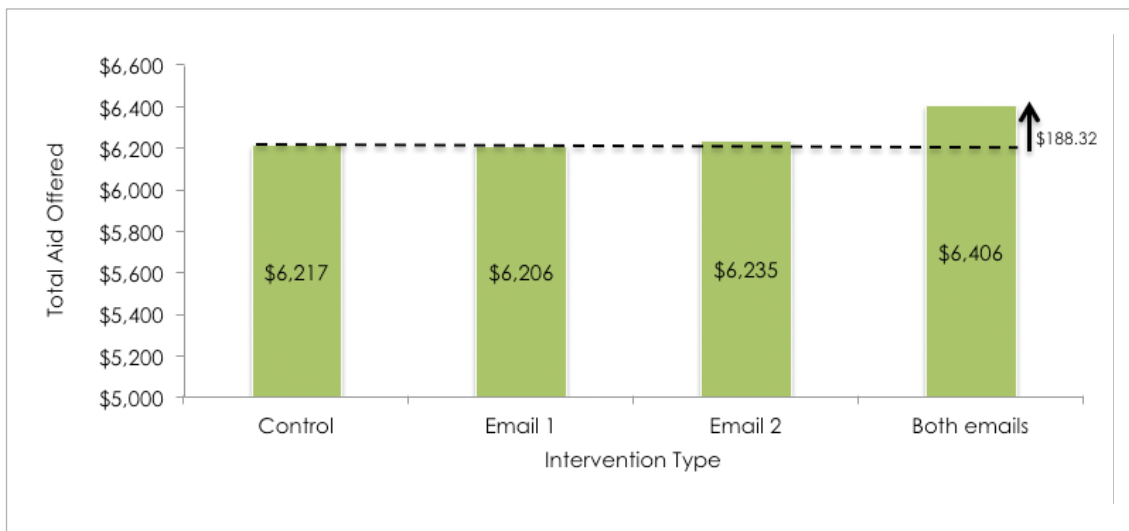
What leads community college students off track? First, little guidance is often available on how to evaluate one course against thousands of others. Labyrinthine online platforms make checking these against degree requirements difficult. When students do plan to register for required courses, small hassles make it less likely they’ll follow through. Warning emails contain confusing language that may backfire by discouraging students from re-registering.

At Valencia, Ideas42 re-designed two emails that the school sends to students during registration: the first to provide general information about how to register, and the second to warn students when they have selected “non-compliant” courses (see below).



They reinforced the link between decisions and actions by highlighting courses that satisfy degree requirements over those that don't and by improving the structure of information students need to know to register.

These designs were tested with a sample of 10,000 Valencia students during the registration process for the Spring 2015 semester. Students in the treatment group became eligible for an additional \$188.32 in financial aid (about 3% more) and passed about a fifth of a credit-hour more on average during the Spring semester. These increases were even higher for minority and older students. This amounts to more than \$1 million gained in aid eligibility and almost 700 additional credit-hours passed across the entire sample.



Example 4. Improving Student Retention Through Social Belonging at San Francisco State University

ideas42 began work with San Francisco State University (SFSU) in February 2014 to increase retention among first-year students. In the diagnosis phase, it identified several key barriers that students face when making the decision to return to school, including the negative identities that may be triggered by academic and administrative hassle factors, fears around belonging, and the lack of positive feedback. With guidance from our academic affiliates, we designed a three-pronged social belonging intervention: (1) a video of student testimonials to incoming freshman through SFSU's online platform (see below), (2) a brief questionnaire designed to reinforce the message of the intervention, and (3) follow up messaging based on student responses. The intervention was launched in August 2014. In September 2015 the team received student data from the first full year of the project.

Screen grab from SFSU social belonging video containing testimonials from current students



Overall there are no statistically significant differences in outcomes between the treatment and control groups. However, there are significant differences for students who are part of SF State's Metro Academies College Success Program (Metro) for at-risk students. The students selected into this program are typically underrepresented minorities, first-generation, and receive federal financial aid. Relative to control, Metro students in the treatment condition completed 8% more credits (21.4 vs. 19.9), had a 7% higher GPA (2.88 vs. 2.70), and retained at a 10% higher rate (91.0% vs. 82.5%).

Example 5. Helping At-Risk Students Keep their Financial Aid and Thrive at State University of New York (Brockport)

The national conversation surrounding postsecondary education has largely focused on two major challenges – low rates of college completion and the growing national student debt. Though policymakers and educators have highlighted a number of factors contributing to each, many fail to recognize that the two are inextricably linked. Students that take longer to graduate take out additional, unplanned loans to get their degree. Those who fail to complete college end up in lower-paying jobs, making it more difficult to pay off student debt. And a recent economic analysis showed that after accumula-

ting \$10,000 in debt the likelihood of completing college is greatly reduced, providing the most direct evidence of this phenomenon.

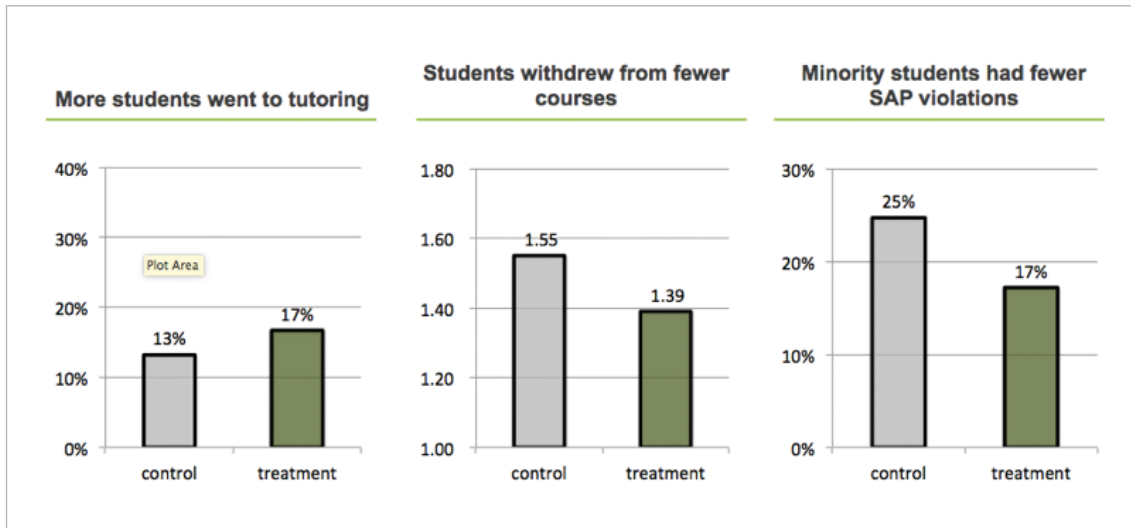
ideas42 tackled the relationship between academic success and student debt in partnership with State University of New York (SUNY) at Brockport. Here, the team aimed to reduce violations for students not meeting Satisfactory Academic Progress (SAP) standards. These standards were created to encourage students to do well in school, and have a tangible, negative consequence: students lose federal financial aid when they are not met. Despite good intentions, SAP standards make it harder for some students to complete college and, by cutting off aid, contribute to increasing debt.

The diagnosis process led the team to both expand the pool of students considered to be at-risk of receiving SAP violations and create behavioral strategies around three indicators of poor academic progress: missing class, poor study skills, and low uptake of tutoring. Though these challenges have received problem-solving attention in the past, the team newly approached them from a behavioral perspective. For example, many attribute poor class attendance to a lack of student motivation. However, the team identified several behavioral challenges contributing to low attendance – small hassles that make attending class more difficult, misunderstandings about the costs of missing class, and inaccurate perceptions of norms around class attendance.

Keeping these behavioral factors in mind, the intervention invited students to join 3 in-person workshops and sent 1-2 weekly emails and text messages throughout the course of one semester as depicted below.

The image shows two parts of an intervention. The top part is an 'Interactive text conversation' with three messages: a grey message from SUNY-Brockport (3/24/15 10:34 AM) asking for a goal, a green message from a student ([student name], 3/25/15 1:19 PM) stating a goal to catch up on cell bio readings, and a grey response from Nicki Cohen (3/25/15 1:50 PM) saying 'Sounds good -- let us know how you do!'. The bottom part is a 'Workshop activity' titled 'D. Getting Gritty' with a definition of grit, instructions to complete statements with personal goals, and two examples of goal statements followed by blank lines for student input.

Each component of the intervention was carefully designed to target at least one of the three indicators. A randomized controlled trial (RCT) of our intervention showed promising results. Students receiving the intervention were 26% more likely to go to the tutoring center and withdrew from 10% fewer classes. These effects were even stronger among minority students, who also saw a 30% decrease in SAP violations.



Before starting with a specific project such as described in the above case, usually a pre-selection process will have taken place already.

A behavioral theory expert organisation like ideas42 usually structures its search for partners for behavioral design projects in a particular area, such as post-secondary education, through a “Request for Problems (RFP)”.

By requesting potentially interested parties to submit problems – specific programmatic challenges they are facing that have to do with human behavior, and are therefore potentially amenable to behavioral solutions – rather than proposals about what to do, experts seek to enable a focus on the challenge at hand, rather than pre-emptively seeking to identify solutions, which emerge from the application of a behavioral diagnosis and design process.

A typical RFP is a form with between 15 and 20 questions, designed to take no more than 2 hours to complete. Questions cover a range of topics ranging from proposed problem focus area, organizational buy-in, experience with experimentation, data collection and quality, and sample size. This is supplemented with 2-4 pages of guidance about how to complete the form, with a focus on how to define a problem focusing on human behavior.

For its work in Post-Secondary Education, ideas42 sent out its initial RFP to over 600 organizations working in the field, including a number of colleges, community colleges, and universities. 72 organizations attended an informational webinar, following which 70 organizations sent in initial expressions of interest. 56 applications were received, and a team of reviewers narrowed down the field of applicants to the top 30, who were then invited to attend a two-day convening workshop, which delved into the details of the behavioral approach to assist applicants to further refine their proposals. Final partner selection involved further informational meetings and due diligence.

In other cases, where the specialized nature of the work means that the potential applicant pool is smaller, ideas42 has begun with a one- or two-day convening workshop for those interested in applying to the RFP, followed by a similar process of rating, due diligence, and informational meetings to facilitate the selection of the final project partners.

A sample RFP timeline is as follows:

- RFP released;
- After two weeks: one-day convening;
- After 8 weeks: Informational Webinar to answer further queries;
- After 3 months: Applications Due;
- After 5 months: Partner Selection Finalized.

While specific criteria are developed for each such process to align with the specific needs of the desired project portfolio, ideas42 reviewers, both internal and external, typically score problems received in an RFP process by using a set of criteria along the following dimensions.

1. **Problem quality:** reviewers assess the extent to which the stated problem directly relates to the topic of interest, has a strong behavioral core, relates to an existing program of sufficient scale, and addresses an aspect of the issue that is of wider interest beyond the organization that has submitted the problem;
2. **Feasibility of implementation:** reviewers focus on sample size and data quality with a view to determining the scope of a potential RCT. They assess whether data is currently being collected at a level of disaggregation that would permit the evaluation of the outcomes of interest, whether the form in which the data are being collected makes them amenable to analysis or whether further data collection and entry costs will be incurred, and whether the population served by the organization/programme is large enough to permit a sufficiently powered RCT;
3. **Organizational capacity:** this set of criteria focuses on the extent to which the applicant demonstrates organizational buy-in, which is critical for successful completion of projects. Criteria include both the extent of staff commitment, whether staff points of contact have been identified in advance, as well as organizational experience with rigorous evaluations;
4. **Location:** where there are specific geographies of interest, the applicant's location is mapped to these geographies.

The collation of individual reviewers' scores is used as a basis for further discussion and the eventual development of a shortlist of applicants for further discussion and due diligence through one or more phone conversations or in-person meetings, where feasible, until the final candidates are identified.

Concluding remarks

The presented interventions tend to address existing, well-recognized needs that however seem hard to address. While the interventions as such are new, they usually refer to or combine with existing services or intervention, enhancing them in some way. They also tend to be relatively cheap and easy to execute. Of course, when developing entirely new services, such as with the previous two cases (Life programme and A&E project) “nudges” can also be used to make these new services as good as possible.

More information

- <http://www.ideas42.org/blog/project/postsecondary-education/>
- <http://www.cgdev.org/publication/behavioral-design-new-approach-development-policy>
- BIT EAST framework: <http://www.behaviouralinsights.co.uk/publications/east-four-simple-ways-to-apply-behavioural-insights/>
- Other cases of nudging: improving secondary education in the UK: <http://www.behaviouralinsights.co.uk/publications/behavioural-insights-and-the-somerset-challenge/>

13. Relevance to ESIF

The research supports the view that if ESIF focuses on new service offerings, this cannot be disconnected from new user/service interfaces as these provide the various “touchpoints” with users that create an entire service experience. However, it should be clear that innovation that does not imply any changes in the user experience (pure “process” innovation for mere internal efficiency reasons) should not be the focus of social innovation actions by the ESIF as this will not lead to any impact on user well-being.

This would not be acceptable given the adapted DG REGIO (2013) definition of social innovation as *“development and implementation of new ideas to meet social needs and create new social relationships or collaborations. It is aimed at improving human well-being. Social innovations are innovations that are social in both their ends and their means. They are innovations that are not only good for society but also enhance individuals’ capacity to act.”*

In addition, service innovations should be put into interaction with innovation in business models.

Also, the ESIF should strongly emphasize spending generous amounts of time on empathic gathering of user insights, providing guidance on prototyping and experimentations as well as measuring success. In addition, it is important to involve a broad range of people, including in the creative parts of innovation. Also, intellectual property issues should not receive too much attention due to the fact that “service experiences” are very hard to copy exactly. Using approaches such as a creative commons license to disseminate information about the service and its elements should be acceptable to most service innovators.

Finally, the use of behavioral economics and “nudges” is perfectly compatible with a service design approach and provides an additional powerful tool. However; care should be taken not only to “nudge” existing services but to integrate “nudging” into the development of entirely new services as well, ensuring their optimal delivery.

D Transition theory

1. Introduction

“Transition theory” has been put firmly on the map of innovation research over the last decade. For this section, we set out five different contributions to an understanding of systems of innovation. The first three contributions are largely derived from the article “From sectoral system of innovation to socio-technical systems” by Geels, FW in Research policy 33 (2004, p. 897-920).

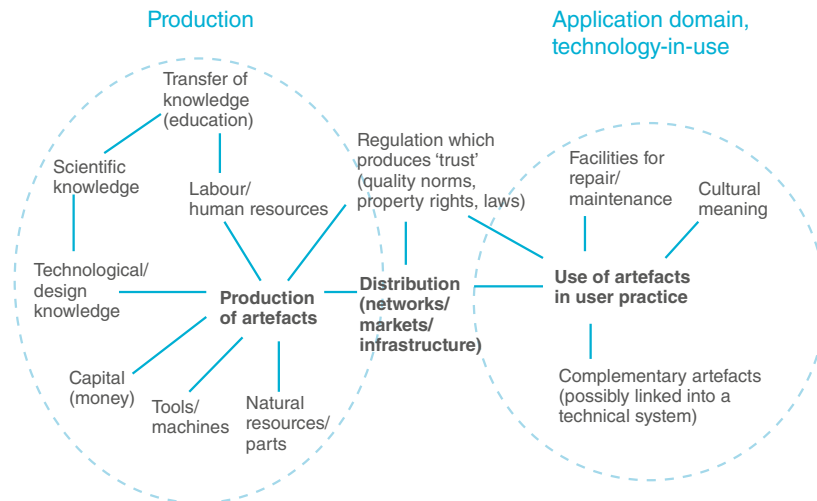
After this elaboration of theory, the practical translation into what is referred to as “transition management” will be explored on the basis of a variety of sources.

2. From sectoral innovation systems to socio-technical systems

Transition theory is interested in understanding what elements are necessary for a system (hence the elements are linked to each other) to fulfill societal functions. Societal functions are e.g. transport, communication, nutrition, ... and other functions a society requires to maintain itself.

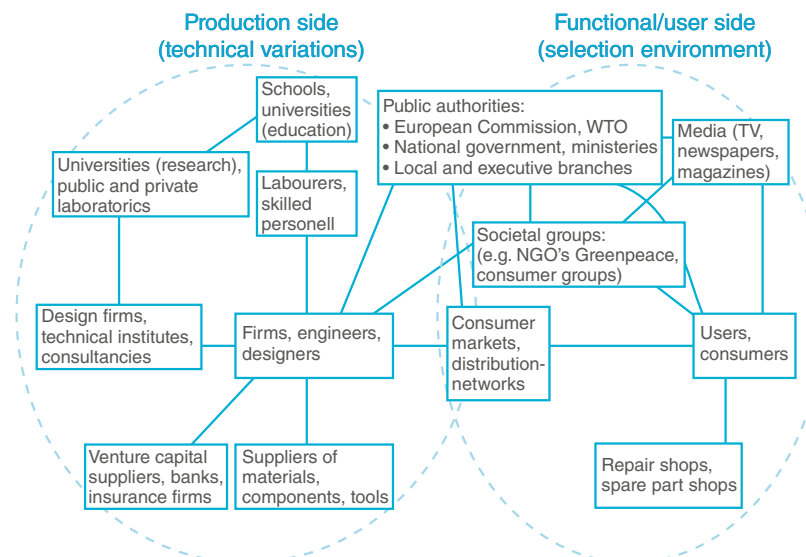
A depiction below of the elements of a system that aims to provide a societal function shows that elements like knowledge, capital, labour, cultural meaning, ... being part of the production, distribution and use (three generic-sub-functions) of technological artefacts. This is hence a technological perspective in the broad sense of the word.

Figure 14: supply and demand systemic perspective to societal functions



However, the interest is not only in “artefacts” but also in actors, since systems do not function autonomously but are the outcome of activities of human actors. These actors are themselves embedded in social groups. A social group means its members share certain characteristics (roles, responsibilities, norms, perceptions, aims, problem agendas, preferences, jargon, stories, fora/conferences where they meet, lobby clubs, professional associations, journals they read...) with which they distinguish themselves from others. In modern societies specialized social groups relate to specific resources and sub-functions as depicted in the figure below. For example, in the last two centuries, production and use have increasingly grown apart (due in part to low cost transportation and mass production methods) as depicted below. In the Middle Ages, a blacksmith for example would unite knowledge, capital and labour in production in one person and the consumption would be situated close by (in the village).

Figure 15: actors on the supply and demand side of a system to provide a societal function



Hence we use the term “socio-technical system” to link both sides of the coin.

Evolutionary economics, business and innovation studies tend to focus on the creation of knowledge and innovation (e.g. organizational learning, routines, knowledge management, ...) but usually assume the user and markets are simply out there, without investigating these further.

On the other hand, cultural and domestication studies focus on the user side: adoption is more than a passive act of “buying” an innovation but involves also integration of artifacts into the user context of existing practices, organisations and routines (symbolic and practical work) as well as learning about the artifacts (cognitive work) to be able to do that. But this user focus has a down-side: innovation development is treated as a black box.

However, innovation within a socio-technical systems perspective, involves a dynamic process of mutual adaptation and feedback between technology development and the user environment, bridging the two areas of research.

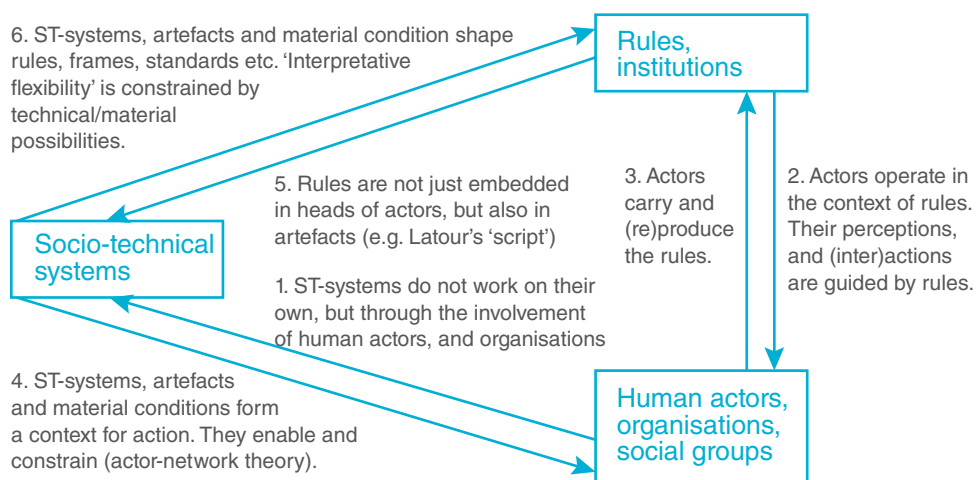
3. Three interrelated dimension exist to analyse socio-technical systems

Human actors, the rules, linked in “regimes”, that guide them and socio-technical systems interact in different ways. “Rules” are understood in the general sociological sense of the word:

- **regulative:** explicit, formal rules (e.g. government regulations on property rights, taxes, ...) which are the focus of institutional economics;
- **normative:** values, norms, role expectations, duties, rights, responsibilities, which become internalized by socialization, which is the focus of traditional sociology;
- **cognitive:** This can be viewed in several ways: first, the limited cognitive capabilities of humans and how they use cognitive frameworks, belief systems, frames etc. to select and process information and act on it which is the interest of social and cognitive psychology and recently behavioral economics. Second, as evolutionary economics and sociology of technology has interpreted it, this concerns cognitive routines, search heuristics, exemplars, paradigms,...

This means that in the chapter on the capability approach, the distinction made by the CRESSI project of cognitive frames and institutions reflects the more elaborate concept of a regime.

Figure 16: interaction of rules, actors and systems



The figure above makes clear that ST systems do not work on their own but their artefacts, elements and links between them are created and sustained by actors (as supported by sociology of technology with actor-network theory, social construction of technology and large technical systems theory).

In the chapter on the capability approach, this was referred to as “networks” by the CRESSI project.

Also actors create rules for themselves and reproduce these in groups. At the same time, actors are already constrained by existing rules (sociological structuration). These rules in turn become embedded in the artefacts, elements and linkages between them of the ST-system (sociology of technology).

However, it is also clear that the existing ST-system at some point also constrains both the creation of new rules (as not all interpretations of reality are possible due to technical and material “hardness” derived from e.g. scientific laws, real limits to what a technology can do,...) and directly what actors can do (as actors cannot just shape artifacts at will, due to the same kind of “hardness”).

In addition, rules do not operate on their own but they are linked together and organized in rule systems. When collectively shared, this is a social rule system which we can refer to as a “regime”. This is a semi-coherent set of rules where it is difficult to change one rule without changing others. This alignment between rules gives a regime stability and the strength to coordinate actions. As made clear, actors need to carry these rules and are at the same time constrained by them. There are several such regimes that have a different thematic:

- technological and product regime e.g. technical standards (a regulative rule);
- science regime e.g. scientific paradigms (a cognitive rule);
- policy regime e.g. policy goals (a normative rule);
- socio-cultural regime e.g. media laws (regulative);
- user, market, distribution regime e.g. user preferences (cognitive).

In the table below, some other examples are given of the different kinds of rule they contain.

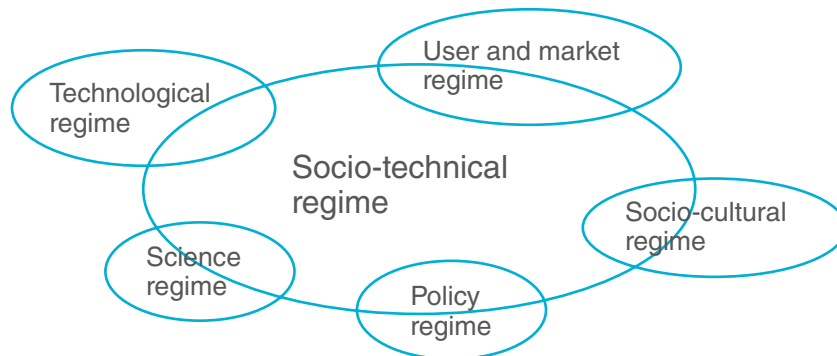
Table 5: different kinds of rules and regimes

	Formal/regulative	Normative	Cognitive
Technological and product regimes (research, development production)	Technical standards, product specifications (e.g. emissions, weight), functional requirements (articulated by customers or marketing departments), accounting rules to establish profitability for R&D projects), expected capital return rate for investments, R&D subsidies.	Companies own sense of itself (what company are we? What business are we in?) authority structures in technical communities or firms, testing procedures.	Search heuristics, routines, exemplars), guiding principles, expectations, technological guideposts, technical problem agenda, presumptive anomalies, problem solving strategies, technical recipes, ‘user representations’, interpretative flexibility and technological frame classifications
Science regimes	Formal research programmes (in research) groups, governments), professional boundaries, rules for government subsidies	Review procedures for publications, norms for citations, academic values and norm	Paradigms, exemplars, criteria and methods of knowledge production.
Policy regimes	Administrative regulations and procedures which structure the legislative process, formal regulations of technology (e.g. safety standards, emission norms), subsidy programs, procurement programs.	Policy goals, interaction patterns between industry and government (e.g. corporatism), institutional commitment to existing systems, role perception of government.	Ideas about the effectiveness of instruments, guiding principles (e.g. liberalization), problem-agendas.

	Formal/regulative	Normative	Cognitive
Socio-cultural regimes (societal groups, media)	Rules which structure the spread of information production of cultural symbols (e.g. media laws).	Cultural values in society or sectors, ways in which users interact with firms	Symbolic meanings of technologies, ideas about impacts, cultural categories.
Users, markets and distributions networks	Construction of markets through laws and rules; property rights, product quality laws, liability rules, market subsidies, tax credits to users, competition rules, safety requirements.	Interlocking role relationships between users and firms, mutual perceptions and expectations).	User practices, user preferences, user competencies, interpretations of functionalities of technologies, beliefs about the efficiency of (free) markets, perceptions of what 'the market' wants (i.e. selection criteria, user preferences).

In socio-technical systems, there is coordination between and within social groups. This reflects respectively interdependence (coordination between groups) and autonomy (difference between groups) from each other. The coordination is in part due to the rule regimes. Those rules within regimes that are aligned to other regimes in one socio-technical system, are referred to as the socio-technical regime. Therefore NOT all rules in all regimes are part of the ST regime, ONLY those that are aligned as depicted below. Hence, these regimes have autonomy and are interdependent, just like the groups that are coordinated by them.

Figure 17: different regimes making up the socio-technical regime



Another way to characterize a “regime” is by describing it as interrelated culture, practices and structures (as described in van den Bosch, S. and Rotmans, J. 2008, Deepening, broadening and scaling up: a framework for steering transition experiments):

- **Culture:** the sum of shared images and values (paradigms) that together constitute the perspective from which actors think and act. Changes in culture comprise shifts in thinking, mental models and perceptions;
- **Practices:** the sum of activities (routines, behavior, habits, daily practices). Changes in practices comprise changes in what actors actually do, how they work or behave;
- **Structure:** the institutional (legal structures, organizations, roles and power structures), physical (infrastructure, technologies, resources, materials) and economic (financial or fiscal) structures. Changes in structure comprise changes in how actors organize the things they do, either physically, institutionally or economically.

While most of these elements indeed fit into the broad category of “rules” as described above, in the “structure” component, the “physical” structures are an element that belongs rather to the socio-technical system as defined above. They constrain rules but are not themselves part of this. Nevertheless, this way of categorizing can be useful for describing what kind of changes are needed in the “regime”. An example is provided by the housing and care sector for the elderly in the Netherlands where a key question was “how can elderly live independently with a higher quality of life at acceptable costs?”:

- **Structure:**
 - Living and well-being is central, instead of care with elderly receiving care in their home environment instead of living in a care institute;
 - Different roles and power structures between elderly and elderly care workers where residents are the main ‘director’ and the elderly care worker ‘works in the world of the customer’;
 - Changing role of housing corporation and care institute, which for example becomes a ‘comfort provider’ and produces and provides sustainable heat and cooling;
 - Financing of care providers not anymore based on the quantity of “care actions” but on the quality of interactions between elderly care workers and the elderly;
- **Culture:**
 - Elderly people actively participate in social activities in mixed neighborhood rather than remain in isolation;
 - Attention for symbolism: living is visible and care institutions are invisible (for example, elderly care workers do not have a front office);
 - Organization culture of care institution changes: the customer is central and providing care is not a solo activity but a joint activity (together with welfare organizations, etc.);
- **Practices:**
 - Practice of care institution changes: from providing ‘supply driven’ care to passive elderly to providing ‘demand driven’ care to active elderly;
 - District contains front office where elderly can ask broad questions to a housing, care and well-being counselor.

4. A multi-level perspective of transitions

The aforementioned ST systems, actors and rule regimes all produce stability:

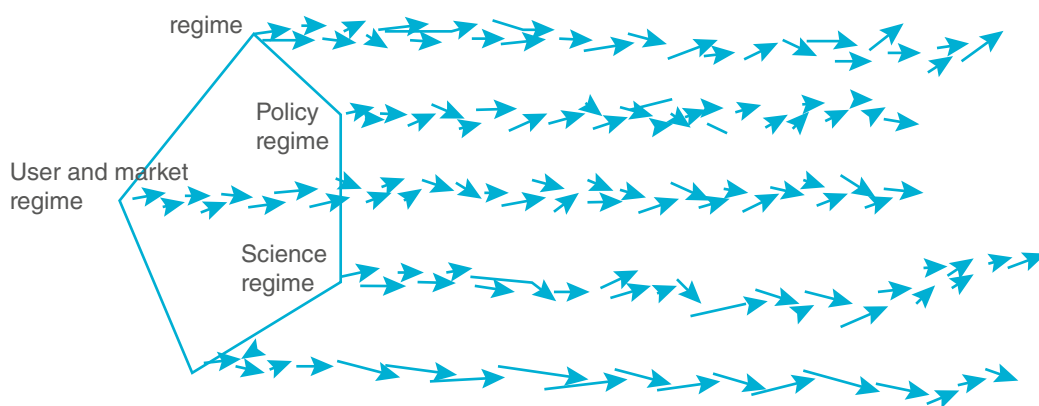
- **Regimes:**
 - Regulative: via standards, legally binding contracts, laws,... etc.
 - Normative: via mutual role perceptions and expectations of what is “proper”
 - Cognitive: as most learning builds on existing knowledge and tends to refine it (rather than challenge it) and as shared belief systems that reflect the past, orient perceptions of the future and steer the present (e.g. expecting that problems will be resolved within the existing regime blinds actors to new opportunities),...
 - Alignment between the rules creates its own stability (it is hard to change one without the others);
- **Actors:**
 - via being embedded in networks with other actors which represent some form of social capital (e.g. knowing whom to call upon – trust);
 - via vested interests and commitments;
 - this makes them “blind” for alternatives
- **ST systems:**
 - via hardness of their artefacts and material networks;
 - via complementarities between components and sub-systems;
 - via being embedded in society (e.g. people lifestyles are linked to it) and network externalities

(the greater the user base, the more it attracts complements and enhancements and the more it attracts even more users, especially if the fact of a large user base is itself functional e.g. in mobile phones, etc...);

- via economics (sunk costs in machines and infrastructure, learning curve which is a sunk cost in competences,...).

These factors of stability work together to create stability in a ST regime. That means there can be change, but the change tends to be in line with what exists: it is incremental innovation. Hence, ST regimes are “dynamically stable”. This is depicted below. The arrows depict change over time. Yet the regime remains stable overall.

Figure 18: dynamic stability of regimes

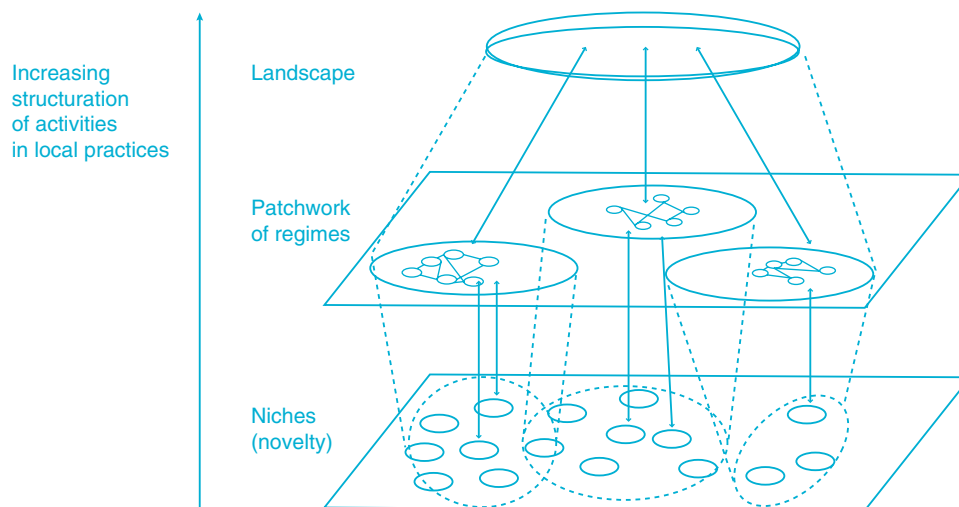


So, how can change then happen via radical innovation?

Radical innovation must emerge in “niches”. A niche is a kind of “protective space”. This (temporary) protection, can come from public policies such as investment grants, tax exemptions,... but also firms may finance (as “skunk works”) them without direct profit but with the expectation that there will be a future market. These niches act as incubation rooms. They can be small market based niches (e.g. a user group with very specific selection criteria) but also could be “technology” niches e.g. in terms of experimental projects with heterogeneous actors (users, producers, government, ...).

It is in niches that more radical learning can happen as there is deviation possible from the rules (structures, culture, practice) in the existing regime. Usually, there is deviation on some dimensions of the ST regime only, not on all of them at the same time. Niches also provide space to build social networks. The figure below shows how niches (bottom level) reflect different existing regimes linked to each other in a ST regime (the arrows pointed towards the regimes). While niches are often geared to deal with the problems of existing regimes, they cannot easily break through as they have a mismatch with the existing ST regime.

Figure 19: multi-level perspective



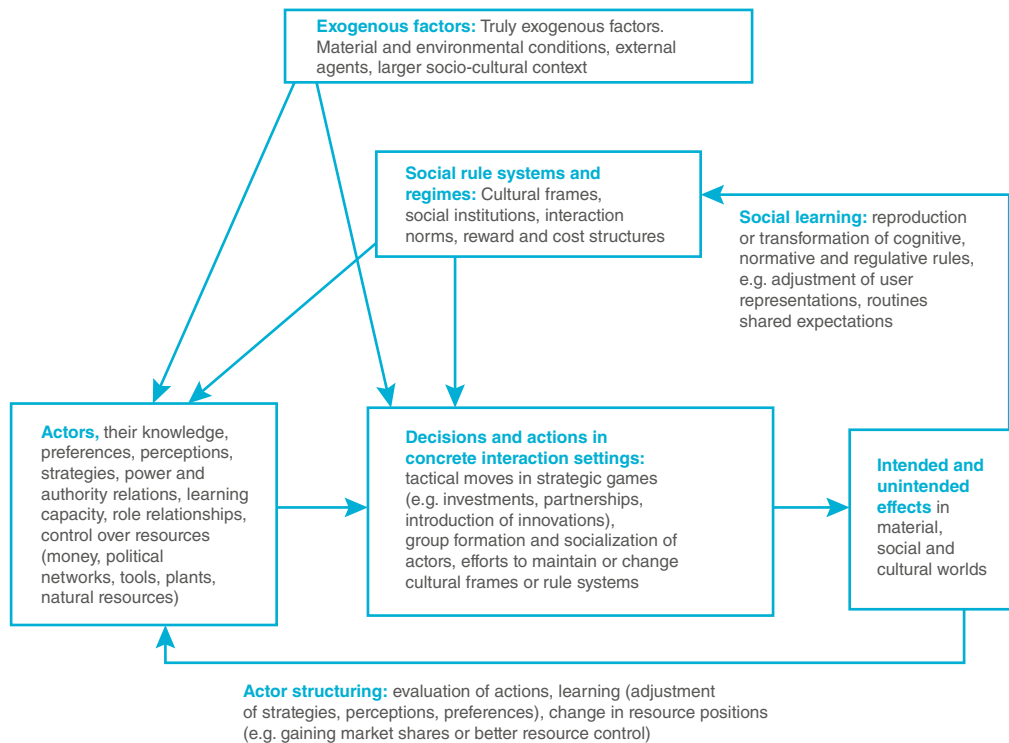
The figure also shows a “landscape” level. This reflects truly exogenous factors (they cannot be directly influenced in any meaningful timeframe) incl. material environments, demographics, macro-economics, macro-politics and societal culture. Changes here are usually very slow (decades) but can also be sudden (shocks).

For a niche innovation to break through, there need to be tensions and mismatches between the activities of the social groups and in the ST regimes. These tensions and mismatches derive from dynamic interactions between systems, actors and rule regimes. Sociology has indeed been attempting to resolve the structure agency dilemma (e.g. Bourdieu) where actors embedded in wider structures (which configure their preferences, aims, strategies,...) decide and act in concrete interaction settings (they struggle, ally, use power, negotiate, cooperate...). This happens within the constraints AND opportunities offered by those existing wider structures AND at the same time this deciding and acting changes those structures.

This is possible because actors exhibit similarity in their patterns of activity, but they also have (sometimes even slightly) different private rule systems, problem definitions, interpretations, strategies, resource positions etc. Due to this, there will be local variations in sense-making (exploring various solutions, afterwards reducing variety by negotiation and coalition building within groups) and ensuing decision-making and action (e.g. giving more resources to a solution that seems to fit better with the selection environment), even though there is a shared social rule system (regime). This has some (intended and unintended) effects. Some of these are direct effects on actors (referred to as “actor structuring”) e.g. changing their resources positions or triggering individual actor learning. This is studied in business studies, industrial economics and evolutionary economics. Some other effects are on the social rule system (regime) level (referred to as social learning where e.g. a shared cognitive frame is built with elements such as goals, key problems, heuristics for problem solving, requirements,...). This represents longer time scales (years, decades,...) than the actor effects (months, years...)

The figure below represents this dynamic. It also shows truly exogenous factors that were represented as “landscape” in the previous figure.

Figure 20: dynamic of change



The pressure on the regime coming from landscape change is channeled by societal pressure groups and social movements (protest, mobilise public opinion, lobby for tougher regulation,...) as well as outside professional scientists and experts who have specialist knowledge that allows them to criticize technical details of regimes and propose alternative courses of action.

The role of power is also not to be neglected in this dynamic: different actors have unequal resources and opportunities to realize their purpose and interest and influence social rules. This is why there are conflicts and power struggles. Transitions are not necessarily harmonious.

In any case, it is the local variations and their effects that end up creating tensions between the activities of social groups who, due to this variation, go from time to time in different directions (misalignment). This then becomes reflected in tensions within the ST rule regimes where certain rules are not anymore in alignment, creating a temporary space for interpretative flexibility for actors. For example, the incentives for academia to focus on publishing in peer reviewed journal may be out of sync with expectations in terms of the usefulness of that research outside the academic world. This tension creates a “window of opportunity” for the radical novelties to break through.

This dynamic is often triggered by:

- changes on landscape level: e.g. climate change is putting pressure on energy and transport ST system;
- negative effects on other ST systems (externalities): while actors inside the ST system tend to downplay this, they may become pressured by consumers and regulators;
- placement on the agenda of internal problems (bottlenecks, diminishing returns, “expected” problems...) where continuing problems undermine trust in existing technologies;
- changing user preferences (e.g. due concern about the aforementioned externalities, wide cultural change, policy measures, endogenously due to interaction with the technology ...);
- strategic games where actors try to get ahead of each other or, alternatively, try to get on the band wagon.

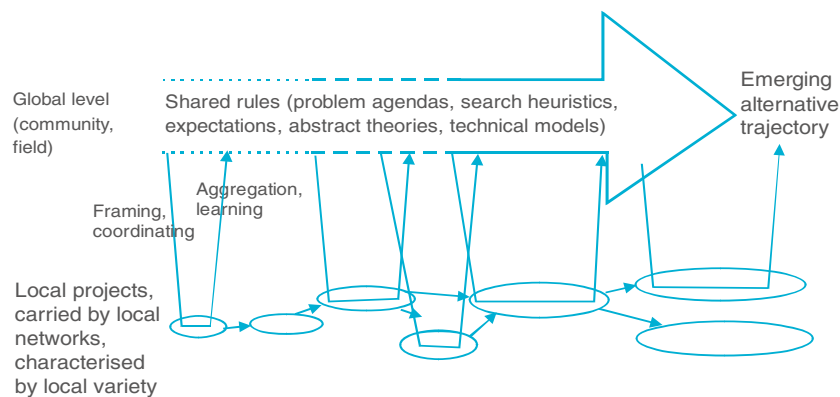
But, to use these windows of opportunity, innovations have to be available to break through. In fact, as explained by Raven, R., van den Bosch, S. and Weterings, R. (2010, “Transitions and strategic niche management: towards a competence kit for practitioners” in *International Journal of Technology Management*, vol. 51, Nr 1), in innovation regarding societal challenges, niches do not pre-exist but are the result of co-creating markets, technologies and institutions. Luckily, (powerful) actors are willing to support and protect niches because they have certain expectations about possible futures (as described in the domain of strategic niche management). Niches in this perspective are often conceptualized as a series of experimental projects. These can cover a substantial number over a period of 30 years.

Both niches and regimes have the character of “organizational fields”. This refers to the totality of actors that are relevant to performing a societal function (suppliers, resource and service users, regulators, other service providers,...). Hence, it represents a cross-sectoral/industry level of a community of interacting groups (with industries being constituted by organisations who are composed of organisations sub-levels and within these individuals) but not a whole society.

Regimes have large and stable communities while niches have small and unstable ones (actors entering and leaving). Also regimes share rules that coordinate action while for niches the rules are “in the making” and unstable (e.g. conflicts over user preferences, regulations, design specifications,...). In regimes rules are more constraining (making some actions more legitimate than others) while in niches they are more enabling (creating convergence of actions, trust, reliability, predictability).

As niches do not yet have full crystallization of rules, there is a great deal of uncertainty. A lot of the work in niches for the actors is to uphold the niche and while doing that, work on articulation of rules and social networks. This process, elaborated in Raven, R., van den Bosch, S. and Weterings, R. (2010), is depicted below.

Figure 21: emerging niche trajectory carried by local projects



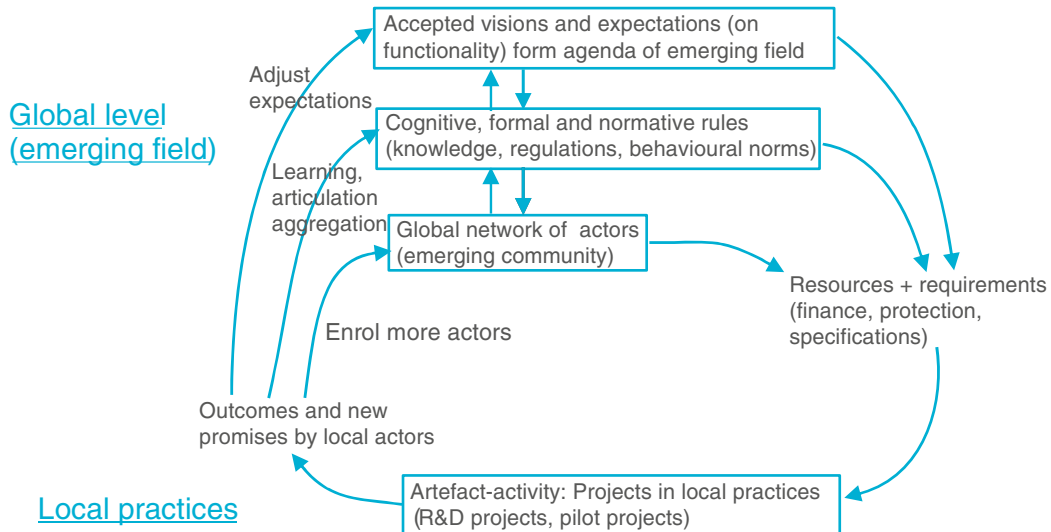
Sequences of local projects gradually add up to a new trajectory. In this process, rules and institutions that are initially diffuse, broad and unstable become more articulated, specific and stable. This does not happen automatically, but requires:

- Aggregation activities such as codification, model building, standardizing, best practice formulation etc.
- Circulation of knowledge and actors via conferences, workshops, technical journals, proceedings and newsletters.

The demonstration of viable alternatives may after some time change perceptions of internal regime actors.

It is the interaction between the three key internal niche processes of learning, networking and articulation of expectations, that fuels the innovation journey, as depicted below.

Figure 22: the dynamics of niche development trajectories



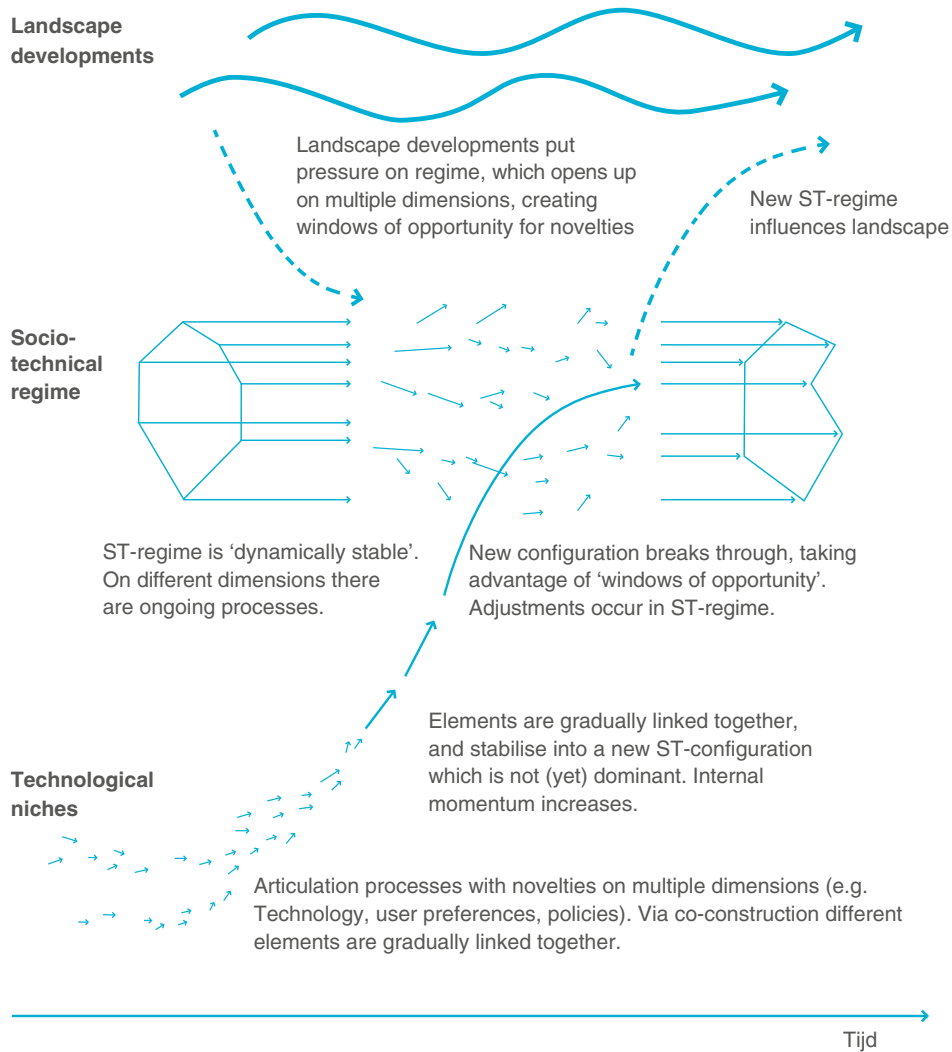
As stated earlier, firms, users, policymakers, entrepreneurs and other relevant actors participate in transition experiments on the basis of expectations. Articulating these is important to attract attention and resources as well as new actors, particularly in the early stages when a lot of uncertainty still characterizes the innovation. The process is good when an increasing number of actors share the same expectations (a shared vision) and these are increasingly based on tangible results from experiments.

In the early phases the social network that supports the innovation is still fragile, with actors coming from previously unconnected fields and disciplines. These networks are also reinforced via experiments. The process is good when the network is broad (with actors from firms, users, policy, science and technology and where outsiders are not excluded) and alignment is facilitated by frequent interaction.

Also, a good learning process needs to be present that enables adjustment of solutions and/or social embedding. It should be broad, focusing not only on techno-economic optimization (e.g. design, infrastructure) but also on alignment with the social domain (e.g. user preference, regulation, cultural meanings, ..), and reflexiveness (questioning underlying assumptions and values and changing course if needed).

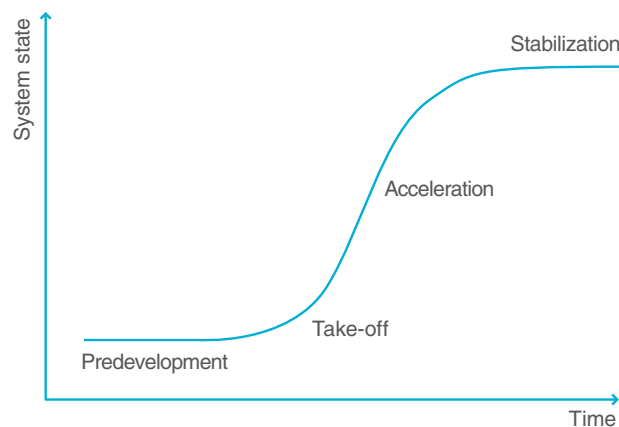
The whole dynamic of interaction between landscape, regime and niche levels is depicted below.

Figure 23: multi-level perspective on societal transitions



Within this figure we also recognize the “multi-phase” model or “S-curve” with predevelopment, take-off, acceleration and finally stabilization.

Figure 24: multi-phase model of transitions



However, there are also “failed” transitions where the system becomes locked-in, deteriorates or even collapses.

5. Different transition pathways and the role of social innovation

Transition theory also puts forward that there are different kinds of transition trajectories possible. These are derived from “Typology of socio-technical transition pathways“ by Geels, FW and Schot, J in Research policy 36 (2007, p. 399-427).

A first one is referred to as “reproduction”:

- No landscape pressure;
- Internal problems are disregarded (belief the current regime will be able to deal with it);
- Change is incremental, within a stable rule set and proceeds in a predictable direction;
- Niche innovations cannot break through.

A second one is transformation:

- Moderate landscape pressure (disruptive change which occurs usually on one dimension, not too quickly but building up slowly, does not provoke frequent disturbance, but does represent in the end a rather big shift from initial conditions) and outsider criticisms;
- Usually this leads to conflicts, contestations, power struggles as at first regime actors do not respond very quickly to this slow change;
- No competing niche innovations present yet;
- In response to changes in the selection environment (societal protest, public opinion, stricter regulation) regime actors use their adaptive capacity to reorient their current development trajectory by creating technological variations that are more in line with the changed selection environment;
- When these variations propagate, they change the regime from within, with most regime actors surviving although some changes may occur in social networks;
- External knowledge can be imported if not too distant from the regime (symbiotic niche innovations);
- An example was the transition from cesspools to sewer systems in the Netherlands.

A third one is de-alignment and re-alignment:

- Landscape change is large (amplitude), on multiple dimension (scope) and sudden (speed) with a high frequency of disturbance within a given time scope (“avalanche” change);
- Increasing regime problems may cause regime actors to lose faith which leads to de-alignment with actors not defending the regime;
- Niche innovations not yet there;
- Emergence of multiple niche innovations that co-exist and compete for attention and resources;
- Eventually one becomes dominant with ensuing re-alignment in a new regime;
- An example was transition from horse-drawn carriages to automobiles in the US.

A fourth is technological substitution:

- Enough landscape pressure (disruptive or avalanche change as in variations two and three or even a specific shock which refers to a change that is fast, sizeable but not frequent nor wide in scope)...;
- combined with the presence of radical niche innovations that have stabilized enough and have enough internal momentum...;
- leads to these innovations breaking through market niche by market niche;
- regime actors defend and invest in improvements;
- but if the niche innovations win the struggle, they end up replacing the regime;
- this usually has consequences for who the regime actors are (old ones being replaced by new ones);
- An example is the transition of sailing ships to steamships in Britain.

A fifth is reconfiguration:

- No landscape pressure;
- Niche innovations exist that can be integrated (symbiotic niche) into the regime to solve local problems;
- This then trigger further adjustments however in the basic architecture of the regime as actors further explore new combinations between the old and the new and learn more about the new;
- Regime actors tend to survive;
- An example of this is the transition from traditional factories to mass production in the US.

A final one is a sequence of transition pathways:

- Landscape pressure takes the form of disruptive change as in the second pathway. Hence, this second pathway of transformation starts off the process;
- However, the difference is that landscape pressure may continue to increase (as it is disruptive and hence slow to build up), making regime improvements seem insufficient;
- This can then trigger a reconfiguration path (when symbiotic niche innovations are at hand), a technological substitution path (when entrepreneurs are triggered by the same landscape pressure and have radical innovations at hand) or a de/re-alignment path (when no niche innovations are at hand).

These pathways show similarities with other typologies incl. those regarding political revolutions (as put forward by Geels, FW, in “The multi-level perspective on sustainability transitions: responses to seven criticisms” in *Environmental Innovation and Societal transitions* (2011, p. 24-40):

- [Reformists](#): existing elites (in politics and business) gradually change existing institutions. This resembles the transformation pathway;
- [Impatient revolutionaries](#): the existing elite is overthrown by a new one, willing to implement drastic measures, which is related to the substitution path;
- [Grassroot fighters](#): change comes from below, outside existing institutions, with social movements developing alternative structures, hoping the ruling majority will be influenced by the power of example. This is also related to the substitution path;
- [Patient revolutionaries](#): new initiatives have little chance until existing structures open up or collapse, which may require environmental shocks or disasters. Until that happens revolutionaries limit themselves to nurturing niche-innovations and preparing themselves for the right moment by facilitating learning processes, public education and awareness raising. This is related to the de/re-alignment path.

While landscape pressure, niche innovation and characteristics of regimes make up the basic framework above, Loorbach, D (2104, *To Transition! Governance Panarchy in the New Transformation*. Inaugural Address for appointment as professor of socio-economic transitions; science and practice, at the Faculty of Social Science at Erasmus University Rotterdam), also points out the importance of what he refers to as “transition points”.

These are possible breakthrough events through which an existing regime can be put under pressure or opened up, creating space for agency to accelerate transitions. The “acceleration” phase is then the time period within which a sequence of “incidents” is acted upon to reorient or reconfigure the existing societal regime. It should be clear that these (series of) “transition points” do not necessarily lead to full scale transitions, nor do they automatically trigger changes that reinforce each other towards a more sustainable future. These incidents have a greater potential to be acted on and changing the regime if there are a number of elements in place such as:

- an alternative narrative of change;
- an established interest in change;
- a concrete set of steps and actions and a frame through which the event can be linked to the dominant system.

As an example, the “incident” of the Fukushima nuclear accident in Japan is given, which was acted on in Germany to set in motion the “Energiewende” (including phasing out nuclear energy). This could only happen because there was already an established economic interest in renewables along with a longer standing cultural resistance against nuclear energy. In the Netherlands however, the same “event” did not provoke any change.

A key point is that while these “incidents” cannot be predicted, one should at least anticipate that they will happen and hence be prepared to seize them as levers for accelerating change. Only then can these transition points become “tipping points”.

Avelino, F and Wittmayer, J (2014, Insights for policy on game-changers and transformative social innovation, TRANSIT discussion paper, TRANSIT) elaborate further on this in the context of the TRANSIT project (part of the EU’s 7th framework programme for research – see www.transitsocialinnovation.eu). They define social innovation as “new social practices, including new combinations of ideas, models, rules, social relations and/or products” (with as examples new services and business models) as distinct from system innovation which refers to “change at the level of societal sub-systems” (with as examples welfare system reforms, tax reforms, ...) (p. 2).

Hence transition theory provides the framework for understanding system innovation while service design (incl. the use of behavioral theory) as discussed in chapter 2 c) is related, in their view, to the concept of social innovation.

However, both are seen as only two elements in a larger story of “societal transformation” which they define as “fundamental and persistent change across society, exceeding sub-systems and including simultaneous changes in multiple dimensions” (with examples like the industrial revolution, European integration, the rise of the market economy) (p.2).

They also put forward that these larger societal transformations result from the co-evolution of social innovations, system innovations as well as “narratives of change” and “game-changers”. Narratives of change consist of “discourses on change and innovation i.e. sets of ideas, concepts, metaphors and/or story lines about change and innovation” (with examples such as the “circular economy”, “greening” the economy, etc.). Game changers are “phenomena that are perceived to change the rules, fields and players in the game” (with examples such as the economic crisis, the aging population, youth unemployment, climate change, the ICT revolution, increasing inequality, dismantling of the welfare state, biodiversity loss, increasing levels of social unrest, etc.). These phenomena should not be equated with macro-developments as the game can be changed at any level.

Innovators can increase the transformative potential of social innovations by smartly playing into the game changers of their time while at the same time connecting to political (calls for) systems innovation and linking up with narratives of change (e.g. “transitioning”) in both mainstream and grassroots movements.

When pursuing more transformative social innovation, it is crucial, as already suggested earlier by Loorbach (2014), to be prepared to propose systemic alternatives when windows of opportunity open up due to the combination of game changers and the perceived tensions in inevitable crisis moments.

The question is how and to what extent players in the game acknowledge, experience and perceive something as a game-changer. Policy-discourses play a significant role in the public perception and social construction of game-changers.

However, when it is acknowledged that social innovation is a collective process that happens at the interfaces of the logics of the state, the market, the community and civil society, out of negotiation and collaboration between actors, who are changing roles and redistributing responsibilities, then it is clear that no single actor can own this process nor set goals and values for it. But the state can support social innovation by:

- providing deliberative spaces for interaction where different institutional logics can engage with each other;
- engaging in initiatives to discover barriers which hamper interaction between the various logics and address them through policy.

Nevertheless, it is possible for social innovation to be directed against the state out of disappointment with the failing welfare state, that it develops in the absence of a strong state or that it is being propagated by an activist state.

For Pel, B. and Bauler, T. (eds.) (2014, The institutionalization of social innovation: between transformation and capture, TRANSIT deliverable 2.2, TRANSIT) the “art” is to use narratives to create alliances between actors in very different positions and fields bundling innovative/transformational energies without alienating the vast diversity of voices that is present in social innovation.

Indeed, social innovation can be understood on a continuum ranging from a “maximalist” position of “transformative” social innovation, aiming to address the grand societal challenges by providing alternatives for the current dominating coordination mechanisms of markets and states, to the less revolutionary extreme that mainly considers incremental improvements in terms of efficiency, demand orientation and citizen empowerment. Likewise, some understand social innovation as grass-roots, spontaneous, small scale and do-it-yourself action, while others talk about institutional anchorage, policy transfer, evidence-based action, etc.

Indeed, different stakeholders will approach social innovation from different angles. Even within the same stakeholder groups, there is a diversity of perspectives. The table below provides an overview:

Table 6: different stakeholder definitions of social innovation

In they eyes of...	...social innovation...
... government	<p>ranges from:</p> <ul style="list-style-type: none"> • seeing social innovation as a “beyond the state” activity versus a source of energies to tap from, blending it with policy reform, public innovation or innovation in governance • playing a part in an efficiency driven New Public Management or austerity agenda versus reinventing government or refocusing it to confront the grand societal challenges of our time in partnership with other societal actors
... the market	<p>ranges from:</p> <ul style="list-style-type: none"> • a thrust against the market logic that leaves many needs unmet (e.g. by creating alternative economies based on access to common goods, shared services...) ... • ... to an extension of the market logic with a reinvention of entrepreneurship or by introducing new business models where social and environmental considerations are integrated more (e.g. corporate social responsibility) ... • ... to reproducing the current system by reinforcing individual choice and free association as cornerstones of society, with social innovation being connected to a hollowing out of the state and hauling in neo-liberal ideology (e.g. Uber)
... civil society	<p>ranges from:</p> <p>... being bottom-up but oriented towards major system transformation and global in ambition ...</p> <p>... to more modest local solutions or even a retreat in the personal sphere.</p>
... science	<p>ranges from:</p> <p>... triple and quadruple helix models promoting the embedding of science in terms of contributing to tackling grand societal challenges</p> <p>... to making science less embedded and less instrumental to retain its objectivity and reflexive nature</p>

This then also raises issues in terms of how social innovators engage with their external environment. Some social innovation initiatives tend to stick to their internal rules sets and opt for retreat and isolation. Others, by contrast, elect unruly behavior such as clandestine action and therefore handle the friction between rules in a confrontational manner. In between, certain initiatives develop mixed rule sets as preconditions for broader support, accommodation and collaboration. When initiators are guided by considerations of, for example, a religious or spiritual nature or when the initiative is based heavily on trust, then it is less likely that one will develop those mixed rule sets and the initiative is more likely to remain limited to a small community. In fact, some initiatives need not worry about clashes with external rules because they are so small they can indeed coexist without creating a conflict. But when the desire is to change existing societal rules, then social innovators have no choice but to engage with them by trying to have a meaningful dialogue and specifying amendments on them.

However, going for the creation of hybrid rule sets triggers a discussion about the danger of “capture” by the incumbent regime where transformative impulses are channeled, encapsulated, domesticated and eventually stifled by the very regimes they were meant to change.

But this line of reasoning forgets about the large grey area in between the extremes of capture and transformation. Most transformation has been brought about not by grand revolutions but by patiently sustained efforts towards change. This also seems to be a blind spot for the current obsession with “experimentation” that is more pre-occupied with innovation rather than change.

Therefore, due attention should be paid to the role of supporting structures and relations, that develop around social innovation initiatives, in sustaining longer term mobilization and reform. Social innovation initiatives indeed can be shaped by, while also shaping, slowly evolving social coalitions and alignments.

In addition, social innovators should be considering what internal rules they want to preserve as essential and which ones they see as open to change and adaptation to external rules.

6. Criticisms on transition theory

The main criticisms relating to transition theory are covered by drawing on “The multi-level perspective on sustainability transitions: responses to seven criticisms” by Geels, FW in *Environmental Innovation and Societal transitions* (2011, p. 24-40).

Table 7: criticism and responses in terms of transition theory

Criticism	Response
Underplaying the role of agency	Social groups are central to transition theory. All trajectories and multi-level alignments are enacted by them. However, various mechanisms of agency have been less developed by transition theory. These include the role of power, social movements and culture (at landscape level).
How to specify/operationalise a regime is, is unclear. a) For example, in the electricity domain one could study a regime at the level of primary fuel (oil, coal, gas) or at the level of the entire system (production, distribution, use). What is seen as a regime shift at the level of primary fuel, could be just incremental change in input at the overall level. b) Regimes and systems are confused often.	a) Analysts should always first demarcate the object of analysis and only then operationalize the levels of the multi-level perspective. b) Systems are the tangible elements (artefacts, market shares, regulations, consumption patterns, infrastructure,...) while regimes are the intangible and underlying deep structures (beliefs, heuristics, rules of thumb, routines, ways of doing things, visions, expectations, norms, paradigms,...). So, "regime" is just an analytical concept that is used to guide analysts to discovering what is lying underneath the activities of actors who reproduce system elements.
c) Regimes are presented as too homogenous	c) Regimes are stated to be only semi-coherent rule-sets. There is always variety, internal conflict, debate, ... on specific issues
d) Most work on transitions focuses on only one regime	d) Indeed, the interaction of multiple regimes with niche innovations and how these regimes influence a focal regime is understudied.
There is a bias towards a bottom-up view of change (starting from niche innovations)	This is addressed in part by the section above on different pathways of transition.
The landscape level is a garbage can concept that accounts for too many kinds of contextual influences	This is a fair criticism. Indeed, the landscape is characterized typically as stable or slow moving. However, more recent work has already differentiated factors that do not change (or very slowly e.g. geography) from rapid external shocks (e.g. wars) and long term changes in certain direction (like demographical trends). Also, more attention should be paid to landscape developments that help stabilize existing regimes. Finally, the influence of regime shifts on the landscape is also understudied.
There is no "hierarchy of levels" in reality	This derives from a confusion of the micro/meso/macro levels as hierarchical rather than as degrees of structuration. Levels thus refer to degrees of stability. There is no nested hierarchy as niches do not generally emerge within regimes but outside them.

The two remaining criticisms are not of a substantial but purely research methodological nature and well addressed in the article.

7. Practical tools for transitions: transition management

Overviews of practical tools used in transition management are provided by Roorda C, Avelino F, Wittmayer J and van Steenberg F (2012, Methoden in Transitie management. Een inleiding op de vijf kernmethoden.) as well as applied specifically for municipalities by Roorda C, Wittmayer J, Henne-man P, van Steenberg F, Frantzeskaki N, Loorbach D (2014, Transition management in the urban context: a guidance manual) and DRIFT (2011, Urban Transition Management Manual, appendices).

Below, we draw more specifically on Loorbach, D. (2010), "Transition management for sustainable development" in Governance, Vol 23, No.1 (p.161-183) as well as Frantzeskaki, N. and Loorbach, D. (2012), "Governing societal transitions to sustainability", in International journal of sustainable development, Vol. 15 nr. 1/2.

Transition management is oriented toward so called "societal challenges". A societal challenge is defined (van den Bosch, S. and Rotmans, J. 2008, Deepening, Broadening and Scaling up: A Framework for Steering Transition Experiments) as "a question related to a persistent societal problem" (p.18). It provides direction for actions that try to address societal needs in the present and the future. These actions cover a broad range of innovations that can be of a technological nature but also institutional, legal, financial, socio-cultural.

The challenges are complex as:

- they are deeply embedded in dominant practices, culture and structure of society;
- both nature of the problem (e.g. the scale of the problems relating to the ageing population for health care provision) and their solutions are uncertain.

Essentially they require:

1. analysis of

- the system:
 - this consists of determining geographic and/or thematic focus and identifying key elements to research further;
 - next comes collecting data from multiple perspectives and based on different kinds of knowledge (using interviews/sessions with experts and other stakeholders, existing qualitative and quantitative data, studies, policy documents as well as information concerning how these have been interpreted by different actors and used by them), concerning a selected time period (looking back);
 - then comes interpreting (collectively) in order to present key insights and (re)frame the real challenges (persistent problems) faced;
 - this provides a historical perspective (change over time) and a common information base;
 - it also stimulates systems thinking (seeing interconnections and crossing the boundaries of one's own work/expertise);
 - it is provocative and hence a good starting point for the next phase.
- the actors:
 - a long-list of actors is established based on who can be influenced, who can influence due to having relevant information, expertise, knowledge, resources or relevant implementation instruments and who can bring a new perspective/ideas;
 - this list is generated by the system analysis, connecting existing activities to actors, newspaper analysis, snowballing (asking one interviewee for other actors);

- they are clustered on the basis of:
 - their type of power : traditional (to reinforce structures and institutions) or innovative (power of ideas) or transformative (power to mobilise actors and resources to move into new directions);
 - their organizational background (government, civil society, knowledge institute, intermediaries like consultants);
 - their interests;
 - their competences (see below);
 - their domain (social, economic, environmental).
- this leads to a selection of actors to work with, initially specifically frontrunners in society and sustainable development whose importance lies in providing innovative ideas and impulse.
- depending on this analysis, a strategy can be designed that focuses on primarily structuring societal problems, envisioning, setting up experiments, political lobbying, or a combination of all this as well as structuring and coordinating those informal networks of actors that, collectively and over time, can influence the existing regime.

2. transition arena (strategic level):

- this is a temporary network of actors that want to bring about sustainable change relating to a particular socio-technical system;
- they are supported by a small team of facilitators;
- this group of “innovators” (around 15-20 are required) comes together to conduct several tasks such as defining the most urgent and persistent issues, drawing an inspiring vision of the future, work out multiple transition pathways to get to this vision from today,...;
- they are not supposed to represent anyone but themselves;
- they return to their organisations to further the vision they helped create;
- these people should exhibit certain characteristics:
 - Competences:
 - ability to consider complex problems at a high level of abstraction;
 - enjoy a certain level of leadership within various networks;
 - ability to establish and explain visions of sustainable development within their own networks;
 - etc...
 - Interest profile:
 - have their own perception of the transition issue based on their own background and perspective (intrinsic connection to the issue);
 - willingness to think together;
 - creative open for innovation instead of having already specific solutions in mind;
 - ability to look beyond the limits of their own discipline, interest, expertise and world view;
 - already show drive: active in developing or stimulating innovation at either niche or regime level, derived from feeling responsible, having an interest in the future, meeting new people and learning about other worldviews;
 - willing to invest their time and energy;
 - with a diversity of backgrounds:
 - organizational: from government, companies, NGOs, knowledge institutes and intermediaries (consultants, mediators, project organisations);
 - domain: social, economic, environmental;
 - not necessarily (but can be) experts, but also networkers or opinion leaders;
- in addition, a certain representation from the existing regime is necessary with an eye to legitimacy and financing of the process but the arena should not be mistaken for a consultative platform;
- the selection should not be done by a “gate-keeper” but by a core group in which also transition experts are present;

- what should be avoided also is to establish a wide range of bodies around the arena, such as a steering group, a consultation group or an advisory group, as this is the recipe for limiting the space for innovation;
- the group should attempt to converge, from the articulation of their own initial diverging perspectives and a reflection on their daily routines, towards a more shared problem perception. It is this attempt that itself leads to new insights into the nature of the problems and the underlying causes. Its output is a map of the pathologies / flaws in the current systems that answers the question: why a transition? They shift from passively observing societal problems to realizing that their actions reinforce those societal phenomena. This then forms the prelude to change in perspective which is a necessary but insufficient precondition to realising a transition;
- based on this new perspective, and through discussion and interaction, a vision is generated which includes for the most part the shared basic principles / criteria for long term development, leaving room for dissent on the short and mid-term solutions, goals and strategies;
- it also leads to a formulation of “images” of areas that need to change (for, example images of winder energy in a clean energy vision);
- by definition, this vision will oppose the (implicit) expectations of the regime actors and hence (explicitly) seeks conflict with vested interests and powers to establish a fundamental debate on future development;
- based on the vision, transition pathways are elaborated that focus on exploring how barriers (regulatory, institutional, economic conditions as well as consumer routines, physical infrastructure, technological) can be tackled;
- one of the side effects of such an arena is therefore that participants develop a sensitivity for the complexity and uncertainty inherent in societal change processes as well as a perspective on how (small scale) strategic interventions can alter system trajectories over time. In this sense, the arena is not just a network, as its actors are tied by a common belief (even if they have divergent interests) rather than common or complementary interests like a network;
- it may also be that some participants leave the arena and others are invited to replace them, as the visioning process itself serves as a selection environment.

3. agenda setting (tactical level):

- based on the previous exercise, a common transition agenda is set up which contains a number of joint intermediate objectives, action points, projects, instruments to realize these objectives;
- finally, it should be clear who is responsible for each action, project or instrument;
- the group involved in this will have been expanded from the original arena to a broader set of actors who fit the following characteristics:
 - they represent organisations that have a stake in future development;
 - they have sufficient authority and room for maneuver in their own organisation and insight in how their organization could contribute to the envisaged process;
 - they are willing to operate for more than just a short period of time;
 - they have the capacity to translate the vision and the consequences of this vision to the agenda of their own organization;
- this will lead to interests, motives and policy of these actors to come out into the open with intense negotiations about investments and fine-tuning of individual plans and strategies;
- coalitions, partnerships and networks usually develop around pathways or around sub-themes where sub-arenas can be created;
- however, this can also lead to serious tension between the transition arena and the everyday policy agenda of (newly) involved actors which may necessitate a new arena with some of the existing actors but also with some new ones, to set a new direction.

4. experimentation (operational level):

- this offers an opportunity to create alternatives for dominant practices on a small scale via existing or planned initiatives and actions;
- the experiments need to fit within the context of the transition paths, but as such they can compete or complement each other but overall, in the longer term, need to strengthen each other in their attempt to move towards the vision;
- they should be iconic with a high level of risk;
- as they are time consuming and costly, they should use wherever possible, existing physical, financial and institutional infrastructure.

5. monitoring and evaluation (reflexive level):

- a great emphasis is put on collective reflection within a bigger picture of transition pathways and a vision of the future;
- actors should be monitored with regard to their behavior, networking activities, alliance forming and responsibilities;
- also the goals, activities, projects and instruments they agreed on need to be monitored;
- it has to be monitored that learning takes place from experiments and that this knowledge is transferred;
- the transition process itself needs to be monitored in terms of rate of progress in tackling barriers;
- evaluation then takes of the form of taking a step back and reflecting move fundamentally and collectively on what the monitoring is conveying.

While the idea is that the process creates self-steering networks of actors that connect their agendas to each other and develop experiments together, there remains an important role for government. Government facilitates and intermediates between actors while also ensuring a space exists in “the shadow of policy” where open discussion and experimentation remains possible. Also, it would accept the long term vision as a guide for current policy (Paredis, E. and Block, T, “Transitiepraktijk van de Vlaamse Overheid”, in *Vlaams Tijdschrift voor Overheidsmanagement*, 2015 /1).

The different instruments as described above are integrated in four activity clusters, which take place at a strategic, tactical and operational level:

- operational level:
 - includes mobilizing actors and setting up and executing transition experiments with the goal to translate visions and agendas in concrete actions and to learn via experimentation about technology but also institutions, rules, values, ...;
 - these experiments are often carried out in innovation projects and programmes and serve to show that other ways are indeed possible and hence to trigger broader debates;
 - action at this level is often driven by individual ambitions, entrepreneurial drive and skills or promising technologies;
 - the focus is on novel practices, within a time horizon of 0 to 5 years, but, without any links to broader policies or agendas, limited to a niche, they almost never, except by chance; lead to system innovation and transition.
- tactical level:
 - what needs to happen here is the build-up and break-down of system elements (e.g. regulations, institutions, infrastructures) as formulated in transition pathways, through negotiation, lobbying, collaboration,...;
 - this includes the development of images and paths that give direction to different transition experiments and provide a basis for cooperation;

- the goal of activities at this level is to develop coalitions and transition agendas, involving larger number of actors and creating broader support;
 - this level relates to the regime and the actors that carry this regime in the pursuit of their interests. They almost never focus on the overall development of a societal sub-system but rather on achieving goals and a certain position within a specific (industrial, institutional, societal) context within a time horizon of 5-15 years, from which each actor then enters into interaction and negotiation with other actors;
 - hence power relations, financing, institutionalization, business models, communication all become important;
 - at the level of the individual actors, these kinds of actions are generally considered “strategic” but at the level of the overall system this leads to fragmentation in governance and suboptimal solutions.
- strategic level:
 - creating a common understanding of a problem, a shared sense of urgency and a shared direction and ambition (vision, longer term goals) as well as collective norms which implies also a degree of politics and opinion making;
 - this reflects the “cultural” aspect of a societal (sub-)system and relates to an entire societal (sub-)system;
 - it should be clear that in the regular policy-making environment, long-term concerns (30 years) and governance have no place, due to the focus on the short and mid-term because of political cycles, individual interests and public pressure.
 - reflexive level:
 - this relates to monitoring, evaluation and assessment and debate of ongoing policies and societal change, constantly structuring, reframing and dealing with the issues;
 - in part, this is located in existing institutions established for this, but in part this is also socially embedded (e.g. via the media, incl. the new social media) and in science;
 - these activities are needed to prevent “lock-in” and to enable the exploration of new ideas and trajectories;
 - they can focus on all previous three levels and take the form of a supportive process that helps participants learn (from failure and success);
 - they can also be used to communicate, justify or improve the transition process.

The transition management cluster of activity presented above do not present a fixed sequence of steps. Activities can be executed in parallel and iteratively. Indeed, Frantzeskaki, N. and Loorbach, D. (2012, “Governing societal transitions to sustainability”, in International journal of sustainable development, Vol. 15 nr. 1/2), cite examples where transition management started

- with a portfolio of experiments (like in healthcare in the Netherlands);
- with reflexive evaluation (e.g. via transition monitoring of the Rotterdam Climate Initiative).

However, they also state that, in most cases, transition management started with the transition arena, the majority of which were initiated by entrepreneurial policy makers (at regional or local level), not as planned projects relating to a broader national policy strategy.

Impact of the transition process as such should be understood as:

- influencing regular policy;
- influencing and inspiring concrete projects;
- influencing participants that diffuse ideas within their own daily professional context;
- articulating a shared promising perspective to which many, to date uninvolved participants, start to relate.

Paredis, E. and Block, T. (“Transitiepraktijk van de Vlaamse Overheid”, in Vlaams Tijdschrift voor Overheidsmanagement, 2015 /1) as well as Paredis, E. (2014, “Pleidooi voor een genuanceerde kijk op transitie” in Okois 68) offer some constructive criticism on transition management:

- the frameworks of transition theory have proven themselves useful time and time again in helping people to think differently about how societal change happens;
- however, in practice, too much attention goes to sub-systems (e.g. housing) and too little to the overall context within which such a system functions, e.g. the neo-liberal, capitalist growth economy which influences these systems, even though in principle, the theory acknowledges this influence;
- transition arenas in practice are good at creating innovative visions and new networks as well as ideas for experiments (which if money can be found also happen);
- yet as a method it is very much like a standard recipe (arena, vision, pathways, experiments) which does not go well with the underlying theory of complexity, uncertainty, etc.
- also, the image is projected that the participants in the arena are participating on an equal basis, free from specific interests and power relations, to form a consensual or democratic coalition for change. However, in practice, tensions between members of this coalition quickly surface as actors are encountering and considering other options and paths and these actors have no qualms in using their power to pursue what they think is best for them (incl. protecting their vested interests);
- it underestimates the importance of tying the transition story to current policy developments (as will be clear in the case of Plan C below) and hence to engage in “politics” in the sense of affecting political ideas, as well as how political ideologies are framing problems and formulating solutions, by reforming institutions to support transitions and by redefining interests by creating new centers of power and reform minded coalitions. The price to pay for that is that some of the most transformative elements of the vision may be lost. However, in the longer term, these elements may return. Hence, transition management should more explicitly advocate a road that navigates conflict, resistance from the bottom-up (e.g. via social movements and small, alternative projects) as well as cooperation, dialogue which entails some compromises;
- transition management is then one element in a bigger political process; where it should be understood that coincidence and luck are also important.

As transition management as such is outside of the direct scope of the current publication, but is nevertheless relevant in a longer term perspective, as pointed out by DG REGIO (2013, Guide to social innovation) (see annex 2, where step 6 of the proposed regional social innovation strategy entails setting up transition innovation platforms), more explanations on methodology are provided in annex 5.

Nevertheless, two cases are presented below that aim to illustrate what transition management can be about in a concrete way. In annex 5, a third case (concerning care and housing in the Netherlands) is also provided.

CASE 4: PLAN C IN FLANDERS: SEEKING A TRANSITION FROM WASTE TO MATERIALS MANAGEMENT IN SUSTAINABLE DEVELOPMENT

Background of the case

The case description draws in large part on two publications: Paredis, E., 2013, *A winding road: transition management, policy change and the search for sustainable development* as well as Paredis, E., 2013, *The art of coupling: multiple streams and policy entrepreneurship in Flemish transition governance processes*.

Inspired by the Dutch transition management policy (Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieu, 2001, Nationaal milieubeleidsplan 4), the Flemish Government decided in 2004 to start experimenting in its environmental policy with transition management. It was decided that the expertise of Prof Jan Rotmans and his team would be hired to give transition management a start in Flanders. This means that the approach to transition management that is tried out in Flanders, is the one developed by ICIS/MERIT and later on further refined in DRIFT, which employs a so-called transition arena with niche-players and forward thinking regime players to develop a common problem structuring of the system under discussion, and then moves on to develop a transition agenda. The transition agenda contains a future vision for the system, transition paths towards that vision, and a series of experiments to test and initiate the paths in reality.

In Flanders, the first transition process to adopt this approach was initiated in October 2004 in the area of sustainable housing and building (DuWoBo), and Dutch researchers were directly involved in this process. This process was initiated by the environmental administration LNE (at the time called Aminal). The second process, that we will elaborate further in this case study, regarding sustainable materials management (called Plan C), followed the same transition management approach, and started in June 2006, but without Dutch involvement. The process was initiated by the Flemish waste agency OVAM. Plan “C” refers to the idea that a Plan “B” would not be sufficiently radical in terms of innovation.

In the case of Plan C, there were two problems that demanded attention. First, since the turn of the century there was an ongoing discussion within OVAM about the long term orientation for waste policy, in particular the further development of the waste hierarchy and prevention policies. At the beginning of the 21st century, Flanders had succeeded in creating a well-performing waste system and it was (and still is) considered top of the European class in selective collection and recycling. However, the fact that the total amount of household waste remained high and that industrial waste was not under control, had led to a realisation at the political level and with several OVAM officials that, in order to further reduce waste amounts, a new step in waste policy was needed.

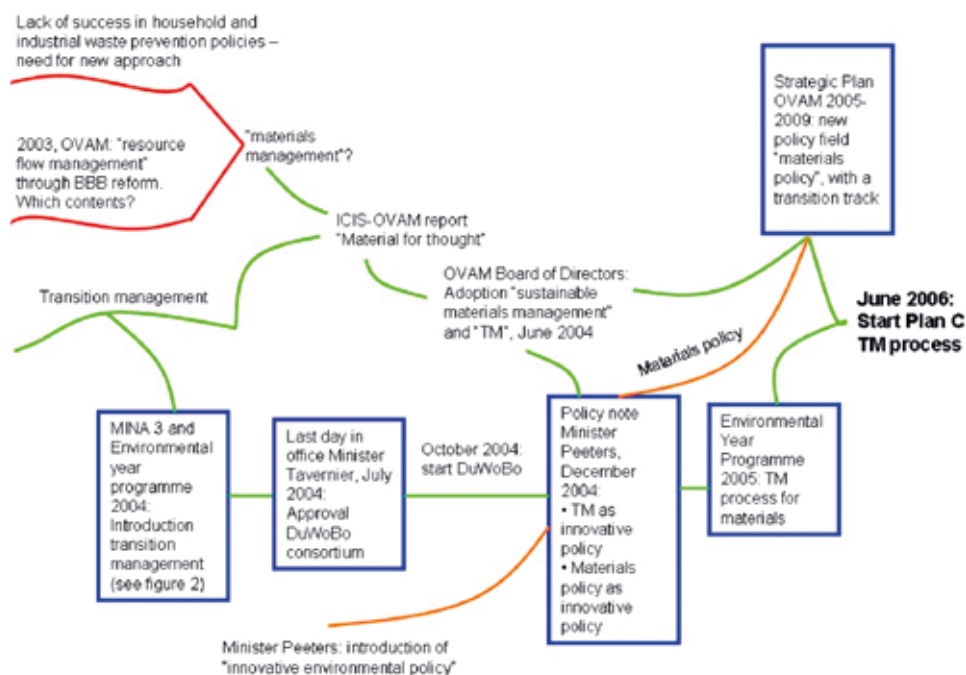
Second, during the administrative BBB (Beter Bestuurlijk Beheer) reform (inspired by New Public Management) at Flemish level, OVAM had been assigned the task of ‘resource flow management’ This was in fact a manoeuvre from OVAM supported by the Minister of the Environment to keep waste prevention policies in the task description of OVAM (under the disguise of ‘resource flow management’), instead of losing it to the general environmental department LNE (Leefmilieu, Natuur, Energie). Of course, the new description initiated new expectations and it was unclear what the contents of the new field were to be, how it should be organised and what its relation was with existing waste policies. In the follow-up discussions, OVAM started interpreting the new task as ‘materials policy’ and as a possible translation for its long-term policy. But still, the contents of the new field remained unclear.

During the preparation of MINA 3, the Environmental and Nature Policy plan for 2003 to 2007, transition management had surfaced in several studies (and in the advice of the advisory councils SERV

(advice 10 June 2002) and MINA-raad (advice 4 July 2002) as a potential solution for the problems of long-term sustainable development policy and the integration of environmental and innovation policy. Both SERV and MINA-councils pleaded for radical innovations under the form of long-term system innovations and asked the government to study the possibilities of framing these as transitions and transition management. Between 2002 and 2004, several researchers, civil servants (such as Walter Tempst at OVAM, others at LNE) and policy advisors (such as at SERV) had come in contact with the concepts of transitions and transition management through research reports or in the preparation of policy advice and had started regarding them as promising concepts for policy renewal. In this period, several of them also went to visit Jan Rotmans and his team at ICIS Maastricht to discuss the new concepts. These civil servants and policy advisors actively promoted transition thinking as a policy option by bringing it up during the preparation of policy advice or the preparation of new policy plans (MINA 3 Environmental Year Programme, 2004 & 2005, OVAM Strategic Plan, 2005-2009). Specifically for the case of Plan C, under the impulse of Walter Tempst, OVAM ordered a study from ICIS Maastricht about the potential of transition management for the reorientation of waste policy. The study concluded that a sustainable materials perspective had potential to tackle the existing problems in the waste system and that transition management was a promising concept to initiate renewal of policy. In June 2004, OVAM's Board of Directors adopted the conclusions of the report and decided to defend them with the new Minister of the Environment.

In fact, the overall mood in environmental policy-making had become more supportive of long-term policy-making and sustainable development after green Ministers entered the Flemish Government in 1999. Even after the Greens lost the election in June 2004 and the Christian Democrats took over the policy domain, the support for transition management remained, as the new minister Peeters introduced it in his Policy Note 2004-2009 (published in December 2004) as an experiment in policy. Its very last operational goal stipulates that sustainable building and housing will be used as a testing ground for TM in Flanders. The specific wording of these parts of the note is influenced by proposals from the environmental administration and advisory councils SERV and MINA-council. The next year, the minister also approved the start of a transition management process in sustainable materials management via the environmental year programme.

The figure below provides the overview.



It uses a framework provided by Kingdon, JW (2011, *Agendas, Alternatives and Public Policies*) who distinguishes between three “streams” of influence in shaping policy:

- the problem stream (in red) which contains all conditions that become interpreted as problems. Conditions attract attention through all sorts of indicators, through focusing events (crisis, personal experiences, and symbols) or feedback from experiences. But they only become perceived as problems when interpreted against the background of for example values of policymakers, comparisons between groups of people and with other countries, or classification of a condition in a particular (problem) category. Agendas are influenced when some participants succeed in getting more attention for one problem than for another;
- in the policy stream (in green), ideas, proposals and alternatives float around. Here, a community of specialists is active that interact and discuss a whole range of problems and solutions. Ideas surface, are rejected, mature, are recombined and evaluated against criteria such as technical feasibility, value acceptability, tolerable cost, anticipated public acquiescence, chance of receptivity among decision makers. A viable alternative facilitates high placement on the governmental and decision agenda;
- the political stream (orange) is determined by elections, changes in government, a new balance of power in parliament, swings in the mood of the public, interest group pressure campaigns. Developments in this stream have powerful effects on agendas. When for example a government changes, new items move up the agenda more easily.

The blue boxes depict “policy windows”: A policy window is the period of time during which it becomes a lot easier for advocates of particular policy solutions or of particular problems to push their ideas. Policy windows are relatively scarce and are only open for a limited time period. They are the result of developments in the political or in the problem stream. A problem window opens when decision makers become convinced that a problem is very pressing and needs action. A political window results from political events such as elections or a change in government, when political actors are receptive for developing new initiatives. These kind of moments are indeed scarce, yet other possible windows such as renewal of government programmes that expire, the budget cycle and regular reports or addresses are more frequent. They often are relatively well predictable.

“Policy entrepreneurs” as advocates of certain problems or solutions that are willing to invest resources (time, energy, reputation, money) to promote their cause, either because of their concern for specific problems, their policy values, or for personal benefits. Policy entrepreneurs can come from very different corners (elected officials, civil servants, lobbyists, academics, lawyers, journalists). They can spend years in softening up the system for their ideas. More, they do not only push for their conception of problems or for policy alternatives, they are also central in the coupling of streams as they hook solutions to problems, proposals to political momentum, and political events to policy problems.

Innovation approach

1) Setting up and conducting an analysis of the system (mid-2005-June 2006)

After the OVAM Board of Directors permitted to set up a transition management process, OVAM officials began the preparation in mid 2005 with the selection of two consultancy agencies to coach the process. They first screen potential Flemish participants from government, business, knowledge institutions and NGO's. Early 2006, two group discussions are organised with potential candidates around the theme “broadening waste policy to materials policy”. The participants that seem most interesting and forward-looking are asked to participate in the first transition arena. There is some contingency in this selection: some people do not find themselves capable enough or they refuse because of lack of time, others are stumbled upon more or less by accident, but in the end a diverse group of fifteen

people is composed from government (OVAM, LNE, IWT), business (Agoria, Indaver, Colruyt, Federplast), academia (KU Leuven, UGent), consultants (Sustenuto, Advizors), NGO's (NBV40, Oxfam), and a representative from the Minister for the Environment. These people have backgrounds in amongst other things materials, waste, chemicals, environment, consumer affairs, distribution and innovation. In the terminology of transition management, the group can be said to consist almost entirely of forward-looking regime players.

In line with TM theory, they are asked to participate as individuals and not as representatives of their organisations, but it is obvious from the group's composition that it also respects certain equilibriums between stakeholder groups.

In addition, a preliminary system analysis is prepared by the consultants, drawing on a previous study delivered by Dutch transition researchers.

In June 2006, the arena is officially installed. The representative of the Minister of the Environment and the Administrator-General of OVAM address the participants and urge them to develop a long-term transition vision for sustainable materials management that can also be translated in short-term actions. In explicit references to the rules of the game of transition management, the representative of the Minister tells participants that they are not chosen for their representativeness but for their ideas, and that they are provided space and time to deliver good work, away from the pressure of short time tangible results.

In terms of resources, the yearly budget of Plan C is estimated at 250 000 EUR, to pay for consultants, staff of OVAM (+/- 60 000 EUR) and other administrations (+/ 25 000 EUR). Since 2011, additional means of 80 000 EUR are provided via the Flemish Administration of general government services (Diensten Algemeen Regeringsbeleid, DAR).

2) Transition arena: defining urgent and persistent issues and formulating a vision (September 2006-January 2007)

In September 2006, the transition arena meets for the first working meeting. Karel Van Acker (materials scientist from KU Leuven) and Paul De Bruycker (industrial waste group Indaver) are chosen as presidents. OVAM has also reserved a limited budget for two experts in groups dynamics and multi-party collaboration (prof. Tharsi Taillieu, Marc Craps) to follow the process, draw lessons and when needed give advice on how to conduct the process.

The management and coaching of the process is done by a transition secretariat made up of the consultants, the OVAM project leader, the process experts and one of the presidents (Van Acker). Except for the president, these people try to stay clear from substantive discussions during the arena meetings, so as not to mix different roles.

The systems analysis is thoroughly discussed during this first two meetings. Problems identified include the environmental consequences of current production and consumption patterns, growing scarcity of resources and materials, social effects of these patterns, unequal North-South distribution, and the current culture of consumer spending. These trends undermine welfare worldwide and necessitate the search for radical changes in the system of material use and management.

Then in the subsequent 3 meetings the group moves on to the formulation of a future vision of sustainable material use, selecting key themes on which to focus in Flanders, defining solutions and identifying levers for change. The full 6 page vision in Dutch that was finished in January 2007 can be found on the site of Plan C at <http://www.plan-c.eu/wat/onze-visie/>.

The vision sketches an image of how the Flemish society should ideally deal with resources and materials. Society will handle resources, materials and energy responsibly and with care, and resources and materials will be regarded as common goods. Materials are managed and controlled over the whole of the life cycle in cooperating networks or clusters of producers, processing companies and consumers. The materials system will function as a subsystem of a service economy: people do no longer measure their happiness on the basis of the property of material products, but on access to services that are embedded in the social and natural environment. Flanders is a trend setter in material management, with a high level of knowledge about wise material use and the development of new materials and services. These developments also offer new opportunities for the Flemish economy as the cradle of sustainable material management.

The central storyline around which the participants unite in this picture of the future is therefore one of a high-grade closing of the material loops: we will not use less material products, but the new resources needed have to decrease drastically.

The vision is made more concrete by defining five themes for change:

- **Smart Closing of Cycles:** materials are managed as common property. Closing of circles becomes possible thanks to intelligent infrastructures which facilitate material flows;
- **Tailor-made Materials:** access to materials is guaranteed, but this is only possible when materials and products are drastically renewed (made from renewables, multifunctional and flexible in usage, easy to disassemble and to reuse or recycle, intelligent materials);
- **At Your Service:** people do not measure quality of life on the basis of property, but on the basis of access to services. A service economy develops with completely new type of companies. New functions and services are integrated in products.
- **Alert Public:** consumers take on responsibility for their consumption choices and take conscious and informed decisions. They evolve from unconcerned choosing towards conscious caring;
- **Green Synthetics:** an important Flemish industrial sector which makes use of new opportunities to become market leader in sustainable synthetics.

The group then works at bringing in more people for the next phase, by drawing on their networks.

3) Transition arena: working out transition pathways with a broader group (May 2007-May 2008)

In May 2007, about 60 persons meet in Leuven, where the new members are introduced to the work already done and invited to participate in one of the five themes. The working groups are mostly headed by people from the original group. Their task is to flesh out transition pathways for their themes. This requires describing a desired future and detailing the necessary steps to reach it.

Coordination and management is now done by a task force, which merges most of the members of the original arena with the presidents of the working groups in order to make it easier to watch over the process and guard the coherence between the original vision and the work of the working groups. It produces a mission statement in the spring of 2008: within 5 years, by 2013, the network should be the reference in Flanders for sustainable material management, with a portfolio of 20 talked-about transition experiments, of which at least half have been initiated by private actors. By then, Plan C will have created societal awareness for a materials transition, realised some institutional changes that support self-organisation of the process and become an esteemed partner in European and international networks.

The working groups meet on a regular basis. During a meeting in October 2007, they present their work to each other for the first time. By May 2008, they have completed their task in formulating pathways

for each theme and in identifying in total 33 possible experiments linked to these pathways. These can be accessed via <http://www.plan-c.eu/wat/onze-visie/>.

During a new collective meeting, they present their work again to each other. Everyone receives a “reference document” containing the systems analysis, the vision, the mission, the pathways and the experiments. The administrator-general of OVAM declares that Plan C will receive further support until half 2009, but that other parties should also start chipping in to help sustain Plan C as an independent network of excellence.

An example of pathways is provided below for the theme Alert community (excerpts):

“In current Western thinking economic growth is often the most important criterion. But this cycle of ‘production for production’s sake’ and ‘consumption for consumption’s sake’ is unsustainable. Support for this way of thinking in our society is coming to an end.

An important challenge is to break through habitual behaviour. Sustainable, co-determining consumers play an increasing part within the whole production and consumption chain – also in material management. They feel jointly responsible for caring for the community.

An Alert Community is an alert, informed, caring and respectful community that shows great readiness to act. Things may and can be called into question and there is readiness to make changes. It is a community that looks out for the collective needs, interests and problems and develops towards a positive attitude and really positive behaviour with respect to the big ecological challenges.

An Alert Community considers, chooses and acts from conviction – not from guilt or a narcissistic concern for itself – and is always aware of the limitations of people, society and the earth. It is a community that cares for each of its members.

An Alert Community succeeds in bringing about a renewed stewardship for the earth, a circular economy with real opportunities of minimising our impact on the environment. In addition to thinking in terms of efficiency, sufficiency – “enough” – has an important place in this society with alert citizens.

Who must be made alert and how?

- *Politicians: they must create the framework for sustainable materials management; change takes place via regulations and policy.*
- *Business people: they must make sustainable materials management possible from the supply side; change takes place via businesses with corporate social responsibility*
- *Citizens / consumers: they must make sustainable materials management possible from the demand side as a consumer (with the purse) or as a citizen (with the vote); change takes place by sustainably consuming citizens.*

This leads us to two transition paths that are not fully independent of one another: corporate social responsibility and sustainable consumption.

In the first transition path a sustainable materials management is achieved because the citizen as consumer has taken a step towards sustainability. In the first phase a critical percentage of the population (10-15%) takes the step towards sustainability. As a result sufficient energy is created to mainstream this behaviour. The target public are the pioneers, the cultural creatives. There is a commitment to new or existing experiments and innovations that already partly reach this public. This mainly comes down to linking the experiments together so that the consumer is approached in a more integrated

way. Successive series of experiments gradually become increasingly ambitious (from low hanging fruit to radical changes). At the same time via education the corporate consciousness of sustainability is increased. When the majority of this section of the public have taken the step towards sustainability, this behaviour can be mainstreamed by imitation or policy.

In the second phase a sustainable materials management is achieved because the general public takes steps towards sustainability. The target public is the general public. The experiments from the first phase are built on further. The wider culture is already focused on sustainable materials management. The challenge now consists of encouraging individuals to sustainable behaviour. New experiments now reach a wider public that is made alert by education and via exemplary roles. They appeal to the consumer as an individual.

To sum up this leads to the following milestones:

- 2010 First generation of integrated experiments carried out
- 2010 Both internal and external dimensions of sustainability are embedded in the education plans
- 2015 Critical mass of cultural creatives closes the attitude-behaviour gap
- 2020 Second generation of experiments carried out
- 2025 General public consumes sustainably

In the second transition path a sustainable materials management is achieved because the business community has taken the step towards sustainability. Here too we distinguish two phases.

First we work with these pioneering businesses on experiments and innovations. Because they gain a competitive advantage (more profit and/or better image), other businesses will in the meantime imitate this or the policy can mainstream the new behaviour via regulations. At the same time via different channels the corporate consciousness regarding sustainability is increased.

In the second phase a sustainable materials management is achieved because all the companies take steps towards sustainability. This builds further on the experiments from the first phase. New experiments now reach the whole business community that is made alert by communication and via exemplary roles.

To sum up this leads to the following milestones:

- 2010 First generation of integrated experiments carried out
- 2010 Both internal and external dimensions of sustainability are communicated to the business community
- 2015 Critical mass of businesses is sustainable
- 2020 Second generation of experiments carried out
- 2025 All companies produce sustainably”

4) Agenda setting and experimentation (May 2008- 2014)

In October 2008, Plan C goes public and presents its work to an audience of 120 participants from different sectors. People and organisations are connected and new ideas for experiments collected. However, “entrepreneurs” who can actually get some of the experiments started are hard to find. Participation of companies is rather low.

The task force also works on a business plan for sustaining the network. In this plan, Plan C is put forward as a platform for radical renewal, that also will work towards cooperation and consultation with existing funding channels. Plan C is not itself a financing mechanism for experiments. However, the label “Plan C experiment” should become recognized as a value added in appraisals for funding by others.

In January 2009, the administrator-general of OVAM announces that Plan C will start work on becoming autonomous, that there will be a new consultant appointed and that there will be a provisional structure in the mean time. The provisional structure replaces the task force with two complementary bodies: the Strategic committee for organisational development, in charge of making Plan C autonomous, and the Strategic committee for substantive coordination, in charge of realizing the vision via experiments. The new consultant will support both of these bodies.

The start of this new structure leads to some of the original actors dropping out, while also a few new ones come in. However, no business representatives remain. The consultants now take on most of the work, a marked difference with the earlier phases of Plan C. For example, they develop a method to bring ideas to the level of feasible experiments. The hardest part is however to assemble all the resources and make sure pre-conditions are fulfilled for an experiment to get started. From 2009 to 2011, four experiments are coached, out of which two are finally proposed for funding to the MIP3-programme by consortia. Only one is approved.

Plan C, using European Regional Fund financing, also sets up various multi-stakeholder platforms around specific themes (e.g. re-use of wood-waste, tailor-made local production and consumption, internet of things, sustainable materials management) to create new ideas for experiments. Plan C is recognized as being good at bringing people around the table and developing ideas. However, the basic problem remains that funding sources for taking these further are not under Plan C's control, which discourages entrepreneurs to engage.

By the spring of 2011, the Minister of Environment proposes the theme of "sustainable materials management" as the flagship initiative for the policy domain in the "Vlaanderen In Actie" (Flanders in Action) programme, which was launched by the prime minister to put Flanders in the top 5 of regions within Europe by 2020.

This then resulted in a round table conference where government, industry, knowledge centres and other stakeholders discuss the matter. There, Plan C presents "I-made", a project intending to turn Flanders into the first experimental garden worldwide of local custom-made production, using 3D-printing and rapid manufacturing. Hence it is clearly part of the transition pathway "tailor-made materials" defined in the previous phase of Plan C where "route c" consisted of "more attention for local (and smaller scale) production (see <http://www.plan-c.eu/wat/onze-visie/materialen-op-maat/>).

Plan C then managed to secure funding for I-made as a two year project and hence it became active as of the Spring of 2012. This project was also the first to be operated by the newly (March 2012) established autonomous non-profit organization Plan C vzw. The road towards becoming such a "vzw" (non-profit) was not an easy one, with ongoing disagreements concerning the legal form and sources of funding, attested by the fact that it took more than 3 years to make it happen (since the request mentioned above by the administrator-general of OVAM in 2009 that Plan C become autonomous).

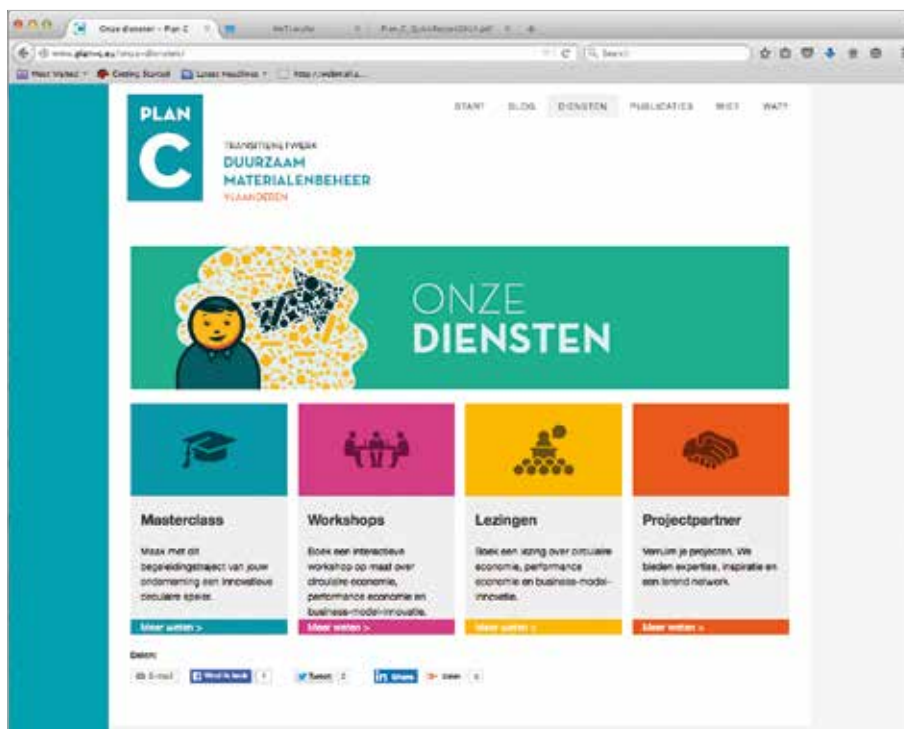
The Materials Decree of 24 June 2011 established in its chapter 6 an informal cooperation, between OVAM, the departments EWI (economy, science and innovation) and DAR, and VITO (Flemish institute for technological research), with OVAM taking the presidency of the new cooperation; other government agencies can later be included. The cooperation has three tasks: operational support for Plan C (but in principle also other organisations with a similar goal can be supported), stimulating information exchange and cooperation between government agencies with similar goals, and participating in projects where the expertise of OVAM and the other agencies can be useful). However, only when OVAM finally decided in December 2011 to found the "vzw" and to guarantee funding for it, regardless of who joins in, was the momentum created to get a diversity of other partners to join in setting up the "vzw" in March 2012.

In 2014, Plan C published the lessons learnt from I-made (see <http://www.plan-c.eu/2014/10/20/lessen-uit-2-jaar-imade/>). The publication firmly positions the project in transition theory. It describes the experiments that were conducted with two lead partners: TP Vision and Helbig. For example, the experiment conducted with TP Vision consisted trying out how television (components) could be produced quicker, more flexibly and with great design freedom as well as made more sustainable in terms of materials use. The experiment consisted of an exploration of technology, a life cycle analysis of old versus new production methods, technical and cost impact analysis, business model development and innovation and finally design and proof of concept using rapid manufacturing technology. Valuable lessons were learned which are cited in the report. The same applies to the other experiment with Helbig, concerning the fashion retail environment of the future. This project first developed four strategic scenarios of the future to get a better sense of different possible futures. Next a service design project (with design agency Pars Pro Toto) to develop the “shop of the future” was undertaken. Next, possibly useful technologies were explored. Finally, an environmental impact analysis of the fashion retail sector was made.

Interestingly, also other related initiatives, not under the control of Plan C are discussed in the report. This shows the Plan C may have recognized that other initiatives can also support the vision, even if they did not originate in the Plan C process.

Today, Plan C offers various services ranging from coaching businesses in their challenges of becoming more circular in terms of material use, delivering workshops and lectures on the topic as well as being partners in projects, as depicted on their website (see below). In 2014 it employed 5 full time staff members and has an annual budget of +/- 410 000 EUR, financed for 5% by own revenues from events, lectures, sponsors), 65% structural funding (+/- 250 000 EUR) and 25% from projects (see http://www.plan-c.eu/uploads/Plan_C_QuickReport2014.pdf).

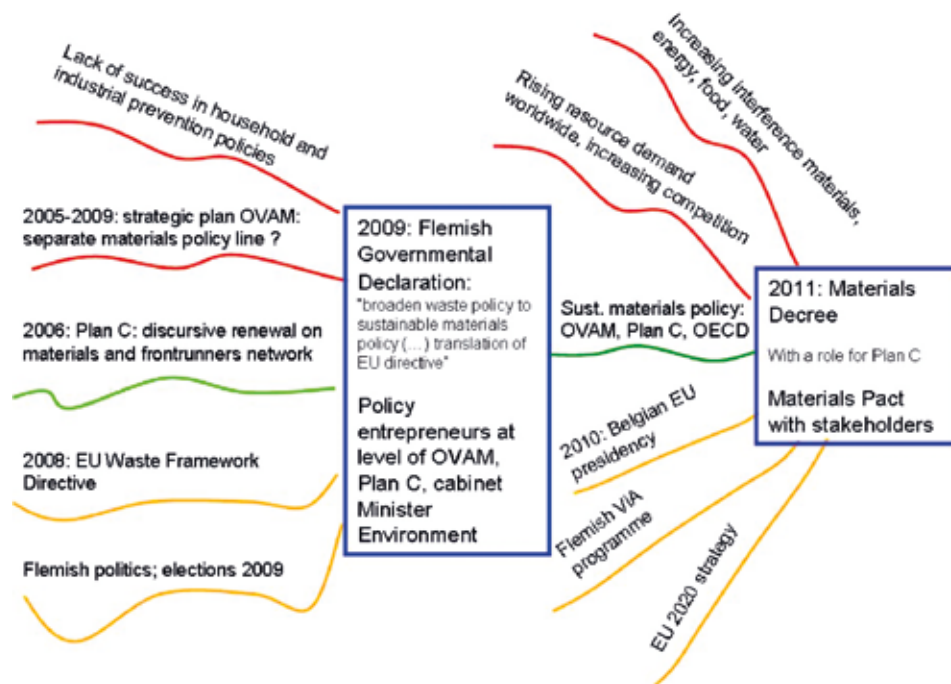
The idea is that OVAM takes the overall lead in developing the materials system, with a focus on the short and medium term, while Plan C gets the task of long term development and engaging in experiments that are a translation of its vision. A new policy research centre on sustainable materials, called SuMMA, which is headed by the president of Plan C, should support both.



Evaluation

While the case study shows how Plan C over a period of about 8 eight years went through most of the steps advocated by transition theory, the question is how to evaluate this? Clearly, such “projects” that aim at very long term visions cannot be evaluated simply by assessing if they made that vision happen.

However, it is possible to ascertain the “contributions” made by Plan C. The figure below shows what happened after it was decided in 2006 to set up Plan C as a transition platform in its wider context.



From the point of view of Plan C, this can be interpreted as a form of anchoring the ideas developed at the level of a policy niche to the regime level, making smart use of passing streams. From the point of view of the regime level, it looks more like a typical example of agenda-setting.

Probably the most important result of Plan C was the discursive renewal it realised in Flanders between 2006 and 2008: it formulated a discourse on sustainable materials management in which waste is part of a broader materials system. Certainly until 2008, Plan C was the main voice in Flanders on sustainable materials management.

Several OVAM policy officers were not only participants in the Plan C process, but were also involved in internal OVAM discussions on the translation of the results and their implications for OVAM's own policy orientation and organisation. Parallel to the Plan C process, OVAM installed an internal learning forum during 2007-2008, called The fifth floor, where the new developments and the results of Plan C were discussed and where the insight grew that materials management should not be regarded as a third policy line (along with waste and soil management as stated in the strategic plan of OVAM for 2005-2009) but that the waste system should be regarded as part of a 'higher' system, the materials system.

A crucial breakthrough was the realisation within OVAM that this line of thinking implied that the obligation, coming from the EU-level, to translate the Waste Framework Directive (2008/98/EC) into new Flemish legislation, should not simply lead to a new Waste Decree, but that the new Decree should somehow reflect the materials storyline. In fact, the EU Directive's main aim is to strengthen the waste hierarchy in the waste policies of the EU member states and to reduce the discrepancies in waste poli-

cies between member states. But inspired by the experiences with Plan C and by similar discourses at EU and OECD level, OVAM proposed to the Flemish Minister of the Environment to translate the Directive into a Materials Decree instead of into a new Waste Decree, in that way going several steps further than the EU required (and then the ambitions of most EU member states). The minister, guided by advisors that had an OVAM history and who had closely followed the Plan C process during the first years, was positive and during the negotiations for the new Flemish Government in 2009, succeeded in inserting the idea into the Governmental Declaration.

The shift from waste to materials policy had now reached the governmental agenda, but it took two more years to rise on the decision agenda. Different opportunities arose and different streams could be coupled that strengthened the adoption of the materials discourse and anchored it further at political and administrative level.

One evolution is situated in the problem stream, where in the course of 2009 and 2010 we see a fast rising awareness of the urgency of addressing the resources and materials problem. This can be labelled as landscape pressures, such as the rising demand for resources worldwide (e.g. from China), the import dependency of EU-countries, and the rising prices of resources as well as growing interference between systems of materials, energy, food and water (e.g. renewable biomass energy policies may hinder development of a bio-based materials economy or impact on food security). Apart from OVAM itself and Plan C, important new players in the Flemish materials system such as the sector federations Agoria (technology industry) and Essenscia (chemical industry) actively drew attention to these problems and demanded government action. Also EU initiatives such as the Raw Materials Initiative (EC, 2008), which grew out of anxiety over the availability of resources for the European economy, increased the awareness for the problem.

Another element, part of the political stream, was the preparation and development of the new Strategic Plan 2010-2014 for OVAM. Under coordination of OVAM's strategic team, a broad consultation process with stakeholders was set up. This process deepened the understanding of a sustainable materials orientation within OVAM. In the strategic plan, waste and materials are no longer regarded as separate policy lines – as was the case in the previous Strategic Plan 2005-2009 – but waste policy has become part of sustainable materials policy. The new plan was accompanied by an internal reorganisation of OVAM, meant to prepare the organisation for its role in the future materials economy.

Since 2010, the former department waste management has been reformed into the department waste and materials management. While the old department was organised around seven specific waste flows (such as organic waste, household waste etc.), the new department is organised around two chain services (“chain management and companies” and “chain management and local government”) and a policy innovation service. Within each chain service, specific teams are created that have the ambition to do the follow-up of a whole production and consumption chain, such as a team chemistry and a team biomass that try to cover the chemical and biomass cycle respectively. The objective of the policy innovation service is to evaluate the policy instruments OVAM currently employs and to formulate ideas for innovating instruments in such a way that they contribute to the waste-materials shift. It is interesting to note that the head of the new policy innovation service has played an important role in Plan C (he was amongst others the OVAM member of the first arena in 2006). OVAM officials also recognise the influence of Plan C in the reorganization of OVAM.

A further opportunity was the Belgian presidency of the EU during the second half of 2010. Because Belgium is a federal state, the preparation of a task such as a European presidency requires a lot of coordination between the federal and the regional level. During the preparation process, the presidency of each EU policy domain is divided between ministers of the different Belgian policy levels. In this way, the Flemish Minister for the Environment became responsible for the presidency of the

EU Environment Council. It is a tradition at European level that each presidency formulates several own priorities, so during the preparations for the environmental presidency at Flemish level, OVAM proposed materials policy as one of the priorities. Because materials policy was already politically relevant with its introduction in the governmental agreement and because of OVAM's good reputation for its European policy work – with a first-hour member of Plan C's transition arena as head of OVAM's EU division – the ministerial cabinet was in favour of the idea and formulated 'sustainable materials management' as one of the environmental spearheads for its Belgian presidency. In July 2010 an informal Environmental Council in Ghent was devoted to sustainable materials management, which gave the minister an opportunity to present herself nationally and internationally with the theme. During the formal EU Environment Council in December 2010, she succeeded in introducing language that links the EU 2020 Strategy and its flagship initiative on resource efficiency to 'system innovation' and 'the creation of a multi-actor transition platform on resource efficiency'.

Furthermore, exactly during the presidency, OVAM organised and hosted a high-profile OECD workshop on sustainable materials management. The result and visibility during the EU presidency together with the OECD workshop, contributed to a political confidence in the potential of the materials storyline. Early 2011, the minister proposed sustainable materials management as her flagship for the socio-economic programme Flanders in Action (ViA), in that way positioning materials as an essential part of the transformation and innovation of the Flemish economy.

This resulted at 6 June 2011 in a Round Table on Sustainable Materials Management where industry, knowledge centres and other societal partners signed a Declaration in which they engaged themselves to work towards a Materials Pact and an operational plan on sustainable materials.

By the time the Materials Decree was approved by the government on 24 June 2011, the combination of all these streams had laid a solid political and administrative foundation for the new orientation. Furthermore, the whole process and the different evolutions had also led to active involvement of all important stakeholders. There do not seem to be any major voices that oppose the shift from a waste to a materials orientation. What is moreover noticeable, is that most of these actors cannot be categorised as small players or niche actors. The regime actors themselves, often larger companies active in private waste management, are trying to reposition themselves from "handlers of waste" to "suppliers of materials and fuels from secondary processes"; the traditional technology and chemical industry (as represented by Agoria and Essencia) want to reposition themselves as partners in more sustainable, closed-loop economy (with Agoria's director having been part of the original Plan C arena and Essencia involved in Plan C's Green Synthetics pathway, which sparked the FISCH initiative – Flanders Strategic Initiative for Sustainable Chemistry); universities and knowledge centres are presenting themselves as pioneers and partners in knowledge development for materials. An example is VITO (which has a unit for "Transition, energy and the environment") which also launched in 2010 Cleantech Vlaanderen vzw to coordinate all initiatives in the Flemish clean technology industry.

This dynamic is confirmed by the approval mid 2012 of the Vlaams Materialenprogramma (Flemish Materials Programme), a collaborative programme between government, industry, science and civil society, coordinated by OVAM.

More information

- <http://www.cdo.ugent.be/drupal-7.15/?q=publicatie/701>
- <https://steunpuntrado.be/documenten/papers/trado-rp-1-art-of-coupling-eng.pdf>
- <http://www.plan-c.eu/>

CASE 5: LIVING LABS APPROACH WITH EXAMPLE FROM SPAIN

The transition management methodology is similar to what is advocated in the recent publication by the World Bank in collaboration with the European Network of Living Labs on “Citizen-Driven Innovation: a guidebook for city mayors and administrators”, released in March 2015. Indeed, living labs can be seen as a special case of transition management.

While the living lab idea was originally developed as a way to more efficiently carry out research and development in ICT, bringing users into the innovation process, hence taking R&D out of the lab and into the real world, it is now applied in a range of settings. The World Bank guide now targets cities and their societal challenges with the aim of social transformations that can promote a good life for citizens.

The challenges are positioned as “wicked problems” caused by complex links between the behaviours of individuals, organisations and institutions that require deep changes in the structure and organization of our societies, starting from the patterns of our daily behavior.

ICT, more particularly mobile communication, social media, internet of things, cloud computing and open data, is stated to have had a transformative role in many contexts, by putting users at the center of the innovation process. The Smart Cities concept is put forward as an example of such a transition, which is the idea that there is a city-wide deployment of sensor technology that can capture in detail what is happening in the city in real time (e.g. concerning transport, energy, water, air, etc.) while interactive control systems, e.g. linked citizen’s smartphones, allow to intervene directly and to personalize city services according to what is going on as well as to citizen patterns of behavior and profiles.

However, as suggested by transition theory and management, technology is not enough. The human dimension is often missing. When people are seen only as “end-users” and not as an integral part of the system itself, then they invariably end up doing things differently than engineers expected. The idea should be that technology is no longer an end – product but rather a platform allowing a continuous process of creation, development and modification. Running a “smart” city is not anymore about efficient administration but is a continuous co-design process, engaging with different stakeholders (especially those not normally engaged in political negotiation processes) and exploring solutions together, moving away from viewing citizens as passive objects of services. Rather, these have demonstrated that they can even take up alternative solutions themselves, up to organising local currencies. Indeed, many innovations involve citizens in actually delivering the service (e.g. monitoring air quality).

This means the nature of political trust changes, moving away from a commitment to fulfilling promises (delivering policy objects) to a commitment to openness, inclusiveness and shared ownership. Indeed, the publication states that “most city administrations have gone beyond the tipping point and are simply unable to deliver.... those who are capable of recapturing the trust of their citizens discover that they don’t have to do it all alone.” (p. 32)

A number of steps are proposed:

1) Getting started:

a. Look for the invisible:

Traditional policy-making is rooted in confrontational dialogue. It is about stakeholders fighting for resources (who gets what). Most policy instruments in cities therefore focus on the economic fabric and physical capital and less on the creative potential of the population. Hence, policy options are determined by money available and projects to spend it on. Doing “more with less” is an impossible task in this framework. A shift is required to doing less (as government) with more by tapping in to the hidden resource of creativity and innovation. However, public adminis-

trations are not normally meant to be creative and innovative stakeholders probably had plenty of negative experiences with the administration.

b. [Build trust](#)

Therefore, trust must be rebuilt. It is key to connect to at least some innovators already active in the city as well as some of the less vocal citizen groups e.g. by checking out what is going on in a neighborhood, what is behind newspaper headlines, to see who is really doing what. Innovation communities tend to coalesce around concrete issues. Refrain from thinking trust can be built by offering power, money or fame. Rather offer a different kind of practice and behavior by being honest about the kinds of issues the administration is facing and listening and showing you want to engage rather than having all the answers ready.

c. [Test collaboration](#)

Don't start with the cities' agenda. Try to get the stakeholders to identify what has meaning to them and that is concretely possible, especially using simple technologies that are already in place. Identify the conflicts and barriers that the city can tackle itself (as it may be the cause of them due to the cities' operational structure). The key goal is to demonstrate reciprocally that a new way of collaborating is possible. In essence, trust derives from showing one is trustworthy.

d. [Rethink technology](#)

In terms of technology, it should be understood no one can still control any given ICT system. Hence, it is also not possible to "buy" an isolated system. In fact, usually, sub-systems are added to the complex mesh of technology already out there. It is becoming increasingly political as it challenges norms in terms of how knowledge and information are shared and value created and how power is used and defined.

e. [Spot the champions](#)

There are already many "leaders" out there, some of which are experts in methods of citizen engagement, others are natural leaders. They could be artist, entrepreneurs, volunteers, civil servants, technology buffs, ... They may never have worked with the city administration before. They will not require formal recognition or position but will require commitment from the city to listen and act.

2) [Build a strategy:](#)

a. [Set the rules:](#)

Once you start moving towards the bigger issues in the city and drawing in more stakeholders, it becomes useful to establish some rules. Primarily this is about shared values of openness, transparency, inclusiveness, shared ownership. But it could also be about intellectual property rights and privacy issues. The focus should not be on preventing all possible problems but on creating a shared identity so the trust is there to tackle any problems that may and will arise.

b. [Define a vision](#)

Next, a vision should be built, reflecting main points of consensus on where you want to go in the long term (not a rigid definition), rooted in a deep analysis of the city's potential.

c. [Generate ideas](#)

Working around concrete issues, ask the partners what emerging technologies are up and coming. Together, explore the different perspectives everyone can bring. Stay grounded in concreteness as this allows to tackle issues in their entirety (e.g. not "transport" in general but, for example, issues surrounding school start hours leading to extra traffic to drop of kids and deterioration of air quality and kid's health).

d. [Define scenarios](#)

The vision is a broad platform that then allows to return to a more sector-oriented approach, focusing on specific areas of shared interest such as health care, education, poverty,... For each area a long term, desirable scenario is built, thinking far enough into the future to get beyond the details of current debates but not so far that you lose contact with reality. Often it is useful to think a generation ahead (20 years).

Participation in this reflection should go beyond the usual set of stakeholders in the “sector”. The scenarios should be developed as narratives where different stakeholder experiences (how they interact and benefit) unfold in parallel. Finally, they should be connected back to the vision and to each other.

e. [Make a plan](#)

Priorities for action should be set as follows: what actions are likely to have more transversal effects, bringing benefits to the greatest number of stakeholders by working on common barriers across scenarios that derive from a lack of openness, collaboration and innovation? What is feasible to get off the ground in the short term? This should lead to a portfolio of projects with roles and goals for all stakeholders.

3) [Co-designing solutions:](#)

At the level of each of the concrete projects, certain steps are now needed.

a. [Unpack the problem](#)

A few questions are helpful. How can the bigger issues be broken down into manageable ones? Who is involved then? How much does it have to do with interfacing, sharing knowledge or communication? Who has to gain what? How might benefits for one actor also benefit others? What resources exist? Probably there are already initiatives and actors, with resources framed in traditional ways, that can be pooled and steered in the direction you are interested in.

b. [Co-design service concepts](#)

Here an approach has to be decided on (e.g. an online challenge, an innovation jam, etc.) but in any case the resources to follow up have to be there. A key aspect is to also provide access to the data the city holds and ensure that weaker actors can also participate and the process is not high-jacked by the strongest.

c. [Follow-up on creativity](#)

To allow groups to take concepts forward it is necessary to give visibility to them (e.g. externally via the media as well as inside the city administration) and support them with short term, small amounts of funding and public spaces or working places to prototype and test their concepts. In addition, cooperation of and interaction with relevant public services should be ensured.

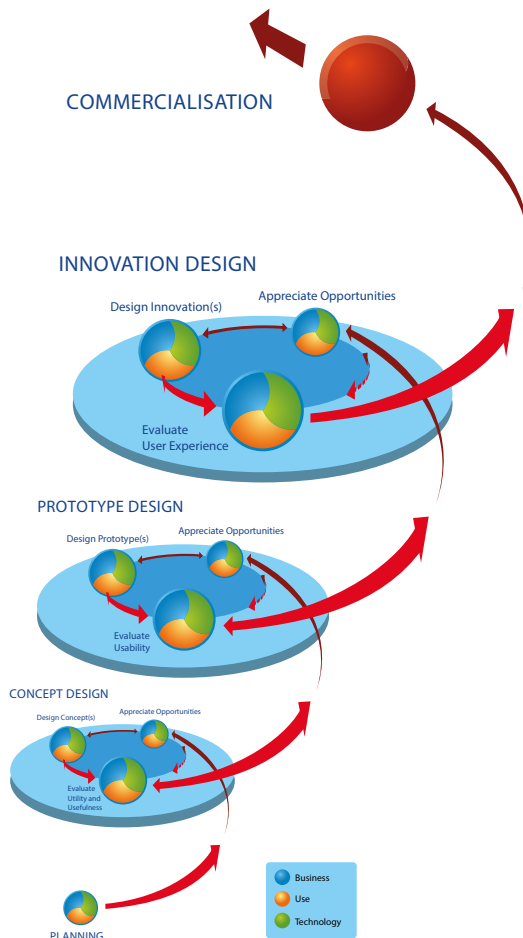
d. [Pace development](#)

Imagine business/service models on the basis of working prototypes, including exploring revenue streams and roles for different actors, public or private.

Take care to balance innovator’s rights with collective interest, ensuring the principles of openness originally agreed are respected.

e. [Go official](#)

At some point, making adoption of a new service formal has to happen, which may include having to draw up a legal base.



In the publication by Ståhlbröst, Anna and Holst, Marita (2012) called “Living lab methodology handbook” this process of co-designing is depicted as follows.

It is very similar to the double diamond design process depicted earlier in the chapter on service design. Similarly, the importance of five key principles is emphasized which are close to what was discussed in service design:

- **Value:** to users by understanding needs and motivations and by allowing users to elaborate the service in their own context;
- **Influence:** see users as active, competent domain experts and partners with decision-making power, moving beyond mere participation to ensure that their needs and ideas can be traced in the concepts, prototypes and final service;
- Sustainability in both the economic, social as well as environmental sense of the word;
- **Openness:** gather a variety of perspectives (e.g. from academia, public, private sector etc.);
- **Realism:** work in a realistic, natural (online) environment, not an artificial one.

4) Ensuring sustainability

a. Demonstrate impact

While showing impact of innovations matters (complex as this may be), it is also important to monitor the interaction between stakeholders as well as the quality of the co-creation processes. This may lead to identifying elements of creativity that could otherwise be overlooked.

b. Structure appropriately

Until now, collaboration happened in an open partnership. At some point, it may be needed to give this its own institutional structure. However, this could also make the network collapse and hence should be done gradually. First, an open partnership with no legal form at all, using a Memorandum of Understanding, committing to collaborate and adhere to a set of principles, should be established. When specific projects need resources then more specific agreements between parties can be drawn up. At a later stage, when a series of successful projects have already consolidated the collaboration, a legal structure can be set up.

c. Ensure financial and policy support

Rather than being fully dependent on a public budget, which could lead to the old situation of government “buying” initiatives, it is better to cultivate a range of funding sources, where the city can have a part but should not dominate. It is better to align with other sources of funding such as present, for example, in a university research project, a civic initiative, a new business service, etc. Also non – financial resources such as volunteer work and equipment and/or facilities that are provided should be considered.

5) Joining force

Here the lab can offer its special mix of creative capital to others and vice versa.

6) Application in Spain: Citilab

Citilab is a center for social and digital innovation in Cornellá de Llobregat, Barcelona. It is a mix between a training and research center and an incubator for business and social initiatives. It sees itself as a center for civic innovation, using the Internet as a way of innovating in a more collaborative manner, integrating citizens in the core process.

The Citilab vision starts with the community networks of the 1990s, including Cornellanet and BCNet in Barcelona as well as similar efforts in Cleveland, Ottawa, and Amsterdam. Citilab takes the next step of shifting the emphasis from universal access to services to such access innovation, considering Citilab as a center for community and individual innovation literacy.

The governance model is based on a non-profit foundation: the first time in Spain for an innovation foundation set up by a municipality. The President is the Mayor of Cornellá, while Board Members include representatives from local companies as well as multinationals, the Catalunya Region, the University, and local civic leaders.

The main challenge of Citilab has been to introduce an innovation culture in the normal life of citizens. The basic approach of Citilab is learning to innovate: “What do you want to do?” is the question Citilab asks every newcomer. Their experience then takes shape through a personal and team-driven project, as a dynamic work-in-progress learning path. In this model, a key role is played by the “local innovation agent”. This actor brings together academic contributions, knowledge of new technologies and a special insight into requirements from citizens. Public authorities and companies provide resources but also ask questions: they are equally invited to participate in discovering their own needs and setting up their own projects in their own organizations.

The first step for creating Citilab was to find a place, which the City identified in a restored textile factory. This was ideal for its symbolic value: if in the '90s the factory was the center of civic life, now it is the laboratory: in fact, people identify Citilab with the building.

With the physical and digital infrastructures in place, the organization of activities started in November 2007, launching projects with two social groups: SeniorLab (helping the elderly to develop their own innovations using IT) and Edutec (helping kids open up to computational thinking: Scratch, Arduino, etc.). Over time, the model has been extended to other social groups, such as Musiclab with local musicians, Sportic, with young football teams and GameAcademy with dropouts (“turning your hobby into your profession”) or the LaborLab, a laboratory for inventing new forms of work using ICT.

Citilab currently has 7,000 registered users (they are issued a card like public libraries), which is over 6% of the population of Cornellá. The Citilab foundation works with an annual budget of 1.2 Million Euros (50% local government and 50% projects and services) and employs 25 professionals.

Over the years, Citilab has strengthened and extended its laboratory model, cited as best practice in the EU's Guide to Social Innovation (DG REGIO, 2013). SeniorLab is now collaborating with other cities through EU Grundvig funding, while the Edutec is extending its scope to mobile applications, working with primary and secondary schools. The Spanish government is extending the Citilab concept in a program with Medialab Prado of Laboratorios Ciudadanos, with a stronger element of social innovation.

Finally, Citalab participates in international exchange by coordinating the CYTED research project, with a network of citizen laboratories in Brazil and elsewhere in Latin America.

Sources

- Eskelinen, Jarmo; Garcia Robles, Ana; Lindy, Ilari; Marsh, Jesse; Munte-Kunigami, Arturo, 2015, Citizen-Driven Innovation: A Guidebook for City Mayors and Public Administrators. World Bank, Washington, DC, and European Network of Living Labs <https://openknowledge.worldbank.org/handle/10986/21984>
- Ståhlbröst, Anna and Holst, Marita, 2012, Living lab methodology handbook <http://www.openlivinglabs.eu/news/living-lab-methodology-handbook>
- <http://www.citalab.eu/en>

8. The link of transition theory with “systemic” innovation

While transition theory certainly provides interesting insights, the question is still whether this is “systemic innovation” as discussed in DG Enterprise/SIE (2012).

The concept of “systemic innovation” has recently been elaborated further and discussed in key publications by NESTA, the UK’s innovation foundation. The first was by leading innovation experts Geoff Mulgan (director of NESTA) and Charles Leadbeater (in “Systems Innovation”, 2013), followed up by a discussion paper (NESTA, “Systemic Innovation: a discussion series”, 2013) with many more experts.

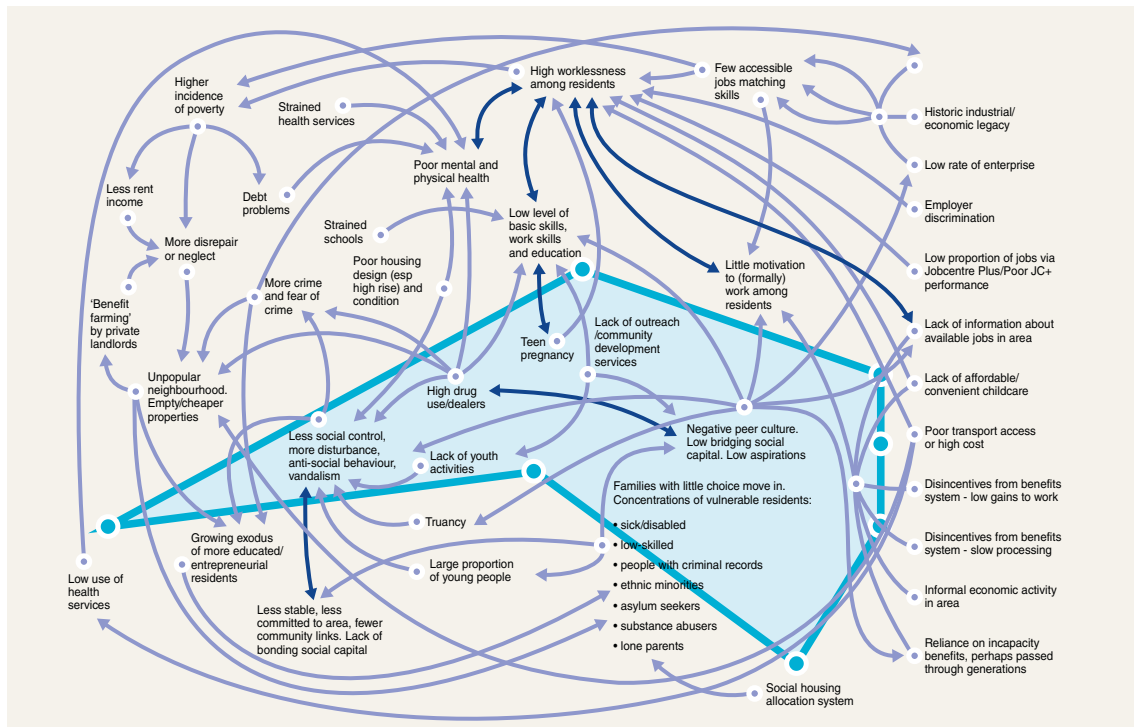
It uses the same definitions of systemic innovation as put forward earlier by the DG Enterprise / SIE (2012) publication on systemic innovation.

Mulgan and Leadbeater (2013) state some points concerning the nature of systemic innovation:

- systems can be quite small and localized as well as national or global;
- individual and groups help shape a new system as an idea before it becomes a reality, without knowing or controlling exactly what would come. It would however be a mistake to think that this kind of emergence implies no one was attempting to shape the system consciously;
- however, it IS indeed much harder to orchestrate systemic innovation, even at a small scale, than product and service innovation;
- this is because no single actor has control and there are many (complementary) innovations needed
- in fact, true systemic change will find at least a number of the following elements:
 - New ideas, concepts;
 - New laws and regulations;
 - Coalitions for change;
 - Changed metrics;
 - Changed power relations;
 - Diffusion of new technology;
 - New skills and even professions;
- the risk of failure is quite high as it is very hard to foresee how informal systems or the fine grain of human nature will interact with attempts to change the system
- systemic change hence does not come all at once: there may be long periods where only a few pioneers advocate change, and then a tipping point comes which leads to a swarm of competing alternatives followed by a winnowing out and consolidation.

They also put forward some advice on how to proceed in practice.

Figure 25: complex systems analysis



First, try to understand a system

- in terms of how its elements influence each other
 - some try to do this in visual ways as in the figure above, but this should not be confused with knowing exactly how acting on one elements will in the future affect other elements and the system of a whole as this is unpredictable;
 - a key element is infrastructure: the physical, tangible manifestations of a system (e.g. school buildings in education). These can be changed, but this can take a long time and does not guarantee behavior changes (e.g. new school buildings with modern technologies do not guarantee that teachers change how they teach);
- in terms of what kind of system and systems change is considered:
 - heavy versus light in terms of capital investment for its infrastructure (with light systems able to disrupt old, heavy and expensive ones as for the lighter ones the capacity to raise a critical mass of finance up front is less an issue but rather lots of partners, developers, users need to make lots of smaller investments that need to come together);
 - adapting old systems versus creating new ones (mature underlying technologies that can be piggybacked or rather a new field all together). However, experience learns that new systems fail if they demand that everything has to be changed at the same time. Almost without exception, successful new systems cleverly incorporate elements of old ones which makes the new system easier to use, more familiar and hence reduce the amount of learning required;
- in terms of how knowledge and power in the system are concentrated (dominated versus negotiated):
 - if both are highly concentrated (relatively closed system) then a small number of actors may be able to test and implement systemic innovations (e.g. driving forward standards) but they can also block change;
 - when knowledge is concentrated but power is not, then looking for allies and points of leverage is a key strategy. The goal is to force open closed systems to new ideas. Hence, it is not always necessary to be big to generate systemic change: small organisations can be catalysts and mobilisers and grow big if their ideas are strong enough. However, they usually need to couple with existing more mature stems;

- when power is concentrated but knowledge is not, experiment and learn fast;
- when both power and knowledge are highly distributed (open system), change will more likely be pulled by changing consumer tastes, fashions and political sentiments;
- however, in most cases, there is a mix of all of the above going on as even if there are a few big players, systemic change still requires many decision makers to change their minds and actions. An example is the transformation of “waste”. It required new laws, new taxes and fines, new technologies and new behaviours of citizens (e.g. separating waste). This was all triggered by social movements. These were in turn strengthened by the changes in the system;
- as having a stable versus fluid knowledge base: the first has less scope for fundamental innovation and more consolidation carried by a dominant players with little room for new players. But when knowledge is expanding the locus of innovation will be in networks of learning;
- as tight versus loosely coupled which refers to whether there are many or a small number of relationships / connections in a system and how quickly stuff moves from node to node on the network. Greater connectivity can make systems more resilient if they can draw on a wider range of skills and resources to cope with shocks, but this can also make it harder to innovate as a change in one part would require aligned changes in many other parts. In addition, if a shock hits a part of the system that cannot absorb it, it could collapse the system as a whole;
- as complicated versus complex: complicated systems are stated to have many parts but they present definitive solutions that have a predictable effect. Complex systems are however stated to be unpredictable. But they can be designed to promote adaptation and self-organisation. Both can be present depending on how you look at the system;
- as public versus private: there are few entirely private systems. In fact, government should be ideally placed to affect systemic change as they tend to concentrate quite a bit of knowledge and power. Yet much of the time, vested interest are threatened and innovations do not match the organisational silos that are prevalent in the public sector. The true value of innovations may hence be reaped only by reshaping the architecture of the system: how money, knowledge, professional formation, targets, etc. are reorganized on the boundaries of policy domains.

Second, there needs to be some faith and arrogance to advance a radical vision, as it is unlikely there is more than just fragmentary evidence that an innovation works (e.g. complementary innovations may not exist yet). Also, it is important to situate individual actions in the context of a broader movement of change and iterate between the big picture and small steps.

At the same time there is a need for humility to learn from experience and from inevitable surprises.

Third, the role of building alliances should not be underestimated. As was clear from the understanding of the nature of systems (see above), a single actor almost never has the possibility to change a system alone. A lead innovator needs to bring others together to realize the potential of radical innovation.

Intermediaries such as networks, think tanks and development agencies have often played the role of providing a vision for change, often in partnership with experts from the field. They also have orchestrated advocacy and campaigns (focused on key points of leverage such as laws or corporate behavior and delivered demonstrations of alternatives on a small scale);

Alliance builders need to take into account:

- shared value: if actors need to be lured away from old alliances into new ones, there needs to be value in this for them;
- orchestration: alliances can be shaped in different ways ranging from having one more powerful actor who functions as a landlord with the others being tenants (typically with more knowledge and power, incl. over money flows, than the others) versus a fully distributed model (which is rather lead as a collaborative and open source community);

- alliances can be built in a modular way (with clusters of actors dealing with certain elements) or actors can be tightly linked across the system;
- users matter: a systemic innovation is only real if users start to make massive use of it. Hence, new norms, behavior, habits and expectations of users have to be worked on as well. This entails triggering and facilitating peer to peer social learning (copying and emulating each other) as social movements or, if these already exist, making use of them.

Fourth, the NESTA papers also put forward a mix of four overall strategies:

- driving a system to do more by relentless, incremental innovation with better information, better infrastructure and new standards. This favours easy to measure inputs and outputs while keeping overall goals of the system the same. This is at some point not sufficient anymore, hence come in the other strategies...;
- repurpose: questioning the goals of a system by opening it up to challenges (e.g. instead of transferring “old” knowledge, education may be about preparing kids to work in jobs that do not yet exist and solve problems that are not yet apparent with technologies that are still to be invented). Repurposing is stated as bringing the greatest potential for transformations to take place especially if it can be coupled with changing the rules;
- reconfigure: overlay an existing system with an information based one to allow the existing physical resources to be used differently (e.g. the “internet of things” which is a network of physical objects or “things” embedded with electronics, software, sensors and connectivity). Enabling information to flow to where it is needed most (to improve the working of feedback loops) can play its part, but again is rarely enough on its own;
- leapfrog old systems (typically heavy) with new technology making the old redundant (e.g. mobile networks used to replace hospital based health care).

Below are a number of concrete actions that can affect critical goals of systemic innovation.

Table 8: options for contributing to systemic innovation

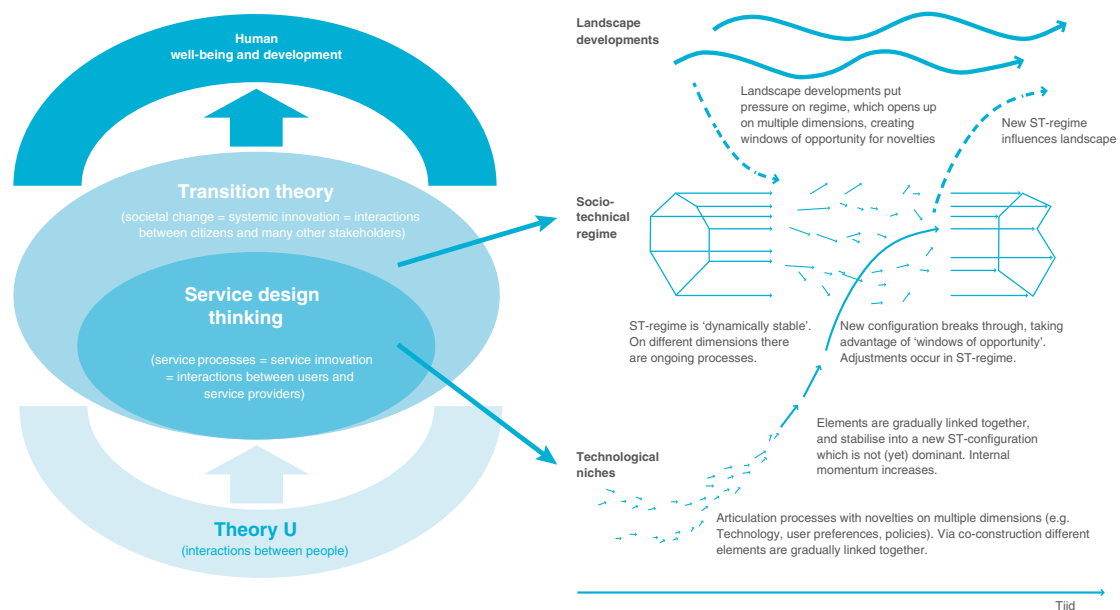
	Raise awareness of need or possibility	Reshape laws, regulation, taxes	Design elements of new system	Change attitudes, cultures	Demonstrate new system on small scale	Spread, export new
Move into existing power structures	XX	XX	XX	X	X	X
Research, advocacy, argument, policy promotion	XX	X	X	XX		
Create new organisations that exemplify new system				X	XXX	X
Develop coalitions, networks	XX	X	XX	X		X
Develop new markets					XX	X

As a final note, it should be clear that innovation per se is not necessarily beneficial: it could lead to new monopolies, create ecological and social damage and public risk. Hence it is important to assess an emerging system by testing it on a small scale.

Clearly, there are many parallels between the notions of systemic innovation, as propagated by the NESTA publications, and transition theory. Transition theory however presents a clearer and more coherent explanation of systemic change in which the practical advice of NESTA can make more sense.

9. Service innovation in a transition perspective

Figure 26: service innovation in a transition perspective



Transition theory shows how service design innovation is typically situated at the level of niche innovations. Hence, for a transition to occur, having service innovations is crucial. However, service innovation, to stay truly radical, also requires a possibility to break through. Hence, considering the existing socio-technical regime is of the utmost importance or service innovations are doomed to do little more than incrementally improve things within the existing regime. Radical innovation will only be able to break through if there are “cracks” in the regime (e.g. due to landscape pressure). Transition theory provides some tools to create such pressure and / or openings in the regime to provide a better foundation for more radical innovation.

Avelino, F and Wittmayer, J (2014, Insights for policy on game-changers and transformative social innovation, TRANSIT discussion paper, TRANSIT), as stated above, equate social innovation with new business models, services and practices while reserving the term system innovation for working at the level of societal subsystems.

10. Relevance to ESIF

The relevance of transition theory should be clear to anyone who is interested in societal change. Transitions take place at the level of socio-technical systems. This corresponds to the “systemic innovation” as elaborated by various EC sources in chapter 2 and influential commentators such as NESTA. Transition theory also explains why coming up with radical innovation, e.g in terms of a business model or services, especially in a public sector context, is not straightforward. Any ideas by current actors in the system is bound to respect the formal and informal set of “rules” that govern existing practice in the system. Hence, most radical innovations need to be incubated as a “niche”. Getting such a radical innovation adopted is even less straightforward. Adoption is only likely if the innovation fits relatively well with the existing regime. ESIF managers should be aware of this, even if they are mainly interested in funding service innovations. In the longer run, it may become necessary to spend ESIF resources on a dedicated transition platform to act on the regime itself if a mass of innovations are still not able to break through and create a desired transition on their own.

E The deeper dynamic of changemakers: Theory U

1. Introduction

Theory U grew out of the work done by MIT (Massachusetts Institute of Technology) professor Peter Senge concerning “systems thinking”. His book “The Fifth Discipline” (1999) was based on blending system dynamics, organizational change and creative processes. What emerged from this synthesis resulted in the concept for the MIT Learning Center and in an initial set of methods and tools developed by this small group of action researchers at MIT.

After a few years, Senge noticed that the tools worked very well in the hands of some practitioners but that in other cases the application of the same tools resulted in no significant change. Why are the same tools effective in the hands of some and ineffective in the hands of others?

Otto Schärmer and colleagues subsequently conducted more research out of MIT to answer that question, including 150 interviews with leaders, entrepreneurs, and innovators as well as by actively participating in change processes in companies, governments, and communities. The result of this 18 years of work is Theory U. This is elaborated in the books Theory U (Schärmer O, 2009) and Presence (Senge P, Jaworski J, Scharmer, Flowers B, 2005). A recent book elaborated the relevance of Theory U for societal problems (Schärmer O, Kaüfer, K, 2013, Leading from the Emerging Future). It provides a theoretical framework as well as a method for leading profound change.

2. Short summary of Theory U

The key premise of Theory U is that we cannot change systems unless we change also the quality of attention that people apply to their actions within these systems, both individually and collectively. Another way to put this: most of the time, people’s actions are governed by collective habits of thought. In transition theory (see the previous chapter) this was described as an element of the “regime”. According to theory U, if we spend our time reacting against the patterns of the past, then we usually end up perpetuating them. Transition theory referred to this as regimes being dynamically stable and producing only incremental innovation.

Clearly, both transition theory and theory U are in line with each other. However, while transition theory focuses on conditions to enable radical innovations to break through and change the regime, theory U has elaborated much more how persons, both individually and collectively, can change the quality of their attention and hence create radical innovations in the first place and then find the energy to keep working on the regime to accept these innovations.

Key is that we can shift our thinking from “ego”-awareness (caring only about one’s own well-being, seeing only one’s own viewpoint) to “eco”-awareness (caring about the well-being of all, including oneself, seeing through the eyes of others). The journey from “me” to “we” has three dimensions. We need to:

- Better relate to others and better relate to the whole system: we can do this exploring the edges of the system, by stepping into the shoes of the most marginalized, where the problems but also opportunities are the most visible. If diverse stakeholder groups do this and try to make sense of it together, then new possibilities arise;
- Better relate to ourselves: we do this by suspending our habits and opening our minds (suspending judgment), heart (empathise with others) and will (courage to let go of the past and enter into the new).

Theory U is built on a number of principles:

1. [Energy follows attention](#): we need to shift attention from what we are trying to avoid (as this tends to bring more of the same), to what we want to create;
2. We have to go through a process that deals with three main movements
 - [Observe, observe, observe](#): immersing oneself totally in the places that matter most to the situation you are dealing with
 - [Retreat, share and reflect on the deeper learning from observation](#);
 - [Act in an instant](#): explore the future by doing (prototyping);
3. [Go to the edges of self](#): the above mentioned three-stage process only works if we cultivate the inner instruments mentioned already above: Open Mind, Open Heart, Open Will;
4. [At the source of this inner cultivation process are the two root questions of creativity](#): Who is my Self (my identity)? What is my Work (our sense of purpose, our calling)? The more we can connect to what is essential to us, the more we can clarify what we want to be in service of, the better we can act in making things happen. Essentially, what applies is “do what you love, love what you do”. If you are missing this then you are in danger of leading someone else’s life and losing your way. Hence, we should cultivate our capacity to access our deeper purpose e.g. by daily moments of stillness or contemplation or by getting together with others a few times a year to support one another;
5. [This process is the road less traveled because the moment you begin, you are going to face three enemies that prevent you from accessing your deeper sources of creativity](#): Voice of Doubt and Judgment (shutting down open mind), Voice of Cynicism (shutting down empathy), Voice of Fear (shutting down courage);
6. [Attending to the “crack”](#): we need to attend to the openings, challenges and disruptions where we “feel” the past is coming to an end and a new future can emerge. It is in feeling that the future first reveals itself, not in abstract analysis;
7. [This opening process is not only important to do as an individual](#); you need to hold the space to go through the same process on a collective level, with others. This transforms not only the quality of our thought but also of our relations. That is the biggest leverage for change if we do not have hierarchical power;
8. For this we also need to let go of single focus approaches and rather understand that complex problems require complex solutions, where we need to master the art of broadening and deepening the [problem definition](#) to get at all relevant parties who need each other to change the system. Hence we need to use different language with different stakeholders;
9. [Iterate, iterate, iterate](#): try, practice and adapt; be mindful of feed-back, even when it is not pleasant;
10. [Never give up](#): Most great ideas took years to make a concrete difference. Being discouraged is

a waste of energy. Courage should come from the trust that you are not alone. Otherwise we risk succumbing to judgment, cynicism and fear.

Very important is the fourth principle, which is at the heart of the whole process: this touches on the importance of every person's "identity" as a key source of energy. This is the source of what is referred to in psychology as "intrinsic motivation". It is not a superficial concept of motivation as being triggered by external factors (such as praise, rewards,...or the reverse of those), but by what we value because it is part of who we are. The importance of motivation for dealing with complex challenges has been elaborated at length by Wauters, B. (2013, SMART or not: are simple management recipes useful to improve performance in a complex world?, paper for the conference "Performance of public sector organisations: from weighing to losing weight.")

The "U" in Theory U stands for a 7 steps journey (see figure below; please note all figures in this section are derived from MITx: 15.S23x U.Lab: Transforming Business, Society, and Self under Creative Commons license by the Presencing Institute - Otto Schärmer, see <http://www.presencing.com/permissions>). On the left hand side of the "U" are

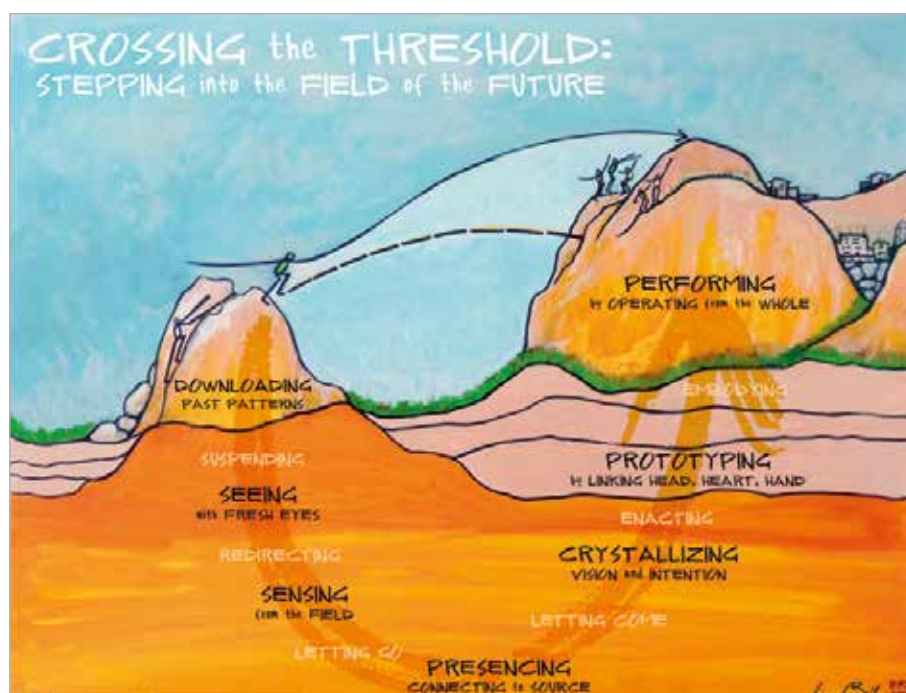
- downloading past patterns;
- seeing with fresh eyes;
- sensing.

On the right hand side we find:

- crystallizing vision and intention;
- prototyping;
- performing.

The link between the two branches of the "U" is made by "presencing" (the combination of sensing the future out of the present). In between the 7 steps are the actions needed to move to the next step.

Figure 27: theory U

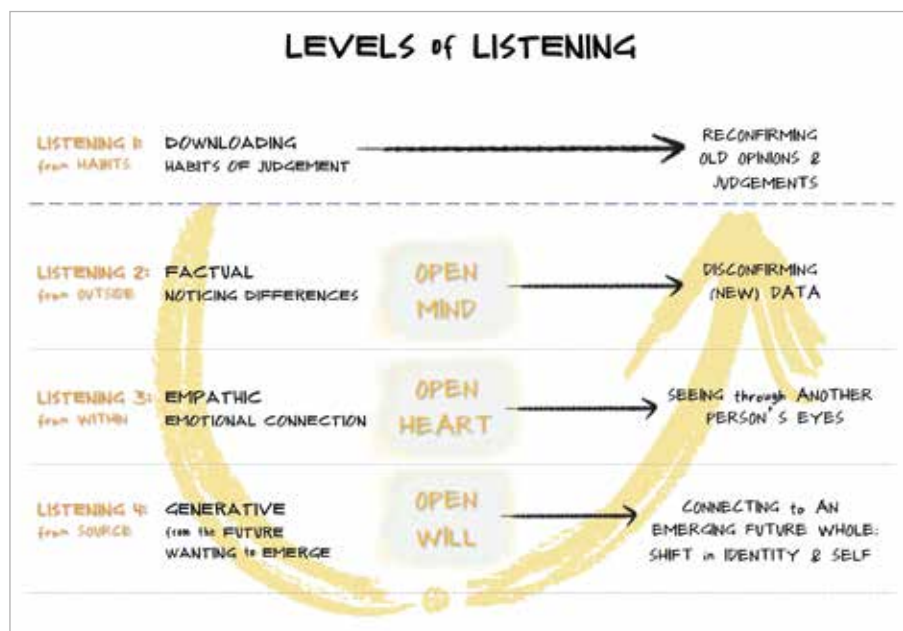


To move from one level to another, we need to pass some turning points:

- from level 1 to 2 requires suspending judgment;
- from 2 to 3 requires redirecting our attention (from ourselves to others);
- from 3 to 4 requires letting go.

The left hand side of the U is connected to increasing the quality of our awareness by changing the quality of listening (see figure below). Theory U states that we cannot transform the behavior of the system unless we transform the quality of attention that people apply to their actions within the system, both individually and collectively.

Figure 28: levels of listening



At level 1, we are not really listening to others but “downloading”. This means we only hear what we think we already know. It is listening out of habit and past experience. It fails to recognize new challenges as well as opportunities. At level 2 (factual listening), we direct our observation to the world around us and are able to recognise different perspectives but want to argue our own is better. At level 3, we are able to see the world through the eyes of others (emphatic listening). This does not mean we agree with how others see it, but we can acknowledge and respect other viewpoints. The more perspectives we can take, the more the “we” starts to come to the forefront. At level 4 (generative listening) we are able to dynamically integrate all perspectives into a collective emerging vision of the future. It is what great coaches do. It resembles how a good jazz band simultaneously listens to the others while creating the future together. This is then “presencing”: a conflation of presence and sensing that refers to acting from the presence of an emerging potential.

The right hand side of the “U” concerns how to create a new reality. It consists of creating a vision, prototyping (small scale experimentation, learning by doing) and scaling up. These are not new ideas about innovation (they were presented already in the chapters on service design and transition theory), but when grounded in the left hand side of the “U” have a much greater potential for creating radical innovation.

The inverse of the U process is referred to as “Absencing”. This is characterized by getting stuck with the idea there is only one truth (versus open mind) and the unilateral, linear communication that characterizes it, as well as ending up in “us versus them” thinking (instead of empathizing), with low, exclusion based transparency, and, finally, being frozen up in one identity (instead of courage to change and evolve) with an intention to serve the well-being of only a few. This is also what characterizes “fundamentalism”.

Theory U can be applied both at the level of entire socio-technical systems (as in transition theory where transition arenas provide a platform for a new vision) or at the level of services (where empathy with users via immersive research feeds into collective creative exercises and an ensuing vision of a new service experience). Key to understand is that using the “tools” of e.g. service design or transition management, will not lead to radical innovation unless at the core of it is the “U” process.

A more explicit link to transition theory is also made by Schärmer and Käufer in their book “Leading from the Emerging Future” (2013). This book described what are in essence the core elements of transition visions relating to economic thought (labeled “4.0” as the authors also describe three previous historical “transitions”) relating to nature, labour, capital, technology, leadership, consumption, coordination and ownership. This is depicted below for reference as an elaboration would go beyond the scope of this publication.

Table 9: transition of economic thought in history

Stage	Nature	Labor	Capital	Technology	Leadership	Consumption	Coordination	Ownership
0.0: Communal: Premodern Awareness	Mother Nature	Self sufficiency	Natural capital	Indigenous wisdom	Community	Survival	Community	Communal
1.0: State-Centric: Mercantilism; State Capitalism; Traditional Awareness	Resource	Serfdom, slavery	Human capital	Tools: Agricultural Revolution	Authorita- rian (sticks)	Traditional (needs- driven)	Hierarchy and control	State
2.0: Free Market: Laissez-Faire; Ego-Centric Awareness	Commodity (land, raw materials)	Labor (commodity)	Industrial capital	Machines: first Industrial Revolution (coal, steam, railway)	Incentives (carrots)	Consumer- ism: mass consumption	Markets and competition	Private: exchange of private ownership in markets
3.0: Social Market: Regulated; Stakeholder- Centric Awareness	Regulated commodity	Labor (regulated Commodity)	Financial capital (externality blind)	System-centric automation: second Industrial Revolution (oil, combustion en- gine, chemicals)	Participative (norms)	Selectively conscious consumption	Networks and negotiation	Mixed (public- private)
Co-Creative: Distributed; Direct; Dialogic; Eco-Centric Awareness	Eco-system and commons	Social and business entrepre- neurship	Cultural creative capital (externality aware)	Human-centric technologies: third Industrial Revolution (renewable energy and information technologies)	CCC: collabora- tive conscious consump- tion	ABC: Awareness based collective action	Co-creative (collective presence)	Shared access to services and common resources

3. Practical tools for U-processes

Four tools specific to Theory U are described below (based on descriptions offered by the Presencing Institute on www.presencing.com). They have in common that they lead people into exploration of their identities, who they are, and hence what they value and drives them. In essence, these tools help individuals to pay attention to their attention (self-awareness or seeing yourself), teams to have conversations about their conversations (dialogue or groups seeing themselves), organisations to organize their organizing (networks of networks, eco-systems or creating conditions for system-wide organizing to be more fluid, intentional and self-aware) and, as eco-systems, to coordinate our coordination (systems of awareness based action or allowing a community of players to see themselves and adjust their portfolio of coordination mechanisms e.g. by redrawing the boundaries between cooperation and competition in an industry).

While the practical side of the tools is highlighted, it should be clear that it is from the application of the principles as described above, that they derive their effectiveness. That is the added value of Theory U.

Other tools that do not differ significantly from service design tools are described in annex 4.

A first tool is the “case clinic”.

Case clinics are often used during the prototyping phase of the process. They help a peer respond to an important and immediate leadership challenge in a better and more innovative way.

The case giver first clarifies these questions:

- **Current situation:** What key challenge or question are you up against?
- **Stakeholders:** How might others view this situation?
- **Intention:** What future are you trying to create?
- **Learning threshold:** What do you need to let-go of – and what do you need to learn?
- **Help:** Where do you need input or help?

Coaches listen deeply and may ask clarifying questions (without giving advice!).

Then 3 min of stillness should be respected in which participants:

- Listen to their heart
- What images, metaphors, feelings and gestures come up that capture the essence of what they heard?

Next coaches engage in “mirroring” where each coach shares the images/metaphors, feelings and gestures that came up in the silence or while listening to the case story.

Having listened to all coaches, the case giver reflects back on what s/he heard. All reflect on remarks by the case giver and move into a generative dialogue on how these observations can offer new perspectives on the case giver’s situation and journey. Participants build on each other’s ideas and stay in service of the case giver without pressure to fix or resolve his/her challenge.

A second tool is the “dialogue interview”.

Dialogue Interviews can be used in all phases of the U-process, yet the most common use is during the preparation phase in order to:

- Provide data on the participants' current challenges, questions, and expectations or on the organizational current challenges;
- Create increased awareness among participants or within an organization about the upcoming process and how it might serve their needs and intentions;
- Increase the level of trust between facilitators and participants that helps to create a generative field of connections.

Example questions for the interview are:

- What is the leadership journey that brought you here?
- When have you faced significant new challenges, and what helped you cope with them?
- Describe your best team experiences. How do they differ from your other team experiences?
- What top three challenges do you currently face?
- Who are your most important stakeholders?
- On the basis of what outcomes will your performance be considered a success or a failure – and by when?
- In order to be successful in your current leadership role, what do you need to let go of and what do you need to learn? What capabilities do you need to develop?
- How will you develop your team? What do you need from your team, and what does your team need from you?
- Nine to twelve months from now, what criteria will you use to assess whether you were successful?

Next, the interviewer should reflect on the conversation and listen to him/her self: what important questions come up for now that they take out of this conversation and into your forward journey? They need to take some time immediately after the interview to review:

- What struck me most? What surprised me?
- What touched me?
- Is there anything I need to follow-up on?

A third tool is “guided journaling”.

Journaling practices can be used in all phases of the U-process especially during the sensing and presencing steps.

Guided journaling leads practitioners through a process of self-reflection that moves through the U-process. This process allows participants to step into a deeper level of reflection than in an un-guided journaling process, and identify concrete action steps.

Read one pre-prepared question after the other; invite the participants to journal guided by the respective question. Go one by one through the questions. Move to the next question when you sense that the majority of the group is ready. Don't give participants too much time. It is important to get into a flow and not to think too much. With the instruction emphasize that participants just start writing and see what emerges.

Some examples of questions:

- **Challenges:** Look at yourself from outside as if you were another person: What are the 3 or 4 most important challenges or tasks that your life (work and non-work) currently presents?
- Write down 3 or 4 important **facts about yourself**. What are the important accomplishments you have achieved or competencies you have developed in your life (examples: raising children; finishing your education; being a good listener)?

- **Emerging Self:** What 3 or 4 important aspirations, areas of interest, or undeveloped talents would you like to place more focus on in your future journey (examples: writing a novel or poems; starting a social movement; taking your current work to a new level)?
- **Frustration:** What about your current work and/or personal life frustrates you the most?
- **Energy:** What are your most vital sources of energy? What do you love?
- **Inner resistance:** What is holding you back? Describe 2 or 3 recent situations (in your work or personal life) when you noticed one of the following three voices kicking in, preventing you from exploring the situation you were in more deeply:
 - **Voice of Judgment:** shutting down your open mind (downloading instead of inquiring)
 - **Voice of Cynicism:** shutting down your open heart (disconnecting instead of relating)
 - **Voice of Fear:** shutting down your open will (holding on to the past or the present instead of letting go)
- **The crack:** Over the past couple of days and weeks, what new aspects of your Self have you noticed? What new questions and themes are occurring to you now?
- **Your community:** Who makes up your community, and what are their highest hopes in regard to your future journey? Choose three people with different perspectives on your life and explore their hopes for your future (examples: your family; your friends; a parentless child on the street with no access to food, shelter, safety, or education). What might you hope for if you were in their shoes and looking at your life through their eyes?
- **Helicopter:** Watch yourself from above (as if in a helicopter). What are you doing? What are you trying to do in this stage of your professional and personal journey?
- Imagine you could **fast-forward** to the very last moments of your life, when it is time for you to pass on. Now look back on your life's journey as a whole. What would you want to see at that moment? What footprint do you want to leave behind on the planet? What would you want to be remembered for by the people who live on after you?
- From that (future) place, **look back** at your current situation as if you were looking at a different person. Now try to help that other person from the viewpoint of your highest future Self. What advice would you give? Feel and sense what the advice is and then write it down.
- Now return again to the present and **crystallize** what it is that you want to create: your vision and intention for the next 3-5 years. What vision and intention do you have for yourself and your work? What are some essential core elements of the future that you want to create in your personal, professional, and social life? Describe as concretely as possible the images and elements that occur to you.
- **Letting-go:** What would you have to let go of in order to bring your vision into reality? What is the old stuff that must die? What is the old skin (behaviors, thought processes, etc.) that you need to shed?
- **Seeds:** What in your current life or context provides the seeds for the future that you want to create? Where do you see your future beginning?
- **Prototyping:** Over the next three months, if you were to prototype a microcosm of the future in which you could discover "the new" by doing something, what would that prototype look like?
- **People:** Who can help you make your highest future possibilities a reality? Who might be your core helpers and partners?
- **Action:** If you were to take on the project of bringing your intention into reality, what practical first steps would you take over the next 3 to 4 days?

Journaling is a personal process. Never ask participants to share their journaling notes in public.

A fourth tool is the "U-lab". This is a free mass open online course from MIT, offered via the edX platform (see <https://courses.edx.org/courses/course-v1:MITx+15.671x+3T2015/info>). In eight weeks, participants are guided through a variety of presentations, readings, group work and individual exercises. At the start of the September 2015 edition, 33 086 people from 182 countries were participating in the U lab. The case below describes how the Scottish government approached the U lab.

CASE 6: U-LAB IN SCOTLAND

Background to the case

The development of a distinctive approach to policy making in Scotland can be traced back to the advent of outcomes based government in 2007. This was complemented by the restructuring of the Scottish Government to abolish Departments and promote a more connected “whole system” approach to the business of supporting Ministers.

This provided a framework for a different relationship between central and local government. In early 2008, an agreement was reached between the Scottish Government and the Convention of Scottish Local Authorities that the funding relationship between central and local government would focus on a Single Outcome Agreement for each local authority. The Scottish Government agreed to reduce, year by year, the proportion of its funding of local government activity which is earmarked for particular activities, giving local authorities greater freedom to allocate money to the activities which they considered the most effective in securing the outcomes they wished to pursue and which were prioritised in the Single Outcome Agreement. Local authorities agreed, in return, to incorporate elements of the National Outcomes in their Single Outcome Agreements, so that local activity was aligned with national purpose.

Implicit in this changed relationship, which has been sustained since 2008, is the shared belief that it is reasonable for there to be variation both in the nature of what different localities aspire to and in the ways in which government and communities work together to deliver those aspirations.

The National Performance Framework has set direction for the last two parliamentary terms and the requirement to have an outcomes framework which sets long term direction is now enshrined in legislation in the Community Empowerment (Scotland) Act 2015.

There is broad recognition and consensus around the outcomes across public services in Scotland and developments over the last two terms of government show a broadening of thinking beyond policy silos to consider the range of factors contributing to outcomes. For example, the Justice Strategy defines the justice system broadly with the aim of promoting a “flourishing, inclusive and respectful society”.

A more personal influence in developing the approach of Scotland was the work of Dr Harry Burns, Scotland’s Chief Medical Officer until 2014. He amassed compelling evidence about the many deep-rooted socio-economic issues which lead to such gulfs in health and life expectancy between the richest and poorest sections of society. He concluded that progress is less about the straightforward funnelling of maximum public funds through traditional services, and more about communities becoming resilient, inter-connected, and learning how to make the most of their own distinct assets of people, skills, interests and networks, and thus improving the quality and diversity of the activity they are able to provide within their own boundaries.

In 2011, a broad consensus was also voiced around the major issues and barriers to improving outcomes in terms of the Christie Commission analysis (see Commission on the future of public service, 2011). Christie (President of Scottish Council for Development and Industry serving as chair of the Commission) set out a compelling vision of what needs to be done to continue to improve outcomes in the face of reducing public budgets, in terms of four pillars:

- *“public services are built around people and communities, their needs, aspirations, capacities and skills, and work to build up their autonomy and resilience;*
- *public service organisations work together effectively to achieve outcomes – specifically, by delivering integrated services which help to secure improvements in the quality of life, and the social and economic wellbeing, of the people and communities of Scotland;*

- *public service organisations prioritise prevention, reduce inequalities and promote equality; and*
- *all public services constantly seek to improve performance and reduce costs, and are open, transparent and accountable.” (p. 72)*

The fundamental elements of how Scotland is trying to turn this into a reality are nowadays referred to as “the Scottish approach”. It entails a focus on:

1. Assets or strengths of individuals and communities: initiatives should be local, not central, and build on strengths, instead of being driven by the need to address failings or “deficits”;
2. Co-production or policy developed with rather than done to people (person-centred): “person-centred” refers to involving more people – including service users (think everyone from vulnerable children to the elderly) – in the design and delivery of public services that actually meet their needs. The commitment to “co-production”, meanwhile, recognises and values the role of multiple groups and organisations in coming together as increasingly creative and holistic systems of collaboration;
3. Improvement – local ownership of data to drive change.

The draft Scottish budget for 2015-16 contains the following statement (p. 10): *“To make further progress, policy and service delivery should increasingly adopt approaches which are asset-based, co-produced and person-centred, to bring about effective and sustained change. There is strong evidence of the effectiveness of this distinctive Scottish approach to government and we are committed to ensuring that it underpins all reform activity.”*

Although developing in thinking pre referendum (for independence of Scotland in 2014) it has had a significant boost post referendum as Nicola Sturgeon’s government increasingly recognises that how they do things is as important as what they do. Ever since the referendum Scotland has seemed to operate with a heightened political awareness. The referendum was really mostly about what kind of future the people of Scotland want to create.

How the Scottish Government became involved in U lab

In January 2015, a small group based in Edinburgh, from the Scottish Government, Joint Improvement Team, Local Government and Community sector and others from the local government and voluntary sector, did the first U lab “MOOC” (Massive Open Online Course) together. Kenneth Hogg a Director in the Scottish Government also completed the first U.Lab.

The Scottish Government’s priorities are of prosperity, fairness and participation and First Minister, Nicola Sturgeon wants her government and Scotland’s public services to be known for the quality of their relationships with communities of both place and interest. In his capacity as Director for Local Government and Communities in the Scottish Government and lead on developing the ‘policy profession’ within the Government, Kenneth wondered if U Lab could help (See a video by Kenneth on <https://vimeo.com/133026180>).

He approached the group of other participants in the first U Lab about how they could encourage people to take part in the next U.Lab as a participative method to bring to life the Scottish Approach at scale. This was the beginnings of the U.Lab Scotland team.

As there would be a second global U Lab kicking off on September 10th 2015, Kenneth Hogg and colleagues asked Otto Scharmer in March 2015, if he and his team might be willing to support Scotland. At Otto’s suggestion, the U.Lab Scotland team sought to constitute a U.Lab community in Scotland, seeding wider interest in the course and in particular encouraging people from all walks of life to host ‘hubs’ – spaces where people could come together to support each other through the learning and watch the live sessions ... the times when many thousands of people from around the world tune in together.

The first step was to invite as wide and diverse a group of people as they could to attend one or more preparatory events over the summer period. This was done through an email to a variety of different networks (e.g. the 32 community planning partnerships, local authorities, public services voluntary sector, business sector etc.) and asking people to forward on to others who may also be interested. Angie Meffan-Main, Policy Profession Manager, and Keira Oliver, Principal Social Researcher, took on the lead for developing, promoting and delivering these events. In effect, they took on the role of building a community across Scotland prior to the next U Lab commencing.

As U.lab is not an “official” government initiative (U.Lab is owned and delivered by the Presencing Institute and MIT), these events would be focused on promoting it as a tool to help people make the changes they want to make – either new changes or complementing what they are already working on. Government would convene the events and help constitute a U.Lab Scotland community but would not run or control what happens. It is about self-organizing.

The preparatory events

On the 8th of May, the team held the first event with civil servants. It was the day after the UK General Election when the Scottish National Party had won 56 out of the 59 Scottish seats at Westminster. As the main topic of conversation for the sixty, mainly senior civil servants, in the room, it was also a highly relevant example of how Scotland is changing in ways people are still trying to make sense of, that fits well with U.Lab’s theme of being able to “lead from the emerging future” rather than from the past. The discussion was engaging and also questioning of how a course like this could be useful in the Scottish context.

The first community event was on 1st of June 2015. It was attended by +/-180 persons coming from all different sectors of society (e.g. health, agriculture, students, volunteers, a few also from private sector). The focus of the discussion was on information sharing about U.Lab and the shifts people are seeing in their environment. A video of the event is accessible here: <https://vimeo.com/132187411>.

The second event was on 3rd July 2015 and was attended by +/- 250 persons. Otto Scharmer, Adam Yukelson and Julie Arts from the Presencing Institute U.Lab team also attended to help facilitate the event. Another video (with Otto Schärmer) is present here: <https://vimeo.com/134074613>.

In the morning the U.Lab and U.Lab Scotland teams again shared information about U.Lab and their experiences, mainly through presentations. In the afternoon, there was an open space meeting focused on what participants might do in a hub around a community of place or of interest.



For both events, there was quite a buzz in the room: it seemed clear that there was much more happening than simply telling people about a new course. One civil society activist who participated said: *“What I loved about the first meeting is that a government director opens the meeting by saying: ‘Hey, we know that the system is broken, and we know that we do not have the answers. We need your help! That’s why we are here.’ How often have you heard such a statement from government? That instantly created a totally different tone and atmosphere.”*

The first and second events were led by the U Lab Scotland team. At the end of the second event the team recognised the appropriateness and the community’s willingness to take a lead on the next event, so that it could have a different, more co-created feel: less about talking from the front, more about the newly formed U.Lab Scotland community sharing what’s happening in relation to this work across Scotland.

Before the 3rd July event, about 25 people were invited along to brief Otto and colleagues on the Scottish context to help them ‘tune in’ to where Scotland was at.

After the event, the team emailed this group to ask if anyone might be willing to join a design/hosting team. In addition, a couple of people had pro-actively offered to help out following the second event. Those who agreed to step up and help design the event came together as a design team. This group included members from government, private, third and public sectors.

When they met, the group recognised they shared experience in hosting participative events. They focussed on ensuring the event centred on the U Lab Community which was building in Scotland and that learning was fed back “real time” at the event in creative ways to ensure all those at the event got the most out of it.

The third event took place on 1st September 2015, again with the U.Lab team in attendance. About 200 people came to this last event pre-U lab. After an exercise where people were asked to design an “advert” for their hub, 40 people got up on stage to present their newly formed “hubs” in 30 seconds pitches. The variety of themes was huge. A video can be found here: <https://vimeo.com/138551678>.

There is a map online showing those hubs who chose to put their hub on the map: <https://ulabscot.wordpress.com/map/>. There are more than 50 hubs on the map from all around Scotland, but this doesn’t capture all the U.Lab activity going on.

Into the U lab

As the U lab started in September 2015, Otto Schärmer and his team arranged to give Scotland their own section in the online platform of the U lab called “U.Lab Scotland”. There are roughly 850 Scottish participants registered for this and just under this same number are from elsewhere in the world, showing the amount of interest there is in what is going on in Scotland.

Angie, Keira and now Karen Lawson are keen to learn what is going on and share this with the wider U.Lab Scotland and global U.Lab communities. If invited by a hub, they go out to interview people, document what is going on and sometimes make a video or better still, encourage the hubs and participants to make their own video of their experiences.

Here is an example of how the Scottish Recovery Consortium is using U Lab in two hubs which it has formed in Glasgow – <https://www.youtube.com/watch?v=pWvQVx4GffU> – an excerpt from this film was used during the global live session on 8 October 2015.

Angie, Keira and Karen approach it as a learning journey. They try to capturing hub stories in a variety of ways, suited to the context. For example, in one hub they hosted a table and they had some prompts (e.g. how is it going, what is emerging ...) in a world-café setting. Other hubs prefer to respond by email or by skype or telephone. Some of the hubs are in remote locations so they have regularly used skype to speak to them. They also encourage people to post on the U lab website, Facebook Group and twitter (#ulabscot #ulab).

In addition, they did a short survey to capture some basic demographics from U lab participants. This also included standard participation indicators. They are interested to see if the U lab will lead to broadening participation to people who are not usually so active.

At the time of writing this case, the U lab is still in its initial stage. But it will be very interesting to follow-up and see what happens next in Scotland.

The Scottish team will also support further events after the U Lab to gauge how the community is getting on, to welcome people in to share their prototypes and to see what the future holds.

Sources:

- Articles by Jamie Hume, PwC Consulting Director and former Head of the Scottish Government Strategy Unit:
 - 07 November 2014, Can “the Scottish Model” of public service leadership, deliver better results? <http://pwc.blogs.com/scotland/2014/11/can-the-scottish-model-of-public-service-leadership-deliver-better-results-.html>
 - 14 November 2014, What are the strengths of “the Scottish Model” of public service leadership and is it delivering fast enough? <http://pwc.blogs.com/scotland/2014/11/what-are-the-strengths-of-the-scottish-model-of-public-service-leadership-and-is-it-delivering-fast-.html>
- Article by Zoe Ferguson, former Chief Researcher in the Scottish Government involved in establishing What Works Scotland, 23 June, 2015, “What is the Scottish approach?” on <http://www.alliance4usefulevidence.org/what-is-the-scottish-approach/>
- Paper by Sir John Elvidge, former permanent secretary to the Scottish government, 2013, The Enabling State: A discussion paper <http://www.carnegieuktrust.org.uk/publications/2012/the-enabling-state---a-discussion-paper>
- Article by Otto Schärmer, A Second Enlightenment in the Making? Seven Stories From the Front Lines, 7 august 2015, http://www.huffingtonpost.com/otto-scharmer/a-second-enlightenment-in_b_7747820.html
- U lab Scotland webpage: <https://ulabscot.wordpress.com>

4. Relevance to ESIF

Theory U provides insights into how more radical innovation ambitions need to be anchored into a process of enhanced awareness/listening together with others and a personal sense of identity. Without this, any “tools” or “methods” will not deliver on expectations. This then challenges ESIF authorities as this can hardly be achieved via “forms” and “procedures” but may require them to more actively facilitate and connect budding innovators, as in the Scottish case.

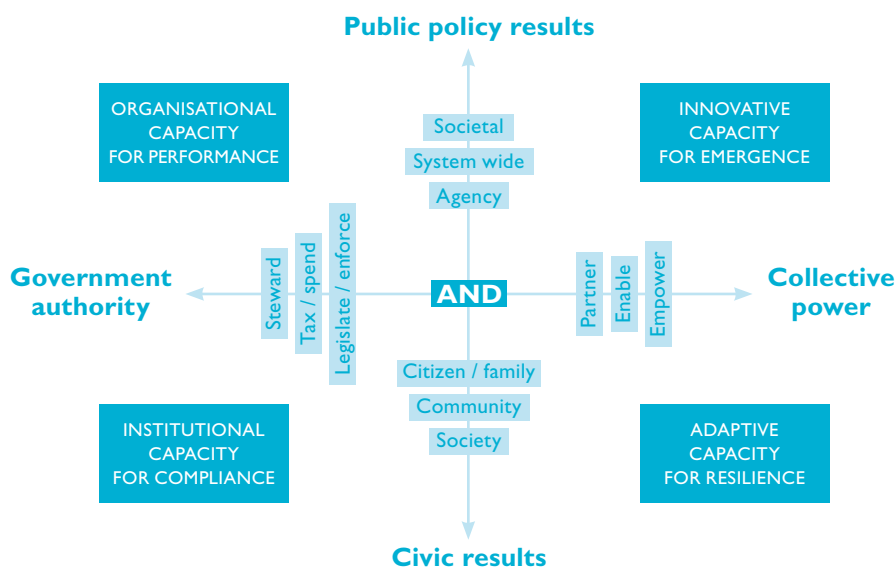
F A new synthesis

1. Introduction

In 2009, J. Bourgon, a previous Clerk of the Privy Council (the senior civil servant) in the Canadian government, invited six countries to join the New Synthesis Network (NS6), composed of officials, scholars and experts from Australia, Brazil, Canada, the Netherlands, Singapore and the United Kingdom. Committed to supporting practitioners whose work is becoming increasingly difficult, this network has engaged close to 200 people from more than 24 organizations. Their efforts have resulted in five international roundtables, five post-roundtable reports, and 17 case studies. The Network’s findings have been captured in the publication of a new book entitled *A New Synthesis of Public Administration: Serving in the 21st Century* (2011).

The New Synthesis framework is depicted below.

Figure 29: New Synthesis framework



The vertical axis depict two kinds of results:

- **public policy results:** the performance of public sector organizations in democratic societies is directly related to their capacity to achieve results of high public value. These range from more narrow single agency to system-wide and societal results. Agency results are the traditional basis for accountability in the sense of achieving and improving efficiency. However, each public organisation also has a mission, that reflects a public purpose, that extends beyond the walls of the organisation and the programmes and services they administer. Therefore, they must be able to work with other organisations that also contribute to the same purpose. These are the system-wide results. Finally, societal results relate to the overall performance of a country and represent the sum total of contributions made by private, public sector, civil society and citizens. The OECD Better Life Index is an example of what is meant;
- **civic results:** these relate to the capacity of citizens, families, communities and society as a whole to achieve better results over time. It includes active citizenry, resilient communities and a civic spirit conducive to collective action. This builds the social capital that contributes (next to other forms of capital) to overall performance of a society. It is in this that lies an explanation why similar reforms lead to different results in different societies. Civic results can be enhanced by allowing and encouraging people, families, communities to play an active role in producing public results. Three ways to do this are:
 - **improve access:** integrated service-delivery, self-service options, access at home or after hours, making public data readily available;
 - **allow stronger voices:** crowd-sourcing and feed-back mechanisms bring people's voices closer;
 - **expand choices:** let recipients decide themselves between modalities of how to achieve results.

Key is that both public and civic results have to be achieved at the same time, NOT one at the expense of another.

The other axis relates to how power is used by government. It reflects the means to achieve results.

- one extreme sees government as primary agent in serving the public good and defining the collective interest. According to this view, governments set the agenda for change, propose new laws and enforce existing ones, mediate among conflicting interests, collect taxes and spend on public service provision. Government operates here without much interaction, within the limits of their mandate and with instruments and resources granted to them. Government is however also acting as steward to promote and defend the public interest which means monitoring, anticipating and introducing corrective and preventative measures when the collective interest demands it. This becomes more important the more dispersed decision-making and power in society is. Government is the insurer of last resort.
- however, at the other extreme, governments move towards producing results with others who also hold resources, capacities and legitimacy. To do this it has expanded the repertoire of roles it can play:
 - partner with others to achieve public results e.g. public-private partnerships where responsibility is shared requires an equitable sharing of risk and reward and conflict resolution mechanisms;
 - enable others to innovate: this can be done e.g. by creating common public platforms and modern infrastructure as well as providing access to public data or various incentives to encourage innovation and experimentation. Enabling others also means to co-create and co-produce with others (often supported by modern ICT e.g. social media) where new ways to combine existing resources and people lead to better results;
 - empower others: allow people to exercise power and mobilise into action, again supported by modern ICT.

The four quadrants of the framework represent four sub-systems deemed crucial for holistic governance.

The **compliance sub-system** reflects the constitutions, conventions, rules and norms that govern how we live in society. It includes public institutions that make and oversee the implementation of political decisions on behalf of society and the expectation that public office holders exhibit integrity and that there is due process. They ensure the rule of law and evolve only slowly. Audit, in terms of ensuring process controls, is a key component of this system. These controls set limits within which public office holders can exercise discretion and set the parameters of acceptable behaviour. These controls must be objective, rule-based, enforceable and verifiable.

The **performance sub-system** transforms public purpose into action by combining authority, policy instruments, organisational capacities, and public resources as well as public platforms of cooperation to achieve agency, system-wide and societal results. Improving organisational capacity has been the centrepiece of reforms since the 1980's, focused on making government more productive and efficient and pay attention to user satisfaction. However, some of these reforms have led to an explosion of controls that are stifling innovative capacity crucial for dealing with complexity (see below). This refers to input controls (constraining the nature of resources that can be used to fulfill a mission), ex ante controls (obliging to get permission to use resources that were already allocated) and, more recently, output controls where performance indicators were converted into performance targets, in effect ceasing to be a source of information to actually improve results and leading to phenomena such as "hitting the target but missing the point". These kinds of controls are less about ensuring due process and more about trying to control performance. This proliferation also carries a cost: anecdotal evidence suggests the costs of control and associated reporting may be as high as 25-30% of the total budget of programmes. Given the dubious capacity of these controls to really improve results, this can hardly be seen as a contribution to performance.

The **emergence sub-system** builds capacity to anticipate and detect emerging issues and to be proactive in the face of imperfect knowledge in uncertain circumstances. Emergence refers to the process by which new patterns arise out of a multiplicity of interactions between different systems and actors within them. Dealing with this entails thinking about alternative futures and how to get there as well as detecting weak signals and potential wild cards.

It is also to be recognised that reorganisation of departments (corporate structure) can never deliver a final answer: there is no right way to divide powers and responsibilities in the face of complex, multifaceted, emerging issues and a diversity of dispersed networks. Each new structure creates a new boundary to be crossed. Therefore, it is important to ensure shared accountability (eg using memoranda of understanding) among government and external partners. Collective efforts and results should be reflected in annual reports usually focussed only on one organisation. This recognises the fact that it is hard to establish direct causal links between the action of one actor and collective results that arise after often very long chains of cause and effect. Ideally, this reporting is linked to an overall view of a country or region such as provided by the aforementioned OECD Better Life index.

In addition, collaboration across boundaries should be emphasised beyond mere reporting e.g. senior leaders should explicitly recognise the need for hierarchies and networks to coexist (e.g in mandate letters, policy statements, ...), funds should be set aside to cover costs of collaboration, job descriptions and performance agreements should contain references to this kind of collaboration, incentives can be tied to this, ministers should be role-models for joint action, there should be a sufficient cadre of leaders (at all levels) who have the knowledge and diversity of experiences to handle this way of working, therefore mobility to acquire a diversity of experiences should be supported as well as participation in various conferences and international events as well as professional associations, co-creation/production processes should ensure that government works directly with citizens in developing, testing and experimenting (e.g. using ethnography and service journeys) etc ... It would be useful if a central agency could support these ways of working across government and keep government firmly focused on the future.

The development of an innovative government and society also has to be encouraged. Here, innovation does not have to be “new” as such. The newness may rest in the way various elements (including ideas) are combined with locally available resources and capacities. A key part of innovation is exploration, the bringing in of a constant flow of ideas (from anywhere). Another part is to allow solutions to take form in an organic way, learning and adapting along the way. These kind of solutions tend to be unique to the given context. Yet, they can provide lessons and elements of solutions with potential for use in other contexts.

Getting innovation to happen at a societal level requires to invest in modern ICT (especially technologies like blogs, facebook, twitter etc.), putting public data at the disposal of whomever wants it and participating in or creating public platforms to animate discussions and encourage sharing ideas and issues (e.g. using crowd-sourcing). This will give rise to challenges in terms of security and privacy that have to be tackled. It should also be understood that a fair amount of divergence and conflicting views is part of this approach. Innovation and consensus do not tend to go hand in hand. In fact, if everyone agrees on something, it is most likely not innovative.

In addition, government should encourage social experimentation, social innovation incubators and hubs. Incubators and hubs are necessary because experience shows it is very difficult to preserve “innovation” in line departments that are busy dealing with day to day work and crises. These incubators and hubs should support a number of departments and agencies, benefiting from some distance of daily pressure while encouraging cross-fertilisation and efficiency. When providing dedicated resources such as venture capital or innovation funds it is crucial that the approach is kept light, agile and fast. Too often the amounts are relatively small but the workload to access them is very high.

No matter how pro-active government is, there will always be sudden shocks and crises. Therefore **the resilience subsystem** tries to build the capacity of society to adapt, absorb, change and even prosper in the face of crisis. Resilience is built up via self-reliant individuals who have the ability to take charge of their lives and shape their futures. They believe in the possibility of improvement, grounded in reality and know how to improvise. If there is a critical mass of such people, resilience is also developed as they work together and learn they can count on each other. This provides a basis for even greater capacity of communities to define issues, find solutions and act. These strong networks lift everyone up when times are good and reduce risks when times are rough.

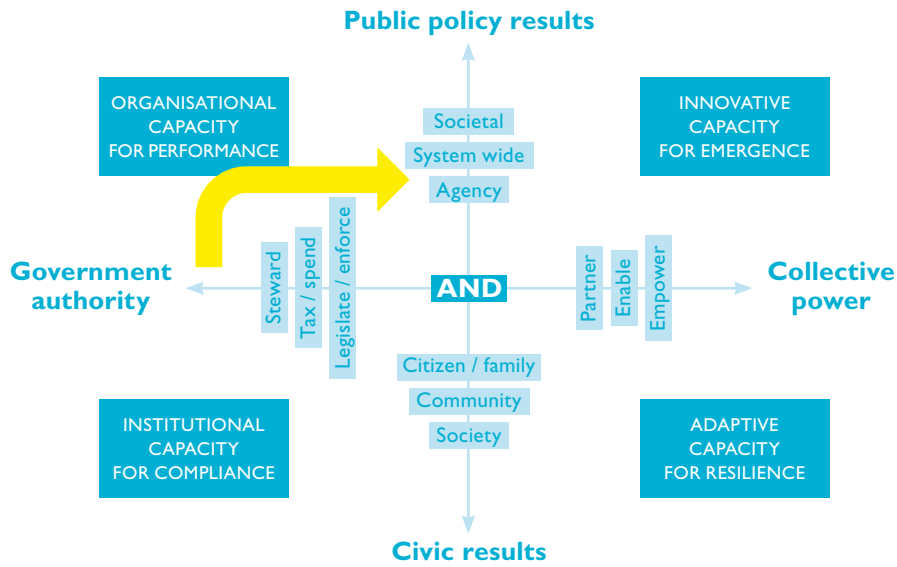
Resilience cannot be created by government. A first rule is to avoid taking action that erodes natural resilience by creating dependencies or increasing vulnerabilities. Second, while government cannot create resilience, it can nurture it. It is better to build on strengths than to reinforce deficit reduction thinking. The latter tends to lead to quick fixes with a tendency to disempower people and communities. Social capital can be fostered by using collaborative networks and citizen engagement in the design of public policies and programmes and ensuring that helping others is built into the service delivery system, deliberately creating active roles for citizens and communities (referred to more generally as co-production). Finally, it is helpful to use positive narratives to generate optimism and energy.

The New Synthesis framework is also being put to practical use for guiding reflection on how to tackle public challenges (Bourgon, J., 2013, A new synthesis of public administration: a self-help guide for practitioners) via positioning, leveraging and engaging as elaborated in the sections below.

2. Practical use via positioning

How an issue is framed influences the possible range of solutions and policy responses available for solving the problem in practice. Positioning is about expanding the range of policy options open to government by exploring the inter-relationship between agency (outputs), system-wide (sectoral outcomes), and societal results (cross-cutting sectors).

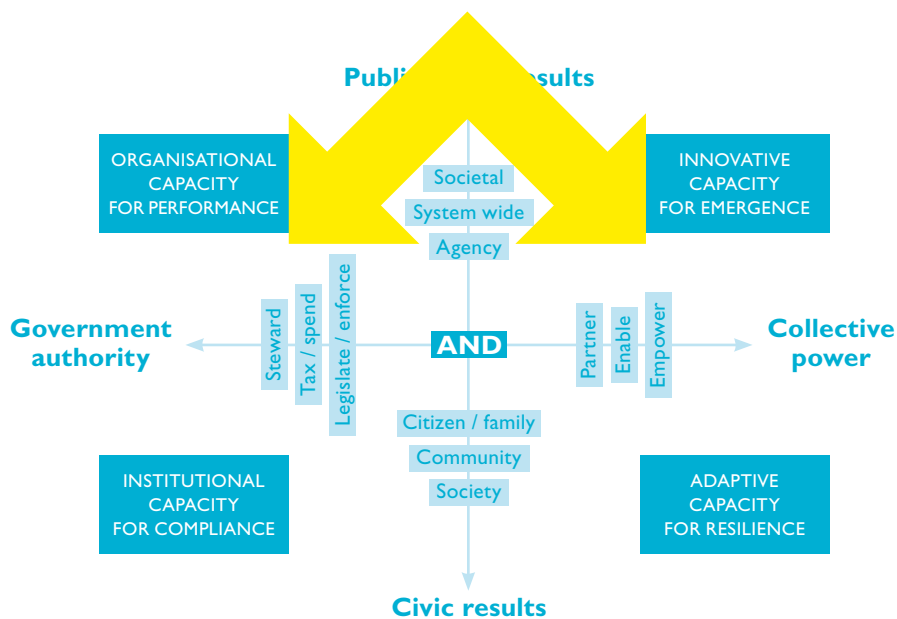
Figure 30: positioning with the New Synthesis



3. Practical use via leveraging

Leveraging is about harnessing the contributions of others to achieve results of high value to society. Based on the understanding that an increasing number of public policy results and intractable problems exceed the capacity of government working along, leverage encourages practitioners to seek the greatest possible impact with the least intervention by engaging actors from across government and throughout society. By pooling capabilities and through building on the strength of others, governments can achieve better results at a lower overall cost. One way of triggering a reflection about leveraging is by positioning. Indeed, once an organization looks beyond its own narrow objectives, it becomes rapidly clear that collaboration with others will be required.

Figure 31: leveraging with the New Synthesis

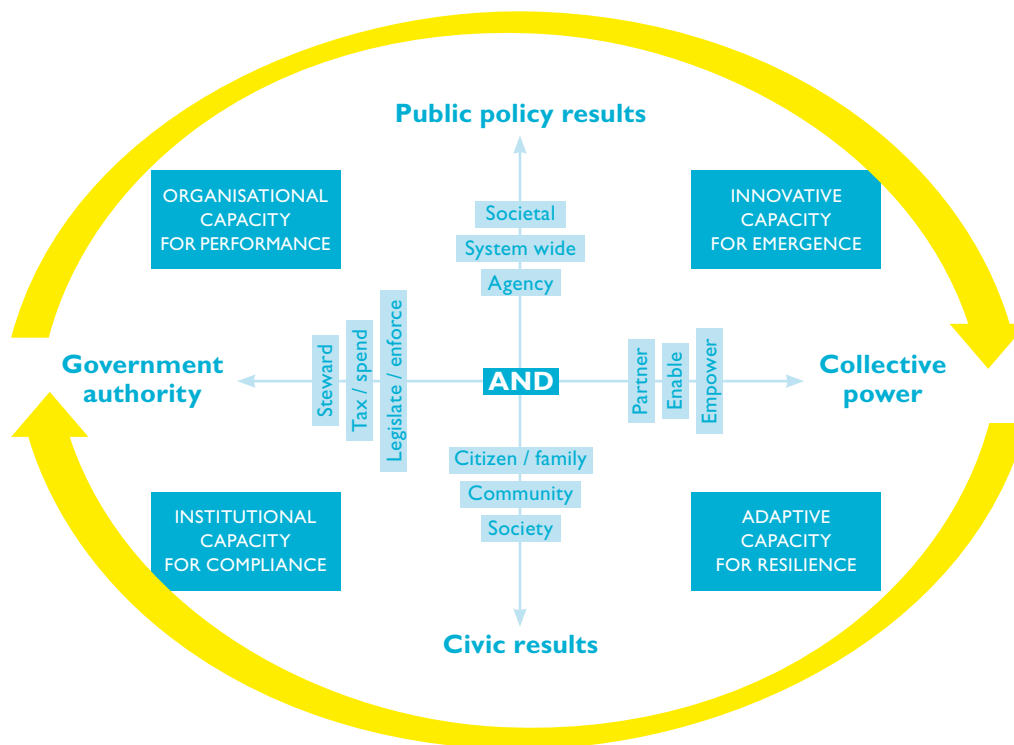


4. Practical use via engaging

Engaging is about transforming the relationship between government and citizens from one of dependency to one of mutuality and shared responsibility. By viewing citizens as important assets and active contributors to achieving public outcomes, engaging encourages practitioners to involve the users and beneficiaries of public services in the design, creation, and production of public goods.

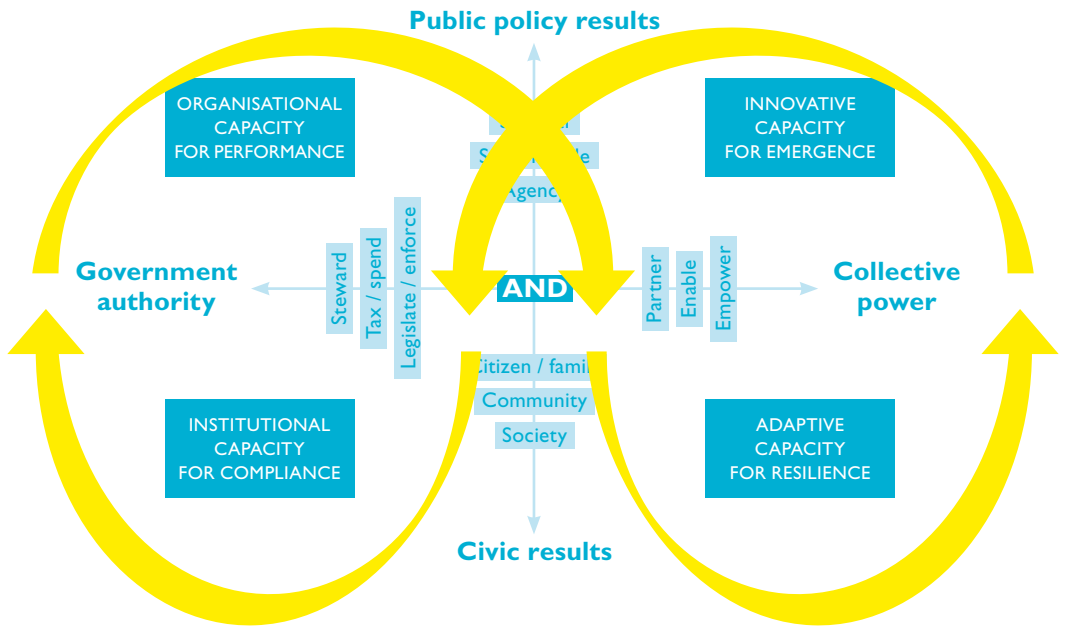
Engaging aims to explore and distinguish between the tasks that government is best positioned to perform, those that citizens can produce for themselves, and those that can be best accomplished by working together.

Figure 32: engaging with the New Synthesis



All three mechanisms described above should be used together. Public actors re-frame a challenge to focus also on the societal level and then work together with citizens as well as other actors to come up with a narrative of change for a better future. This is depicted below.

Figure 33: the New Synthesis innovation dynamic



The capability approach presented in an earlier chapter complements the New Synthesis framework by clarifying what “societal results” actually are. “Positioning” therefore can benefit greatly from using Sen’s ideas.

In addition, “engaging” in terms of getting citizens to in design and creation of public goods is very similar to using empathy and observation as advocated in Theory U as well as service design. However, “engaging” also emphasizes the need to reflect on tasks citizens can best do for themselves and tasks where it is best to work together with other actors.

As to “leveraging”, this is very close to the ideas put forward by transition theory and theory U which recognize that to realise more widespread change, it is necessary to get a variety of actors to work together.

In a sense, the practical use of the New Synthesis framework is similar to the core of theory U. Only if actors involved in a societal challenge really listen to each other, within the public service itself as well as to stakeholders and the citizens they aim to serve, can new shared visions come alive and give rise to experimentation and innovation.

The case from Singapore below exemplifies all the elements of the New Synthesis approach.

CASE 7: REFORMING THE SINGAPORE PRISON SERVICE

Overview of the case

In 1998, the Singapore Prison Service (SPS) was confronted by two pressing issues – an overcrowded prison straining existing infrastructure and resources, and shortage of staff due to difficulties in recruitment and retention. Prison staff were overworked and morale was low. Poor public perception of the organisation and its work did not help.

Even though rehabilitation had always been articulated as a component of SPS work, efforts to do so were fragmented, adhoc, and considered the responsibility of specialists like the counsellors. The role of prison officers remained mainly custodial. Rehabilitation programmes for offenders, limited to work, education and religious counselling, were not systematically monitored and assessed for effectiveness.

This case chronicles the change journey of the SPS; how a traditional command-control agency faced with challenges of an increasing prison population, high staff turnover and poor public perception, engaged its staff, stakeholders and eventually the community to create outcomes that impacted the lives of inmates and their families. It illustrates a change that started from within an organization cascading outwards to the rest of community.

The case explores the following elements of the New Synthesis Framework:

- The possibilities that open up when the focus on results is shifted beyond agency to societal level (positioning);
- The impact when government includes other stakeholders (leveraging) as well as prisoners and members of society (engaging) beyond acting alone.

Essentially, the process of change was triggered by the SPS developing a broader view of its role in society. It transformed itself from an organization “focused on protecting society through the safe custody of criminals” (agency results) to playing an instrumental role in steering offenders towards “being responsible citizens with the help of their families and the community” (societal results). This new role revealed the need for a more integrated approach that goes beyond security to include prevention, rehabilitation, reintegration into society and after-care (system-wide results).

As SPS work attracted new believers first internally and then externally, more resources were made available to deepen their mission. Positive results in turn attracted more believers and resources – a reinforcing loop. Quality of relationships both within the organisation and with external partners enabled collective thinking, improved planning and actions, which led to higher quality outcomes that in turn grew relationships and deepened trust improving outcomes – another reinforcing loop. “Think big, start small” was where it seemed to have begun – a shared desire to see the lives of those whom they served change. The circle of influence started from individuals, organization cascading to the rest of community.

Innovation approach

a) Going on a learning journey

In late 1998, SPS had a change in top leadership. Chua Chin Kiat, who had held several key positions at the Singapore Police Force, took over as the director of Prisons. He felt that a mere increase in staff headcount would not address the problems, nor would it be sustainable in the long run. He also realised that he alone could not bring about change; he had first to convince his senior management team the need for it. He then initiated a series of visits to prisons overseas, most of which had in place progressive rehabilitative programmes. The visits gave the senior team fresh perspectives of how the prisons in Singapore could be managed.

b) Re-thinking the Prison's purpose for existence

Chua realised that SPS' focus had been on maintaining security and safety within the prisons. It did not have an articulated vision. In 1999, more than 800 staff across ranks, and strategic partners from the Ministry of Home Affairs (SPS' parent Ministry) and voluntary welfare organisations were invited to share their vision for SPS. A variety of platforms – retreats, facilitated dialogues, and on-line intranet forums were employed. The exercise challenged the way SPS staff saw their roles and their impact. While some prison officers wanted to do more to help inmates under their charge become contributing members of society, not everyone was receptive. There were pockets of resistance and scepticism at the ground. The visioning exercise was not all smooth sailing. It took about a year to confirm the new vision – “We aspire to be captains in the lives of offenders committed to our custody. We will be instrumental in steering them towards being responsible citizens with the help of their families and the community. We will thus build a secure and exemplary prison system.” The fundamental change was the shift beyond security and safety to the rehabilitation and reintegration of offenders into the society.

Cascading from the vision, SPS also developed a set of core values to articulate what they wanted to preserve, and how they would operate as they pursued their goals. These were – (i) Honour our vision by placing it above self-interest and inspiring others to our cause, (ii) Excel in our work because we care enough to want to be the best, (iii) Be agile by being innovative and open to new possibilities, overcoming adversity through continuous learning, (iv) Respect our fellow colleagues and the community we come into contact with, and (v) Foster teamwork by coaching, guiding, and inspiring one another in our workplace. In the process of articulating their vision, SPS' mission was also re-crafted.

c) Changing the way the Prison thinks by acting

While a compelling vision could be a powerful driving force, what often hindered its translation to practice were old ways of thinking. From the outset, Chua was mindful that without a significant headcount increase, he had to find new ways of freeing up his staff's time for the real work of reforming the prison system. His habit of challenging assumptions and getting Prison staff to critically re-examine old ways of doing made many uneasy, but also forced them to re-think and achieve breakthroughs through exploring new possibilities and developing new solutions.

In the past, to ensure that security would not be compromised, prison officers were periodically rotated. As a result, most did not know the inmates well. Chua's challenge for them to tell him everything they knew about the inmates under their charge stumped many, but also caused them to realise that it was impossible to help offenders whom they did not quite understand, change.

In 1999, the Housing Unit Management System which emphasised engaging inmates in a meaningful and purposeful manner was conceived. Under the system, a dedicated team of prison officers was assigned to manage all matters relating to the inmates in a particular housing unit. Prison officers were no longer just custodians of prisoners, but had to take on roles as disciplinarians, mentors and para-counsellors. They were empowered to make decisions as long as these served to help the inmates make the change for the better. The SPS leadership team anticipated that not all SPS officers might be ready for the change. Inevitably, some would still hold to the “lock and bolt” mindset. Many were likely to find balancing the multiple and seemingly conflicting roles of disciplinarian and rehabilitation officer overwhelming. New skills were also needed before the transitions to the new roles could take place. Hence, instead of a full-scale roll-out, volunteers were invited to test out the system. Six out of the 15 SPS institutions responded. To address ground concerns of security lapses and manipulation by inmates, SPS subsequently also instituted an ethics structure, team-based approach, and a coaching framework. Prison officers soon discovered the value of the Housing Unit Management System – besides rehabilitation, it helped them gather intelligence, augmenting the level of security, discipline, and control in the prisons. They experienced the power of team – working and learning together indeed enhanced the quality of decisions and outcomes.

d) Building innovation capacity

Chua also believed that the long term success of an organisation hinged on its preparedness for the future. This in turn depended on its current ability to anticipate and learn. A Research & Planning Branch was set up to conduct research, network with other external research institutes, as well as co-ordinate the planning and implementation of key organisational-wide initiatives. One of the outcomes from research was the adoption of the Level of Service Inventory (Revised tool in 2000). The tool enabled SPS to allocate resource by assessing, categorising and matching inmates to different rehabilitation programmes based on their criminogenic risks and rehabilitation needs. New learning surfaced by the Branch challenged SPS staff's established ways of thinking and doing. The setting up of the Branch was instrumental in helping staff embrace change, and creating a culture of learning and innovation within SPS.

Additionally, twice a week informal "agenda-less" breakfast meetings between the Senior Management, Heads of Staff Units and Superintendents were started to encourage dialogue and exchange of ideas, as well as strengthen the quality of relationship and trust within the leadership team. The leaders took turns to share with recruits at induction programmes, walked and connected with the ground to seek out diverse and fresh perspectives. At the staff level, cosy coffee corners were created to encourage informal interaction and exchange of ideas. A learning centre with a resource library, broadband internet access and training/meeting rooms was set up to provide an environment conducive for sharing and brainstorming. On-line platforms were developed to facilitate sharing between officers and resources across departments. Notes of Senior Management meetings were posted on the intranet so that all officers could follow the thinking behind decisions made. To encourage ideas from the bottom-up, a system was developed to capture and track all suggestions generated. With these new supporting systems and structures in place, prison officers over time picked up new behaviours, new ways of learning and new capabilities.

Chua Chin Kiat galvanised the organisation and his staff through an inclusive approach. He did so by listening to and learning from the ground, creating safe environments for open and deep conversations. He developed a strong leadership team, and built trust by empowering, sharing ownership, as well as risks. Together, they helped their officers see new meaning in their work and a new future with stakeholders and inmates.

e) Getting new rehabilitation services off the ground by engaging prisoners and their families

A Programme Branch was set up to give greater focus to rehabilitation. Inmates were roped in to help out in simple duties, including peer support counselling and tutoring. Some participated as members of Work Improvement Teams. These initiatives not only relieved prison officers' workload and improved inmate-staff relationship, but also became an essential part of the rehabilitation process.

SPS also observed that chances of rehabilitation were higher if inmates had the support of their families, yet divorces were common in the prisons. Family Resource Centres were set up to help inmates' families cope with incarceration. SPS introduced family visits during Fathers' Day and Mothers' Day, other family celebrations within the prisons, and tele-visits to enhance family bonding.

f) The next phase: moving beyond the prison walls by leveraging the CARE network

Other effective rehabilitative programmes such as the establishment of Kaki Bukit Centre Prison School were brought into being as well as the Home Detention Scheme, deployment of female officers in male institutions, tele-visits and virtual court sessions for remand inmates, which fundamentally changed the way SPS operated. Some of these not only freed SPS resources for other areas of need, but also gave SPS staff the confidence to explore new solutions beyond the prison walls.

SPS realised that even if the rehabilitation efforts within the prisons were successful, chances of re-offence would still be high if aftercare support for ex-offenders was weak. The transition from the controlled incarcerated environment to a society not quite ready to receive them could be quite a culture-shock. The inability to cope with the stigma and stress could turn ex-offenders back to crime. They realised that internal resources alone would not be adequate to meet the needs of inmates forced SPS to venture beyond the confines of prisons to engage the community. Their new vision: a system of well-established rehabilitation and reintegration programmes with strong emphasis on family and societal support.

In 2000, SPS had mapped out its primary functions – (i) secure custody of offenders, (ii) rehabilitation, (iii) prevention, and (iv) aftercare, as well as its stakeholders – (i) staff, (ii) families of offenders, (iii) the community, and (iv) Board of Visiting Justice into a four by four strategising matrix. Through a series of dialogues at the ground, a total of 96 strategies organised along four focal areas – (i) Enhanced Operational Capabilities, (ii) Staff Development Structure, (iii) Integrated Incare for Inmates and (iv) Co-ordinated Aftercare for Ex-offenders, were surfaced, further prioritised and narrowed down to 15 projects over three years.

In 2003, these focal areas were further refined. This round, inputs were sought not only from prison officers, but also inmates and community partners. It became clear from the strategic conversations that incare and aftercare should not be implemented separately. These were merged into “Maximising Inmates’ Reintegration Potential”, acknowledging that reintegration really began on the first day of incarceration. A key thrust under this focal area was to “improve public perception of ex-offenders”, where the mass media was identified as a key enabler in shaping the community’s mindset. A new focal area, “Preventing Offending and Re-offending”, with the goal of significantly reducing the incarceration rate, also surfaced. To do so, SPS realised that they needed to work more closely with family members, and community partners like Singapore Corporation of Rehabilitative Enterprises (SCORE), the Singapore After-Care Association, and the Singapore Anti-Narcotics Association.

The Community Action for the Rehabilitation of Ex-offenders (CARE) Network had been one of the 15 projects identified for 2000-2002. In 2000, SPS had brought together eight major community and government organisations responsible for the rehabilitation of ex-offenders to form the CARE Network aimed at promoting seamless incare and aftercare support for ex-offenders. Co-chaired by SPS and SCORE, its other six members comprised representatives from: (i) Ministry of Home Affairs, (ii) Ministry of Community Development, Youth & Sports, (iii) Industrial & Services Co-Operative Society Ltd, (iv) National Council of Social Service, (v) Singapore After-Care Association, and the (vi) Singapore Anti-Narcotics Association. A government-initiated informal network, the CARE Network held annual retreats and met quarterly to set direction and co-ordinate the strategies and efforts of all the eight agencies, as well as others in the aftercare sector. Their focus – to maximize resources and results through alignment and collaboration.

One of CARE Network’s first initiatives was the Case Management Framework established in 2000. Under the framework, case managers from Singapore After-Care Association, and the Singapore Anti-Narcotics Association would meet with inmates to identify with them their aftercare needs one to two months before their release and then followed up to ensure that they received the needed support up to six months after release. This work would be co-funded by SPS, SCORE, the National Council of Social Service and the respective aftercare agencies.

Another project, Singapore’s first community movie, “Twilight Kitchen” in 2003, featured an ex-offender seeking a second chance in life. A private movie company, who supported the cause, funded the publicity efforts for the movie.

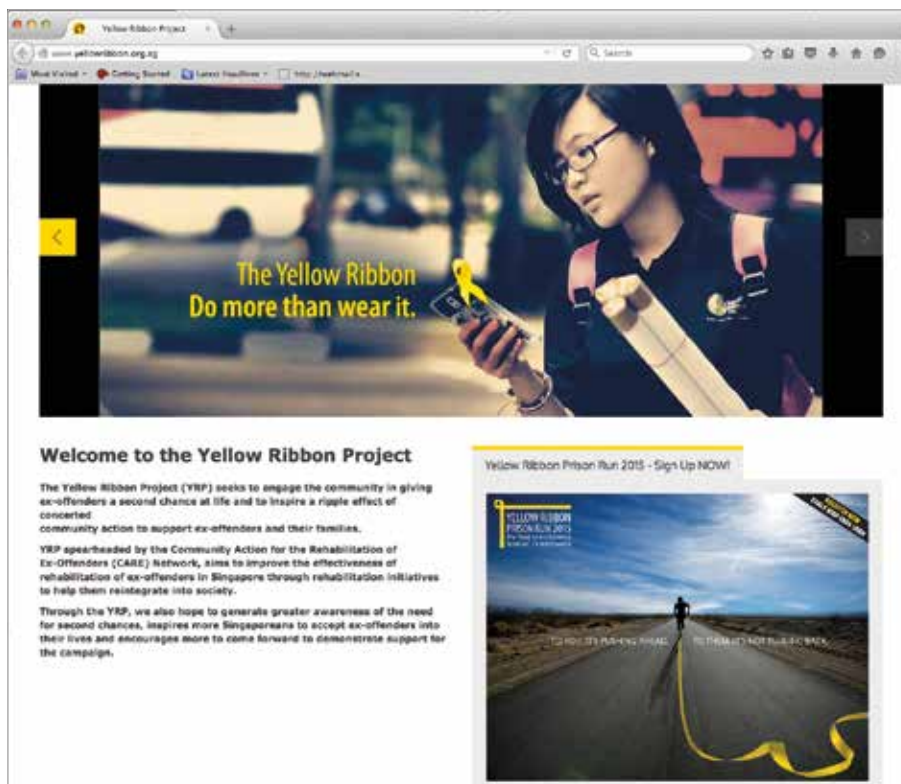
In 2003, following the refinement of its focal areas for action, SPS also developed a Community Involvement Framework. A stakeholder analysis was conducted and community resources were segmented and mapped to needs. Emphasis was placed on volunteer management such as, recruitment, screening,

placement, orientation, training, recognition, as well as exit. Groups with high leverage were identified. This required a mindset shift from seeing volunteers as “outsiders” to “partners” and a critical resource to be tapped. The Community Involvement Section was set up to bring more focus to the work. Regular dialogues with volunteers were instituted to better understand challenges at the ground, seek feedback to improve processes and identify new avenues for community contribution. Critical issues were escalated for discussion at the annual SPS and SCORE joint work plan seminar attended by staff of all ranks and community partners. These interactions between SPS, SCORE and their partners greatly enhanced understanding between the groups and enabled them to find joint and new solutions to old problems, and spot new ones.

g) The yellow ribbon project: touching other citizens

One of CARE Network’s most successful initiatives was the annual “Yellow Ribbon Project” (YRP), a series of public education efforts started in 2004 aimed at: (i) creating awareness of giving second chances to ex-offenders, (ii) generating acceptance of ex-offenders and their families into the community and (iii) inspiring community action to support rehabilitation and re-integration of ex-offenders. Inspiration for the name originated from a 1970s pop song “Tie a Yellow Ribbon Round the Old Oak Tree”. A yellow ribbon was picked as the symbol for its simplicity, and because it embodied the message of acceptance and forgiveness and resonated with the community. The message behind it was that every offender encounters 2 prisons – Physical Prison and Psychological & Social Prison. Offenders’ families, friends, neighbours, employers, colleagues, the community hold the keys to help unlock the second prison.

The Yellow Ribbon website is depicted below.



The YRP organisational structure consisted of a steering committee led by SPS and SCORE senior officers, a Secretariat anchored by a SCORE team, and Chairpersons of the various sub-committees. Each year, chairs of sub-committees were traditionally filled by SPS and SCORE officers, attempts had been made over the years to encourage volunteers, community partners, and other members of the CARE Network to take up more leadership roles.

YRP's activities were fully government-funded in the initial years, with growing corporate donors' support in the recent years. Once, the theme and overall concept plan for YRP had been endorsed by the CARE Network, events were managed autonomously by the chairpersons of the various sub-committees. Only issues that impacted other sub-committees or the entire campaign would be surfaced to the steering committee. Support functions that required co-ordination such as finance, publicity, sponsorships, invitation of Guests-of-Honour for the various activities that cut across sub-committees would be centrally managed by the steering committee. The Secretariat periodically monitored the progress to ensure consistency of themes and objectives.

A Yellow Ribbon Fund was separately set up to specifically provide financial support for (i) rehabilitative and aftercare services to inmates before and after their discharge from custody, (ii) other programmes aimed at raising the awareness of public to the needs of ex-offenders and inspiring community involvement, and (iii) support services for family members of inmates before and after their discharge from custody. An independent Yellow Ribbon Fund Committee was formed to manage the fund on behalf of the CARE Network. To ensure good governance, two sub-committees were formed to advise the Yellow Ribbon Fund Committee on the disbursement and fund-raising activities.

Every year, the month of September would be set aside for intensive YRP activities. The initial focus was on promoting to organisations that were more open, e.g., the religious groups and schools, the message of giving second chances to ex-offenders. Gradually, the work extended to the rest of the community. Activities in the first two years (2004-2005) were aimed at creating awareness. The next two (2006-2007) were focused on deepening the community's understanding of the rehabilitation journey and profiling the contribution of reformed ex-offenders. Serving inmates and ex-offenders were also mobilised to contribute to society through community service. In the recent years (2008-2009), the themes shifted focus from raising awareness to generating acceptance and inspiring action.

At the inaugural launch of the YRP in 2004, SPS invited targeted groups such as volunteer groups, employers, policy-makers and students to tour various prison institutions to deepen their understanding of life in prisons and their role in the rehabilitation journey. Talks held in schools, and Open House events heightened the groups' awareness to the needs of ex-offenders and their families, as well as sparked new ideas of actions they could take to support the reintegration process.

The Singapore National Employers' Federation and National Trade Unions Congress Income supported the Skills Competition and Talent Showcase launched in 2004. About 200 employers were invited to visit prisons' training facilities and witness inmates' IT, multi-media and cooking skills, and encouraged to consider hiring them. Subsequently, job fairs, employers' networking sessions and forums to discuss issues on reintegration of ex-offenders into the workplace were also organised. Corporate organisations were appointed as rehabilitation ambassadors and roped into YRP publicity efforts. Awards were given annually to recognise exemplary employers and corporate donors.

The "Wear-A-Yellow-Ribbon" was a key event in the YRP's annual calendar to engage the community at large. Inmates would hand make yellow ribbons that ex-offenders and inmates from half-way houses distributed on the streets (donations optional) encouraging members of the public to wear in support of ex-offenders and their families. Subsequent years, fairs and road-shows were held at major city and heartland malls throughout the country to reach out to different segments of the population. To attract groups of all ages and interests, a range of activities such as performances by artistes and ex-offenders, testimonies by ex-offenders, and interactive games all spreading the message of second chances to ex-offenders, were organised. There were also booths by various volunteer groups aimed at educating the community on the rehabilitation process, as well as sale of products and crafts made by inmates. Art exhibitions showcasing the talent of inmates were also held at public places.

Song-writing competitions, open to inmates, ex-offenders and aftercare agencies were organised with local song composers and musicians invited as judges. Winning entries would be showcased at the annual YRP charity concerts, another key event where local and overseas artists performed alongside inmates and ex-offenders to raise funds for the Yellow Ribbon Fund. The President and the First Lady graced the inaugural concert. Mass walks led by Ministers, community leaders and celebrities were also organised. In 2009, Deputy Prime Minister Teo Chee Hean led the first public run that cut through the prisons compound.

The inaugural YRP Conference was held in 2005 to align and inspire community action through sharing of case studies, best practices and research. Participants included overseas delegates, ex-offenders, as well as community partners such as employers, volunteer groups and grassroots organisations. The YRP Conferences with its plenary sessions and concurrent workshops led by local and overseas practitioners and academia became important events for the different groups involved in rehabilitation and reintegration work to come together to share experiences, and tap on collective wisdom to develop more integrated approaches. In 2006, ex-offenders from Industrial & Services Co-Operative Society Ltd Youth Wing played a key role in organising the Conference.

The YRP team was surprised at how the project had grown over the years. What started as branding and public education efforts, gained momentum and with support from the media, corporate organisations and individuals from all levels of society, seemed to have taken a life of its own.

A most recent example was the community service project with the Singapore Lions Club. Besides volunteering with the prisons, the Club also worked with the elderly. They approached the YRP team to jointly host a lunch for the elderly in 2009. On that day, the inmates cooked the meal, while ex-offenders served it. Funding came from the Singapore Lions Club with the National Arts Council sponsoring the entertainment programme. The event, covered by the media, helped to further reinforce YRP's message to the rest of the community.

Another example was created when the owner of GiGATT International Marketing Pte Ltd acquired the distribution rights for a type of laser machines that could also be used to remove tattoos. She had her staff call the YRP hotline to see if these could be of use to YRP. This gave SPS the idea of using tattoo removal as a means for inmates to pledge their commitment for change. As at 2010, 174 inmates have benefited from the pilot.

Besides changing the community's perception of ex-offenders, it was equally important to educate inmates and ex-offenders the need to seize the second chances given to them. The inmates (as part of their work with SCORE) contributed to the nation's efforts to fight SARS through washing of hospitals' dirty linens. And they also volunteered to fill the fun-packs for the National Day parade. Hanneil Chong, a reformed drug addict teamed with a prison officer and SCORE officer to take part in an Ironman race to raise S\$10,000 for the Yellow Ribbon Fund.

Although the events and stories may change, YRP's message of acceptance and renewal each year remained the same. The YRP received tremendous recognition and support from the media, with increasing number of individuals, communities and corporate organisations coming forward to volunteer their services, donate money and employ ex-offenders. A nation-wide public perception survey in 2007 revealed that 94 percent of respondents expressed awareness of YRP. 70 percent were willing to accept ex-offenders as either a friend or colleague. Between 2004 and 2008, about 300,000 Singaporeans had participated in YRP events, 690 new employers added to SCORE's database, 720 new volunteers recruited, more than 400 inmates and ex-offenders mobilised, and S\$3.9 million raised for the Yellow Ribbon Fund's work.

In support of the YRP, the Government amended the Criminal Registration Act in late 2005 to strike out ex-offenders' criminal records for minor offences provided they remained crime-free for a specified period.

Results

The Singapore Prison Service (SPS) transformed itself from an agency focusing on protecting society through the safe custody of criminals to a leading rehabilitation agency in Singapore. Between 1998 and 2009, the recidivism rate dropped significantly from 44.4 percent to 26.5 percent. It is also one of the most cost-effective prison institutions in the world with an average cost of incarceration at \$75 per day and an inmate-to-staff ratio of 7.6:1. More than 1,800 employers have come forward to offer employment to ex-offenders, and about 1,400 volunteers served alongside Prison staff in counselling, various personnel development activities for inmates. Yet, security and discipline have not been compromised – there has been no escape or major riot, and assault rate has been kept low. Staff morale has also been high, with about 81 percent of officers indicating their satisfaction with work in the organization.

In 2006, SPS won the top Public Service Award for Organisational Excellence and the Singapore Quality Award. In 2007 and 2009, it was voted one of the top ten Best Employers in Singapore by the global human resource consultancy, Hewitt Resources, and has little difficulty recruiting the talent it needs.

More information

- <https://www.ccollege.gov.sg/Knowledge/Pages/The-Story-of-Singapore-Prison-Service-From-Custodians-of-Prisoners-to-Captains-of-Life.aspx>
- http://www.score.gov.sg/CARE_network.html
- <http://www.yellowribbon.org.sg/>

5. Relevance to ESIF

The NS framework supports the legitimacy of using public funds such as the ESIF for social innovation. It also puts forward that the public sector has a key role to play in tackling societal challenges. This role goes beyond simply providing funding to e.g. social entrepreneurs to start up a socially innovative business. The NS framework also provides a structure for integrating the capability approach, transition theory, theory U and service design.

PART II
PARTITION:
SOCIAL INNOVATION IN THE ESIF?
HOW TO IMPLEMENT

3. Innovation strategy for ESIF programmes

Chapters three to six elaborate a number of principles related to an innovation strategy for ESIF programmes. These principles have been derived from a collection of recent articles on innovation: Annex 8 contains more info concerning the fiches that summarize these articles. Chapters three to six are meant to stimulate reflection and discussion as to what principles underpin the various tools that are proposed. Readers should read each principle and clarify for themselves what they think the principle means. They can discuss this with other team members and stakeholders. This may trigger the need to read the underlying articles and in this way engage in a deeper study of innovation.

Of course, it is also possible to stay at a very practical level and only browse the “tools” and watch the “videos”.

Video 1: Guy Kawasaki and the art of innovation

GET INSPIRED BY THE EXPERTS ...

Guy Kawasaki is the New York Times and Wall Street Journal bestselling author of twelve books including Author, Publisher, Entrepreneur and Enchantment: The Art of Changing Hearts, Minds, and Actions.

He is a special advisor to the Motorola business unit of Google. He is also the co-founder of Alltop.com, an “online magazine rack” of popular topics on the web, and a founding partner at Garage Technology Ventures. Previously, he was the chief evangelist of Apple.

Watch him at:

<https://www.youtube.com/watch?v=Mtjatz9r-Vc>

His key take-aways on “the art of innovation”:

- 1) Make meaning (why should people care about your innovation)
- 2) Have a mantra (a few key words) that make this meaning clear
- 3) Go for the next curve (rather than just improve what exists)
- 4) Innovation should be deep (lots of functionality), intelligent (understands your problem), complete (links with other elements and the context), empowering, elegant
- 5) If you have jumped to the next curve, it is ok to offer the innovation to users even if not yet perfect
- 6) Let a hundred flowers blossom (support a variety of uses of your innovation by users, not just what you had in mind initially)
- 7) Polarise people: great innovation means some people will really love it, others will hate it
- 8) Keep changing, evolving what you offer
- 9) Only go for what has value and is unique
- 10) Perfect your pitch (customize your intro to the audience, max 10 slides, 20 min, 30 pt font)
- 11) Don't let bozo's grind you down

PRINCIPLE 1: SET THE SCOPE

A set of clear strategic guidelines is required regarding on whom, where and how innovation efforts should be focused as well as why, together with unambiguous briefs for innovators on which problems or opportunities they should focus. Formulating these elements as a compelling vision that captures people's hearts and minds, with consistent commitment over time to this by decision-makers (incl. with strong symbolic actions), is a crucial foundation for ensuring more successful innovation. For truly radical innovation, the most challenging groups and issues should be prioritized. This may also lead to better solutions for less difficult but related issues. (art. 14+30+49+a5+C1)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle is used in TOOL 1. There, it is proposed to make a choice between the broadest possible scope, namely a compelling challenge for a target group to be proposed by project promoters themselves, or rather to narrow the scope by putting forward a challenge to which projects should respond. Also, more radical innovation is put forward as the goal of the call.

PRINCIPLE 2: THINK ABOUT TOTAL USER EXPERIENCE AND CONTEXT

Innovation concerns not only new discrete services. It could also be that innovation resides in linking a current (part of a) service in new ways to other activities or having different actors (e.g. users themselves) execute some of these activities. A discrete service may function, but the whole journey a user has to go through to get to the outcome they desire, could be very difficult and in need for improvement. It could also be about the process how the user co-creates service provision with providers to arrive at a solution for their issue. Sometimes, something that has already been tried but failed, may now work because of other changes happening in the relevant context (art. 11+15+50+C4).

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle is embedded in TOOL 2 as the use of customer experience journey mapping is recommended as well as empathic research in general. In TOOL 8 again, attention is drawn to the importance of empathic fieldwork rather than desk research. Also, empathy is important in the appraisal criteria in TOOL 9 under “schedule”.

PRINCIPLE 3: MEASURE A BROAD SET OF OUTCOMES AND BENEFITS AS WELL AS HOW THEY ARE BEING ACHIEVED

Innovation should not always be measured in economic terms. It also concerns a) better achievement of individual and/or societal outcomes, b) more meaningful, attractive and useful services as experienced by end users (citizens, businesses), c) enhancing the internal efficiency of how services are delivered d) strengthening democratic citizen engagement and participation, ensuring accountability, transparency and equality in society.

The latter benefits are crucial in building resilience for innovation in society, which is the enduring capacity of society to transform, renew and recover in the face of complex challenges. For this, interventions/projects should move from “implementing a solution” to creating a space, “an authorizing environment” for various actors to work ongoingly in a more systemic way (b3+B9).

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle is integrated in TOOL 1 where the ultimate goal of innovation is to better support people’s well-being and development.

This principle is also integrated into TOOL 2 where in the “concept template” a distinction is made between impact (in terms of well-being and human development in terms of expanding people’s freedom of opportunity and agency, incl. by drawing on the wider community and other actors rather than solely on the public sector) and how the impact is achieved (e.g. the solution is faster, more user-friendly etc.). In addition, an explicit question is asked in the concept template how the solution is empowering users. Furthermore, in TOOL 5, several questions are asked with regard to the business model that allow to clarify this e.g. what is offered to users, what type of relationship is strived for and how partners will be used. Correspondingly, TOOL 8 contains guidance how to integrate well-being and human development in the formulation of a societal challenge (in the phase 1 proposal under the description of the challenge) and TOOL 9 details how to appraise it (before starting phase 1, under the criterion “quality and aspiration of the challenge”). Similarly, it is integrated in TOOL 10 in the criterion “advantage for the final target group” to be used at the end of phase 1 for approval of phase 2.

TOOL 1: DESCRIPTIVE PART OF A CALL FOR PROPOSALS ON SOCIAL INNOVATION

The descriptions below are limited to explaining the purpose of the call, who it intends to reach and what is expected from a project in what time-span and for how much budget.

Statements in between [] are there to think about what is needed for your particular context.

CALL FOR PROPOSALS: INNOVATION VIA EXPLORATION (IVE)

What is the IVE call about?

The call wants to support service providers active in [select and describe regional, national labour market, health, education, etc. policy domains as appropriate for your programme], to propose, in a first phase, innovative concepts for tackling societal challenges for which there is today no sufficient solution. In a second phase, such a concept will be developed into a new service provision that will, by the end of the project, have been tested and evaluated. Ultimately, this will support the well-being and development of [name groups relevant to the programme] in a better way. This in turn contributes to [insert relevant overall policy objectives].

In addition, IVE is aiming for radical or evolutionary innovation, not incremental innovation (see figure below).

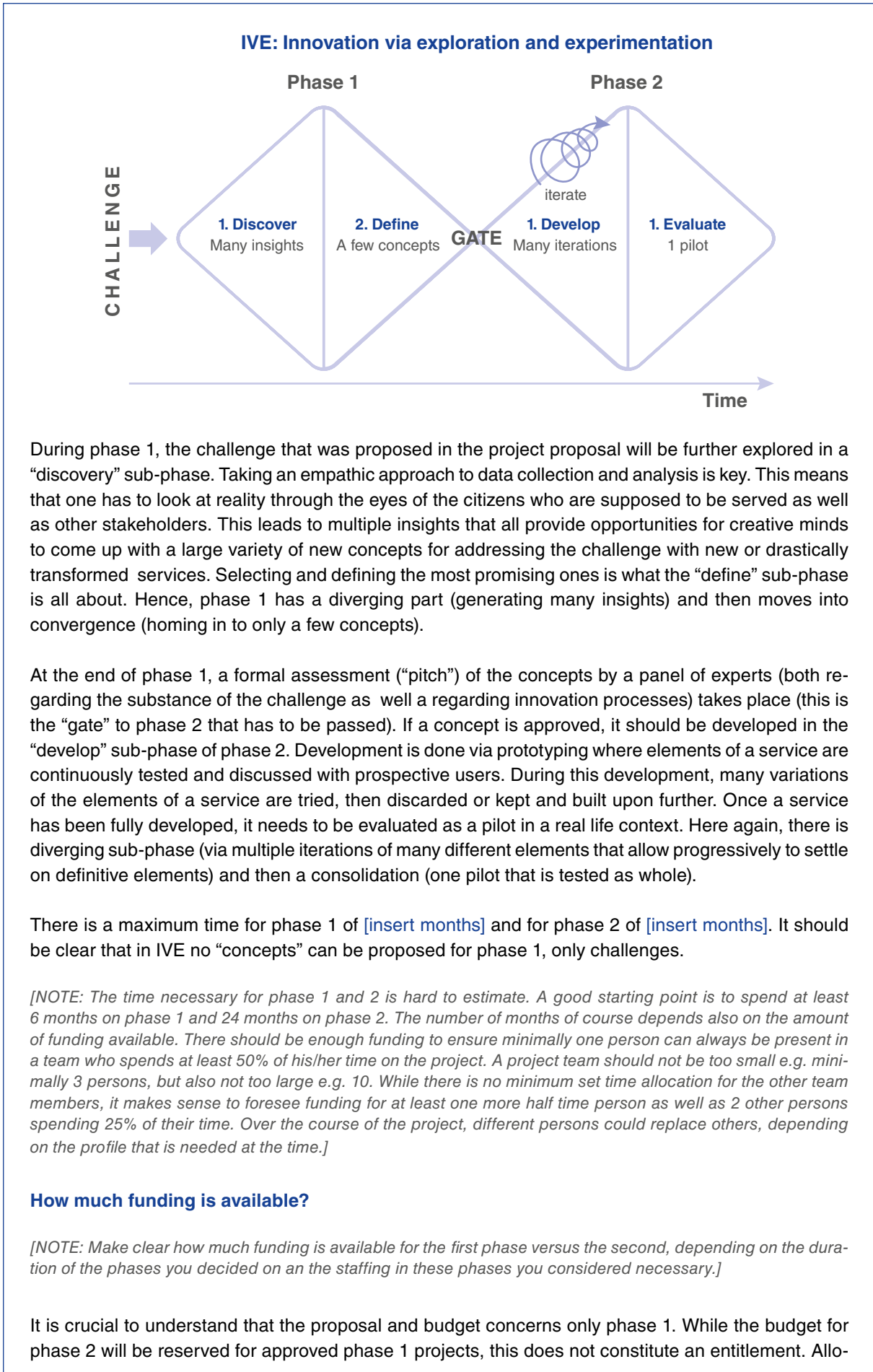
		Group that is intended to benefit, needs, context	
		New	Existing
Concept	New	<p>Radical Service provision that in [region or country] is either very rare or non-existent, provided to a group newly conceptualised for [region or country]</p>	<p>Evolutionary (service) Service provision that in [region or country] is either very rare or non-existent, for a group that in [region or country] is regularly named as such</p>
	Existing	<p>Evolutionary (target group) Service provision already existing in [region or country] but now provided to a group newly conceptualised for [region or country]</p>	<p>Incremental (instrument) Improvement of method already well distributed in [region or country] for a group that in [region or country] is regularly named as such</p>

Well-being of an individual is defined as engaging in activities and enjoying conditions that this individual has reason to value. More generally it refers to being able to realize one’s potential and flourish. Development is then understood as expanding people’s opportunities to engage in such a life as well as, through agency, being able to create such opportunities on one’s own initiative.

Who is the call for?

[Specify who can apply for funding].

What are beneficiaries expected to do during the project?



cating the phase 2 budget to a beneficiary will depend and the assessment of the presented concepts and the plan for phase 2, presented at the end of phase 1.

In addition, the main elements of the proposal for phase 1 are to describe a societal challenge, a wider vision this challenge is embedded in, a plan for phase 1 and an appropriate team and partnership.

[NOTE: Of course, some deviations from what is proposed above are possible as discussed below:

1) This particular call design allows project promoters to submit their own societal challenge. It represents the broadest possible scope for an call for proposals. Of course, it is equally possible that a challenge is formulated by policy-makers and that the scope is made much more narrow. The latter has an advantage that more actors will be mobilized to work on one challenge and that the challenge is clearly of high relevance. The disadvantage is that policy-makers may formulate a challenge in too narrow a way, offering less potential for truly innovative concepts to emerge. In addition, allowing challenges to be formulated bottom-up may lead to discovering something about the real challenges in society as lived by actors that are closer to the issues than policy-makers. More guidance on setting scope is provided in section 7.a.1 of this guide, under the tasks given to “activators” of innovation.

If challenges will be proposed by policy-makers, they should bear in mind the same guidance given to promoters when formulating challenges: see TOOL 8, challenge and vision parts.

This of course also means that project promoters should not be asked anymore to provide their challenge and vision but only their interpretation of this challenge and vision (how they understand it) and be judged on this.

2) ESIF programme managers should also consider whether they only want to focus on radical innovation or also on incremental and evolutionary innovation.

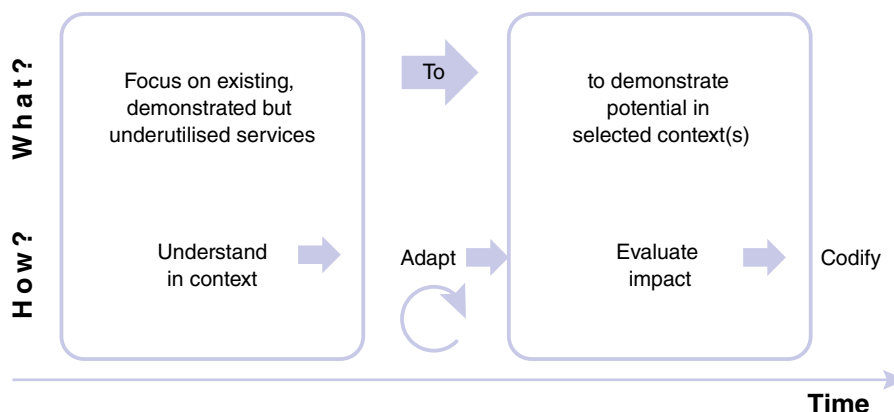
3) Ideally, the IVE call is complemented by an innovation via adaptation (IVA call) which follows a very different logic. In IVA, existing approaches that have already proven their potential (abroad or within [country/region] but remain underutilized (e.g. in certain sectors, regions, for certain organisations, groups, needs, etc.), can be piloted and evaluated.

IVA is therefore a “demonstration” call, rather than a call to come up with something completely new, as in IVE. In IVA, a first phase would rather concern understanding how the specific service that was selected actually works. There would be no set time limit for this first phase. A next phase would be to adapt the service to work in a new context. Finally the service would have to be evaluated in the new context. Finally, if the evaluation shows the service indeed realizes its potential, the service should be codified so that others can also replicate it.

As in the IVA, new ideas are not created nor developed, but exist already and are only adapted and implemented as a pilot, the term “innovation” is not really applicable. It concerns rather the idea of “replicating” or “broadening” an existing innovation. Nevertheless, it is very useful to make the distinction clear and to foresee separate calls for IVE versus IVA, as too often, project promoters will otherwise submit existing innovations into a call that supports a process that starts from a societal challenge and is meant to generate radical new ideas, NOT merely propose existing ones.

The figure below depicts the logic of IVA.

IVA: Innovation via adaptation



4. The innovation process at the level of a project

Video 2: Marc Stickdorn and service design

GET INSPIRED BY THE EXPERTS....

Marc Stickdorn is a trainer and consultant for service design thinking from Germany. With a background in strategic management and information systems, he supports organisations to build up knowledge in the field of service design and helps them to sustainably integrate service design into their structures.

Marc guest lectures at various business and design schools and co-founded smaply, an agency developing software solutions to sustainably implement service design in organisations.

Recently, he co-founded myServiceFellow, a tool to gain genuine customer insights through mobile ethnography. Marc is editor and co-author of the seminal service design book *This is Service Design Thinking*.

Watch him at:

<https://www.youtube.com/watch?v=LUsjjOtAwcs>

Key general take-aways are (even though he speaks mainly about tourism as a service):

- 1) Services are about the whole end-to-end experience and even about the memories of it. After the service there is nothing to put on the shelf.
- 2) The "customer journey" shows this experience from the point of view of different users or "personas" in whose shoes we will pretend to stand (empathy)
- 3) Along the journey are various "touchpoints"
- 4) Expectations are generated before the service, experiences happens during and then (dis)satisfaction afterwards depends on whether or not our expectations are met (or exceeded)
- 5) Service design also covers designing expectations
- 6) Satisfaction measurement should not cover only discrete touch points
- 7) Taking a service perspective means focusing on value in use (value created by user together with provider) rather than value in exchange (pay for product)
- 8) A service ecosystem can be mapped out to see if the customer journey can be simplified
- 9) Service design is a process and set of tools that are used by a multi-disciplinary team, including management e.g. we can find out about the customer journey by observing, doing contextual interviews but also by letting users use apps like "my servicefellow" (see <http://www.experiencefellow.com/>)
- 10) It is user-centred, based on ethnography rather than statistics, co-creation (creating a safe place for interaction), sequencing (journeys of users and service providers), evidencing with tangible elements (how can people know something happened, even behind the scenes, as this contributes also to the experiences and is an anchor point for story telling), being holistic (using all our senses and looking at the whole context)

This section elaborates principles regarding how innovation projects should take shape. Only once this is clear, can an ESIF project manager translate this into proposal forms and appraisal criteria relating to the various stages of a project. The importance of setting up innovation as a process is underlined by P. Kotler and F. Trais De Bes in their book "Winning at Innovation" (2011) as follows: *"For someone to change the way they work today, they must stop what they are doing, step back, think, rethink assumptions, ... think of new possibilities, assess them, design them, refine them and test them, and finally to extend them to the rest ... It is better to leave one person to follow the efficient routine and set up another to figure out a more efficient routine ... it is impossible and even counterproductive to have someone trying to change the way a task is done while demanding that they perform that task efficiently."* (p.14).

Hence, the innovation process is all about stepping back from what people are doing today and having a space to come up with something better.

A Overall view of the process

PRINCIPLE 4: INNOVATION IS ABOUT ITERATION

The process of innovation is not linear: it is better viewed as passing through different spaces or stages with much iteration (going back and forth), rather than as a pre-determined sequences of activities. This does not mean there is no project management. It just means the project management is applied within the different spaces/stages, rather than ON the spaces/stages. (art 20+ 24).

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle is applied in TOOL 1 and TOOL 2 as there is first of all a distinction between phase 1 (discover and define) and phase 2 (develop and evaluate). To progress from phase 1 to 2 there are two meetings where innovators can “try out” their concept on peers, before coming to the formal expert panel at the end of phase 1 to move into phase 2. In addition, during phase 1, innovators are encouraged to test their concepts with users and stakeholders before presenting them (see TOOL 2 and TOOL 8). In phase 2, development via prototyping is explicitly seen as an iterative process with testing and developing building on each other (TOOL 2) and appraised under “schedule” for phase 2 (TOOL 10).

B Getting ideas

PRINCIPLE 5: USE A WIDE NET

A wide funnel/net (capturing more ideas by having a broader scope, criteria, ...) creates a higher probability to find big ideas alongside smaller ones. (art. 2+21+45)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This is integrated into phase 1 which normally leads to the discovery of many potential concepts within any one project. All projects then can present their concepts at the end of phase 1 (as elaborated in TOOL 2).

PRINCIPLE 6: FACILITATE DIRECT INTERACTION FOR IDEA GENERATION

Face to face workshops are superior to online discussion fora when it comes to building on the ideas of others and coming up with more radical new approaches. (art. 3)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

TOOL 2 recommends to spend time face to face in brainstorming exercises during the “define” step within phase 1.

PRINCIPLE 7: FACILITATE DIRECT INTERACTION FOR PROPOSING PROMISING CONCEPTS AND TEAMS TO DECISION-MAKERS

As innovators tend to run on their internal drive, they should be able to present their ideas face to face to decision makers rather than be frustrated by faceless procedures. This is why “prizes/competitions” (for solving a specific issue or for uncovering a range of possible routes to resolve a wider challenge) are appealing, as long as collaboration among a diversity of participants from a wide range of organisations who share a common passion, is encouraged and facilitated and non-winning ideas also get recognized. Track-record should be a factor in getting involved in new projects/competitions, which also helps limit the amount of proposals (art. 3+4+28++35+36+37+38+a5+C1+b5)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle is part of TOOL 1 where at the end of phase one, a face to face interaction with a panel of experts is foreseen to defend one’s concepts. In addition, “a competition” is proposed in TOOL 6 as a way for projects to get ideas proposed to themselves.

PRINCIPLE 8: LOOK THROUGH THE EYES OF USERS WHEN DEVELOPING A CONCEPT AND ALLOW USERS TO TEST YOUR CONCEPTS

In innovation, it is more important to focus on utility/need of and for the user, than on the tool or instrument that may (or may not) help address it. But users may not be able to formulate their needs, asking rather for improvements in current solutions. Careful questioning “why” they want it, as well as in depth observation are required to uncover the real outcomes that matter. The other side of this is that, if you want good user-feedback concerning your innovation, you need to find a way to let them experience (parts of) it. (art. 15+20+39+C2)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle is integrated by putting the emphasis on immersion during the discover step in phase 1. In addition, the concept test at the end of phase 1 and rapid prototyping (continuously showing and testing developed parts of the service to get feed-back) during phase 2 as described in TOOL 2 and TOOL 8 and appraised under the criterion of “schedule” for the phase 1 proposal (TOOL 9) and for the pitch at the end of phase 1 using the criterion of “schedule” (TOOL 10).

C Prototyping and experimenting

PRINCIPLE 9: TEST ON A SMALL SCALE FIRST

Bottom-up small scale continuous experimentation should be supported with seed-money as this may lead to discovery of the next big idea. The small scale is necessary as experimenting on the entire population of a country/region (by immediately deploying a new policy) reflects poor risk management. Experimentation is not random: it is guided by hypothesis on what could work derived from theory/principles and protocols concerning how to learn. Experiments could be run in parallel or sequential, depending on time and money constraints. They can be low fidelity (with rapid prototypes being incomplete but getting specific aspects right) in the earlier stages, gradually becoming more high fidelity to verify the final service. (art. 2+3+5+23+30+31+b5+B8)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

PRINCIPLE 10: TEST MULTIPLE OPTIONS IN PARALLEL AND GO FOR THE BEST

It is better to delay choices regarding final service design as long as possible, keeping several different competing options alive, testing each with users through multiple iterations, rather than only develop, test and refine a single concept with users. (art 25+27)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

Principles 9 and 10 are integrated by recommending multiple concepts to be proposed at the end of phase 1 and also by prototyping several competing options to operationalize each concept in parallel during phase 2 as stated in TOOL 2. The importance of prototyping is emphasized by the appraisal criterion “schedule” used to assess the plan for phase 2 (TOOL 10). And, of course, the entire set up of the call as made clear in TOOL 1 is to conceptualise, develop and test a new service at a small scale.

D Scaling, diffusion and dissemination of an innovation

PRINCIPLE 11: LOOK FOR THE RIGHT PEOPLE TO DISCUSS THE DEMONSTRATED MERITS OF THE INNOVATION WITH AND SUPPORT THEM IN THEIR OWN LEARNING PROCESS

Diffusion of an innovation (particularly of the operating model of innovative services, a legislation or behaviour) depends for the major part on the subjective assessment of it by change-minded peers who in their reference group enjoy an opinion leadership role (also known as early adopters, who tend to be followed by the early majority, then the late majority and finally laggards) as well as on the characteristics of the innovation in terms of a) compatibility with adopter’s values, needs and experiences, sometimes requiring active “sensemaking” (relating an innovation to earlier experiences and understanding in some way), b) its complexity, c) whether it can be experimented with in one’s own situation and d) whether results are easily observable to others than the users. Finally, innovations that can be adapted (e.g. because they are based on transferable principles) to suit one’s context tend to be adopted more easily. However, care should be taken with a simplistic understanding of “diffusion theory”. People do not have an “early adopter” profile in the absolute (the same persons can be early adopters in one context and not in another) nor are the characteristics of an innovation perceived in the same way by all people. It should also be recognized that there may already be adopters of still unrecognized innovations out there, referred to as “positive deviants”, people who are coping differently and more successfully with challenges. Seeking them out and putting them forward as example to their peers is highly recommended as they have already demonstrated the value of an innovation in a similar context.

Adoption is also rarely “staged” in a predictable way (e.g. stage of awareness, followed by evaluation, adoption, implementation) and “evaluation” happens as an ongoing discussion of competing bodies of evidence amongst professional networks rather than being based on a single piece of evidence. An innovation also has a hard core and a soft periphery (structures, systems, ... that need to form around the hard core to support its implementation).

To conclude, the diffusion of systemic innovations is again different from that of operating models, legislation or behavior as discussed above. Systemic innovation entails a large amount of actors collaborating and coordinating changes in what they do and how they do it. A successful systemic change in one place with its unique set of actors cannot just be transferred to another place with other actors. These actors need to be able to go through their own joint learning processes for change to happen. However, they can get a head start by learning from other places that have successfully embarked on similar journeys before. It is not necessary to start from scratch: some problems and pitfalls can be anticipated and resolved faster by leveraging the experience gained elsewhere (art. 31+ 33+41+51+C1+b5+C6+C8).

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle is part of the considerations in setting up innovation support as discussed in chapter 7 under the innovation roles of “execution” and “facilitation”, as it goes beyond what can be expected of a single service development project.

PRINCIPLE 12: THINK SYSTEMATICALLY ABOUT “GROWING” AN INNOVATION BEYOND BEING A PILOT

Some innovations, particularly of operating models of services, will require setting up a separate organization/unit as they conflict too much with existing processes and values of an incumbent organisation. This can happen via a social enterprise or it can be done via social entre/intrapreneurship in a public entity or joint venture with other relevant actors.

In any case, to really create a larger impact for such innovations, creative bees need to find bigger trees. This can be done by making the smaller trees they are sitting on grow bigger (by growing operations) and/or more numerous e.g. via formal agreements such as franchising or by finding an existing larger organization that can integrate the innovation.

Key factors in such scaling are commitment from those involved in scaling (management, staff, network members...), management competence (professional while preserving the social mission), the possibility to identify and replicate a few key elements of the operating model that lead to most of the impact, capacity to find and use the resources required to run the operating model as such in a sustainable way (incl. financially). Next, it is key to be able to secure the human, social and financial capital necessary

to scale, on top of what is needed to just run the operating model. If a model is replicable, sustainable and resources to scale can be obtained, this presents a greater potential for leverage for others of the experience gained with the model. If the originator organization is attractive to partner with for relevant partners, then scaling with others is an effective option. If adaptation to the context of the partners is required, a relation based on a formal agreement is suitable (joint venture, franchise). If no adaptation is required then simply disseminating the knowledge and experience can be sufficient (e.g. via an open source arrangement such as creative commons). Also, if an organization does not need others to scale its operating model, it can just replicate its model with or without adaptation. Finally, it should always be understood that systemic innovation, which when realized may carry far greater impact, does not aim to adapt to the given context but aims to change that very context. (art 13+C1+b6+C6+C7)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

The same applies here in terms of integration of this principle as for the previous one.

PRINCIPLE 13: USERS CAN BE EVANGELISTS FOR THE INNOVATION

When users become (virtual) members of the development team, then testing and marketing become one. Customers can act as evangelists for the innovation, spreading it further. (art. 5+51)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

Careful consideration of the role of users is recommended via the stakeholder analysis proposed in TOOL 2, including for advocacy. It is reinforced by a question relating to this in the phase 1 proposal (TOOL 8) and appraisal under the criterion of “schedule” for phase 1 (TOOL 9) and phase 2 (TOOL 10).

TOOL 2: manual for project promoters to move from ideas to scaling

[NOTE: reference is made below to LEGO SERIOUS PLAY®, experience map, business model and competitions or respectively TOOL 3, TOOL 4, TOOL 5, TOOL 6. These tools should be annexed to the manual below and then circulated to project promoters]

MANUAL FOR PROMOTORS SCHEDULE PHASE 1

1. Introduction

Promoters are free to implement the schedule for phase 1 in their own way. We do however give a few sources that may help implement the schedule for phase 1. As far as possible a limited number of (largely overlapping) sources are relied on, namely:

- A publication of Flanders Inshape, Cecilia's Keuze (in Dutch, in English Cecilia's Choice), see <http://www.flandersinshape.be/nl/onderzoek-kennis/boeken/cecilia-s-keuze> (€ 34.99 excluding shipping costs via Flanders Inshape)
- A publication of IDEO (in English): HCD toolkit, 2nd ed., see http://www.ideo.com/images/uploads/hcd_toolkit/IDEO_HCD_ToolKit.pdf (free). There is also a free online training and coaching process that follows and introduces the IDEO methods step by step at +/-8 weeks and gives the option to receive coaching. See <http://plusacumen.org/courses/hcd-for-social-innovation/>.
- A free publication by the UK Design Council, Design methods for developing services at <http://www.designcouncil.org.uk/knowledge-resources/guide/design-methods-developing-services>
- A publication of Design Flanders "Service design toolkit" available via <http://www.servicedesigntoolkit.org/> (in English and Dutch for € 65)
- A publication that gives examples to show very tangibly how innovation in services can be carried out "Service design, insights from nine case studies" (free, in Dutch and the English, via <http://www.stby.eu/2013/11/30/service-design-in-practice-2/>)
- For a behavioural theory approach please refer to Fran Bambust, Het 7E-model (The 7E model), Politeia, 2015 (see also <http://7e-model.be/>) or MINDSPACE, 2010 (<http://www.behaviouralinsights.co.uk/sites/default/files/MINDSPACE.pdf>).
- Flanders In shape has also developed a website with methods (free, in English): <http://www.usewell.be>

The plan for phase 1 must describe in what way and by whom the following tasks will be carried out.

- Phase 1: Discover phase
 - Preparation for fieldwork
 - Fieldwork
 - Analysis of information from fieldwork
- Phase 1: Define phase:
 - Formulation of opportunities
 - Generation of ideas and selection
 - Develop ideas into concepts that focus directly on improving the situation of the final target group
 - Test concepts and revise
- Draw up schedule and partnership for phase 2 including indicative plan for evaluation
- Pitch of concepts (concept validation)

Ultimately at the end of phase 1 the following deliverables are expected and these must therefore also be scheduled:

1. Concept
2. Experience map

3. Business model
4. Results of concept test with users and with stakeholders
5. Schedule phase 2 including indicative evaluation plan and description of partnership.

What is expected in relation to these deliverables is explained further below. This involves standardised products for which ESIF templates must be used. Based on these deliverables a “pitch” is expected from the promoter/partners at the end of phase 1. During this “pitch” the concepts to be developed with business model, experience map and results of the concept test are presented verbally to a panel of experts, for 15 minutes. Then there is a 45 minute “question and answer session”. This therefore involves a “concept validation”. Before the concept validation can take place the promoter must also have drawn up the schedule for phase 2 and sent it to the project manager of ESIF [region or country]. If the proposed concept can be approved, the promoter can then immediately start phase 2.

ESIF [region or country] will organise two preparatory “pitching” sessions of half a day each (the first at the end of the fourth month, the second half way through the fifth month) where promoters can practice their “pitch” on one another. The pitching itself will be organised during the 6th month. These sessions must therefore also be included in the schedule. Following these sessions the project manager of ESIF [region or country] will also discuss the course of the project with the promoter.

In addition to these deliverables there must also be a report on phase 1:

- Steps carried out including reporting what information was collected
- Statements from analyses
- Results of brainstorm
- Selection of ideas and why
- Process evaluation: What has been learned in the project over the course of the project? Say that you were to do it again what would you do differently? Have you now achieved what you had in mind?

Finally a schedule and a description of the partnership must also be delivered regarding a possible phase 2. More explanation is given of these actions to be scheduled for phase 2 in the manual for phase 2.

2. Schedule

1. Stakeholder analysis beforehand

A very useful instrument that can be used for scheduling an innovation project and involving stakeholders (including service providers, intermediaries, users...) in the right way in all the steps, is the SCIN tool of Flanders In Shape. When using this tool you have to aim for the right goal. On page 11 the choice is stated between “You are hatching a new product concept” and “You are looking for opportunities to innovate”. The latter objective applies to the call.

The SCIN tool helps identify all the stakeholders in an existing value chain of activities. Then the tool also helps in the selection of the stakeholders to take up a role throughout the project. Of particular importance are users. Not only are they crucial for understanding their needs, thinking of ways to address those needs and elaborating and developing/testing concepts, but the users can also act as “evangelists” for the new service, advocating its usefulness and convincing decision-makers to provide support for adopting it.

The SCIN tool provides the following project phases: research, formation of idea, concept and elaboration. Set out below is to what extent this corresponds with what is expected in the ESIF call.

ESIF	SCIN
PHASE 1: Discover	Research
PHASE 1: Define	Formation of ideas and concept
Concept validation	
PHASE 2: Develop	Elaboration
PHASE 2: Evaluation	-

The SCIN tool therefore already contains a step from phase 2 in the ESIF call, namely “elaboration”/ “develop”. In the project proposal for phase 1 of the ESIF call this step does not yet have to be elaborated. This elaboration must however be carried out during phase 1. The tool does not refer to an evaluation phase (end of phase 2). Also as regards the evaluation phase a few choices do however have to be made during phase 1 but not yet in the project proposal for phase 1.

More can be found on:

<http://www.flandersinshape.be/nl/onderzoek-knowledge/tools/stakeholder-centered-innovation-workshop>.

II. PHASE 1

At the start of phase 1, namely “discover”, the focus lies on inspiration. With whom can we go and talk, where can we go and observe, what can we look at that can throw light on the how and why of the challenge?

From a deep insight into the challenge you can proceed to the second part of phase 1: “define”. There you look for possible solutions that can then be elaborated in phase 2.

A PHASE 1: discover: fieldwork

In phase 1 “discover” first fieldwork is done. The focus here must lie on taking different perspectives (the user, service providers, other stakeholders...). In addition, it is important to become aware of the external constraints and / or opportunities that people face or have in their pursuit of a better life. Finding ways to remove constraints (e.g. constraints due to people’s position in their specific environment in combination with their own characteristics) may be the prime task for an innovation project. A key focus in field research should hence be to find out to what extent different types of people are (un)able to convert a given set of resources (e.g. existing public services) into the same level of desired outcomes in terms of their well-being. This can be due to (not) being embedded in an (influential) network of other actors, having a specific (counterproductive) cultural background and/or being subjected to different institutions (formal and informal rules that govern behavior) that limit or enable each person’s pursuit of their well-being.

1. Desk research regarding the challenge: What is already known? What else do we want to know?
 - Recognize existing knowledge: see HCD toolkit, p. 39
 - Identify people to speak with/situations to observe: see HCD toolkit, p. 40-41
2. Learning from users and experts:
 - Interviews: see HCD toolkit, p. 42-3 (users) and 55 (experts). P. 53 describes why it may be useful to have stakeholders carry out interviews, more particularly of the final target group itself. P. 58-65 goes deeper into how you set up and lead an interview along the right track.

- Focus groups: a focus group is an organised and supported group discussion. A focus group consists of a group of users (6 to 12 people) and a moderator, someone who leads the meeting.
 - See Cecilia's choice, p. 122
 - See also HCD toolkit, p. 44-5
3. Immersion in the context of the user (ethnography):
one of the most important inspiration sources for innovation is looking at the world from the perspective of the final target group via observation (incl. video/audio recording). This is highly recommended!
- See Cecilia's choice p. 110 (observation) and also p. 142 (life walkthrough)
 - See also HCD toolkit, p. 46-47
 - See also Design Council p. 14 (Service safari) and p. 15 (user shadowing)
4. User diaries:
Working with diaries is a form of passive observation. This is useful if participative observation is not possible. The basic approach is that you ask the user to document his actions and emotions. The intention is to get a better understanding of the experiences of the user with an existing service during a period.
- See Cecilia's choice, p. 118
 - See also HCD toolkit, p. 50-51
 - See also Design Council p. 13
5. Analogue inspiration:
Inspiration can also be sought in a totally different context but where the activities that are being carried out are still relevant.
- See HCD toolkit, p. 57

B PHASE 1: discover: analyse information from fieldwork

A following step in phase 1 "discover" is to gain insights from the fieldwork. The fieldwork and its analysis do not run entirely separately. It is possible to include some of the following analysis diagrams during the fieldwork and to use them to assess where further questions must be asked.

It is also useful based on the first fieldwork e.g. to put together personas that are then used to carry out more fieldwork, from different perspectives as embodied by different personas, and to analyse the information obtained from this.

1. Empathy map (Flemish innovation centre)
An empathy map is a tool for acquiring insights and structuring them over the intended user of a service. They can be used to support a "persona" (see below).
- See <http://innovatiecentrum.be/dl/38-JFOv0ULmBk.pdf> and <http://innovatiecentrum.be/dl/39-5RFDoDsUQt.pdf> for manuals of the Flemish innovation centres (in Dutch).
 - See also Stanford University (English) <https://dschool.stanford.edu/wp-content/themes/dschool/method-cards/empathy-map.pdf>
2. Customer Experience Journey:
A customer experience journey visualises the process that a customer goes through in his relation with a (number of) organisation(s) and services.
- See <http://innnovatiecentrum.be/dl/12-LWl2uTX1xp.pdf> and <http://innnovatiecentrum.be/dl/35-MwZk9eLh8d.pdf> for manuals of the Flemish innovation centres (in Dutch).
 - See also Cecilia's choice p. 154
 - See also Service Design toolkit p. 11 and 12
 - See also Design Council p.11-12

3. Personas and segmentation:

Personas are archetypes of customers, users or other stakeholders. They present known data about stakeholders in a specific, clear and visual way. A persona looks like a real person, with a name, family name, with character traits, frustrations and stories. A persona is therefore a fictional personality with very specific characteristics. They can be used in fieldwork, analysis and development. The method is however put under “analysis” because there must first be some information and analysis (e.g. based on an empathy map) before a persona can be properly constructed.

- See <http://innovatiecentrum.be/dl/36-TLyAUaX8hK.pdf> and <http://innovatiecentrum.be/dl/37-D3WFITzSjn.pdf> for manuals of the Flemish innovation centres (in Dutch).
- See also Cecilia’s choice p. 136
- See also Service design toolkit, p. 13 and 14
- See also Design Council, p. 16
- For a behavioural theory approach relating to segmentation the section “Explore: explore your target group” of the 7-E model provides clarification or p. 50-51 of MINDSPACE.

4. “Opportunity score”

Based on dialogue with users you can identify what problems they have with an existing supply and what important “outcomes” are behind this. Then based on scores regarding their importance as well as how good/bad a current supply meets these, they can be converted into opportunity scores.

See <http://rand.gatech.edu/wp-content/uploads/2010/11/Turn-Customer-Input-Into-Innovation1.pdf>

5. Trend analysis

Addressing broad social (e.g. migration, ageing of the population, ...) or specific sectoral trends may give inspiration for innovative ideas.

- Flanders DC has an instrument (in Dutch, French and English) that enables trends to be addressed: GPS see <http://www.flandersdc.be/nl/gps>
- ESF Flanders publishes trend research relating to the labour market see <http://www.esf-agentschap.be/nl/publications/detail/trendstudie-2015-the-show-must-go-on-hoe-langer-werken-werkbaar-maken>
- Also look at http://ec.europa.eu/regional_policy/sources/docgener/presenta/social_innovation/social_innovation_2013.pdf on p. 12

6. LEGO SERIOUS PLAY®: a method that allows to harness the power of metaphors. More info on <http://www.lego.com/nl-be/seriousplay/>

C PHASE 1: Define: opportunities

After the fieldwork and its analysis in phase 1 “discover” have delivered enough data, it is time to proceed to phase 1 “define”. At the end of “define” you do in fact “define” what concepts you want to develop in phase 2. But before you can define “solutions” as concepts it is advisable to convert what has been learned from phase 1 “discover” into “opportunities” to innovate. This is a crucial step that you should not skip.

A first step before starting on the definition of these opportunities is to decide how to proceed with regard to the involvement of stakeholders, including the final target group.

- See HCD toolkit, p. 84-91
- See Cecilia’s choice, p. 132

Then an attempt will be made to distil opportunities from the analyses of “discover” to clear the way for targeted generation of ideas.

1. Distil first insights from analysis

This activity is also not separate from fieldwork and analysis. This does however involve, regularly focussing on all the information from the fieldwork and analysis and asking oneself: “what do we learn from this now that is important?”. Quite a lot of information must therefore be available before one can work out what is really of interest.

- See HCD toolkit, p. 92-97 about the sharing of stories and insights
- See Cecilia’s Choice, p. 114 about preparing an affinity diagram

2. Clustering into issues and/or frameworks

Then we try to structure further what we have learned e.g. “what are the wider, underlying issues?”

- See Cecilia’s Choice, p. 114 (affinity diagram) and p. 150 (mental models)
- See HCD toolkit, p. 98-101 (identify issues and prepare frameworks)

3. Formulation of statements concerning the issues:

As the last step, to prepare for generation of ideas as far as possible, statements are put forward that pick up directly on the insights and issues. These are formulated as a question: “How should we...?” If this involves behavioural changes make it clear whether this involves 1) refraining from a behaviour that the group that is intended to benefit does not yet display (but where there is a risk of this); 2) the adjustment of behaviour in a desired direction 3) stopping displaying unwanted behaviour. This ultimately involves the formulation of “opportunities” to innovate.

- See HCD toolkit, p. 102-103

D PHASE 1: Define: Generation of ideas and selection

In this last activity of phase 1 concepts are identified and developed that address the opportunities previously formulated.

1. Brainstorm on selection of opportunities and/or trends:

- See HCD toolkit, p. 104-5
- See Flanders DC GPS toolkit p. 15 (on generation of ideas): this applies both to trends (How should we address “trends”?) that one may have identified as well as to statements regarding opportunities derived from the previous exercise.
- The Service Design toolkit also discusses this on p. 17-18
- See also a tool of HOWEST (in English): <http://app.innowiz.be/innowiz.php?p=overview>
- See also Design Council p. 17
- Flanders DC also has an online course on creative thinking in 2 hours (in Dutch): <http://www.flandersdc.be/tools/cursus-creatief-denken/>
- Organise a competition

2. Select ideas:

- See Flanders DC GPS toolkit p. 16 (on selection).
- See HCD toolkit, p. 134-137.
- The Service Design toolkit goes back into this on p. 17-18
- See back to the tool of HOWEST: <http://app.innowiz.be/innowiz.php?p=overview>

In the Flanders DC GPS a distinction is made between the question whether creative ideas can be achieved in the short or rather longer term (after more study work). A useful variation on this is also to make a distinction between “ordinary” versus “original” ideas as in the Service Design Toolkit (p 17). This then leads to the following diagram (Source: COCD: <http://www.cocd.org/kennisplatform/cocd-box/>)

not (yet) achievable		yellow ideas <ul style="list-style-type: none"> ideas for the future challenges, dreams red ideas for tomorrow vision determining guiding <p style="text-align: right;">HOW?</p>
achievable	blue ideas <ul style="list-style-type: none"> easy to implement examples available little risk a lot of support little effort <p style="text-align: right;">NOW</p>	red ideas <ul style="list-style-type: none"> innovative ideas pattern breaking exciting ideas distinctive give energy <p style="text-align: right;">WOW!</p>
	ordinary ideas	original ideas

It should be clear that original ideas are a priority for ESIF and that one should look into which ideas need development. Matters that in a manner of speaking could already be implemented tomorrow without much development, are best not presented to proceed to phase 2.

The diagram that is submitted in the HCD toolkit also forms a good guide for selecting ideas. This diagram should however be looked at on a [region or country] level (see below).

	Needs, customer group, context	
	New	Existing
New Concept	Radical Service provision that in [region or country] is either very rare or non-existent, provided to a group newly conceptualised for [region or country]	Evolutionary (service) Service provision that in [region or country] is either very rare or non-existent, for a group that in [region or country] is regularly named as such
Existing	Evolutionary (group) Service provision already existing in [region or country] but now provided to a group newly conceptualised for [region or country]	Incremental (instrument) Improvement of method already well distributed in [region or country] for a group that in [region or country] is regularly named as such

Incremental innovation within this call is not eligible for phase 2. In practice such “instrument innovation” will often involve relatively quickly achievable, ordinary ideas (see the other diagram above).

3. Check which behaviour levers are available for the ideas selected and whether this is sufficient:

From a behavioural theory perspective it is useful to check the type of behaviour lever to which an idea corresponds.

▪ From the 7E model:

→ Motivate:

- Enthuse: internal motivation
- Encourage: external motivation: outline the possible profit
- Engage: social motivation: show that a group of people are behind it

- Support:
 - Enlighten: create insight with information
 - Exemplify: show that you mean it, with policy and other measures
 - Enable: reduce the thresholds with tools
- Experience: intrinsic behaviour value: let them experience that they have made the right choice
- Enforce: Ask yourself whether you will have to enforce
- From MINDSPACE: enable, engage, encourage, exemplify.

For insights where behaviour is conducted by a stakeholder (may be a service provider) which has a detrimental effect on the final target group and for which it is not clear why the stakeholder behaves like this, it is useful to collect additional information to throw light on this. Then one can look at the selection of ideas again.

E PHASE 1: Define: develop ideas into concepts that focus directly on improving the situation of the final target group

The following elements are not without obligation but compulsory elements to be delivered before the decision point is reached whether or not to go forward to phase 2. It is sufficient to draw up these elements for one concept to be presented. However, it is recommended to develop several concepts. If several separate concepts are to be proposed, the elements must be elaborated for each concept that one wants to develop further in phase 2. It is of course possible that not all the concepts will be retained upon concept validation.

1. Concept template

Name	Fill in here a name that shows which solution will be set up for which specific group in what context
Overarching challenge	State what the fundamental need is on a social, emotional, intellectual, economic, physical, material... level for the group that is intended to benefit, on which the solution focuses.
Specific question	“How can we...?” Indicate here the more specific statement which was brainstormed. If work was done on behavioural theory insights, indicate here what type of behaviour change was aimed for (stopping, adjusting, refraining).
Solution that offers an answer to the question	Describe in a few sentences the solution that offers an answer to the specific question. Make it clear for whom in what context the solution is intended. This solution is further elaborated as an “experience map” (see below).
How is impact on the overarching challenge achieved?	Describe in what way this solution will address the fundamental need. What are the levers addressed in order to achieve the change, as discovered during the first phase? Describe to what extent and in what way the solution enables this impact to be achieved for the group that is intended to benefit more easily, with less effort, more quickly, more cheaply, more accessibly, more certainly, more pleasantly, less frustratingly, more predictably, with fewer concerns, with fewer errors, more functionally, more reliably, more acceptably, more fittingly, less riskily, more efficiently, If behavioural theory insights are used, state here what is addressed (Enthuse, Encourage, Engage, etc.). In addition, make clear to what extent the solution draws on the self-reliance of the wider community and to what extent it empowers the intended users (allow them to create more opportunities for themselves to realise the life they have reason to value).

Measuring relevant impact in terms of well-being	How will you measure whether the solution works for the users or not in terms of their well-being and development (where well-being of an individual is defined as engaging in activities and enjoying conditions that this individual has reason to value. More generally it refers to being able to realize one's potential and flourish. Development is then understood as expanding people's opportunities to engage in such a life)? Is this relevant for the policy area? Outside it? In how much time can this impact potentially be achieved for the group that is intended to benefit?
What are the present alternatives for the solution? Who are the providers of this solution? What are their strengths / weaknesses?	Describe what is at present used by the group that is intended to benefit to meet their needs, even if this is not intended directly for this need or is inappropriate. Make it clear who is involved in these solutions and what are their strengths and weaknesses compared with the new solution and the stakeholders who want to back them.
Trends and wider framework (if relevant)	Which trends does the solution address? In what wider framework? How is this specifically addressed?
Future scaling up	In what way could even more people be reached with this service provision?

2. "Experience map"

The "experience map" visualises the service provision from the perspective of the user on which you have decided to focus.

Use the ESIF template in for this.

3. Business model canvas (BMC)

Fill in the business model canvas (BMC), in the ESIF version (see BMC guide for detailed instructions).

- See also Cecilia's choice, p. 158
- See also Flanders DC, Eenmaal, andermaal, totaal (Once, again, total) (free via <http://www.flandersdc.be/nl/eenmaal-andermaal>)
- For inspiration (in English): "Model behaviour: 20 business model innovations for sustainability" from Sustainability (free via <http://www.sustainability.com/library/model-behavior>)

F PHASE 1: Define: Test concepts and revise

The concept and the experience map must be submitted to a representative group of users from the group that is intended to benefit. Their feed-back must be obtained with a questionnaire that verifies the following matters (the questions themselves must be adapted to the concept and the user group). This can be done e.g. in a focus group or via interviews.

Matters: to be verified (do not give to respondents)	Questions: to be reformulated
Reaction	1. What is your reaction to the concept? <i>Very negative - Quite negative - Neutral - Quite positive - Very positive</i> 2. Why?
Interest	3. How interested are you in this? <i>Not at all interested - Not very interested - Neutral - Quite interested - Very much interested</i> 4. Why?
Distinctive features	5. How different is this solution from what you are used to? Please clarify what you are usually offered (max 2) Usual solution 1: ... <i>Not at all different - Marginal difference - A small difference - Quite different - Very different</i>

	<p>Usual solution 2 : ... <i>Not at all different - Marginal difference - A small difference - Quite different - Very different</i></p> <p>6. Why? What is the most distinctive element compared with the other solutions?</p> <p>Solution 1: Solution 2:</p>
Preference	<p>7. How far do you find the concept attractive? <i>Not at all - Not really - Slightly - Quite - Very attractive</i></p> <p>8. What three things do you appreciate the most? What three the least?</p>
Readiness	<p>9. What effort are you willing to make to use the service compared with “fill in present alternative”? <i>No effort at all - Not much - Average - Quite a lot - What is necessary</i></p> <p>(Alternative option: if the user must make a financial contribution give a guide price and ask whether they would be prepared to pay much less, a bit less, the same, a bit more, much more)</p> <p>10. Why?</p>
Intention	<p>11. How likely is it that you will use the solution given the effort that you have to make for this? <i>Will certainly not use it - Probably not - Perhaps - Probably will - Certainly will</i></p> <p>(Alternative option: if the user must make a financial contribution then state: “for the price that you want to pay for it”)</p> <p>12. For every 10 times that the need for such a solution arises, how many times would you choose the proposed concept rather than an alternative?</p> <p>13. Why?</p>

The concept must also be tested with those who in the future would have to offer the solution. The partners must be asked the following questions, after they were able to see the results of the user tests. It is assumed that service providers who are already a partner, are also backing the developed concepts. Below are then a few questions for them about the possible launch after a successful evaluation:

Matters: to be verified (do not give to respondents)	Questions: to be reformulated
Rivalry	<p>Is it difficult for the partners to lead users from a prevailing, rival system to the new solution? <i>Very difficult - Quite difficult - Average - Quite easy - Very easy</i></p> <p>Why?</p>
Potential for extending to another context	<p>Is there potential for extending the solution to another context? <i>Very certainly - Probably - Average - Not really - Not at all</i></p> <p>Why?</p>
Need for others outside partnership	<p>Are others outside the partnership needed to replicate or extend? <i>Very certainly - Probably - Average - Not really - Not at all</i></p> <p>Why?</p>

If it is possible to replicate or extend outside the partnership then ask other potential providers the following questions:

Matters: to be verified (do not give to respondents)	Questions: to be reformulated
Reaction	1. What is your reaction to the concept? <i>Very negative - Quite negative - Neutral - Quite positive - Very positive</i> 2. Why?
Interest	3. How interested are you in this? <i>Not at all interested - Not very interested - Neutral - Quite interested - Very much interested</i> 4. Why?
Distinctive features	5. How different is this solution compared with other relevant solutions? Please clarify what is usually offered (max 2) Usual solution 1: ... <i>Not at all different - Marginal difference - A small difference - Quite different - Very different</i> Usual solution 2 : ... <i>Not at all different - Marginal difference - A small difference - Quite different - Very different</i> 6. Why? What is the most distinctive element compared with the other solutions? Solution 1: Solution 2:
Preference	7. How far do you find the concept attractive? <i>Not at all - Not really - Slightly - Quite - Very attractive</i> 8. What three things do you appreciate the most? What three the least?
Readiness	9. What effort would you be willing to make to offer the service compared with "fill in present alternative"? <i>No effort at all - Not much - Average - Quite a lot - What is needed</i> (Alternative option: if the user must make a financial contribution then give a contribution and ask whether this may/must be much higher, a bit higher, the same, a bit lower, much lower to offer the service) 10. Why?
Intention	11. How probable is it that you will offer the solution given the effort that you must make for this? <i>Will certainly not offer it - Probably not - Perhaps - Probably will - Certainly will</i> (Alternative option: if the user must make a financial contribution state: "for the contribution that you will receive for this") 12. Why?

MANUAL FOR PROMOTORS SCHEDULE PHASE 2

In phase 2 the following activities must be carried out:

A Testing development

1. Develop a full service blueprint from the experience map
2. Create prototypes / carry out role plays to test all the crucial elements using continuous feed-back to refine and further develop
3. If possible, try to develop several alternative prototypes in parallel to ascertain which one works best;
4. Develop the business model further in a way that takes into account feedback from all the relevant stakeholders.
5. Finalise the evaluation plan (impact evaluation): at the end of phase 1 an indicative evaluation plan to be carried out at the end of phase 2 should be put forward) including how one recruits people from the group that is intended to benefit to involve in the service provision, where one is thinking of doing this and all that would be necessary for this (in terms of people to provide the service, facilities where the service is provided, expertise to evaluate the results, ...). This evaluation plan must be further developed during phase 2. The requirements are then further derived from the service blueprint.
6. Create an indicative launch plan for after the evaluation (possible embedding and dissemination after the project)

B Impact evaluation

1. Select final evaluation methodology and an implementer for this research
2. Carry out the evaluation of the service under actual conditions

C Codification

Describe the solution developed in detail in a script with a view to dissemination (possibly among creative commons licence)

The deliverables at the end of phase 2 are therefore:

- Script for setting up and implementing the solution (using service blueprints and scenarios)
- Finalised business model
- Results of the evaluation relating to the service provision, including the business model
- In addition a report must be provided on the course of phase 2:
 - Steps carried out including reporting how much data has been collected
 - Process evaluation: What has been learned in the project about the project process? Say that you were to do it again, what would you do differently? Have you now achieved what you had in mind?

Tools for fulfilling the deliverables to be delivered are:

- Developing tests: Cecilia's keuze (Cecilia's choice): Prototyping p. 143 and Role play p. 140; HCD toolkit, p. 106-111 and p. 140-143; Service Design Toolkit, p. 21-22; Design Council p. 20
- Service blueprint: see the Service Design Toolkit (p. 23-4) as well as an explanation in the Service Blueprinting Handbook of the University of Leipzig (via http://www.vgu.edu.vn/fileadmin/pictures/studies/MBA/Handbook_Service_Blueprinting.pdf) or Service Blueprinting: A Practical Technique for Service Innovation by Bitner, Ostrom and Morgan via (<http://files.g51studio.com/parsons/ServiceBlueprinting.pdf>); Design Council p. 19
- Scenarios: Design Council p. 22
- Summary of impact evaluation methods
- The business model manual of ESIF [region or country] that already applied in phase 1.

TOOL 3: LEGO SERIOUS PLAY®

The LEGO SERIOUS PLAY® method (LSP) is a facilitated thinking, communication and problem-solving technique for organizations, teams and individuals. It draws on extensive research from the fields of business, organizational development, psychology and learning, and is based on the concept of “hand knowledge.”

The LSP method is based on a set of fundamental beliefs about leadership and organizations:

- Leaders don't have all the answers. Their success is dependent on hearing all voices in the room;
- People naturally want to contribute, be part of something bigger and take ownership;
- Allowing each member to contribute and speak out results in a more sustainable model;
- All too often, teams work sub-optimally, leaving team member knowledge untapped;
- We live in a world, which can best be described as complex and adaptive.

The methodology is based on the Core Process and the seven Application Techniques:

- **Core process:**
 1. **Posing the Question:** The challenge, which should have no obvious or correct solution, is presented to the participants. The framing of the challenge has to be clear and concise for the participant to connect.;
 2. **Construct:** The participants make sense of what they know and what they can imagine. They do this by constructing a model using the LEGO materials, and developing a story covering the meaning in the model. Through this process, they construct new knowledge in their minds;
 3. **Sharing:** The stories are shared among the participants;
 4. **Reflect:** As a way of internalizing and grounding the story, participants are encouraged to reflect on what was heard or seen in the model;
- **This core process is present in different “application techniques”:**
 1. Building individual models (see two photos below depicting resp. an employment service and the European Social Fund): this enables participants to make implicit knowledge explicit and share it. For example, it can be used to convey how one would characterize the essence of a service, an organization, a problem, etc.;





2. Building a shared model where individual models are “merged” together to symbolise the essence of what people would see as “shared” value;
3. Making connections and building a system of agents, where the individual models are linked physically to each other (see photo below);



4. Playing emergence and decisions: here “what if” questions are asked to see what reactions would follow within the system. Hence it allows to see a first reaction to an idea of what to do to reach some goal;
5. Extracting simple guiding principles: these are the underlying principles that can guide our future actions.

These application techniques can be tailored to work on team development, strategy development, service design etc.

It is important to understand that this method is based on thinking metaphorically. Of course, Lego bricks can be used to visualize explicitly what a service would look like but this is not an application of the method.

For more information:

- <http://www.lego.com/en-us/seriousplay/the-method>
- Kristiansen, P., Rasmussen, R., 2014, Building a Better Business Using the Lego Serious Play Method

TOOL 4: creating and testing an experience map as a deliverable for phase 1 of an innovation project

STEP 1: create Experience map / Storyboard

- An experience map visualises the experience of a user from start to finish
 - How will the person find out that you have a solution? How will they make their first contact? And then? How does it end?
 - not all contacts have to be in an organisation; it is quite possible that different organisations will be involved in the service provision as a whole and this must therefore be made clear
 - Start with the ideal persona
 - afterwards you can view for different persona whether the experience map should be different
 - then consolidate into an experience map that is satisfactory for all persona
 - Go for key moments in the service provision
 - try to limit yourself to 6 moments
 - Use post-its
 - Draw and write text that describes what happens
 - You can also use photo, video, audio recordings that make the experience more tangible
 - Contrasting images, audio, etc. can also be used to make it clear what the experience will NOT be

Person	Title
Put a post-it here with a drawing	Put a post-it here with a drawing
Describe the person that uses the service:	Describe what happens:
Name:
Age:
Profession:
Characterstics:
.....
.....

STEP 2: Prepare Experience map / Storyboard for first test

- For each moment in the experience map specify at least one question that you want answered to find out if your idea is something that appeals to the user. Different options exist:
 - Use a model: paper, cardboard, fabric, ...
 - For websites or digital interfaces you can e.g. easily create a “fake screen”
 - Do a role play:
 - share out the roles and discover what questions they would ask
 - use attributes to make it more real
 - Use a diagram, chart, process flow ... (more developed than the experience map itself)
 - Create a “fake” advert to promote the best of your solution (you can exaggerate) and vary it according to the persona you are trying to reach
 - ...
- Decide what it is most important to quickly verify

<p>Title</p> <div style="border: 1px solid #ccc; background-color: #f9f9f9; padding: 10px; text-align: center; margin: 5px 0;"> Put a post-it here with a drawing </div> <p>What is the most important question we must answer?</p> <p>.....</p> <p>.....</p> <p>How will we test this?</p> <p>.....</p> <p>.....</p> <p>Priority nr:</p>	<p>Title</p> <div style="border: 1px solid #ccc; background-color: #f9f9f9; padding: 10px; text-align: center; margin: 5px 0;"> Put a post-it here with a drawing </div> <p>What is the most important question we must answer?</p> <p>.....</p> <p>.....</p> <p>How will we test this?</p> <p>.....</p> <p>.....</p> <p>Priority nr:</p>
---	---

STEP 3: Test Experience map / Storyboard

- Select a location:
 - In what context will you test: would you learn more in an informal setting such as a workshop, or will you go straight away to the place where the solution will one day be carried out
- Plan the activity:
 - If you want to capture a first impression, arrange an informal conversation
 - If you want to observe, set the scene for the situation or activity as realistically as possible
 - Set something up which users can use for a few days to obtain longer term feedback
- Ensure that participants understand that this is a prototype and do not try to sell it
- Record feedback
 - Look out for subtle reactions, they are usually the most important
 - Pros:
 - What did people value most?
 - What did they find exciting?
 - What won them over to accept the idea?
 - Cons
 - What went wrong?
 - What were the suggestions for improvement?
 - What should be further explored?
 - Unexpected:
 - Did anything unexpected happen?
- Quick debriefings with the team:
 - Plan time after a test to share insights with one another while they are still fresh
 - Write down ideas for improvement and a following iteration immediately
 - Decide where the challenges for development seem to lie
- If there is still time, go for another iteration etc.
- For the presentation of the concept at the end of phase 1 at least one iteration is required
- Clarify the development challenge:
 - Describe what are perhaps the biggest challenges within each of the crucial steps for development and obtaining further feedback
 - Do many elements have to be developed from zero? Or are these rather adjustments to things that already exist?
 - Is the knowledge or technology required previously known and widely available? Or must these also be developed?
 - Which partners are needed in the development phase for which part?

TOOL 5: business model canvas

What is Business Modelling for ESIF [region or country]

(This manual is largely based on the manual of the Flemish Innovation Centres and the book Business model generation by Osterwalder and Pigneur.)

A Business Model describes the way in which an organisation creates, provides and captures value. The creation of a new Business Model is focussed on the user and the customer value proposition. In other words what problem are you solving for this user or how do you help him/her to carry out the job they want to do better?

N.B.: for ESIF [region or country] the “user” is always someone from the group that is intended to benefit. The business model therefore focuses on them. In the case of e.g. a social enterprise it is however possible that commercial activities are developed for “ordinary customers” aimed at offering opportunities to the group that is intended to benefit, e.g. as employee. In that case there are two “parallel” business models: one of central importance for ESIF [region or country] focussing on the group that is intended to benefit (e.g. disadvantaged young people) and one that focuses on a commercial customer. The latter is a function of the first but must of course also run well because the first depends on it. In such a case then two models must be developed. A good tool for how this works is “Using the Business Model Canvas for Social Enterprise Design” of Ingrid Burkett Knode (free via http://knode.com.au/wp-content/uploads/Knode_BusModCanv4SocEntDesign_E1LR_30p.pdf)

A Business Model may be composed of 9 structural elements. These are:

1. customers;
2. customer relations;
3. channels;
4. customer value;
5. key processes;
6. key resources;
7. partners;
8. income flow;
9. cost structure.

Creating a Business Model

Ideally put together a varied team for creating a model (age, experience, function, customer knowledge, expertise...).

First do fieldwork (immersion and empathy) and analyse the data and generate ideas based on this. Bear in mind in the fieldwork that you want to create a business model. So try to gain insights of all the elements of the model.

Then organise a business model workshop. Time spent and material: reserve 3 to 4 hours for a first rough version. This depends on the complexity of the business as well as on the extent of discussion between the participants. Stick together a few sheets of flip chart paper and transfer the template structure to them (see annex). Other requisites are sufficient Post It® notes and a few felt tip pens.

From the previous activities in the project some ideas have perhaps already bubbled up and been prioritised.

Business model innovation can start in various ways. Check which elements relate to which ideas:

- Resources

- Customer value proposition
- Users
- Financial (income/costs)
- Other elements

Then look at what the implications are for the other elements. N.B.: for ESIF [region or country] there must always be an impact for the final target group. A few changes on the side of the resources, the finance,... are not sufficient.

First the ideas can be written down in a few words on post-it notes, then the post-it notes can be replaced with a simple drawing.

To work even more creatively it is also useful to ask oneself: “what if...?” regarding the elements.

It is quite possible that this will lead to different alternatives. Each time tell one another the story of the alternative.

Consider what the pros and the cons are for each alternative and what if anything can be done about them. Tell one another why it will and will not work. Choose one or more alternatives that you want to test further.

Plan a follow-up session to refine the model further and to identify opportunities for innovation.

Different levels of a business model throughout the project

1 Initial: rough idea	2 Canvas: what is necessary?	3 Business case: is it feasible?
Customer value proposition	All elements	All elements
Income sources	General logic is clear	Important data regarding all the elements
	Relations between elements are clear	Costs and income
	Potential is clear (how many users, growth, what impact...)	Sensitivity analysis of the figures
	Basic data to test model	

At the end of phase 1 a Canvas (level 2) must be presented. So it is not yet necessary to calculate costs and income in detail. It is however necessary to give an idea of whether the costs can be covered by income and how. There must then be data that support the logic and statements from the canvas (e.g. interviews with partners, users, ...) and make the story credible.

An exciting story to communicate a business model is a must. This can be done from the perspective of the service provider (e.g. an employee and how in the future they handle and help to give shape to the elements of the model). This can also be done from the perspective of the user (what challenge they come up against in a real context and how the business model interacts with this). Also ensure that the context is taken into account: what do other stakeholders in this story do (e.g. other service providers that are not involved in the partnership).

Do not only use words but also pictures, video/audio, role plays, drawings,...

At the end of phase 2 there must however be a business case (level 3), based on what has been learned from testing the solution.

Elements

Element 1: What is the user offered?

(What is your customer value proposition)

- Summarise solutions that the organisation wants to provide.
- What problem is solved with the (range of) services? What will a user be able to do? Why? What opportunities will the user have to meet their needs on a social, emotional, intellectual, economic, physical, material level? To what extent?
- Is anything customised offered? Is anything offered that is more effective, etc.? In what way does this solution meet the needs/solve the problem of the target group more easily, with less effort, more quickly, more cheaply, more accessibly, more certainly, more pleasantly, less frustratingly, more predictably, with fewer concerns, with fewer errors, more functionally, more reliably, more acceptably, more appropriately, less riskily, more efficiently, ...? If behavioural theory insights are used, state here what levers are being addressed.
- Why would users use your service? Give 5 reasons and share 10 points.

No	Reason	Score

Transfer the most important elements to the Business Model canvas.

Element 2: How to segment the question?

(Who do you want as a user and who not?)

- What user segmentation is proposed? Does this involve 1 segment or several?
- Which segments are focussed on and which not? Are the segments related? Do they depend on one another (e.g. are both the final target group and an intermediary addressed)? How many people do you think you will reach? What will the evolution be in the future (more/less)?
- Are they segments that conceptualise the group that is intended to benefit in a new/different way? Based on context or use, what benefits, characteristics of the people ...?
- Does this involve a vulnerable group regarding this challenge (because of their socio-economic situation, geographic location, language or culture, mental or physical handicap)?

Transfer the most important elements to the Business Model canvas.

Element 3: What type of relationship with the user is aimed for?

The type of relationship may vary from personal (key account) to automatic (web service). A few examples: personal assistance (you can communicate with a person, via the telephone, on site, via email...; this person may even be a permanent person), self-service (generic or automated service provision that identifies individual users and so simulates a personal relationship), communities (where users can help one another directly), co-creation (where users create things for one another)...

- Indicate what type of relationship is aimed for with the user (segment)? What is the logic?
- At what times and how is relationship carried out with the user? When do you have contact with the user?

Transfer the most important elements to the Business Model canvas.

Element 4: Via which channels is the user reached?

A few commonly used channels are: own representatives, telephone, intermediaries, website, own site, presence on other sites...

- Via what channels do you reach your users?
- What task has each channel (attention/create visibility, prospecting/familiarisation/sale, delivery of service provision, after-care...)?
- Which channels work best?

Transfer the most important elements to the Business Model canvas.

Element 5: What are the required key processes?

(Actions / processes that the enterprise must undertake to serve the user.)

A few possible key processes are: design, development, marketing/promotion, logistics, knowledge management, problem solution for customers, familiarisation/prospecting/sale, networking, matchmaking, ...

What are the most important actions / processes that the organisation will have to undertake? Which are rather unique with respect to the already existing service provision (in own organisation or other service providers)?

No	Task	How unique/different?	Importance (share 10 points)
1			
2			
3			
4			
5			

Transfer the most important elements to the Business Model canvas.

Element 6: What are the most important resources?

(Set of resources that the organisation needs to serve the customer.)

A few key resources may be: reputation, patents, employees with unique competences, facilities such as a site and available tools, financial resources, networks, customer lists ...

What are the most important resources necessary for implementing the proposition? Which are unique with respect to the already existing service provision (in own organisation or other service providers)?

No	Resource	How unique/different?	Importance (share 10 points)
1			
2			
3			
4			
5			

Transfer the most important elements to the Business Model canvas.

Element 7: Who are the partners?

- Which are the most important intended partners and suppliers of the organisation? N.B.: “partner” here does not mean that they must be formal partners in the project (although they can be). This involves more generally future partners in the business model once it has been rolled out after positive evaluation (and hence when the ESIF project has been completed). If they already belong to the formal partnership in the ESIF project, state this.
- Why are the partners mentioned called upon? What services (processes / resources) do they supply? What is the mission of these partners?
- What type of relationship is aimed for with partners (strategic alliance – ... – buyer/seller transactional relationship)? Reason? (economy of scale – risk reduction – specific processes / resources – access to users)? Is there synergy for the partners and the central service provider with their current activities (see also key resources/activities in the BMC)?
- What happens in the already existing service provision (in the organisation or elsewhere)?

No	Partner / supplier	Services (process/resources)? Relationship?	What in existing service provision?
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Transfer the most important elements to the Business Model canvas.

Element 8: What are the income flows?

- How does the enterprise receive income from the services supplied (single transaction payment, usage fee, membership, licences, loan/lease, advertising/sponsors, subsidies, brokerage fee...)?
- What are users prepared to pay for? What are they not prepared for? Are there differences in segments (pay more or less according to support, want to receive more specific service, volume, ...)?

- Is there room for negotiation? Are busy/quiet periods taken into account?
- How does one create income in the present service provision (in the organisation or elsewhere)?

No	Income	Relative contribution (%) to cover costs	What in existing service provision?
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Transfer the most important elements to the Business Model canvas.

Element 9: What are the most important cost elements?

- What are the most important costs of the model? Which are fixed, relatively independent of user volume (personnel – rent – facilities – services – ...) / which variable (services – energy – ...)?
- What is their “cause” (personnel – rent – facilities – services – energy – ...)?
- Are there scale economies (falling costs as the volume increases)? Scope economies (falling costs because of use of resources by different services)?
- Does one go for “basic” (generic) or for “premium” (personalised)?

No	Costs / Cause	Relative share of total cost (%)	How in existing service provision?
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

How can the Business Model developed be refined?

Consider the following questions:

- On what points does the Business Model differ from that of existing service provision (in your organisation or elsewhere)?
- Do you have key processes and/or key resources that others do not have?
- How can you open up other segments of users?
- Other relationships/channels with users?
- How can you considerably reduce your cost structure? What implications does that have?
- How stable is your income?
- Have you carefully considered what can best be outsourced to partners?
- Is the user portfolio stable?
- Are the target groups reached efficiently?
- Do the channels cooperate or do they work against one another?
- How strong is your brand or image compared with others?
- Do others threaten with lower prices/costs or a more attractive offer?
- Can services be better harmonised?
- What other needs or problems for the user can be solved (or risk reduced for them)?
- What assets are insufficiently utilised?
- Can follow-up of the user be improved?
- Is it known which users create more income and less costs?
- Are there segments that you should no longer serve?
- What aspects of the service can you drop or strengthen?

Partners	Key processes	Customer value	Customer relations	Customers
	Key resources		Channels	
Cost structure		Income flow		
BUSINESS MODEL				

TOOL 6: guidance on how to organize challenge competitions / prizes

This tool can be used by ESIF beneficiaries in phase 1 of their project, to generate solutions to be further developed in phase 2. The general regulation for the ESIF states in article 66 that “The ESIF Funds shall be used to provide support in the form of grants, prizes, repayable assistance and financial instruments, or a combination thereof.” No maximum amount is defined for a prize, but it is clear that it must be justified. In principle it is the ESIF authority that is in charge of organizing a prize but this can be done in collaboration with beneficiaries.

According to McKinsey (http://www.mckinsey.com/insights/innovation/using_prizes_to_spur_innovation), there are several types of prizes:

- **Exposition prize:** set a challenge to get a range of best practices, ideas or opportunities to be highlighted. Also promote ideas that did not win;
- **Network prize:** to celebrate a community for its innovation efforts;
- **Participation prize:** offer training or mentorships for winners;
- **Market stimulation prize:** drive development cost down through competition;
- **Point solution prize:** solve a challenging, well defined problem / issue.

For our purposes, the first and the last types are the most interesting.

A Point solution prizes

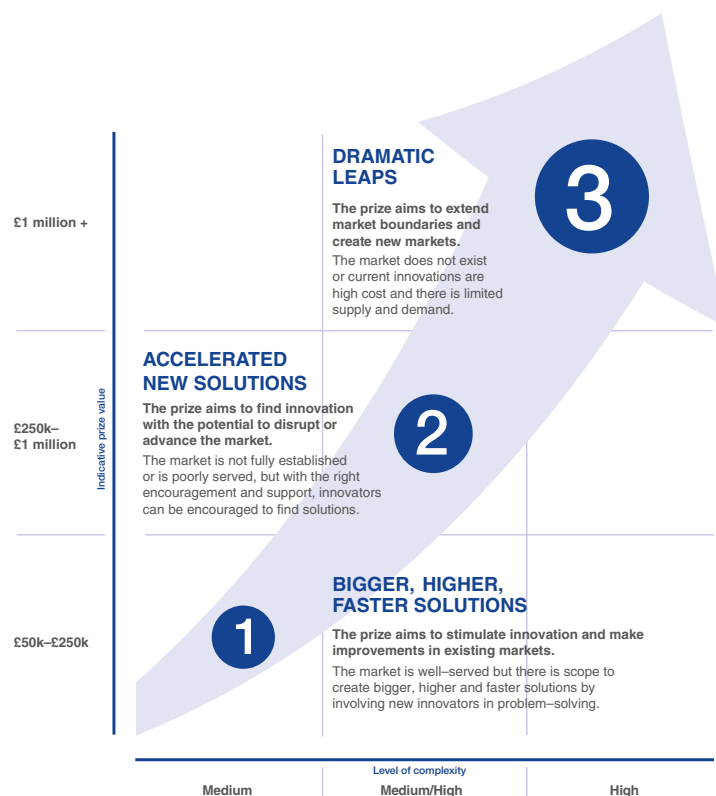
NESTA has written a guide that refers to the last variation: a point solution prize. The text below builds on NESTA's guide “Challenge prizes: a practice guide” (2014) (see <http://www.nesta.org.uk/publications/challenge-prizes-practice-guide>)

A prize/competition is simple idea. You identify a problem, publicise the challenge and offer a reward to the person (or organization) who can find the best solution.

NESTA distinguishes within this between a pure prize challenge and a grant/incubation hybrid, where the challenge is set up within the scope of an existing grant that aims to tackle a challenge in order to help the grantee drive up the quality of solutions. The first corresponds to an ESIF programme that sets up a prize systems itself, the second corresponds to a project using a prize system as part of its project plan.

In addition, the ambition of a competition varies with the monetary value of the prize as depicted below.

Obviously, some categories of prize value will be out of reach of a modest ESIF project.









According to NESTA, five questions should be answered before considering using the mechanism of a competition (for details, refer to the NESTA guide).

1. Can you define a clear goal (in response to your problem, need or opportunity) and see a way to measure and judge whether the goal has been met? An example of a clear goal and measure of success is given by NESTA: “Find a sustainable and cost-effective solution (at a cost of no more than €5,000) for a standalone off-grid renewable energy supply that covers the daily needs of an average family in rural Bosnia and Herzegovina (producing an average of 2,25 kWh and 120 litres of water a day)”.
2. Do you think that you could generate the best solutions by opening up the problem to a wider pool of innovators?
3. Do you think you could motivate innovators to participate?
4. Do you think you could accelerate progress through a prize?
5. Do you think that the solutions will be adopted or taken to market?

If the answers to most of these questions are yes, a competition is an option.

NESTA also provides guidance on the steps to take with an overview below (again for details, refer to the publication).

Phase of work	Example activities
 <p>Scoping</p>	<ul style="list-style-type: none"> • Clarify strategic aims and constraints. • Initial research into the problem. • Initial brainstorm around possible prize participants. • Assemble expert group to test and develop findings and agree on best opportunity to pursue. • Investigate strategic partnerships.
 <p>Design and development</p>	<ul style="list-style-type: none"> • Develop a set of options for a challenge prize design and make key design decisions. • Translate idea for prize design into a prize plan, with defined timelines, milestones, budget and human resource requirements. • Develop specific plans for key activities such as: publicising the challenge and engaging innovators; supporting innovators during the challenge; wider communications around the challenge; methods for judging and assessing entries; and creating the conditions for the adoption of solutions. • Recruit a challenge prize team and relevant expertise to deliver the programme. • Recruit specialists to provide development support. • Recruit communications professional with sector knowledge to support identification of likely participants. • Recruit a judging panel from relevant experts and stakeholders. • Secure strategic and delivery partnerships.
 <p>Pre-launch</p>	<ul style="list-style-type: none"> • Create clear processes for relevant innovators to become aware of and respond to the challenge. • Produce clear materials that communicate: the prize statement or questions; the financial and any other non-financial rewards; the aims, rationale for the prize and any additional contextual information; eligibility and selection criteria; the deadline for submission of entries and other relevant milestones (such as provision of advice and support, or interim prizes), the measures of performance and the method for assessment and judging; any other information about what the challenge will mean or entail for participants. • Publicise the challenge through channels that will appeal to and reach relevant innovators and will engage people and the media (where relevant) more generally. • Provide FAQs and put in place an advice line for interested participants to ask questions and discuss issues. • Recruit specialists to provide development support. • Recruit communications professional with sector knowledge to support identification of likely participants. • Recruit a judging panel from relevant experts and stakeholders. • Secure strategic and delivery partnerships.

LAUNCH THE CHALLENGE PRIZE	
<p>Support</p> 	<ul style="list-style-type: none"> • Maintain an advice line for interested participants to ask questions and discuss issues and provide motivation and support. • Roll out a programme of networking events and developmental support to help drive up the quality of submissions. • Maintain a buzz around the prize, creating opportunities to publicise the challenge and shine a light on work in train.
DEADLINE	
<p>Assessment and judging</p> 	<ul style="list-style-type: none"> • Close the competition and collate entries. • Prepare a briefing pack for the assessment team that includes the assessment criteria and guidance on how to interpret and apply the criteria. Offer specific advice for how to judge whether something is 'innovative' or has 'potential'. • Briefing meeting with the assessment team to ensure everyone understands what success looks like in accordance with strategic aims. • Receive and moderate assessments and judge winner/s. • Inform winner/s and all other programme participants. • Offer feedback on assessment process and decisions made, which could include offers to support the development of a range of submissions with potential. • Make arrangements for conferring the award/s including publicity.
AWARD	
<p>Post-award</p> 	<ul style="list-style-type: none"> • Signpost participants to additional funding and support and communicate how we will take forward the work of addressing the challenge. • Assist the future development of winning solutions by making introductions to would-be investors, commissioners and others. • Establish a schedule for checking progress with winners and interesting other participants. • Seek feedback from competitors, judges and partners and evaluate the effectiveness of the programme.

B Exposition prize

An example of an exposition prize is provided by the World Bank Innovation Market for Development. The approach and supporting tools are provided at <http://wbi.worldbank.org/developmentmarketplace/>. More information is also presented by Gary Hamel and Robert Wood in “The World Bank’s innovation market” in the Harvard Business Review of November 2002.

Since its inception in 1998, the Development Market (DM) programme – housed in the World Bank and administered by the World Bank Institute – has awarded more than \$60 million in grants to more than 1,200 innovative projects. All of these projects have been identified through country, regional and global DM competitions. Using DM funding as a launch pad, many projects have gone on to secure additional funding support from other donors, foundations, governments, impact and CSR investors

Each DM competition focuses on a specific theme or sector and draws applications from a range of social innovators and entrepreneurs. Applications go through rigorous scrutiny by panels of development experts from inside and outside the World Bank who short-list a group of finalists from a pool of applications. The finalists are then brought together at a face-to-face Marketplace event in country locations to present their ideas to the public and participate in networking and knowledge sharing events. At the same time, a jury comprised of corporate executives, (philanthropic) investors and funders, development professionals and other experts meets with the finalist teams and collectively decides which projects merit DM funding.

In the DM, people with ideas are put together in a big room with stalls (+/-100 in the World Bank case) where the ideas are marketed (with posters etc.). The money to be awarded is in 10 000s of euros rather than 100 000’s or millions for unproven but promising ideas. Some of these could prove to be breakthrough ideas. Hence, there is not just one winner who takes all, but a range of winners. For example, in the initial World Bank innovation market, a panel of judges, divided 3Million USD in one day among 11 ideas out of 120.

Motivation comes not just from the prospect of winning some funding but also from competition in a marketplace with others. Hence, there is also a “peoples choice” award where all those who attend the marketplace can distribute stickers to stalls (no funding is attached to this, only recognition).

5. Capacities required at the level of the project

Video 3: Tom Kelley and unlocking creativity

GET INSPIRED BY THE EXPERTS...

Tom Kelley practices innovation every day. His ability to foster a culture of creativity in the companies he works with has made him one of the most beloved figures in innovation.

He is general manager of IDEO, the widely-admired design and development firm. At the heart of IDEO's success is the Creative Confidence philosophy: everyone can contribute creatively to a project if innovation is part of an organisation's way of life.

Tom was named the first-ever Executive Fellow by the dean of the Haas Business School, University of California Berkeley, and received the 2009 Kellogg Award for Distinguished Leadership.

Listen to him about "unlocking creativity":

<https://www.youtube.com/watch?v=usgBsLnXo3c> (start at 21 min 50 sec, end at 1 hour 3 min)

Things that really matter:

- 1) Start with empathy:
 - a. go beyond just asking questions, working only on data from behind your desk as what people say and what they do is not the same
 - b. Look at what individuals do that is weird, special, anomalous (learn from the one, not from millions)
 - c. Defer judgment and ask "what is the opportunity here"? (see with fresh eyes)
 - d. You can redesign an experience rather than focus on the individual products or services that create the experience
- 2) Set up development as experimentation:
 - a. Don't try to get something perfect before showing it to users
 - b. Create a culture of building (progressively) on ideas rather than critiquing
- 3) Wrap your message into a story:
 - a. Data does not speak for itself
 - b. Go for simplicity (boil it into the essence that you want people to tell to others), put in something unexpected and be concrete (see it in your mind, live it, using emotion, authenticity, value)
 - c. Guide the story to a point where users can answer a question in a way that fits with their values but points to choosing different behaviour

This section elaborates principles regarding how to organize innovation projects that follow a process such as described in the previous section. There are no tools attached directly to this section as the tools from other sections already contain elements to help assess and build capacity.

A Innovation team composition

PRINCIPLE 14: GO FOR DIVERSITY IN THE TEAM

Teams should be composed of multi-disciplinary members, ideally with each individual having a background in more than one discipline (sociologists, economists, psychologists, anthropologists), spanning all relevant parts/functions of an organization / wider partnership and even outsiders beyond this where half of a team can be experts in the subject and half “virgins”. Such a mix helps bring a fresh perspective, to rethink what people are doing every day and to make non-obvious connections. However, deep, intensive work with the team is not all that matters. Also more casual connections with others outside of the team may lead to chance encounters with unfamiliar ideas. (art. 2+20+21+24+47+a1+b1+C4+b5)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

PRINCIPLE 15: ENSURE A STABLE CORE TEAM

Project teams should have a core of dedicated members, engaged in the project from start to finish, with a time allocation of at least 50% to ensure proper focus. At the same time, for highly specialized tasks, expertise should be pulled in on a just-in-time basis. (art. 2+8+12+20+24+27)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

PRINCIPLE 16: ENABLE EASY INTERACTION BETWEEN TEAM MEMBERS

Teams should not be too small (e.g. 3 people) as there is too little diversity, but also not too large (e.g. 10 persons) as then it becomes inefficient to exchange knowledge. For the latter, they should also be co-located most of their time. (art 4 +8+12+31)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

Principles 14 to 16 are embodied in the advice given in TOOL 8 regarding the composition of the team for phase 1 and in TOOL 9 regarding the appraisal of this composition. Similarly, the diversity of the phase 2 team is appraised (TOOL 10).

PRINCIPLE 17: KEEP AN EYE ON THE COMPLEXITY OF THE SOLUTION

The number of partners needed for co-creating and complementing the innovative service offering as well as the length of the chain of intermediaries that has to deliver the service to the final users represent a considerable risk of delay in rolling out the service that should be carefully managed to ensure expectations as to when a service can start to deliver are set right. (art. 10)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle is integrated in the appraisal of the concepts at the end of phase 1 (TOOL 9) under the criterion of “development”, based on information present in the experience map (TOOL 4).

PRINCIPLE 18: ENSURE BASIC INNOVATION COMPETENCE IS AVAILABLE

The ability 1) to gain empathic insights into user needs and realities (via going out, observing, asking, listening, immersing yourself to be confronted and see what others missed), 2) to understand the potential of emerging approaches (e.g. via networks, seeing associations, with a wide peripheral vision), 3) to question and challenge (based on systems thinking), 4) to engage actively with users to learn rapidly from (multiple) tests of (parts of) concepts and 5) to work with pilot (lead) users and providers to roll out a solution carefully and assess it,... are basic competences for innovation. (art.9+44+a2+a3+C1+C4)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle is integrated in the proposal where for phase 1 it is recommended to elaborate on such experience in the project team (TOOL 8) and appraised under the criterion of capacity (TOOL 9). Similarly, for phase 2, these skills are also appraised (TOOL 10).

PRINCIPLE 19: KEEP TEAM MEMBERS INVOLVED IN DISCOVERY INVOLVED IN DEFINING

The same creative minds that come up with a multitude of ideas to solve issues, based on in depth knowledge of user's realities and needs (e.g. by immersion into their reality), are well placed to group and sort them, with the best, competing ideas automatically rising to the top. (art. 22 +a2)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle is embedded in the recommendations for the phase 1 team composition and appraisal of this team (resp. TOOL 7 and TOOL 9).

B Leadership involvement

PRINCIPLE 20: ENSURE LEADERSHIP IS COMMITTED

Leaders should be in charge of innovation efforts, rather than those with the strongest technical expertise. Committed senior leadership is the greatest predictor of innovation success. (art. 2+8+34)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

PRINCIPLE 21: GET SENIOR LEADERS TO LEVERAGE THEIR NETWORKS

Senior leaders must play a role in getting the innovation team and outside stakeholders to engage in mutual learning. (art. 2+ C8)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

Both principle 20 and 21 are probed with a question regarding who will be involved in phase 1 (TOOL 8) as well as an appraisal question under the criterion of “schedule” both in phase 1 (TOOL 9) and phase 2 (TOOL 10).

C Networks

PRINCIPLE 22: GO BEYOND THE AD HOC BRAINSTORM BY DRAWING INTENSIVELY ON NETWORKS

To come up with good ideas, it is not enough to just bring people (from academia, business, public sector incl. local government, civic society, citizen networks etc.) together for a brainstorm once in a while. Ongoing dialogue and knowledge exchange (e.g. via online platforms, joint research, face to face conferences and meetings, etc.) and the trusting relationship that goes with this, is required to support such a brainstorm. In addition, the best ideas may come up outside of the brainstorm, when people are not trying so hard. Hence establishing a functioning real-time network of individuals within a broad theme, where the focus is on diversity NOT quantity of people, is key. (art 23+48+b2)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

PRINCIPLE 23: USE NETWORKS FOR INFLUENCING IMPORTANT STAKEHOLDERS

Information concerning users/citizens, approaches, ideas, successes, failures, etc. gained from innovation processes within broad thematic areas of interest should be shared -even beyond organization boundaries. This is facilitated by dedicated knowledge brokers who have a reputation as a trusted “third party” in between those who have information or an idea and those who need it. Knowledge brokering is specialized into a scouting role (to find ideas, incl. via the web, conferences, etc.) and a connector role (to get those ideas to those who can act on them e.g. funders/sponsors, experts, partners,...cutting across organizational silos if necessary and start an innovation process). Ultimately, the seeds of a new idea need to be planted in many minds. It may be best to set up a separate knowledge broker unit to enable crossing boundaries more easily. (art. 8+17+28+42+51+a1+c1+b5)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

The principles relating to networks are embedded in the phase 1 proposal questions regarding the networks that will be drawn on in the project as well as how this will happen (TOOL 8). This is appraised under the criterion of capacity for phase 1 (TOOL 9).

6. Implications for processes of ESIF funding organizations

Video 4: Frans Johansson on diversity and perseverance

GET INSPIRED BY THE EXPERTS...

Frans Johansson is an author, entrepreneur, and consultant. His debut book, *The Medici Effect* shattered assumptions about how great ideas happen, and was named one of the “Best Books on Innovation” by *Business Week*. His follow up book, *The Click Moment*, obliterates the idea that in business you can strategise, plan, and analyse your way to success.

Get his ideas at: <https://www.youtube.com/watch?v=nRAkko6WZbs>

The essence of his message is:

Diversity is key: bring together very different perspectives to break new ground as all new ideas are combinations of existing ideas but they are more interesting the farther apart they are (a bigger, less obvious leap must be made to connect them). At intersections of different perspectives we also tend to come up with more ideas, which matters as many of the ideas will turn out to be failures.

And as we are very bad at predicting what will work (a predictable path to success does not exist) our way of developing an innovation should take this into account. We need to be able to try lots of things and persevere until something works.

This section elaborates principles with regards to how ESIF managers can organise core programme management processes such as project appraisal, monitoring and evaluation as well as coaching and decision-making during project implementation. The approach of ESIF programme management should of course be in line with the way the innovation project was conceptualized for ESIF beneficiaries in the previous chapters.

A Appraising project proposals

PRINCIPLE 24: USE A STAGE-GATE SYSTEM TO MANAGE RISK

It is better to invest a little to learn a lot about critical unknowns/assumptions via focused experimentation, rather than invest a lot early on and wait too long to change direction if the data is unfavorable. Key uncertainties to address throughout an innovation process are (in right order): is there demand? Is there a viable concept? Is it better than what exists? Is there anyone who can actually make it happen? Is it worth doing, incl. will it be financeable once it is mainstream? (art 6+32+C2+b6)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle is of course the reason for having a process in two phases. The questions present in this principle are used for appraisal of the concepts at the end of phase 1 (TOOL 10), fed by the concept, business model and experience map and the test of the concept (see TOOL 2, TOOL 4 and TOOL 5).

PRINCIPLE 25: ENSURE APPROPRIATE BALANCES BETWEEN KILLING INNOVATION AT FIRST SIGHT AND FUNDING EVERYTHING

For good idea conversion rates into productive innovations, it is necessary to find a middle ground between a) the tendency to kill off most novel ideas with too strict criteria, tight budgets and conventional thinking with b) the opposite tendency to let everything pass through weak screens where there is an overflowing with new ideas of varying quality (often underfunded and understaffed), “pet projects” and no sense of how these fit into an overarching strategy, keeping bad ideas resourced for too long and making the same mistakes time and again. For this a balance is needed between using the formal / discipline (formal decision-making, reporting, metric,...) side and the informal/ creativity (informal networks, shared values, emotional connections...) side of innovation. This also requires shutting down projects gracefully where business logic needs to be balanced by emotional logic (taking into account the disappointment of all stakeholders). (art 23+45+46)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

While there is no specific “tool” for this, this principle of “balance” is to be kept constantly in the mind of ESIF staff as well as “experts” engaged in appraisal.

TOOL 7: project proposal form

1. What is the social challenge you want to address with your project? For which specific group (from the wider group of people in work and /or job-seekers) does this challenge apply? How big is this group that is intended to benefit? What are the relevant characteristics of this group? Does this challenge relate to a vulnerable group (because of their socio-economic situation, geographic location, language or culture, mental, physical handicap, ...)? How is this group developing in the current situation with regard to the challenge (e.g. is the problem ever increasing, is the size of the group growing, ...)?
2. How far has attention already been paid to this challenge in the past? To what extent have the groups that should benefit had the opportunity before to become agents of change in their own lives?
3. Why is this a challenge that must be addressed as a priority? Also argue for this on the basis of social costs and benefits.
4. Is there a longer term vision that leads you to formulate the challenge? If so, describe this. What has already happened in the past? What is in the pipeline? Are there already other stakeholders who share this vision? Is there a wider dynamic involved regarding this vision? If so, describe this: who is already involved and how?
5. Draw up your schedule for phase 1 fieldwork, analysis, formulation of insights, generation of ideas and selection, concept formulation, concept test and pitch (which person from which organisation from the partnership carries out what action when and how and what is delivered)? How do you implement each step (method, tool, ...)?
6. Which stakeholders not part of the project team (organisations and/or people, inside or outside of the partner organisations) would you involve when and how in the course of phase 1?
7. What is the mission and what are the key competences of the promoter and partners? How does this fit in with the challenge?
8. What is the experience of the project implementers from the promoter and partners with innovation in general (not only in ESIF)? If possible describe a few successful innovations on which the project implementers have worked and explain why you consider these successful or not.
9. In which relevant networks are project implementers active? Will you rely on them within this project? If so, how? Are you planning to create new networks? If yes, how?

TOOL 8: manual for completing the project proposal form

[NOTE: the text below refers to a “manual for project promoter”: this is TOOL 2]

CHALLENGE

- 1) What is the social challenge you want to address with your project? For which specific group (from the wider group of people in work and /or job-seekers) does this challenge apply? How big is this group that is intended to benefit? What are the relevant characteristics of this group? Does this challenge relate to a vulnerable group (because of their socio-economic situation, geographic location, language or culture, mental, physical handicap, ...)? How is this group developing in the current situation with regard to the challenge (e.g. is the problem ever increasing, is the size of the group growing, ...)?

Why does ESIF [region or country] ask this?

In this call ESIF [region or country] wants to give space to stand back from solutions already conceived. It is quite possible that one thinks one already has a good idea but in many cases it appears, if one can stand back a little, that much better solutions exist. This is why ESIF [region or country] in this call in the first instance is looking for challenges, rather than solutions. Phase 1 of the project must serve to look for opportunities to innovate. Only at the end of phase 1 does ESIF [region or country] expect concepts to address the challenge.

For ESIF [region or country] the “user” is always someone from the final target group. In phase 2 selected concepts are to be developed to directly benefit the group that is intended to benefit. Innovations that purely serve internal “efficiency” without this also being translated into a more effective service provision will not be considered for phase 2.

ESIF [region or country] is interested in impact. A bigger impact in [region or country] may result from the number of people that can make progress regarding the challenge. This group may even be growing in numbers which again means that there is more need for solutions in the future.

But also the intensity of a problem for the specific group is important. Perhaps there are people who are affected by the problem more than others. In other words: the impact on a social, emotional, intellectual, economic, physical, material ... level is greater for them.

In some cases one can even talk about exclusion based on one's socio-economic situation, geographic location, language or culture, mental or physical handicap, etc.... Existing service provision is then perhaps adequate for others but fails or is missing for this group. In that case we talk of vulnerable groups. Vulnerability depends on the nature of the challenge (where the same person is vulnerable regarding a particular challenge, another challenge is perhaps not even applicable). They may have less opportunities and more constraints, limiting them in the pursuit to fulfill their potential and live the life they have reason to value. ESIF [region or country] will give priority to such vulnerable groups.

- 2) How far has attention already been paid to this challenge in the past? To what extent have the groups that should benefit had the opportunity before to become agents of change in their own lives?

Why does ESIF [region or country] ask this?

ESIF [region or country] is also interested in challenges that have been given relatively little attention in the past. These offer greater potential for innovation. In addition, if the groups that are supposed to benefit from innovation have not yet had the opportunity in the past to become agents of change in their own lives, then this may reflect structural disempowerment. This represents a huge potential for social innovation which is all about supporting people to use their agency to create more opportunities for themselves to fulfill their potential.

3) Why is this a challenge that must be addressed as a priority? Also argue for this on the basis of social costs and benefits.

Why does ESIF [region or country] ask this?

Both intensity, size and vulnerability, as well as any underexposure of the challenge are important elements in estimating the importance of a challenge. But it is also important to justify funding a project for tackling a challenge based on societal costs and benefits that are associated with the lack of sufficient solutions. These are

- **Direct monetary costs:** e.g. the benefit payments, health costs.
- **Indirect monetary costs:** e.g. estimates of loss of productive capacity.
- **Human costs/benefits:** benefits such as a good quality of life versus costs such as criminality, addiction, sickness,...

The monetary and human costs would have to be reduced by innovation and the benefits increased.

TIPS:

A few examples of a social challenge are given below (N.B., these are not necessarily challenges on which ESIF [region or country] will focus with the ESIF call, nor are they accurate; they are only given as an illustration) to clarify what ESIF [region or country] expects as an answer to the questions in the project proposal regarding the challenge. (Sources for the examples: 7 questions clefs (key questions), ASHOKA France and Online course material Human Centered Design, IDEO/ACUMEN)

Example 1: The early dependence on others by the elderly presents society, in particular the immediate family and the elderly themselves, with a challenge. The average age that men become dependent is 75 years while their life expectancy is 81 years. For women this is respectively 77 and 83 years. The lack of physical activity is a major reason for this. At the same time the provisions for these dependent elderly lag behind because it was underestimated how much this group would grow. This problem is important because of the high human cost, namely the loss of quality of life for the elderly, including the loss of social contact, as well as for their immediate environment in which the elderly often play an important part in looking after grandchildren or dependent family members. But also the financial cost for society is very high. For example 80% of the costs for healthcare (118 billion EURO) are incurred in the last two years of life. Allowances for around 1 million dependent people cost around 4 billion per year.

Example 2: While more and more younger people are interested in social entrepreneurship as a way of addressing some of the world's greatest challenges, aspiring entrepreneurs often get no further than the idea phase. Some have no access to networks and/or mentors who can give them the knowledge and experience to take decisions, others again cannot get starting capital.

Example 3: We want to tackle the high unemployment as well as the low number of starters of businesses among young people (from 15-24 years) from problem districts in big cities. According to a recent IFOP study 1 in 2 young people from such districts want to create their own business versus 1 in 5 elsewhere. 38% of the young people from these districts are unemployed compared with 20.5% elsewhere. The unemployment benefits for these 136 000 young people without work and not in training amount to 2.5 billion EURO, in addition to the benefits for a minimum income of almost 700 million EURO. These figures do not take into account the human costs: lack of well-being, problems with criminality, addictions,...

Example 4: We want to create an HR-toolbox to screen the development points among workers. There is still too little knowledge among many HR managers about how employees are best helped to identify their development points.

Example 5: It is of the utmost importance to reduce youth unemployment because this is stated by the European Union in its employment strategy. This is also a priority for [region or country] policy.

Comments relating to the five examples:

- The first two examples do not quantify how many people (the elderly, their family members / families, young people interested in social enterprise) this involves. The third does do this and as a result comes across as better informed.
- Relevant characteristics that are summarised in the examples to describe the specific group are its age, sex, type of home, labour market status, health status, ... Are there other characteristics that are relevant?
- The first two examples give a broad view of a few important causes of the challenge (lack of movement, no access to networks, mentors or capital). The last does not do this and as a result there is less of an idea of how the challenge is understood by the project submitter. In addition to causes it is also useful to indicate important opportunities in the environment (e.g. that there is more political attention to entrepreneurship since the previous elections, etc.). Not a single example does this which creates less of a feeling of hope.
- Examples 1 and 3 give monetary costs. In example two this is not the case and this means that for this case the importance of the challenge may be underestimated.
- Example 4 gives no idea at all of a social challenge for the specific group. The question one should ask is: what is the challenge for the group that being screened is supposed to tackle? It is already assumed that screening must be carried out (service provision) and that a toolbox (instrument) is necessary for this. But why screen at all?
- Example 5 refers only to policy (documents). But the citation of policy (documents) is not by definition the same as describing a social challenge. In many cases a policy document also summarise a number of measures/solutions. But the ESIF call focuses precisely on the underlying challenge and on thinking about new measures. It is however useful to refer to the policy documents of the policy area if there could be doubt that the challenge is relevant for the policy area.
- Sometimes a source is indicated for the statements. This gives a better informed picture. This applies both to numbers and to qualitative statements.
- In none of the examples are developments over time set out. Is the specific group growing? Is the problem and cost price growing? This would give a much sharper picture of the need to act, particularly if it is quantified.
- Finally ESIF [region or country] is interested in challenges that are formulated as “behaviour”. This may therefore involve: remaining independent for longer (e.g. 1), starting up as a social entrepreneur (e.g. 2), starting work (e.g. 3), ...
- For more tips: see HCD toolkit, 2nd edition, IDEO p. 34-37 see http://www.ideo.com/images/uploads/hcd_toolkit/IDEO_HCD_ToolKit.pdf

VISION AND STAKEHOLDERS

In the project proposal questions must also be answered regarding a possible wider vision in which the project will be located:

- 4) Is there a longer term vision that leads you to formulate the challenge? If so, describe this. What has already happened in the past? What is in the pipeline? Are there already other stakeholders who share this vision? Is there a wider dynamic involved regarding this vision? If so, describe this: who is already involved and how?

Why does ESIF [region or country] ask this?

An innovation that may be within the context of a wider dynamic is more likely (if the evaluation is positive) to become embedded at a later stage. Certainly more radical innovations may be hampered by the prevailing “system” (the interplay of established actors, interests, knowledge, values, technology, ...) which requires a critical mass of stakeholders that subscribe to a different vision to build up pressure.

It is also important for ESIF [region or country] to know what dynamics already exist in [region or country] regarding what challenges. The innovation action of ESIF can address this more specifically in the future.

TIPS:

An example of a vision (only given for illustration) is given below together with a few comments.

Example of vision Plan C (Source: <http://www.plan-c.eu/wat/onze-visie/wakkere-samenleving/>):

“In current Western thinking economic growth is often the most important criterion. But this cycle of ‘production for production’s sake’ and ‘consumption for consumption’s sake’ is unsustainable. The support of our society for such a model is coming to an end.

An important challenge is to break through habitual behaviour. Sustainable, co-determining consumers play an increasing part within the whole production and consumption chain – also in material management. They feel jointly responsible for the good care of the community.

An Alert Community is an alert, informed, caring and respectful community that shows great readiness to act. Things may and can be called into question and there is readiness to make changes. It is a community that looks out for the collective needs, interests and problems and develops towards a positive attitude and really positive behaviour with respect to the big ecological challenges.

An Alert Community considers, chooses and acts from conviction – not from guilt or a narcissistic concern for itself – and is always aware of the limitations of people, society and the earth. It is a community that cares for each of its members.

An Alert Community succeeds in bringing about a renewed stewardship for the earth, a circular economy with real opportunities of minimising our impact on the environment. In addition to thinking in terms of efficiency, sufficiency – “enough” – has an important place in this society with alert citizens.

...

Who must be made alert and how?

- **Politicians:** they must create the framework for sustainable materials management; change takes place via regulations and policy.
- **Business people:** they must make sustainable materials management possible from the supply side; change takes place via businesses with corporate social responsibility
- **Citizens / consumers:** they must make sustainable materials management possible from the demand side as a consumer (with the purse) or as a citizen (with the vote); change takes place by sustainably consuming citizens.

This leads us to two transition paths that are not fully independent of one another: corporate social responsibility and sustainable consumption.

In the first transition path a sustainable materials management is achieved because the citizen as consumer has taken a step towards sustainability. In the first phase a critical percentage of the population (10-15%) takes the step towards sustainability. As a result sufficient energy is created to mainstream this behaviour. The target public are the pioneers, the cultural creatives. There is a commitment to new or existing experiments and innovations that already partly reach this public. This mainly comes down to linking experiments together so that the consumer is approached in a more integrated way. Successive series of experiments gradually become increasingly ambitious (from low hanging fruit to radical changes). At the same time via education the corporate consciousness of sustainability is increased. When the majority of this section of the public have taken the step towards sustainability, this behaviour can be mainstreamed by imitation or policy.

In the second phase a sustainable materials management is achieved because the general public takes steps towards sustainability. The target public is the general public. The experiments from the first phase are built on. The wide culture is already focussed on sustainable materials management. The challenge now consists of encouraging individuals to sustainable behaviour. New experiments now reach a wider public that is made alert by education and via exemplary roles. They appeal to the consumer as an individual.

To sum up this leads to the following milestones:

- 2010 First generation of integrated experiments carried out
- 2010 Both internal and external dimensions of sustainability are embedded in the education plans
- 2015 Critical mass of cultural creatives closes the attitude-behaviour gap
- 2020 Second generation of experiments carried out
- 2025 General public consumes sustainably

In the second transition path a sustainable materials management is achieved because the business community has taken the step towards sustainability. Here too we distinguish two phases.

First we work with these pioneering businesses on experiments and innovations. Because they gain a competitive advantage (more profit and/or better image), other businesses will in the meantime imitate this or policy-makers can mainstream the new behaviour via regulations. At the same time via different channels the corporate consciousness regarding sustainability is increased.

In the second phase a sustainable materials management is achieved because all the companies take steps towards sustainability. This builds further on the experiments from the first phase. New experiments now reach the whole business community that is made alert by communication and via exemplary roles.

To sum up this leads to the following milestones:

- 2010 First generation of integrated experiments carried out
- 2010 Both internal and external dimensions of sustainability are communicated to the business community
- 2015 Critical mass of businesses is sustainable
- 2020 Second generation of experiments carried out
- 2025 All companies produce sustainably”

Comments regarding the example of Plan C:

- The following elements are a normal part of a “vision”:
 - A specific longer term is described: up to 2025 (17 years into the future from 2008)
 - Stakeholders are identified: politicians, business community, education, citizens/consumers, more particularly “cultural creatives” and actions (behaviour) are stated that are expected of them in the future such as corporate social responsibility, sustainable consumption, regulation, increasing corporate consciousness, ...
 - Broad action lines are set out to realize the vision e.g. actions regarding corporate social responsibility (specifically regarding materials management) and sustainable consumption.
- More interpretation of the terms used (where do the ideas come from) and who are all the people involved in this (what organisations, movements, important people, ...) in what way and what happened before (history), would make this vision even more illuminating. It would also be possible to be more specific as regards what is already in the pipeline for the future.
- It is however important to understand that no technical assessment of the vision is carried out when assessing the project application but rather one looks at the extent to which there is already a wider framework from which there is a need for new ideas and experiments that fall within the scope of the policy area of [COUNTRY/REGION]. It is therefore NOT the intention to write new visions and include them in the project proposal, if they do not yet exist. It IS however the intention to refer to existing elements (documents, websites, ...).
- It is possible that there is such a wider vision and dynamic, supported by a range of stakeholders, but that this is not (yet) much available in formal documents. Describe then as far as possible in your own words what this wider vision and dynamic consists of and who has played what part in this and will play this part in the future.
- The more specific challenge that the innovation project wants to tackle must still be outlined in this possible wider vision.

POSITION and TEAM

- 5) What is the mission and what are the key competences of the promoter and partners? How does this fit in with the challenge?

Why does ESIF ask this?

There is a large likelihood that a challenge that is not in line with the mission and key competences of the promoter and/or the partners will look like opportunistic behaviour. It will therefore be more difficult to make the necessary contacts and to be credible in the field both during the first phase and for phase two.

TIPS:

- Set out what the mission is (the fundamental *raison d'être*) of promoter and partners. Refer if possible to websites or formal documents
- Also describe what it is that distinguishes them from others to whom they are typically similar, what they are better at.
- Clarify how this causes them to take up the challenge that they formulated.

- 6) What is the experience of the project implementers from the promoter and partners with innovation in general (not only in ESIF)? If possible describe a few successful innovations on which the project implementers have worked and explain why you consider these successful or not.

Why does ESIF ask this?

The first phase of the project only lasts 5 months (in the 6th month the concepts must be proposed). There is then relatively little time to learn how innovation processes can best be started up and carried out. Experience is therefore certainly required. This may however come from partners that are also involved in the project as implementers.

In principle one can also work with suppliers though this is less attractive than functioning as partners because of the lower level of involvement and the lesser time spent.

Literature and practice show that innovation teams best consist of people with a diversity of backgrounds. This may involve their field of expertise (e.g. sociologists, economists, psychologists, anthropologists ...), their function in an organisation (operational, marketing, financial, research ...) and their experience in the area to which the challenge relates (deep experience versus new in the field). This enables taking some distance from the daily routine and rethinking what must happen.

It is also true that innovation teams best contain a core of people who will be involved in the project from start to finish. This is to emphasise the responsibility for the project as a whole and to prevent there being insufficient ownership, particularly in later phases.

It is however also important that there is at least one person who spends the majority (at least 50%) of her/his time on the project. This is to avoid the project being a secondary activity for everyone that is always under pressure from the main activity. This person does not always have to be the same person throughout the whole process.

TIPS:

- Describe for each person their experience with innovation. This may cover training, projects, activities, with the promoter or partner or elsewhere. This does not have to be ESIF.
- The experience with innovation relates to 5 areas 1) experience with fieldwork, observation, immersion in the actual environment and context of the specific group that is intended to benefit

2) experience with networking, making creative links, broadening the perspective 3) questioning and challenging oneself, others and the situation 4) active and iterative tests with users 5) investigating impact. Be as specific as possible e.g. which role, contribution did the person have in a project.

- Ideally there is then a core of project staff who are involved in the project from start to finish and who at different times are involved more substantially in the project. Around them are staff who make a specific, much smaller contribution and are not necessarily active throughout the whole project. In addition, it is recommended that team members involved in field work also are involved in generating ideas.
- You can also use screening tools like <http://www.innduce.me/en>.
- It is also important to state how you defined success if you have already worked on innovations. This also shows an understanding of innovation processes.

7) In which relevant networks are you active? Will you rely on them within this project? If so, how? Are you planning to create new networks? If yes, how?

Why does ESIF ask this?

A presence in relevant networks provides evidence of expertise and may be useful for the project. Good relations with other stakeholders and a strong position are after all very important for the later embedding and spread of an innovation. It is also interesting to discover in what way a challenge is associated with networks that can perhaps play a part in future innovation actions organised by ESIF [region or country]. Also, giving the specific groups that should benefit from the innovation access to networks and/or building up new network that involve them gives them more opportunities to take charge themselves of their lives.

TIPS:

- State what these networks do and who the other members are.
- Clarify what you yourself do in these networks. Make clear what your position is in the network. Do you take an active and leading part in it? If so, describe this.
- If possible refer to a website of the network.
- Make clear in what way these networks may be useful for the project and the challenge.

PLAN

The part of the project proposal in which the plan must be proposed for phase 1 consists of two questions.

8) Draw up your schedule for phase 1 fieldwork, analysis, formulation of insights, generation of ideas and selection, concept formulation, concept test and pitch (which person from which organisation from the partnership carries out what action when and how and what is delivered)? How do you implement each step (method, tool, ...)? How much time will you allocate?

The promoters are free to interpret these questions in their own way. They are however advised to go carefully through the manuals regarding the scheduling of phases 1 and 2.

The following deliverables are however compulsory to be drawn up at the end of phase 1 using the provided templates and according to the guidelines of ESIF [region or country].

- Concept description
- Experience map
- Business model
- Results of concept test with users and with stakeholders

These are also described in the manual for phase 1.

Why does ESIF ask this?

From the innovation literature and practice it appears that being able to take another perspective, and in particular that of the final target group itself, is a critical factor for achieving innovation. Fieldwork (observation, interviews, ...) is therefore seen as crucial for gaining insights that later form the basis for identifying opportunities to innovate.

It is also not enough to carry forward abstract concepts at the end of phase 1. A good concept for service provision must be embedded in a sound business model and must already have been tested with users and stakeholders.

TIPS:

- Do not be too vague in describing the tools/methods that will be used in the project. This does not mean that the tools must be described in detail. A brief description (possibly with a reference to a source) is enough. How and why, as well as with/ by whom, you will use them is more important.
- Make clear also how much effort (time) you will spend on what.
- Desk research is best limited and serves mainly to prepare for fieldwork. Fieldwork should focus on immersion in user realities (empathy for users) and be seen as a means to involve these users in thinking about their own reality and how they can themselves play a part in addressing it.
- Although the course of an innovation project is difficult to predict, even for 6 months, there are however a number of milestones that can be identified on an indicative basis e.g. carrying out a minimum number of observations, interviews, etc. at a particular time.
- It is therefore not necessary to draw up a detailed schedule from month to month. It is however as stated above necessary to clarify which milestones should be reached when.
- Try to visualise your schedule so that it is clear at a glance.
- Do not forget a number of important elements such as participation in the start-up session, the two support sessions, the pitch as well as drawing up reports and schedules for phase 2.

9) Which stakeholders not part of the project team (organisations and/or people, inside or outside of the partner organisations) would you involve when and how in the course of phase 1?

Why does ESIF ask this?

The importance of taking the perspective of the group that is intended to benefit has already been mentioned. But also involving other stakeholders gives different perspectives regarding the challenge. Some of these stakeholders are perhaps best involved as partners.

TIPS:

- Prepare a good stakeholder analysis (see manual schedule phase 1 for a suggestion regarding the right methodology) before you write the project proposal. Sometimes a stakeholder is a specific actor within an organisation (section), sometimes even a specific person. Be as specific as possible.
- Do not forget senior management both for the partners and promoter! It is not expected that they will be project implementer but the question arises of how they will be involved.
- It is crucial that those people who have been able to take a different perspective in the fieldwork should also be closely involved in the analysis, formulation of insights, generation of ideas and selection and concept formulation.
- Ideally one can think of a role for relevant representatives from the public authorities, private sector, civil society and knowledge institutions to participate in parts of the fieldwork, analysis, formulation of insights, generation of ideas and selection and concept formulation.

TOOL 9: appraisal form for project evaluators of phase 1 proposals

(Note: This tool was in large part developed on the basis of Cooper RG, 2011, Winning at new products: creating value through innovation.)

1) Quality and aspiration of the challenge

To what extent is an important social challenge mentioned that is incorporated in a wider vision and dynamic? And which is relevant both for the group that is intended to benefit and the policy area?
 0 = Not at all 1 = Hardly 2 = Reasonably 3 = Considerably 4 = Very considerably
 Score of 0-4. (see CHALLENGE AND VISION)

2) Schedule

To what extent is a clear approach set out in which crucial stakeholders are fully involved? And is this approach based mainly on taking different perspectives (incl. from the group that is intended to benefit) to the challenge? And do these different perspectives of the challenge arise from extensive fieldwork?
 Score 0-4 (see PLAN)

3) Capacity

To what extent do the promoter/ partners have a strong background and position both as regards innovation as well as the substance of the challenge?
 Score 0-4 (see POSITION and TEAM)

4) Coherence of the whole

To what extent does the proposal as a whole form a coherent and convincing story?

An overall judgment on the proposal should be put forward based on the four criteria.
 It should state whether the proposal is a) insufficient as regards most critical elements b) contains good elements but these do not counterbalance the poor elements c) contains a few poor elements but these are counterbalanced by the good elements d) covering most critical elements sufficiently

Additional questions for assessment of project proposal to go into PHASE 1:

These additional questions are NOT scored separately. They may only be used to formulate an overall conclusion for each criterion that determines the score for the criterion.

1) Quality and aspiration of the challenge

Additional questions	Why important?
Is the challenge sufficiently broadly formulated without already mentioning solutions?	If a solution is already mentioned or implied then phase 1 is perhaps used to support this solution, rather than distancing oneself from it and looking at the problem from other perspectives, as intended by the IVE call.
Does the challenge focus on an important issue for the policy area?	The challenge must fit within the scope of the policy area.
Is a change in behaviour of the specific group mentioned as the challenge?	Such challenges lend themselves to calling upon behavioural theory insights. These are seen as a promising way of arriving at innovation.
Does the challenge concern a big and/or growing group of people? AND /OR Is it accompanied by substantial direct or indirect monetary and human costs? Is there a pressing need in the specific group? Has this group expressed this need itself?	This may lead to a greater impact in [region or country] in terms of the number of people making progress. AND/OR This may lead to a greater impact in [region or country] in terms of the intensity of the progress that the specific group may make. Human costs (and hence also benefits) may be on a social, emotional, intellectual, economic, physical, material ... level. In both cases supplementing a narrative with facts and figures that have credible sources should be more positively assessed.

<p>Does this concern a challenge to which relatively little attention was paid in the past? AND / OR</p> <p>Does this concern a group to which, as regards this challenge, relatively little attention was paid in the past and which has therefore been excluded in one way or another (because of their socio-economic situation, geographic location, language or culture, mental, physical handicap...)? Also, did this group lack the opportunity in the past to become agents of change in their own lives, reflecting structural disempowerment?</p>	<p>This has a greater innovation potential than problems which have already received a lot of attention and resources. AND /OR</p> <p>Vulnerable groups that for one reason or another have to cope with exclusion, should for reasons of social justice be given priority in innovation precisely because the regular service provision fails them. It is however important that the vulnerability is related to the challenge and is not regarded as a general given.</p> <p>Also structural disempowerment presents an opportunity for social innovation by focusing on ways to empower these groups.</p>
<p>Is there a critical mass of other stakeholders that are already engaged in a wider dynamic with a vision into which the challenge fits?</p>	<p>An innovation that can fit into in a wider dynamic has a greater likelihood of being embedded at a later stage. It is not sufficient to list one's own vision. If this is not shared with others, it is just an isolated vision.</p>
<p>Own elements (fill in below)</p>	
<p>Overall conclusion of the assessor</p>	

2) Schedule

Additional questions	Why important?
<p>Is mainly field work anticipated for the “discovery phase”, in particular by/with the group that is intended to benefit itself, so that the challenge is looked at from other perspectives?</p>	<p>It appears from the literature and practice that taking a different perspective, and then mainly that of the group that is intended to benefit itself, referred to as “empathy”, is a critical factor for achieving innovation.</p> <p>It is crucial that those people who have been able to take the other perspectives in the fieldwork, are also closely involved afterwards in analysis, formulation of insights, generation of ideas and selection and concept formulation. This includes the people that are intended to benefit in order to allow them to become agents of change themselves. Desk research is best limited and serves mainly to prepare for fieldwork.</p>
<p>Is it clear from the description that the project team understands the tools that will be used for executing the project?</p>	<p>The plan should not just list what is given as guidance by ESIF. It can draw on tools that are provided in the guidance but must then make this concrete and applicable to the specific context (e.g. rather than say interviews will be conducted, specific how many, with whom, why and in what manner they will be conducted).</p>
<p>Is sufficient provision made for participation of crucial stakeholders, both of actors from the public authorities, private sector, civil society and knowledge institutions?</p>	<p>This is an extension of the previous question that focuses mainly on taking the perspective of AND involving the group that is intended to benefit by the project implementers. It is also added that there should be a role for representatives from the four sectors mentioned to cooperate in fieldwork, analysis, formulation of insights, generation of ideas and selection and concept formulation.</p>
<p>Is there a clear schedule with a few crucial milestones and key activities as well as appropriate effort spent on them by competent team members?</p>	<p>Although it is difficult to predict the course of an innovation project, even for 6 months, a number of milestones can still be identified on an indicative basis e.g. carrying out a minimum number of observations, interviews, etc. at a particular time to enable agreements for monitoring to be made with the ESF.</p> <p>In addition, it should be clear overall how much effort will be spent on what kind of activities as well as who will execute as this enables to assess to what extent the right people will spend sufficient effort on key activities.</p>
<p>Is attention paid to the project by the senior management of the promoter and partners?</p>	<p>If senior management are not involved then there is less chance of successfully embedding the innovation in the longer term after the project. Involvement does not mean that the management has executive tasks but it should be informed and involved at crucial times, certainly as regards their role in creation of support from stakeholders.</p>
<p>Own elements (fill in below)</p>	
<p>Overall conclusion of the assessor</p>	

3) Capacity

Additional questions	Why important?
<p>Do the project implementers have a sufficiently strong track-record in the area of innovation?</p>	<p>The first phase of the project only lasts 5 months (in the 6th month the concepts must be proposed). There is then relatively little time to learn how innovation processes can best be started up and carried out. Experience is therefore certainly required. This may however come from partners that are also involved in the project as implementers. In principle one can also work with suppliers although this is less attractive than functioning as partners because of the lower level of involvement and the lesser time spent. The experience with innovation relates to 5 areas of which the first three are already of crucial importance for the first phase of a project (and also afterwards). Ideally the team will from the beginning also include people with experience in the last two elements (that relate to the second phase): 1) experience with fieldwork, observation, immersion in the actual environment and context of the specific group 2) experience with networking, establishing creative links, broadening the perspective 3) questioning and challenging oneself, others and the situation 4) active and iterative tests with users 5) investigating impact.</p>
<p>Are several people involved in carrying out the project and is there sufficient diversity between the project implementers? Are the project implementers used in the relevant way for the tasks?</p>	<p>Literature and practice shows that innovation teams best consist of people with a diversity of backgrounds. This may involve their field of expertise (e.g. sociologists, economists, psychologists, anthropologists...), their function in an organisation (operational, marketing, financial, research ...) and their experience with the area to which the challenge relates (deep experience versus new in the field). This enables taking some distance from the daily routine and rethinking what must happen.</p> <p>It is also true that innovation teams best contain a core of people who will be involved in the project from start to finish. This is to emphasise the responsibility for the project as a whole and to prevent there being insufficient ownership, particularly in later phases. In addition, those team members who executed the field research should be involved also in generating concepts as they can draw in the most direct way on their experience of the situation.</p> <p>It is also important that there is at least one person who spends the majority (at least 50%) of her/his time on the project. This is to avoid the project being a secondary activity for everyone that is always under pressure from the main activity. This does not always have to be the same person throughout the whole process.</p> <p>Ideally there is then a core of project staff who are involved in the project from start to finish and who at different times are involved more substantially in the project. Around them are staff who make a specific, much smaller contribution and are not necessarily active throughout the whole project.</p>
<p>Does the organisation or the partnership have a sufficiently strong background regarding the challenge? Is the challenge in line with the mission of the promoter?</p>	<p>There is a high probability that a challenge that is not in line with the mission of the promoter and/or the partners is opportunistic behaviour. It will therefore be more difficult to make the necessary contacts and to be credible in the field. Hence due attention should be placed to assessing the credibility of the partnership in relation to the challenge with more positive appraisals for organisations that have a privileged position or mandate.</p>
<p>Does the organisation or the partnership have a strong position that it can leverage in the network of stakeholders, in particular stakeholders that are crucial for tackling the challenge?</p>	<p>This question is connected with the previous one. Good relations with other stakeholders and a strong position are very important for the later embedding and spread of an innovation. However, the proposal must be specific also about how it will leverage these networks.</p>
<p>Own elements (fill in below)</p>	
<p>Overall conclusion of the assessor</p>	

B Monitoring and evaluation, coaching and decision-making

PRINCIPLE 26: CREATE HIGH VALUE ADDED INTERACTION WITH PROJECTS

Reviews should follow the rhythm of the project rather than predefined quarterly or annual reporting. Decision-making should be based on key data (provided by proper achievement of specific deliverables, based on the team's plan proposed at the previous decision point), with judgment criteria that were mutually agreed (also at the previous decision-making point), rather than be based on executing a list of standard deliverables and criteria for fixed phases at fixed times. (art. 2+24)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

PRINCIPLE 27: AVOID MISTAKES, FOCUS ON LEARNING

“Failure” is when you keep going too long with an unsuccessful project. Stopping such a project is not failure but just a moment to capture the lessons learnt and move on. The latter should be rewarded. Success should rather be assessed a portfolio level where only one really novel idea out of ten, ultimately goes to the finish. The others are to be seen as investments for the successful one in the portfolio. But “mistakes” (e.g. due to poorly planning or executing an experiment, repeating a prior failure) do not produce any extra information and are to be avoided. For more incremental innovations, the success ratio goes up (still 25-40% of ideas fail), but the expected impact is also a lot lower. Regular reviews should be undertaken where in the innovation process changes could be made to increase successes and decrease mistakes. Enough attention should be put on the earlier stages of the process as investing a little bit there may yield much larger overall benefits than trying to fix problems downstream. (art 4+5+6+26+31+32+34+a1+a5+b1+b8)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle relates to the two phases in the IVE call (TOOL 1) as well as to the monitoring as described in Figure 38.

PRINCIPLE 28: INTEGRATE PROJECTS INTO A PORTFOLIO AND CONNECT THEM AND THE ACTORS INVOLVED IN THEM FOR COLLECTIVE IMPACT

Given limited resources, projects should not just be individually reviewed but the wider portfolio to which they belong should also be assessed regularly to maintain appropriate balance in terms of hoped for impact, timing and risk and to feed into the reviews of single projects. Impact in the medium term (1-3 years) is supported by incremental innovations, while more radical innovation is necessary for the longer term (3-20 years). In addition, it should be remembered that systemic innovation (the most radical type of innovation) which is necessary for dealing with complex societal issues, can rarely be brought about by one organization. In such a case, rather than being focused on “isolated” impact (where beneficiaries try to compete with each other to convince funders that they represent the greatest potential for impact on their own), it may be more useful to focus on “collective” impact, which is due to the efforts of a large amount of stakeholders coordinating and collaborating with each other across sectoral boundaries. (art 8+ 24+b5+C8)

My understanding of this principle:

My learning agenda: what do I need to learn more about from the underlying literature references?

This principle relates to the various levels of support as explained in chapter 7 b). It goes beyond what can be expected of “projects” and points to then need for “platforms”.

TOOL 10: appraisal form for project evaluators of a concept and phase 2 plan

(NOTE: This tool was in large part developed on the basis of Cooper RG, 2011, Winning at new products: creating value through innovation.)

A Is there a strong rationale for investing in the proposed concept?

1) Strategic importance / position of the concept

To what extent does the concept form an important component within a wider vision, carried by relevant stakeholders, to tackle the social challenge and to achieve a substantial impact in a reasonable time?

0 = Not at all 1 = Hardly 2 = Reasonably 3 = Substantially 4 = Very substantially

Score 0-4

2) Advantage for the final target group

To what extent does the concept supply a superior solution with respect to the present situation and the services which (may or may not) exist, for a well-defined user group?

Score 0-4

3) Degree of innovation

To what extent is the concept sufficiently different for the user and different from what may (or may not) already exist and be used in [region or country]?

Score 0-4

4) Embedding

To what extent is the concept fairly easy to launch after a successful evaluation, given the synergy with already existing activities and resources within the partnership?

Score 0-4

5) Development

To what extent is the concept fairly easy to develop, given the complexity of the concept and the familiarity/availability of the required knowledge and technology?

Score 0-4

6) Finance

To what extent is there sufficiently robust finance for the future solution once it would become operational after the ESF-funding stops?

Score 0-4

An overall judgment on the concept should be put forward based on the six criteria. It should state whether the concept is a) insufficient as regards most critical elements b) contains good elements but these do not counterbalance the poor elements c) contains a few poor elements but these are counterbalanced by the good elements d) covering most critical elements sufficiently.

B Are the necessary conditions for going onto phase 2 fulfilled?

1) Schedule

Is a sufficiently participative and iterative approach (develop-test-feedback-develop etc.) defined for the development phase? Are there sufficient indications how the evaluation phase will be conducted?

Score: YES / YES with conditions / NO

2) Capacity

Have the promoter and partners together a sufficiently strong background both as regards innovation and the issues included in the challenge?

Score: YES / YES with conditions / NO

The questions below are used to help decide about the above criteria. Between brackets () a reference is provided to the phase 1 outputs that provide the information for this appraisal.

A Rationale

1) Strategic importance / position of the concept

	Additional questions	Why important?
How much impact by when?	Is there a big potential for achieving an impact on social, emotional, intellectual, economic, physical, material ... level for the users as regards scale (namely for many people or for a future greater number if the group grows) or as regards intensity (namely a substantial effect per person)? (BMC: customer value / customers; CONCEPT) (BMC = business model canvas)	The impact being considered should be relevant to the the policy domain in [country/region]. This involves “impact” as progress that the user wants to make on a social, emotional, intellectual, economic, physical, material ... level. This must be distinguished from “benefits” such as achieving this impact more easily, with less effort, more quickly, more cheaply, more accessibly, more certainly, more pleasantly, less frustratingly, more predictably, with fewer concerns, with fewer errors, more functionally, more reliably, more acceptably, more fittingly, less riskily, more efficiently, ... These latter “benefits” are assessed under “advantage” for the user.
	Is it clear how what measures could be used to define this “impact”? (CONCEPT)	Impact for the final target group remains too vague a term if no quantitative measurement instrument is determined for this. This also facilitates the setting up of the evaluation at the end of phase 2.
	Is there also an impact outside the policy domain? (CONCEPT)	It is not necessary but it is a bonus. Innovations that also benefit other policy domains will generally also be more innovative.
	What is the expected time for first seeing the impact after the launch? (less than 3 years versus more than 10) (CONCEPT)	The faster one can achieve the same impact the better.
	Is the concept set up to achieve a behaviour change (CONCEPT / BMC: customer value)?	If a behavioural change is aimed for, the likelihood of impact is greater than if one restricts oneself to generating new awareness or insights. After all the latter do not “Do” anything themselves. And without action there will be no change.
Potential for achieving systemic change	Is the concept of crucial importance because it is a key element within a wider whole of innovations and changes that arise from the broader-dynamic / overarching vision within which the challenge can be positioned? (CONCEPT)	Innovations that are isolated usually have less potential for achieving a wider and more intense impact. There is usually a need for complementary innovations and changes.
	Does the concept address several relevant social trends that form an opportunity for innovation? (CONCEPT)	Addressing a combination of partly overlapping trends provides a greater potential for systemic change.
	Is it difficult for the partners to guide users away from a prevailing, rival system towards the newly developed solution? (CONCEPT TEST)	This question is related to the previous one. It investigates whether the currently prevailing system (of looking at the problems, the existing service providers and actors that have addressed one another, the existing values etc.) is embedded in such a way that it is difficult to compete with them, even if one is working with partners within a wider rival framework.
	Will other relevant stakeholders respond with sufficient support to the innovation? (CONCEPT TEST)	This question is also related to the previous one. It investigates whether there is potential for stakeholders, who form part of the prevailing system or who can exert substantial influence on it, to support a transition to a new system.

Potential for scaling up	Is there potential to replicate the solution in the long term? Or is it too complex and/or too much bound to a few individuals and/or resources that form an inherent constraint for extension? (CONCEPT)	<p>If a solution can only be supported by one of the service providers or the specific partnership around them then the impact that can be achieved is more limited.</p> <p>ESIF considers it crucial to innovate for more than one service provider if more than one exists.</p> <p>To replicate it is however important to focus on the elements that really achieve the impact and that these can be codified and learned by others.</p>
	Is there potential for extending the solution to another context? (CONCEPT)	If a solution can easily be adjusted there is more longer term potential. This is not however a necessity.
Own elements (fill in below)		
Overall conclusion of the assessor		

2) Advantage for the final target group

Additional questions	Why important?
Is there a clearly defined and measurable segment within the specific group which the concept is intending to benefit? Is this a vulnerable group? (BMC: customers)	Segmentation increases the range and the impact of the innovation. You can customise the work which means that the target groups can react more positively. It helps to target e.g. on the basis of who is easier to reach or can be helped more. The characteristics for segmentation must be measurable to allow the people that are to benefit to be identified.
Does the concept make it possible for the group that is intended to benefit to make progress more easily, with less effort, more quickly, more cheaply, more accessibly, more certainly, more pleasantly, less frustratingly, more predictably, with fewer concerns, with fewer errors, more functionally, more reliably, more acceptably, more fittingly, less riskily, more efficiently than what is (or is not) already in existence? Do the benefits together form an attractive presentation of customer value ("value proposition")? (BMC: customer value)	This is NOT about the impact as such (see how much impact by when?) but about the way in which the concept achieves this impact and whether this all together forms an attractive whole for the user. If the proposal is not more attractive than what already exists there is a little chance that users will flock to it, in spite of the promise of impact.
Does the concept entail that the groups that are intended to benefit can themselves become agents of change and create new opportunities to fulfill their potential?	This is especially important if this group has been structurally disempowered in the past.
Is a suitable channel mentioned for reaching and serving the group that is intended to benefit with the solution? (BMC: customer relation)	This again is also important for the possible use of the solution. This is linked to the previous question because channels play an important role e.g. for convenience.
Is there sufficient positive feedback from the group that is intended to benefit concerning the concept including user intention and absence of big barriers to use (that could not be solved) (CONCEPT TEST)	The concept test is aimed at identifying whether users see the concept as being useful and why (not). In the innovation literature it is seen as a crucial element for further developing a concept or not. It is therefore necessary to take a good look at the reasons that would prevent users from using the solution and assessing whether this is insurmountable or not.
Own elements (fill in below)	
Overall conclusion of the assessor	

3) Innovative content

Additional questions	Why important?
Does the group that is intended to benefit experience the concept as different? (CONCEPT TEST)	Innovation can be looked at from two perspectives: “market” (user) and “supply” (service, solution). Here the “market” perspective is addressed and more specifically from the point of view of the user from the group that is intended to benefit him/herself. If they do not see the difference from what already exists then this already indicates a low innovative content from the “market” perspective.
Is the conceptualisation of the intended segment of the final target group of the concept innovative? Or is the conceptualisation of the context of use innovative? Or are there unique benefits which the group that is intended to benefit needs? This is all at [region or country] level. (BMC: customers)	Here again the reasoning is from the market perspective but as conceptualised by the providers on a [region or country] level. The proposed conceptualisation can be rather common outside [region or country]. Concerning the previous item, it is not because the conceptualisation of segment, context or benefits is new for [region or country], that the users from the group that is intended to benefit also effectively experience the service / solution as different.
Is a similar concept already used somewhere in [region or country] in practice (possibly in another context, for another need or for another group)? Is this more an exception to the rule? (CONCEPT)	Here the supply side is looked at from a [region or country] perspective.
Is this an incremental, evolutionary or radical innovation?	Based on the above answers it can be determined what type of innovation is included in the concept. Incremental means that an existing solution for an existing context, group and need is improved. This is however not what ESIF intends. ESIF is looking more for radical (new as regards market and as regards supply perspective) or evolutionary (new in one or both perspectives) innovations.
Own elements (fill in below)	
Overall conclusion of the assessor	

4) Embedding

Additional questions	Why important?
Does the concept fit within the mission of the organisations that are partners in the project partnership? (BMC: partners)	It may be that the new service /solution concept itself does not fall within the scope of activities which an organisation wants to go for. If this is the case for all the organisations from the formal partnership of the ESIF project then embedding within this partnership is less probable.
Is there synergy in the intended partners in the business model with their existing capacities (rather than need for acquiring new ones)? (BMC: key processes, key resources, partners) <ul style="list-style-type: none"> ▪ experience with similar approaches including any required technology ▪ an operational service provision system that is similar to what is necessary for the new concept? ▪ earlier, positive relations with the users and a good “reputation”? ▪ already existing good access to the users? 	Innovations that start from similar experiences, systems, relations, access routes ... are easier to embed. Less work must be done on adjusting the service-providing organisation to start the innovation.
What is the expected time horizon for launching the concept after evaluation? (less than 1 year versus more than 7)	This is related to the two previous questions.
Own elements (fill in below)	
Overall conclusion of the assessor	

5) Development

Additional questions	Why important?
Does the concept clearly and distinctly address the needs of the final target group? (BMC: integral; EXPERIENCE MAP; CONCEPT)	A well set out and visualised concept within a coherent business model forms a firmer basis for a development plan. Certainly in service provision it is important that there is a good understanding of the experience of the service users. Where does it start for them and where does it end? How does one step lead to the other? Do these steps take into account the desired benefits for the users (e.g. if users do not have a lot of time, how does the concept then address them)?
Is the innovation complex with a lot of elements which must be developed from scratch (rather than easy adjustments to what already exists), with many potential roadblocks during the development? (EXPERIENCE MAP)	A clear concept also makes it easier for the most important challenges to development to be assessed beforehand and the necessary time to be scheduled to find a solution for these. For each step in the service provision developed there is ideally an estimate of the degree of difficulty in developing this, testing it and obtaining feedback. The more elements there are, the more difficult, certainly if these elements are interconnected.
Was the required knowledge or technology known and available previously (versus embryonic)? (EXPERIENCE MAP)	If knowledge/technology is widely available then this does not have to be developed first and the development is in principle shorter and the potential for obstacles less.
Are quite a lot of partners needed and depending on each other for the development? (EXPERIENCE MAP)	Several partners means more need for agreement and hence more chance of delays and misunderstandings, especially when partners need to work in sequence (where one partners' output is input for another one).
Own elements (fill in below)	
Overall conclusion of the assessor	

6) Finance

See: BMC: costs/income

Additional questions	Why important?
Are the estimated operating costs sufficiently covered by estimated income flows?	Very many innovations fail to take off because of the fact that they do not have permanent finance to cover the operating costs. Also, no one will be prepared to invest in a start-up of the service/ solution if this cannot be launched and continued in the longer term due to lack of resources. It is therefore a very important element.
Is attention given to indirect beneficiaries as income sources?	Entities that in practice will have to spend less money because the innovation is up and running may sometimes be interested in contributing to bearing a fair share of the costs.
Is clever use made of non-monetary resources? (e.g. volunteers, gifts in kind, alternative payment resources...)	There is also input that does not cost money and can help ensure that the operating costs remain low so less finance is needed.
Is there a diversity of income flows if relevant? (e.g. in addition to subsidies)?	It is too often assumed that subsidies will cover the operating costs. But the authorities have fewer and fewer resources. One should certainly also think of a contribution from users (where this is possible, however minimal) and other sources of income that are not necessarily directly connected with the service itself (e.g. room hire, payments for disseminating knowledge,...).
Own elements (fill in below)	
Overall conclusion of the assessor	

B Are the necessary conditions for going onto phase 2 sufficiently fulfilled?

1) Schedule

Additional questions	Why important?
Is a sufficiently iterative approach provided for the “development phase” where a workable service provision is gradually developed from the concept based on repeated feed-back by users and stakeholders? (DEVELOPMENT PLAN)	Instead of a long development phase and then an evaluation phase and then adjusting, continuously cycling between development and testing seem to work much better. Feedback can in this way be obtained from the start, which otherwise would only come much later, when it is then difficult to still adjust what has already been developed. Late feedback is usually no longer taken into account.
Is sufficient provision made for participation of crucial stakeholders, both of actors from the public authorities, private sector, civil society and knowledge institutions? (DEVELOPMENT PLAN)	This is an extension of the previous question that focuses on drawing stakeholders into the development, and then especially users. The latter should be part of the process in a way that allows them to become agents of change themselves. It is added here that there must be a role for representatives from the four sectors mentioned to work on development and testing.
Is there a sufficiently elaborated approach for evaluating the impact of the fully developed service provision? (EVALUATION PLAN)	Where this may still be indicative at the start of phase 2 it is still necessary that there is already an idea of how one can recruit people from the final target group to take part in the service provision, where one is thinking of doing this and what would be necessary for it (in terms of people to provide the service, facilities where the service is provided, expertise to evaluate the results,...). The elaboration of the details is covered during the development.
Is attention paid to the project by the senior management of the promoter and partners? (DEVELOPMENT PLAN)	If senior management are not involved then there is less chance of successfully embedding the innovation. Involvement does not mean that the management has executive tasks but it should be informed and involved at crucial times, certainly as regards the creation of support for the innovation from key stakeholders.
Own elements (fill in below)	
Overall conclusion of the assessor	

2) Capacity

Additional questions	Why important?
Do the project implementers have a sufficiently strong track-record in the area of innovation?	In addition to the 1) experience with fieldwork, observation, immersion in the actual environment and context of the final target group 2) with networking, establishing creative links, broadening the perspective 3) questioning and challenging oneself, others and the situation, that was required for phase 1 there are new requirements namely 4) active and iterative tests with users 5) investigating impact. This can however come from partners who are also involved as implementers in the project. In principle one can also work with suppliers although this is less attractive than functioning as partners because of the lower level of involvement and less time spent.
Are several people involved in carrying out the project and is there sufficient diversity between the project implementers? Are the project implementers used in a relevant way for the tasks? (PARTNERSHIP)	Literature and practice show that innovation teams best consist of people with a diversity of backgrounds. This may involve their field of expertise (e.g. sociologists, economists, psychologists, anthropologists...), their function in an organisation (operational, marketing, financial, research ...) and their experience in the area to which the challenge relates to which the challenge relates (deep experience versus new in the field). This enables taking distance from the daily routine and rethinking what must happen. It is also true that innovation teams best contain a core of people who will be involved in the project from start to finish. This is to emphasise the responsibility for the project as a whole and to prevent there being insufficient ownership, particularly in later phases.

	<p>It is also important that there is a least one person who spends the majority (at least 50%) of her/his time on the project. This is to avoid the project being a secondary activity for anyone that is always under pressure from their main activity. This does not always have to be the same person throughout the whole process.</p> <p>Ideally there is then a core of project staff who are involved in the project from start to finish and who at different times are involved more substantially in the project. Around them are staff who make a specific, much smaller contribution and are not necessarily active throughout the whole project.</p>
<p>Was the quality of the work supplied in the first phase sufficient? (REPORTING)</p>	<p>Here one must look at whether the steps that were taken were of sufficient quality and whether what was planned happened. Above all one must look at whether the information obtained consists mainly of evidence or rather of opinions, speculation, guesses, etc. of members of the partnership.</p>
<p>Is the (content- and process-related) knowledge or technology that is necessary to develop the concept sufficiently available within the partnership? (PARTNERSHIP)</p>	<p>In principle one can also work with suppliers although this is less attractive than functioning as partners because of the lower level of involvement and less time spent.</p>
<p>Are the necessary people and facilities for developing the concept available immediately or within a reasonable period within the partnership? (PARTNERSHIP)</p>	<p>If the period is too long then a risk arises of the deadlines being too tight.</p>
<p>Own elements (fill in below)</p>	
<p>Overall conclusion of the assessor</p>	

TOOL 11: coaching questions to support promoters by ESIF [region or country] during PHASE 2

[Note: this is a slightly modified tool as compared to TOOL 11. It is to be used for coaching project during phase 2.]

Between brackets () a reference is provided to the BMC (business model canvas), which has to become more precise and substantiated.

A Rationale

1) Strategic importance / position of the solution

	Coaching questions	Why important?
How much impact by when?	Is the potential for achieving an impact on social, emotional, intellectual, economic, physical, material... level for the user as regards scale (namely for many people of the group (user) or for a future greater number if the group grows) or as regards intensity (namely a sizeable effect per person) becoming substantiated? (BMC: customer value / customers) (BMC= business model canvas)	<p>The impact being considered is still relevant to the policy domain [in country/region].</p> <p>This involves “impact” as progress that the user wants to make on a social, emotional, intellectual, economic, physical, material... level. This must be distinguished from “benefits” such as achieving this impact more easily, with less effort, more quickly, more cheaply, more accessibly, more certainly, more pleasantly, less frustratingly, more predictably, with fewer concerns, with fewer errors, more functionally, more reliably, more acceptably, more fittingly, less riskily, more efficiently, ... These latter “benefits” are assessed under “advantage” for the user.</p> <p>In phase 2 more clarity and evidence should gradually be achieved about the Business model canvas areas relating to customer value / customers. In addition, the impact evaluation near the end of phase 2 should provide an evidence based account of impact.</p>
	Has a measure been confirmed that further defines the “impact”?	Impact for the final target group remains too vague a term if no quantitative measurement instrument is determined for this. This instrument facilitates the setting up of the evaluation at the end of phase 2.
	Is impact outside the policy domain becoming substantiated?	It is not necessary but it is a bonus. Innovations that also benefit other policy domains will generally also be more innovative.
	Is the expected time for first seeing the impact after the launch being substantiated? (less than 3 years versus more than 10)	The faster one can achieve the same impact the better.
	Is behavioural change becoming substantiated (BMC: customer value)?	If a behavioural change is aimed at, the likelihood of impact is greater than if one restricts oneself to generating new awareness or insight. After all the latter do not “Do” anything themselves. And without action there will be no change. Within the BMC, the area “customer value” should become gradually clearer and more substantiated.

Potential for achieving systemic change	Is the project working on embedding the new service within a wider whole of innovations and changes that arise from a broader dynamic / overarching vision within which the challenge can be positioned?	Innovations that are fully isolated usually have less potential for achieving a wider and more intense impact. There is usually a need for complementary innovations and changes. In phase 2, projects should be showing that they are actively integrating themselves in a wider whole, e.g. by creating alliances with key actors or social movements?
	Is it the project actively drawing in users from the prevailing, rival system to the newly developed solution	This question is related to the previous one. It focuses on whether the newly developed system is able to provide a credible alternative for whatever existed.
	Are other relevant stakeholders responding with sufficient support to the innovation?	This question is also related to the previous one. It investigates whether there are stakeholders, who form part of the prevailing system or who can exert substantial influence on it, are moving to support a transition to a new system.
	Are steps being taken to replicate the solution in the long term? Are attempts made to make the solution less complex and more transferable to others?	If a solution can only be supported by one of the service providers or partnership then the impact that can really be achieved is more limited. ESIF considers it crucial to innovate for more than one service provider if more than one exists. To replicate it is however important to focus on the elements that really achieve the impact and that these can be codified and learned.
Potential for scaling up	Are steps being taken to extend the solution to another context?	If a solution can easily be adjusted there is more longer term potential. This is however not a necessity.
	Are steps taken to involve others outside the partnership if this is necessary to replicate or extend?	If others are required, steps need to be taken.
Own elements (fill in below)		

2) Advantage for the final target group

Coaching questions	Why important?
Is there a clearly defined and measurable segment within the group which the solution targets? Is this a vulnerable group? (BMC: customers)	Segmentation increases the range and the impact of the innovation. You can customise the work which means that groups that are intended to benefit can react more positively. It helps to target e.g. on the basis of who is easier to reach or can be helped more easily. The characteristics for segmentation must be measurable to allow specific people to be identified. The customer part of the BMC must become more substantiated and clearer in phase 2.
Is the solution making it possible for the group that is intended to benefit to make progress more easily, with less effort, more quickly, more cheaply, more accessibly, more certainly, more pleasantly, less frustratingly, more predictably, with fewer concerns, with fewer errors, more functionally, more reliably, more acceptably, more fittingly, less riskily, more efficiently than what is (or is not) already in existence? Are the benefits together indeed forming an attractive presentation of customer value ("value proposition")? (BMC: customer value)	This is NOT about the impact as such (see how much impact by when?) but about the way in which the solution achieves this impact and whether this all together forms an attractive whole for the user. If the solution is not more attractive than what already exists there is a little chance that users will flock to it, in spite of the promise of impact. If the group that is intended to benefit has been subjected to structural disempowerment then the concept should ensure they can themselves become agents of change and create new opportunities to fulfill their potential.
Is a suitable channel materializing for reaching and serving the group that is intended to benefit with the solution? (BMC: customer relation)	This is also important for the possible use of the solution. This linked to the previous question because channels play an important role e.g. for convenience.
Is there sufficient positive feedback from the final target group concerning the developed parts of the service, including user intention and absence of big barriers to use (that cannot not be solved)?	Throughout prototyping, feed-back needs to be gathered as to whether users see the solutions as effective to use and why (not) and how to resolve issues.
Own elements (fill in below)	

3) Innovative content

Coaching questions	Why important?
Does the group that is intended to benefit continue to experience the solution as different?	Innovation can be looked at from two perspectives: “market” (user) and “supply” (service, solution). Here the “market” perspective is addressed and more specifically from the point of view of the user from the group that is intended to benefit him/herself. If they do not see the difference from what already exists then this already indicates a low innovative content from the “market” perspective.
Is the intended segment of the final target group materializing and still innovative? Or is the intended context materializing and still innovative? Or are there unique benefits which the group that is intended to benefit needs that are materialising? This is all at [region or country] level. (BMC: customers)	Here again the reasoning is from the market perspective but as conceptualised by the providers on a [region or country] level. The proposed conceptualisation can be rather common outside [region or country]. Concerning the previous item, it is not because the conceptualisation of segment, context or benefits is new for [region or country], that the users from the group that is intended to benefit also effectively experience the service / solution as different. In phase 2, the customer part of the BMC needs to become substantiated.
Is the solution still different from what is used somewhere in [region or country] in practice (possibly in another context, for another need or for another group)? Is this still more an exception to the rule?	Here the supply side is looked at from a [region or country] perspective.
Is this still an incremental, evolutionary or radical innovation?	Based on the above answers it can be determined what type of innovation is being developed. Incremental means that an existing solution for an existing context, group and need is improved. This is however not what ESIF intends. ESIF is looking more for radical (new as regards market and as regards supply perspective) or evolutionary (new in one or both perspectives) innovations.
Own elements (fill in below)	

4) Embedding

Coaching questions	Why important?
Is the solution still fitting within the mission of the organisations that are partners in the project partnership? (BMC: partners)	It may be that the service /solution itself does not fall within the scope of activities which an organisation wants to go for. If this is the case for all the organisations from the formal partnership of the ESIF project then embedding the new service within this partnership is less probable. Perhaps other partners need to be found then. In phase 2, the partner part of the BCM needs to become substantiated.
Is synergy between the intended partners in the business model with their existing capacities (rather than need for acquiring new) being realised? (BMC: key processes, key resources, partners) <ul style="list-style-type: none"> • Are they able to draw on their existing experience with a service based on similar approaches to what they already do, including any required technology? • Do they have an operational service provision system that is similar to what is necessary for the new solutions? • Are there earlier, positive relations with the users and a good “reputation”? • Is there already good access to the users? 	Innovations that start from similar experiences, systems, relations, channels ... are easier to embed. Less work must be done on adjusting the organisations to delivering the service. If this is not the case, then this must be carefully managed. In phase 2, the key processes, resources and partner part of the BCM need to become substantiated.

Is the expected time horizon for launching the solution after evaluation shortening or lengthening? (e.g. from less than 1 year to more than 7)	This is related to the two previous questions.
Own elements (fill in below)	

5) Development

Coaching questions	Why important?
Does the solution address the needs of the final target group? (BMC: integral)	Is the solution creating the right experience for the service users? Where does it start for them and where does it end? How does one step lead to the other? Do these steps take into account the desired benefits for the users from the final target group (e.g. if users do not have a lot of time, how does the solution then address them)? In phase 2, the experience map needs to grow into a full service journey within a service blueprint and be substantiated with feedback from the target group. In addition, the full BMC behind the service blueprint has to become substantiated.
Are new elements being developed as intended and/or adjustments being made to existing elements?	Are roadblocks for development being cleared? Is development going to end on time for evaluation still to take place?
Is the required knowledge or technology being put to use or is development of it ongoing? If the latter, is there a risk of running out of time or resources?	If knowledge/technology is widely available then this does not have to be developed first and the development is in principle shorter and the potential for obstacles is decreased. Otherwise, this needs to be tightly managed.
Are the partners needed for the development all contributing? Are there delays or misunderstandings that need to be dealt with?	Several partners means more need for agreement and hence more likelihood of delays and misunderstandings. This therefore needs to be tightly managed, especially when partners need to work in sequence (where one partners' output is input for another one).
Own elements (fill in below)	

6) Finance

See: BMC: costs/income: this part of the BMC has to become substantiated in phase 2.

Coaching questions	Why important?
Are the estimated operating costs sufficiently covered by estimated income flows?	Very many innovations fail to take off because of the fact that they do not have permanent finance to cover the operating costs. Also, no one will be prepared to invest in a start-up of the service/ solution if this cannot be launched and continued in the longer term.
Is attention given to indirect beneficiaries as income sources?	Entities that in practice will have to spend less money because the innovation is up and running may sometimes be interested in contributing to bearing a fair share of the costs.
Is clever use made of non-monetary resources? (e.g. volunteers, gifts in kind, alternative payment resources...)	There is also input that does not cost money and can help ensure that the operating costs remain low so less finance is needed.
Is there a diversity of income flows if relevant? (e.g. in addition to subsidies)?	It is too often assumed that subsidies will cover the operating costs. But public authorities have fewer and fewer resources. One should certainly also think of a contribution from users (where this is possible, however minimal) and other sources of income that are not necessarily directly connected with the service itself (e.g. room hire, payments for disseminating knowledge,...).
Own elements (fill in below)	

B Are the necessary conditions for executing phase 2 being sufficiently fulfilled?

7) Schedule

Coaching questions	Why important?
Is a sufficiently iterative approach being executed for the “development phase” where a workable service provision is gradually developed based on repeated feed-back by users and stakeholders?	Instead of a long development phase and then an evaluation phase and then adjusting, continuously “developing tests” seem to work much better. Although feedback can be obtained from the start that otherwise would only come much later, when it is then difficult to still adjust what has already been developed. Late feedback is usually no longer taken into account.
Are stakeholders participating sufficiently, incl. actors from public authorities, private sector, civil society and knowledge institutions?	This is an extension of the previous question that focuses on drawing stakeholders into the development, especially users. The latter should be part of the process in a way that allows them to become agents of change themselves. It is added here that there must be a role for representatives from the four sectors mentioned to work on development and testing.
Is the evaluation plan acceptable?	There should be sufficient clarity on who will execute the evaluation and for how many months. The evaluation plan needs to be approved by the ESIF programme evaluation function.
Is attention being paid to the project by the senior management of the promoter and partners?	If senior management are not involved then there is less chance of successfully embedding the innovation. Involvement does not mean that the management has executive tasks but it should be informed and involved at crucial times, certainly as regards the creation of support for the innovation from key stakeholders.
Own elements (fill in below)	

8) Capacity

Coaching questions	Why important?
Are the project implementers sufficiently demonstrating the required capacities for innovation in phase 2?	In addition to the 1) experience with fieldwork, observation, immersion in the actual environment and context of the final target group 2) with networking, establishing creative links, broadening the perspective 3) questioning and challenging oneself, others and the situation, that was required for phase 1 there are new requirements namely 4) active and iterative tests with users 5) investigating impact. If not and external suppliers are brought in, are risks arising of the deadlines being too tight or costs too high?
Are several people involved in carrying out the phase 2 and is there sufficient diversity between the project implementers? Are the project implementers used in a relevant way for the tasks?	Literature and practice show that innovation teams best consist of people with a diversity of backgrounds. This may involve their field of expertise (e.g. sociologists, economists, psychologists, anthropologists ...), their function in an organisation (operational, marketing, financial, research ...) and their experience in the area to which the challenge relates to which the challenge relates (deep experience versus new in the field). This enables taking some distance from the daily routine and rethinking what must happen. It is also true that innovation teams best contain a core of people who will be involved in the project from start to finish. This is to emphasise the responsibility for the project as a whole and to prevent there being insufficient ownership, particularly in later phases. It is also important that there is a least one person who spends the majority (at least 50%) of her/his time on the project. This is to avoid the project being a secondary activity for anyone that is always under pressure from their main activity. This does not always have to be the same person throughout the whole process. Ideally there is then a core of project staff who are involved in the project from start to finish and who at different times are involved more substantially in the project. Around them are staff who make a specific, much smaller contribution and are not necessarily active throughout the whole project.

<p>Is the (content- and process-related) knowledge or technology that was deemed necessary to develop the solution still sufficient and is it indeed made available within the partnership?</p>	<p>If not, and external suppliers are brought in, are they able to deliver adequately and one time what is needed?</p>
<p>Are the necessary people and facilities for developing indeed made available within the partnership?</p>	<p>If not, and if external suppliers are brought in, are risks arising of the deadlines being too tight or costs too high?</p>
<p>Own elements (fill in below)</p>	

TOOL 12: guidance concerning methods for impact evaluation of innovations

Evaluation of a fully developed service is a key element to be integrated in phase 2 of an innovation project, where a pilot of the service has to be implemented in a real life context.

In annex 6 a full guidance is provided for supporting the conceptualization of the evaluation. The contents of this guidance are:

1. Introduction
2. Rigorous approaches to impact evaluation
 - 2.1. (Quasi-)Experimental approaches
 - 2.1.1. Foundation of cause and effect in these approaches
 - 2.1.2. Randomised controlled trials (RCT's)
 - 2.1.3. Propensity score matching
 - 2.1.4. Difference-in-difference
 - 2.1.5. Regression discontinuity
 - 2.1.6. Instrumental variables
 - 2.2. Case study research
 - 2.2.1. Foundation of cause and effect in these approaches
 - 2.2.2. Process tracing and realist evaluation
 - 2.2.3. Congruence analysis and contribution analysis
3. Pragmatic approaches
 - 3.1. Performance monitoring
 - 3.2. Theory of change as a framework for data
4. Impact evaluation and the capability approach
5. NESTA's standards of evidence framework
6. Evaluating transition platforms
7. Further reading

PART III
PART OF
ORGANISING THE ESIF
ORGANISATIONAL INNOVATION

TO DELIVER SOCIAL

7. Implications in terms of overall organization and staff requirements for an ESIF programme

A Who does what in ESIF funded social innovation?

According to P. Kotler and F. Trias De Bes in their book “Winning at Innovation” (2011), there are a number of important roles to take into account when setting up innovation processes:

1. **Activators:** initiate process (put forward a need, a trigger);
2. **Browsers:** search for information, throughout the process;
3. **Creators:** produce ideas (new concepts, possibilities, solutions) at any point of the process;
4. **Developers:** turn ideas into products/services (invention);
5. **Executors:** bring innovation into the organisations that will use them and to the users (implementation);
6. **Facilitators:** approve funding / deblock and support the innovation process (instrumentation).

Kotler and Trias De Bes state that the innovation process takes shape as an interaction process between all of these roles and give two examples. One example of a process is something relatively simple where activators ask developers to adapt a service to a local context and then pass it on to executors to launch it.

A much more substantial process could be where activators request information from browsers who go with what they found to creators. These go back to activators for approval to go ahead with their ideas. The activators approve and ask the facilitators for their appraisal and for additional resources. Then the developers start working. They realize that they need some more information and hence they go to the browsers. Developers then use the information they get and develop prototypes which they show to the facilitators, who approve moving into implementation. Now, the executors come in. When planning for implementation, they ask creators to come up with some good ideas on how to market the innovation. The executors then select the best ideas and launch.

The book of Kotler and Trias De Bes provides elaborate insights into the differences of these roles and how to execute them. It provides a useful framework for ESIF programme authorities to decide who will do what in their social innovation measures. Indeed, some of the roles are well in line with what such authorities are usually expected to do, while for others, a discussion is needed before deciding.

1) Activators

Activators are in charge of the innovation strategy. They are the ones who lift others out of their routine and “provoke” them.

The principles for defining an innovation strategy were discussed in chapter 3. Nevertheless, it is useful to summarize what is expected and to check how this is being provided in for a call for proposals.

To set a scope, the following questions are useful:

- whom should innovation target (organisations, geography, citizens, government agencies ...) e.g. Unemployed young migrants in large cities? Or more broadly all unemployed in a region?
- what existing or future problems/threats and/or what more specific bottlenecks should be tackled? E.g. discrimination of unemployed migrants in search of jobs and /or their low level of qualifications,

not having networks etc ...? Or more broadly any kind of issue?

- what trends offer positive opportunities that should be capitalised on? E.g. widespread access to social networks (see annex 1 and annex 3 for other trends)? Or more broadly any kind of trend?
- type: what kind of innovation is aimed for e.g.

Figure 34: different types of innovation



- focus of innovation: to make the scope even more restrictive, the innovation efforts can be targeted at a precise desired benefit or even tangible aspect of a specific service for a given need/customer group/ context. However, this then implies an incremental innovation;
- other key requirements e.g that for any innovation to receive funding there should be involvement of certain stakeholders, etc.;
- how decision-making will happen throughout the process, based on what key criteria;
- how support throughout the process will be provided.

According to Brown, L. and Osborne, S. (2014, Risk and innovation, Public Management Review, 15:2), radical innovation tends to be triggered by organisational crisis / poor performance or horizon scanning. In addition, while in the private sector competition may be a driver for innovation, more recently services driven theory has emphasized open systems approaches (incl. co-production with service users). The latter is therefore of relevance to the public sector which is not usually in competition with others.

Brown and Osborne also identify three types of innovation that correspond to Figure 31:

- **Evolutionary:** an existing need and user group requiring new organizational skills and capabilities (incl. technological). As an example the idea of pendant alarms for the elderly addresses their existing need for independent living (the service) but with a new organizational capacity that does not fundamentally affect the existing service (although it may affect the experience of the service). In the table above, this corresponds to “incremental”;
- **Expansionary:** this concerns a transfer of methods to a different user group. An example is the transfer of a therapeutic method from working with young offenders to adult ones. In the table above, this corresponds to “evolutionary target group innovation”;
- **Total:** this concerns a new solution for a new need and hence corresponds to radical innovation. An example is the development of new responses to the new needs of people with AIDS in the 1980’s.

They do not identify innovation in terms of new solutions for existing, acknowledged needs. In their thinking, this would seem to be close to “total” innovation.

Who should be the activators in an ESIF context?

Clearly, there is a big role here for policy-makers. However, it is also possible that “activation” is taken up by a group of people e.g. stakeholders, the academic community, frontline workers...

The activators should consider that a broader and less defined scope can trigger more ideas for innovation, yet many of these could fail to be of interest to the activators. On the other hand, the potential for truly radical and unpredicted innovation decreases as the scope narrows.

This is why Kotler and Trias De Bes recommend to have two mechanisms at the same time: one where innovation on a more narrow scope is requested versus one that leaves the scope very broad, defining only the kinds of services for whom that one is interested in. The latter they refer to as “exploratory” innovation.

A useful strategy for ESIF programme managers may indeed be to launch different kinds of calls for proposals. The only difference between fully “exploratory” innovation and more restricted innovation is that the scope is indeed more narrow. The tools presented in the previous section assume the broadest possible scope. This can be easily made more narrow.

2) Browsers

Browsers search for information. This is a supportive role so that means they always browse on behalf of someone else. Traditionally browsers are drawn from marketing (market research and marketeers). However, they could also be drawn from operations (in service environments as opposed to R&D departments in product environments).

Browsers can support **creators**.

They do this for example by [reviewing innovations](#) that have already occurred in a particular area of service provision or for particular citizens, from breakthroughs to marginal ones, as well as successful and failed ones, going back as far as the last 10 years, covering a broad geographical scope (going abroad). The actors that are connected to these innovations are also identified. This allows to identify innovation paths as well as who is carrying them forwards. It also allows to identify if innovations that failed in the past, may now have a better chance, due to changes in the context (e.g. new technology or trends).

Another way browsers can support creators is by finding [existing research about the situation](#) in terms of target groups, about the size and prevalence of issues, specific trends relating to this, etc. as well as more exploratory research about latent needs of citizens and possible sources of innovation.

They can also bring information about [technological advances](#) (in the broadest sense, e.g. new approaches).

They can also draw on [networks of experts and frontline service providers](#), asking them for relevant things (regarding users and their characteristics, motivations and barriers they experience; technical or organisational possibilities and constraints; strengths and weaknesses of current solutions, etc.) that should be taken into account as well as any ideas.

Browsers can bring interesting [general social trends](#) (as opposed to specific trends that would be part of the situation analysis) forwards for consideration by creators. These kinds of trends are usually of interest to mainstream services in the sense that the service is strengthened if it is in line with prevailing general trends. However, it is also possible to use trends to identify opportunities to be at the forefront of a trend.

Social trends can however be classed in four categories:

- [Macrotrends](#): these last minimally five years (e.g. “eco”-awareness);
- [Trends](#): one to five years;
- [Fashions](#): a season, at most one year;
- [Fads](#): a month, or even just one or two weeks.

Fads can turn into fashions which can turn into trends which can become macrotrends. Clearly, macro-trends are of the utmost interest while fads are risky, as it is highly uncertain they will last.

Browsers must summarise everything into an innovation diagnostic with two main components:

- A “sizing” report: evolution and size of an issue for particular groups (and sub-groups);
- A list of insights to act as mobilisers (drawing mainly on qualitative research).

Also, next to drawing on existing information, browsers can and should engage in field study.

Kotler and Triad De Bes state it is very difficult to innovate in something you do not know firsthand. They also state that it is key that browsers should not just inform but inspire. Kotler and Trias De Bes “advocate an active role for information, data and insights that go beyond mere description and that, in a certain manner, are part of the creative process.” (p. 47).

Taking this last statements seriously, in the guidelines we have provided in the earlier sections of this publication, we have emphasized the important of going into the field by prioritizing this above analysis of existing data. This does not mean existing data is not useful, only that the scarce time and resources available should be used primarily for empathic research in the field. It should hence also be considered to take creators out into the field as well, rather than leaving it up to the browsers alone. Kotler and Trias De Bes especially adovate the use of ethnographic research (immersion in the user context). This approach has three advantages:

- it enables to detect user insights that these users would be unlikely to express in a focus group or interview;
- the quality of information from video or audio recordings is vastly superior to that of a verbalized description;
- Traditional techniques rely on memory and verbalization so that the subject focuses only on obvious, memorable and habitual points. Ethnography allows to capture what is going through someone’s mind in real time.

By creating actionable insights, browsers also support [facilitators](#). The “insights” or opportunity areas for innovation that they uncover must be approved by facilitators because these may have no interest in pursuing certain of these routes for innovation. Then it would be a waste of time to find ideas that link to those routes.

Browsers can also support [developers](#). These require information of a more technical nature. Browsers can research how technology (in the broad sense of the word as “practice”) has been adopted successfully in other services.

Browsers can support **executors**. This concerns mainly information how to bring the innovation to the users in a full scale launch. This can be found by looking at introductions that have some analogy with the innovation at hand. In addition, a report on pitfalls and mistakes made by others is very useful.

Who should be the browsers in an ESIF context?

There are some decisions to be taken here. Regarding browsing support for creators, one extreme is that browsing is left entirely up to ESIF beneficiaries with no role for the ESIF authority. Another extreme is that the ESIF authority expends considerable resources to provide all projects with a comprehensive innovation diagnostic. How much can be done by the ESIF authority versus its beneficiaries is a matter of resources and position: sometimes a public actor can have access to information that is not available to others or only at a prohibitive cost. Regarding the latter, it can be more efficient to commission a study at the level of a region or country, that can be made use of by many actors, rather than asking all of these actors to all invest some of their resources. Especially in the case where an activator has demarcated the innovation scope quite precisely, should the ESIF authority consider pooling resources and acting as a browser to provide an innovation diagnostic. One way to contribute to this at a large scale is by organizing an innovation jam (see tool 14). The support browsers give to developers and executors is best left to the ESIF promoters themselves, as this is more closely tied to how they intend to deploy the solutions.

What is very clear however, is that field research, especially ethnography, has to be conducted by the ESIF beneficiaries who are going to come up with creative ideas, as this part of browsing is itself part of the creative process.

TOOL 13: innovation jam

This description draws on an article in MIT Sloan Management Review vol. 50 nr 1, fall 2008, An inside view of IBM's "Innovation Jam", by O M Bjelland and R C Wood as well as <https://www.collaborationjam.com/>.

IBM first conceived of a "jam" as a massive online parallel conference in 2001. It wanted to unite the organization, giving people a sense of participation and being listened to. There were 52000 post in this first jam, to questions such as "How do you work in an increasingly mobile organization?". This led to important actions.

But as of 2006, IBM started to use the jam process and technology to create ideas how to make money from technologies (technological innovation). The process for this "innovation" jam was as follows:

- 1) Define the goal as brainstorming to develop ideas better and commercialise them more quickly;
- 2) Determine categories and subjects for discussion: provide enough info to trigger the discussion and inspire. There were 6 broad groupings of 25 clusters of technologies;
- 3) Build web sites to provide the information (incl. digital mini-lectures, demonstrations) and places to discuss them (incl. with online experts and moderators);
- 4) Jam phase one: 72 hours of brainstorming on forums and wikis led to 46000 posts from 150000 participants;
- 5) Post Jam phase one: Here text mining technology is used to generate clusters of ideas. These clusters were reviewed by humans and those that made no sense were discarded. In addition, volunteers reviewed every single post to find those that seemed of special interest. This was then reviewed by fifty senior executives and professionals meeting together in nine sub-groups of five to eight people. This led to 31 big ideas;
- 6) Jam phase 2: refining the big ideas. Wikis were set up to refine the ideas;
- 7) Phase 2 reviews similar to phase 1;
- 8) Proposing new business units.

Lessons learnt and adaptations to future jams:

- Moderating online discussion is much harder than face to face ones: you have to be able to write quickly and crisply and when you leave the discussion (e.g. to get some sleep) and then come back, you cannot tell anymore where the ideas came from
- Phase 2 was dropped for subsequent jams: it turned out that people did not refine the big ideas but just started the phase 1 process again without responding to moderator efforts to focus on refining;
- None of the big ideas that emerged were really totally new. However, the jam did allow for these ideas (that no one really knew what to do with before) to become much more articulated. In addition, many smaller ideas emerged that complemented and hence could be combined with the big ones;
- As in any brainstorm process, many ideas were completely impractical or irrelevant.

Other organisations have set up similar processes. One major difference in some of these is that they have added a "vote" option that allows to promote a particular post to prominence. This has the advantage that attention tends to converge quickly on a few topics. However, there is no way of ensuring that the posts that get voted into prominence are actually the most interesting ones. Many of them tend to amount to sensational trivia.

The software used for the Innovation Jam is now commercially available (<http://elguji.com/innovation.nsf/content/ideajam.htm>).

3) Creators

Creators are ultimately there to provide plausible ideas that can be implemented. Part of this happens by breaking down an area and seeing components in a different way than usual (creative analysis), another part is in coming up with original combinations and syntheses.

The creative process can be helped by following three stages:

- **Focus:** on a problem, a goal or a physical item. It is possible to work with a variety of ways to focus, but each done separately;
- **Displacement:** this concerns taking the focus and then coming up with something illogical in relation to it. This can be done by substituting part of the process, eliminating part, combining elements of the focus with others, rearranging elements of the focus, exaggerating aspects of the focus, transposing elements of the focus.
- **Connection:** displacement is a provocation as it triggers the human mind as it cannot remain inactive in the face of absurdity.

All creativity enhancing techniques amount to this. This publication is however not intending to provide a catalogue nor an explanation of all existing creativity techniques. Kotler and Trias De Bes provide useful starting point (p. 64-84 of their book).

Management and complexity thinker Dave Snowden similarly claims (see <http://cognitive-edge.com/videos/apollo-13/> and <http://cognitive-edge.com/blog/culture-and-innovation/>) that three conditions are necessary but not sufficient for a creative process:

- starvation of familiar resource (shortage of resources where usually there is abundance), forcing you to find new approaches, doing things in a different way;
- pressure that forces you to engage in the problem;
- perspective shift to allow different patterns and ideas to be brought into play.

He gives the following example: “A great illustration of this can be found in the film of Apollo XIII. Following the initial disaster a group of scientists are placed in a room and on the floor in front of them is all the equipment that is in the capsule. They are told to fix the problem and they do. Starvation of resource, pressure on time and a key perspective shift: people we know will die if we don’t find a way to think differently about the problem.”

Clearly, having little resources in the face of an urgent problem (pressure) is a form of “displacement”. The perspective shift is a form of “connection”.

The bulk of the function of creators is to provide developers with ideas. Together, they turn ideas into concepts. A concept has the following elements:

- a name that makes clear what service will be delivered to whom in what context;
- the need that will be addressed for the targeted constituents, their internal motivation to use the innovation, what will convince them (e.g. the need to be healthy). Here it is important to support the existence of this need throughout the innovation track (with qualitative rather than quantitative research);
- the core benefit: how the need will be addressed by the innovation (e.g. much more simple, faster, agreeable way to stay healthy);
- trends within which the concept is situated;
- images that embody the concept and contrasting images that do not;
- alternative already existing solutions with which the new idea will have to compete. This is important for developers who will have to determine where/how the innovation is to be embedded;
- verifiable, objective elements that can convince the targeted users that the benefit can be realised (e.g. because they can try the service out OR because third parties will provide a form of accreditation).

The concept is an important element for facilitators who have to be able to judge whether it has sufficient potential for being developed. Ideally, facilitators want many concepts that they can select from. They can then rank the concepts according to potential (strategic, advantage for users, innovative) and difficulty (easy or hard to develop, to launch/embed, to finance). Of course, easy and with high potential should be prioritized. High potential but also very difficult concepts can perhaps be revised. Easy and low impact are not very interesting but could merit (low) investment while difficult with low potential should be avoided altogether.

However, creators are not only important to developers and facilitators. Creativity is also important to executors and even browsers, and creators can support them in this matter.

According to Kotler and Trias De Bes, creative people can be described in various ways:

- Personal characteristics: flexible (go beyond the obvious), fluid (generate many ideas about an issue), elaborative (expand the task in detail), tolerant of ambiguity (stand up well to conflict), able to see the whole (systemic), inquiring (interest in many disciplines), sensitive to interests of others, curious (interest in “playing” with things), independent (ideas of their own), reflective (think about what they see and hear), action-oriented (go beyond ideas to acting), able to concentrate, persistent (don’t give up easily), committed, sense of humor;
- Personal qualities: verbal fluency, high IQ, imagination, ability to influence others, ability to take risks, interest in properly defining the problem properly;
- Patterns of behavior: using metaphors, images, logic,... asking about the “why” in what they observe;
- Passionate, aware of having finite time, exploiting their own potential.

Who should be the creators in an ESIF context?

Anyone can be involved in creation. However, as the ultimate goal is plausible ideas that can be implemented, the process should be owned by those who ultimately are supposed to implement. This will not be the ESIF authority. It should be well-understood that “owning” the process does not have to mean running the process. The worst thing to do is for example give control over a creative process to an executor. An ESIF authority CAN conceivably provide active support to actors who are missing expertise in creative processes. This does not mean it “owns” the process. It only facilitates (see facilitator role below).

4) Developers

The role of development is played mostly by people with technical expertise, which in a service environment means people with experience in service design and provision. Usually these are people from operations, supported by designers (especially for tangible aspects of a service) as in services, there are no real R&D departments. But also marketeers can be involved in this role. Together, this creates a mix of what is possible and what is valuable into “valuable possibles”.

Developers know about limitations that answer the following questions: 1) do we have the know-how and the technology that is needed for developing the concept? If not, then external parties must be found to acquire this and this tends to be a more costly, lengthy and difficult process 2) do we have the resources (incl. financial) or capacity to deliver it once developed? If not, extra resources or partners must be found. The answers to the questions may lead to dropping a concept, maintaining it and starting to look for partners, suppliers, resources ... Or one should modify the concept to make it more realistic.

In the latter case, a risk arises: to get a highly feasible concept that is so diluted that it has no more potential. Basic ideas and benefits of the concept must be maintained. All the roles involved in the

innovation should track the concept as it evolves and work together to overcome limitations via new ideas, information, research or additional resources.

The development process itself runs along the maxim of “fail soon, fast and cheap”. Hence service concepts should be made tangible as soon as possible in cheap ways, to gain knowledge. For services, the following scheme is applicable: concept – configuration of the service – demo(s) – real test (pilot) – established service. During these steps, checks are made on: 1) use: does it work well enough? Is it safe / in compliance with regulations? Does it meet the expectations of users? 2) Can we deliver it in a real context up to this standard? 3) Are we preserving the core benefits and the key insights that defined the concept in the first place?

A good developer possesses two key qualities: patience and tenacity. They need to be able to go over and over the limitations, obstacles and difficulties that inevitably arise and never give up. Otherwise, services end up being launched that are not ready and will fail miserably. Or no services ever end up launched.

Who should be the developers in an ESIF context?

The same line of argument as for the creators is applicable to developers.

5) Executors

Executors take care of the practical roll-out of an innovation, be it as a first pilot or a full scale implementation. They need the other roles to provide them with a synthesis of the key ideas they have dealt with over the process. Their aim is to communicate the unique innovation value to users in a launch.

Executors may be present inside the organization that developed the solution, but also outside. The latter can be by setting up a new organization or by engaging in a kind of joint venture. This is of course not relevant for incremental innovation. Moving an innovation outside the place where it was developed makes more sense ...

- the more radical the innovation is;
- the longer the projected trajectory is;
- the more there are barriers and resistance in the developing organisations;
- the lower the costs are;
- the more resources you have.

If execution will happen inside the organisation that developed the innovation the question arises which team will execute:

- it could be a team that is dedicated only to this innovation : the cost is higher but the team is totally focused;
- it could be shared team where the executors are also running other existing services: this is cheaper but there is a risk the team will be too stretched;
- it could be that several innovations are grouped together and given to one team. This makes sense if innovations complement each other or if there is synergy between them in some way.

The profile of a good executor, especially for more radical innovation, is that they can deal with new situations and sudden changes in unfamiliar environments. This requires sharp reflexes (being quick and creative when faced with issues).

Before an actual full scale launch, it is best to execute with a smaller group of selected users in a real life situation. Or it could launch in a smaller geographical area (e.g. in one city). These small scale launches are referred to as pilots. They can be the subject of an intensive evaluation incl. opportunities to improve.

A full scale launch concludes the innovation process.

Who should be the executors in an ESIF context?

Execution is definitely not a task for an ESIF authority. However, an ESIF authority can still help developers to find execution partners if they are not able or willing to execute themselves (this is a brokering function). ESIF authorities can also provide resources for an extended period of time to executors until execution can be financed in another way (this is facilitation). This applies particularly to situations where the new service is in competition with an existing publicly funded alternative. It takes time before the government can reformulate laws and decrees to suit the new alternative.

6) Facilitators

Facilitators have the following tasks: approve investments, select the best concepts, jumpstart innovation teams when bogged down, give the definitive go for a launch.

Facilitation in terms of jumpstarting the innovation processes is of a different nature than facilitation in terms of decision-making. Tools in jumpstarting a process are methods that allow different perspectives to come to the fore and be considered like a nominal group technique, six thinking hats etc. Tools in selecting are subjective assessment by a group of decision-makers based on a set of criteria (where not only a mean score but also standard deviations count, as a high standard deviation with a high mean score means this is a polarizing concept with ardent opponents and supporters; these may be the most interesting concepts as truly radical innovation will never please everyone), having a large group of people vote (the concepts with the most votes win) and using the Delphi method with a limited amount of experts.

However, it is healthy that as decision-makers they stay a bit at a distance from the process so that they can act objectively. However, they should always be ready to make decisions.

Facilitators as decision-makers can be different people or groups as the innovation process goes on or depending on the type of innovation. For example, as an innovation moves forward and investments become larger, more senior or expert decision-makers may have to be involved. Also innovations that carry greater risks (e.g radical versus incremental innovation) may require more senior or expert facilitators.

In some cases, activators and facilitators can be the same people, but this is not necessarily so.

Useful input when selecting concepts are concept tests with prospective users. Concept tests also allow to make a rough estimation of the potential of an innovation in terms of yearly demand. This is done by multiplying all the following variables:

- total population of the target group
- estimated awareness percentage with communication campaign
- % of users that said they would definitely use (from concept test)
- estimated frequency a person needs the service in a year (from research on needs)
- % of times users would use this service rather than an alternative (from concept test)

Finally, pilots provide the information to facilitators for deciding whether a service really should be fully launched or not. This includes more exact estimates of volumes but also of costs, benefits to users and impact.

In an ESIF context, this creates a link to the publication by DG Enterprise/SIE that was elaborated in the first chapter that described the framework for funding. However, it has been adapted based on the insights delivered in this publication. The shaded area is what the current publication focuses on.

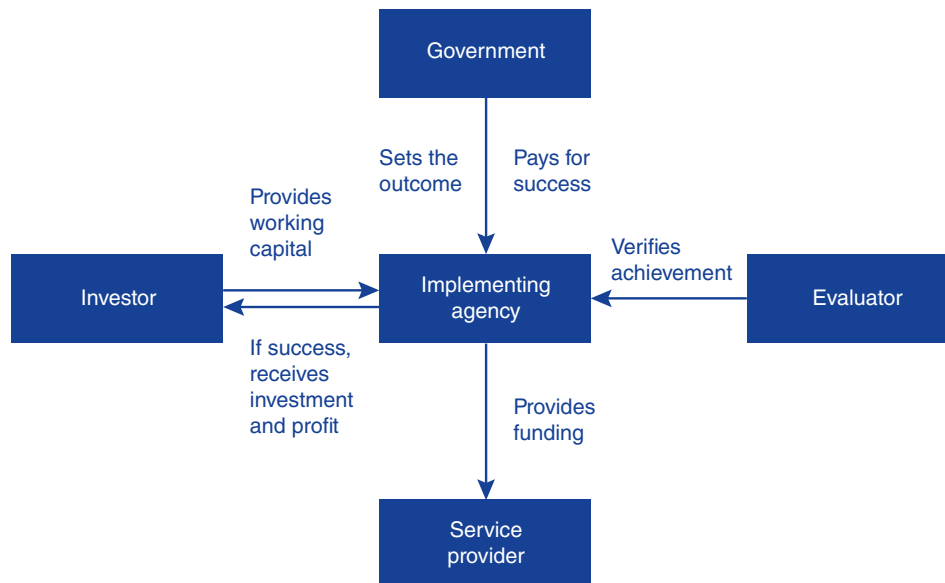
Table 10: types of funding for innovation

	1. Ideas fund	2. Prototype (or pilot) fund	3. Implementation fund	4. Scaling fund
Relation to the proposed mechanisms in this publication	Innovation via exploration phase 1	Innovation via exploration phase 2 AND Innovation via adaptation	Not foreseen yet	Not foreseen yet
Objective	To enable frontline staff and individuals in civil society to pursue a social innovation idea	To enable good ideas to be prototyped and road tested	To enable pilots to be scaled up and to explore how they can be sustained	To enable large-scale expansion
Nature of support	Up to € 50000 (phase 1), relatively easy to enter into. It might be possible to theme around challenges and sectors (e.g. education, health, ageing).	Grants of up to € 150 000 over one year and a half (for phase 2)	Grants and DAF (Donor Advised Funds) of up to € 30m (in accordance with state aid rules)	Bonds (quasi equity) – up to € 100m
Gateway to next stage	The successful ideas would be judged by external panels composed of experts and users, or by peers.	Pilot produces promise of better results than existing models based on sound evaluation techniques (e.g. social experimentation using control groups)	Mainstreamed pilot demonstrates superior results and value for money at significant scale	Scaling suggests systemic transformational potential of new paradigm
Description of terms	Grant for up to six-months staff release	Taking known idea and working up a feasibility study/ business plan, then testing for 12 months	Something like EQUAL/ urban programmes operating within the Structural Funds	Pay for results/SIB model (tax breaks, multi-level governance structure, virtuous circuits) and public/social, or public/partnerships (private/social)
Existing examples	Unltd, Ashoka Fellows, Kennisland digital pioneers fund	PROGRESS Social Experimentation call for proposals. The URBACT action planning approach funded under ERDF	Equal, URBAN	SIBS, Pay for Results (USA)

The processes described so far clearly cover the “ideas fund” as well as the “prototype fund”. In fact, the way of working proposed in the “innovation via exploration” (see tool 1) ties the ideas fund and the prototype funds together. In addition, the “innovation via adaptation” is a second manifestation of the “prototype/pilot” fund.

However, part of the facilitation role to be executed by the ESIF can also be to act as an “implementation fund” and a “scaling fund”. The latter two however are much closer to funding “mainstream” projects than they are to innovation. As proposed by DG Enterprise/SIE, implementation could also be funded by ESIF. For further scaling, social impact bonds as a funding mechanism for scaling are proposed. However, this positioning of SIBs may not be entirely appropriate and therefore the idea of a SIB is elaborated below.

TOOL 14: Social impact bond (SIB)



Basic approach

The scheme as described in the figure above reflects the arrangement of the first SIB that was set up in Peterborough prison in the UK as of March 2010 with the aim of reducing prisoner recidivism. In this case the government is the UK Ministry of Justice complemented by the Big Lottery Fund who pay for success to the implementing agency (also referred to as intermediary). The latter is Social Finance UK, a specialized not for profit organisation that develops and build funding models to tackle entrenched social problems. Investors that provide the working capital to Social Finance UK are mainly philanthropists like the Tudor trust. Social Finance UK provides the finance to allow the service provider – in this case a consortium of organisations that cover a variety of services – to operate.

Payment for success is a fixed fee per re-conviction event reduced. This fee is itself derived from the savings that accrue to the society per event. The “saving” does not only include actual financial cashflow savings to the government but also monetised societal benefits (e.g. the monetary value of the impact of the avoided crime for the victim of the crime). Payments per event are made only if a threshold is passed: for an intermediate payment per cohort when 10% less re-conviction occurs for any of three cohorts of prisoners or 7,5% across all cohorts after 12 months are passed since release from prison. 10% or 7,5% less is not based on a comparison between a baseline and the situation after a year but on a comparison with a (matched) control group (hence the term “impact” bond).

However, in practice this means an outcome payment can be expected at the earliest only after three to four years since starting work with a cohort as it takes about two years before the first full cohort will have been released from prison. Then one to wait for a year and then one has to count another 6 months before any court actually processes an eventual offence, another three for the Ministry to receive an update and then one more month to allow the independent assessor to undertake an impact evaluation. The evaluation by RAND of this mechanism states that this is the maximum that an investor can be expected to wait for a first payment.

In the case of reaching 10% for each cohort, then the annual internal rate of return for the investor would be 7,5%. A cap is set on earning a return of 13% (when having more than 10% less reconvictions). The SIB was well on track to achieve at least a reduction of recidivism by 7,5%.

The RAND evaluation (2014) of this SIB states a number of key success factors, amongst others:

- Flexibility as to the services provided: no up-front theory of change, which enables the needs of every individual cohort member to be addressed;
- Good cooperation with the prison;
- Partnership working: building strategic links with a range of agencies to enable access to the statutory services they provide;
- The investors rather than the providers take the outcome achievement risk;
- Investors being motivated to have services provided by voluntary and community based organisations;
- The use of volunteer ex-offenders on probation or released on temporary license enabling relationship building with cohort members that had the least complex needs and posed low risks, freeing up time for the more complex cases;
- The absence of restrictions on how SIB working capital could be spent enabled commissioning new service providers during the life of the SIB.

Setting up a SIB

A recent report by the Brookings Institution (2015) reviewed 38 SIBs. It lists the following feasibility criteria:

- Meaningful and measurable outcomes: simple to measure (e.g. with administrative data) and predictive of the further life trajectory of participants and interesting to outcome funders i.e. aligned with policy objectives and/or monetisable;
- A reasonable time horizon: there is substantial evidence that outcomes can be achieved within this timeframe, that outcome funders and investors are willing to accept;
- Appropriate legal and political conditions: political support for the services, paying for outcomes beyond the fiscal year, intermediaries having authority to make decisions such as selecting providers, etc.

Variations

The report also states that there are many variations that can deviate significantly from the first SIB. For example, while there are four key components in any deal, namely a feasibility study, a negotiation of a deal, implementation and evaluation/payment, the order in which these happen can change. For example, sometimes a service provider is selected early on, enabling their input to be part of the feasibility study, sometimes they are only brought in after the feasibility study was done and the deal structured. In most cases, government takes the initiative. Intermediaries tend to determine feasibility, structure the deal and find investors. Intermediaries sometimes look also for service providers and/or are involved in managing performance.

The report finds there are three broad types of SIB:

- Where the outcome funder pays an intermediary;
- Where the outcome funder pays the investors directly;
- Where the outcome funder pays the service providers, who then pay the return to investors but keep what is left over.

Further variations are:

- Whether repaid funds to investors are recycled into the SIB (or not) to fund extra service delivery;
- Extent to which capital is paid up front or in parts during the contract lifetime;
- If the latter in combination with recycled money as a source of finance, then the risk is higher as the service does not have a guarantee to continue without being successful early on;

- Whether rates of return are mostly fixed (like in debt) or depend rather on achievement of outcomes (like in equity);
- Whether investment covers only service provision or also other costs e.g. those of the intermediary and evaluator;
- Whether intermediaries and / or service providers themselves receive success fees;
- The length of the contract (which often does not cover the full period of service delivery but is longer than the traditional yearly contract);
- Whether the payment is done on the basis of output, outcome or impact measures (the latter was present in only eight of the SIBs) as well as the timing (ranging from weekly to yearly);
- Whether there is for investors capital protection (a portion of their investment being repaid irrespective of the outcomes) or early termination opportunities (e.g. stop the deal if after three years the rate of success is below a particular threshold);
- Whether there are outcome thresholds for payment (only in 6 cases) or not and the size of the maximum return;
- SIBs where one fund is able to fund several contracts that all work on different outcomes concerning the same issue;
- Whether stakeholders have different roles e.g. the intermediary who also does some of the investment.

Why do stakeholders engage in a SIB?

The report points out that outcome funders are interested in SIBs mainly because they want to test innovative financial models for addressing social issues, linked closely to the desire to deal with budget silos, procurement issues, budgeting and political barriers. Also the opportunity to gain both financial (saving) and social returns was of importance. What was, contrary to what might be expected, not very present was the motivation to achieve financial savings on its own nor the desire to reduce risk for the government. In any case, SIBs can still entail risks for governments. Service providers can cherry pick and engage in other gaming tactics. If investors can pull out prematurely, then a population of needy citizens could end up stranded.

Service providers are motivated by the opportunity to scale successful interventions and achieve more social impact. However, the number of individuals being reached by the current SIBs is rather small in absolute terms. But the relative share of the targeted population may be quite high. Building capacity to also increase absolute numbers remains a challenge that is not addressed by the SIB mechanisms as this assumes service providers can indeed deliver. Other reasons to engage in a SIB were, for example, to get funding for prevention and longer term contract. Indeed, all but one of the studied SIBs in the Brookings Institution report focused on prevention.

As for the investors, they were motivated, like governments, by the opportunity to test innovative financial models and gain. Also, they want to achieve social outcomes. In addition, they found it attractive that they could recycle funds (when paid back, put the funds back into more service provision). In addition, publicity (e.g. being the first to do this) was important.

Challenges

The report states that evidence that the services will actually be effective, facilitates setting up a SIB. However, this means that SIBs are NOT themselves used to create innovations but rather already established approaches. However, if investors with large risk appetites can be found, this may be less of an issue.

Having easy to measure and monetize outcomes is an enabler. Connected to this, improvement on those measures should not take too long to materialize.

SIBs took from 6 months to three years to develop which represents quite a bit of up-front work which

also requires resources. A problem is also that benefits/saving may materialize for other actors than the outcome funder. Also legal conditions (e.g. taxes) and existing financial mechanisms (e.g. public budgeting) have been problematic.

The Federal Reserve Bank of San Francisco also published a review of SIB experience in 2013, that highlighted the question whether governments would be prepared to fund interventions that do not pay fully for themselves in financial terms e.g. whose value is constituted by 75% financial savings and 25% other social benefits that do not represent actual cashflows. This indeed represents then a 25% cashflow gap and hence requires increased budgets.

The Bank paper also states that it is necessary to have adequate sizes of cohorts participating (generally more than 200 per year) to be able to execute a proper statistical analysis of impact. In addition, larger cohorts enable larger real financial savings to be realized by being able to close down other services and their associated fixed costs (e.g. if enough prisoners do not come back, an entire prison can be closed, whereas otherwise, the savings amount only to the variable costs associated with the individual prisoners). Also, the overheads associated with setting up a SIB are stated to require SIBs of a value of +/- 20 million US dollars.

Conclusions relating to the use of SIBs for innovation

The Brookings Institution report does not support that SIBs have created any radical innovations. Not a single intervention was funded that did not exist before. This is linked to the rather low risk appetite of the investors who want to see some evidence that the intervention will deliver. The report suggests that other instruments such as innovation challenges may be more suited to trigger more radical innovation. Nevertheless, quite a few of the SIBs are funding “evolutionary” innovation in that the interventions are now applied in a different context or by different providers. Some interventions have been combined under a SIB which is also a form of innovation. Indeed, SIBs do prove to be useful to support collaboration between stakeholders, even though this may be challenging.

Also, once SIBs are underway, there is relatively little adjustment occurring to the delivery in most cases. But it does occur in some.

It is therefore fair to conclude that SIBs seem suited mostly for scaling of previously tested innovations for which there is already substantial evidence that they work and capacity to deliver on them, as indeed suggested in Table 10.

ESIF can intervene as the outcome funder. Indeed, the ESIF regulations already allow to use a pay for performance structure (e.g. via standard cost options). Alternatively, ESIF can act as investor in which case the ESIF regulations covering loans are applicable. The Federal Reserve Bank paper did indeed raise the issue that governments would have to reduce the risk for investors in the future if it wants more widespread use of SIBs. One way to do this is by using ESIF to provide a part of the investment at more favorable rates than other investors.

Sources

- Gustafsson-Wright, E., Gardiner, S., Putcha, V., 2015, The potential and limitations of Impact Bonds (Brookings Institution).
- Disley, E. and Rubin, J., 2014, Phase 2 report from the payment by results Social impact bond pilot oat HMP Peterborough (RAND)
- Azemati, H., Belinsky, M., Gilette, R., Liebman, J., Sellman, A., Wyse, A., 2013, “Social Impact Bonds: Lessons learned so far”, in Community Development Investment Review of the Federal Reserve Bank of San Francisco.

Who should be the facilitators in an ESIF context?

Clearly, here is a role that an ESIF authority should take up. The facilitator should however not be a person that was involved in other roles as they need to remain objective. In addition, the ESIF authority should not be the only one taking up this role. Activators could also be involved in selecting concepts and, once the concept has been piloted and has demonstrated its potential, to approve funding for mainstream implementation and scaling.

7) Intra/entrepreneurial mindset as a foundation

While all of the roles described above are crucial for an innovation process to fulfill its potential, overall, they are supported by an “entrepreneurial mindset”. This does not mean that all innovation has to come from a new (social) enterprise. An entrepreneurial mindset can exist inside the public sector or an existing private sector or social/non-profit organisation as well (intrapreneurship).

Research by prof. Sarasvathy at the Darden Graduate School of Business Administration (Effectuation: Elements of Entrepreneurial Expertise, 2009) reveals that entrepreneurial thinking is very different from standard “managerial” thinking. The former is referred to as “effectual” reasoning or “effectuation”. The latter is referred to as “causal” reasoning. The research does state that the best entrepreneurs can use both types of reasoning. Yet in the early stages of innovation, effectual reasoning is more important.

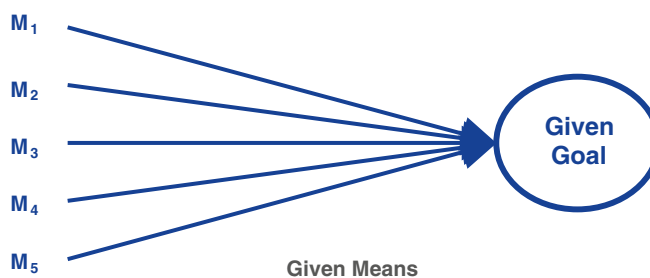
Causal reasoning begins with a pre-set goal and seeks to identify the optimal solution to achieve it. Sometimes the means are also given, sometimes new means can be created.

Figure 35: managerial thinking versus strategic thinking

Managerial Thinking — Causal Reasoning

Distinguishing Characteristic:

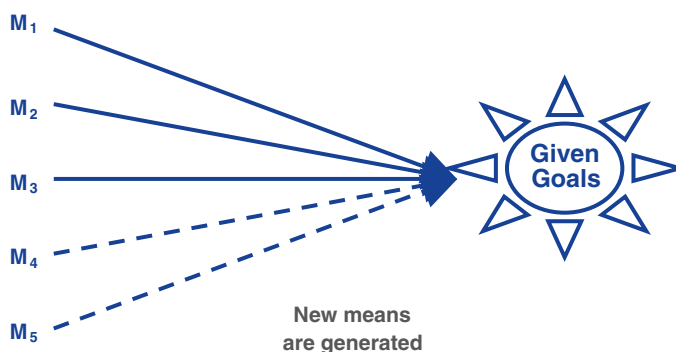
Selecting between given means to achieve a pre-determined goal



Strategic Thinking — Creative Causal Reasoning

Distinguishing Characteristic:

Generating new means to achieve pre-determined goals



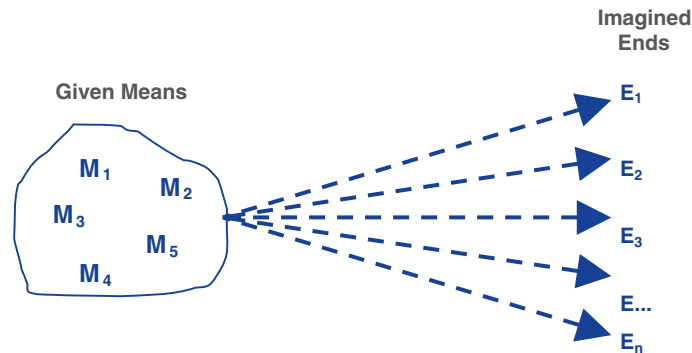
Effectuating does not begin with a specific goal. It rather starts with a given set of means and then allows goals to emerge over time from the varied imagination and aspiration of actors. Below the two form of reasoning are depicted.

Figure 36: entrepreneurial thinking

Entrepreneurial Thinking — Effectual Reasoning

Distinguishing Characteristic:

Imagining possible new ends using a given set of means



The “means” of these actors consist of “who they are”, “what they know” and “whom they know”. There is no elaborate, up-front planning but action is taken based on minimal plans. In fact, plans are made and remade through action and interaction with others on a daily basis. Eventually, some of the emerging consequences of this action coalesce into clearly achievable goals. Then causal reasoning can take over.

An experiment demonstrated the power of effectuation as when a group of entrepreneurs was asked to start with the same product, they ended up in 18 completely disparate industries.

We can see that effectuation matters greatly when creating a business model around a concept as well as afterwards when the concept is being developed and tested, with the business model forming and reforming as well.

Below causal and effectual reasoning are contrasted systematically on the basis of principles.

(Source: <http://www.effectuation.org/sites/default/files/documents/effectuation-3-pager.pdf>)

Table 11: contrast between managerial and entrepreneurial thinking

	<p>Bird-in-hand {START WITH YOUR MEANS}</p> <p>When expert entrepreneurs set out to build a new venture, they start with their means: who I am, what I know, and whom I know. Then, the entrepreneurs imagine possibilities that originate from their means.</p>	<p><i>contrasts with...</i></p> <p>Pre-set goals or opportunities</p> <p>Causal reasoning works inversely by assembling means after a goal is set.</p>
	<p>Affordable Loss {FOCUS ON THE DOWNSIDE RISK}</p> <p>Expert entrepreneurs limit risk by understanding what they can afford to lose at each step, instead of seeking large all-or-nothing opportunities. They choose goals and actions where there is upside even if the downside ends up happening.</p>	<p><i>contrasts with...</i></p> <p>Expected return</p> <p>Causal reasoning first targets a return, then works to minimize associated risk.</p>
	<p>Lemonade {LEVERAGE CONTINGENCIES}</p> <p>Expert entrepreneurs invite the surprise factor. Instead of making “what-if” scenarios to deal with worst-case scenarios, experts interpret “bad” news and surprises as potential clues to create new markets.</p>	<p><i>contrasts with...</i></p> <p>Avoiding surprises</p> <p>Causal reasoning works to minimize the probability of unexpected outcomes.</p>
	<p>Patchwork Quilt {FORM PARTNERSHIPS}</p> <p>Expert entrepreneurs build partnerships with self-selecting stakeholders. By obtaining pre-commitments from these key partners early on in the venture, experts reduce uncertainty and co-create the new market with its interested participants.</p>	<p><i>contrasts with...</i></p> <p>Competitive analysis</p> <p>Causal reasoning presumes that competitors are rivals to contend with.</p>
	<p>Pilot-in-the-plane {CONTROL V. PREDICT}</p> <p>By focusing on activities within their control, expert entrepreneurs know their actions will result in the desired outcomes. An effectual worldview is rooted in the belief that the future is neither found nor predicted, but rather made.</p>	<p><i>contrasts with...</i></p> <p>Inevitable trends</p> <p>Causal reasoning accepts that established market forces will cause the future unfold.</p>

Effectuation is necessary to deal with uncertainty. But this confuses people who try to predict the future to reduce risk. But the latter is only possible when there is enough information. Consider an urn that contains red and white balls. The game is that for each red ball you draw you get 50 EUR. If you know there are as many white as red balls, you can calculate an average reward of 25 EUR per draw. You will only draw if you can draw for a cost of less than 25 EUR. This is the model of an uncertain future where we have probabilities at our disposal.

In innovation, the game can be the same but this time we do not know how many balls there are nor their color. Hence, we have no clue about probabilities. In this case, the best strategy for a player is to draw balls randomly several times and the try to figure out over time from the results what the distribution of balls is. This is a model of an uncertain, but learnable future that becomes more predictable over time.

Entrepreneurs will take the second model and then try to increase the number of red balls in the urn by their own actions. They do this by finding other people (in their networks) who have such balls. Or alternatively, if everyone they know has green balls, they will try to create a game where green balls win. Entrepreneurs try to create the future rather than predict it. This is especially useful for radical innovation (as defined above) which entails new concepts for newly defined needs, contexts or target groups (markets). Effectuation does not assume pre-existing markets but rather presumes the markets we create are predicated on the people we are able to bring together. Of course, many ventures will ultimately fail. But there is no other way. This brings us to a consideration of risk.

8) Risk governance and innovation

According to Brown, L. and Osborne, S. (2014, Risk and innovation, *Public Management Review*, 15:2), risk is invariably presented as a negative phenomenon in the public sector. However, successful innovation requires effective risk-taking. Risks come from failure to develop or adapt the new concepts and services for the local context, failure to deliver outcomes with them, failure to adopt them more widely (incl. by users, media, politicians, larger public) or failure to sustain them. Brown and Osborne point to recent studies that indicate that perhaps only 20% of the innovation processes turn out something viable and sustainable.

The public sector especially has a hard time accepting this, given the vulnerability of many users of public services and the intense media and political scrutiny that these services receive.

To address this reality, Brown and Osborne propose to treat different kinds of innovation with a different kind of risk governance. Three kinds of governance are put forward depending on the type of risk:

- Risk minimization is required when needs/ends are uncontested, a technology/solution is uncontroversial and the consequences of failure limited to individual users. Then risk is limited to a “technical” risk;
- Risk analysis is appropriate when needs/ends are uncontested with risk mainly at the individual user level as well as in terms of professional / organisational reputation and legitimacy of the service provider. The new technology/solutions to be applied is more controversial in relation to the need;
- Risk negotiation is to be used when the novelty is so high that there is an interaction of individual, organization/professional and “behavioural” risk. This latter risk consists of a risk for the wider community of stakeholders in terms of interest or geography (e.g. when a new response is developed for a “new need, namely the desire of mentally ill persons to remain integrated into the community, this may pose dangers for this community). There are multiple and conflicting views on the balance between risks and benefits amongst and for different stakeholder groups. The “need” in this case, due to its novelty, is bound to be contested to some degree.

Risk minimization is the typical approach from the actuarial literature. It stems from a closed systems approach where risk is internal to an organization and can be managed internally by preventing the taking of risky actions with rules and procedures. The assumption is risk is entirely avoidable. This approach is also referred to as “technocratic” risk management where experts ensure the risk of any action is largely avoided.

Risk analysis is derived from the health and safety literature that acknowledges the inevitability of risk but seeks to manage and limit its consequences for the organisation. It stems from a natural systems approach where there is interplay between the organisation and the environment but it is seen as a process that can be managed in a linear and unidirectional way. Risk assessment is then the process where the possible outcomes of a pending risk are considered and options formulated to deal with this risk. Professionals are able to make decisions based on their assessment of the residual risk versus the projected benefit. Putting the chosen option into practice is then risk management. This is also referred to as “decisionistic” risk management where scientific / expert input is combined with political decision-making. However, it does not open up the debate on risk versus benefit to all the key stakeholders.

When risk minimization, driven in the public sector by inspection, audit, performance management and targets, is applied here rather than risk analysis, then innovation may still happen but people will conceal errors as opposed to identifying them and learning from them. Risk analysis on the other hand is also not equipped to deal with multiple conflicting views.

For the latter, a risk negotiation approach is more suitable which stems from an open systems approach that acknowledges the fragmentation of both knowledge and the task (hence it is not possible to adopt a unidirectional approach), as well as the need for iterative interaction across a range of stakeholders (rather than a linear process). This requires consideration of who the stakeholders might be. It assumes the nature of “risk” is socially constructed by these stakeholders. They all may be willing to engage in a different trade-off between benefits and risks and these benefits and risks can be contested (where one person’s risk is another’s opportunity). It is also referred to as “transparent risk governance” where novel ICT tools can enable new public scrutiny and a plurality of voices to engage in the debate.

The table below brings all of this together in relation to the two types of call (as referred to in TOOL 1) and the type of innovation that is associated with them and what kind of risk governance is then used.

Table 12: types of call, type of innovation and risk governance approach

Type of call	Type of targeted innovation	Required risk governance
Innovation through adaptation	Existing concepts to be used in new contexts	Risk analysis based on existing data concerning the effectiveness of the approach in its original context and the similarity / difference of the target context with the original context. The more the new context differs, the bigger the risk. This requires only one, up-front decision to go ahead with adaptation or not. In principle, only one expert, capable of assessing the information as provided in the project proposal, is required.
Innovation through exploration	New concepts for existing contexts or New concepts for newly contexts	<p>Risk negotiation approach requiring multiple iterations of decision-making over time as new information becomes available and is discussed and interpreted by multiple stakeholders.</p> <p>This happens firstly at the level of (not) approving funding by having two phases: a first one to which a limited amount of funding is allocated to an effort to develop new concepts for addressing new or existing needs of new or existing users in new or existing contexts. The decision is to be made by a panel of stakeholders who represent different perspectives.</p> <p>A second phase with a larger amount of funding concerns the development of these concepts into an actual service. To enter the second phase, another panel of experts judges the concepts from a plurality of perspectives. This happens in a direct dialogue with the innovation team itself. Hence, a true negotiation is taking place. This could be opened up to more stakeholders e.g. via ICT.</p> <p>However, also within the project there is a risk negotiation going on. In phase 1, negotiation is happening by testing and refining concepts iteratively with a variety of stakeholders. In phase 2, iterative development via prototyping similarly engages multiple stakeholders.</p>

9) Different models across the world for inspiration

In 2014, NESTA together with Bloomberg philanthropies released a publication named “1 teams: The teams and funds making innovation happen in governments around the world” by Ruth Puttick, Peter Baeck and Philip Colligan. In the foreword it states “From city halls to public agency front lines, govern-

ments are thinking more and more about how to create innovative solutions to their most pressing problems. It makes sense given the challenges governments face – dwindling budgets, increased citizen expectations, morphing societal needs. But there’s something beyond that happening, too. Government officials at every level are increasingly thinking of innovation as a process. And, increasingly, as an essential capability they wouldn’t want to govern without.” (p. 2).

While the European Structural and Investment Funds are not limited to stimulating innovation inside government, there is much to learn about supporting innovation to tackle societal challenges from existing innovation support teams, labeled her as “i-teams” but more commonly referred to as innovation labs.

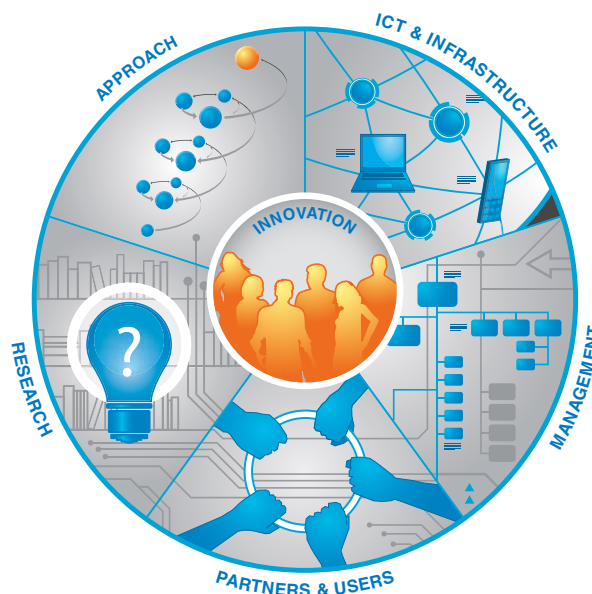
Below an overview is given of these teams in Europe (with the level of government they target), but more were identified in the rest of the world (20 in total):

- VINNOVA, Stockholm, Sweden (national,);
- La 27ième region, Paris, France (regional);
- Mindlab, Copenhagen, Denmark (national);
- SITRA, Helsinki, Finland (national);
- Barcelona Urban Lab, Spain (local);
- Behavioural Insights Team, London, UK (national);
- NESTA innovation lab, London, UK (national);
- Fonds d’experimentation pour la jeunesse, Paris (national).

Jesper Christiansen and Runa Sabroe of Mindlab define a “lab” as “a process that constitutes a dedicated explorative space for discovering new ways of addressing problems and designing the appropriate processes to develop new ideas into practical outcomes” (Public Sector Digest of August 2015).

Ståhlbröst and Holst (2012, Living lab methodology handbook) however, make clear that labs are both an approach (methodology, process) AND an environment (milieu, arena) which encompasses the approach (p. 5). This figure below is used in the publication to visualize this environment (p. 7).

Figure 37: innovation teams / labs as an environment



The approach represents the tools and techniques, the infrastructure consists of technology that can facilitate cooperation and co-creation among stakeholders, management concerns ownership, or-

ganization and policy, partners (from companies, public sector as well as academia) and users bring knowledge and expertise while research reflects the learning that takes place.

The NESTA/Bloomberg publication describes each of these i-teams including their budgets and staff numbers. Interestingly, some of these teams are not themselves part of government (e.g. la 27ième région, NESTA) although they originated as a government initiative (e.g. the Behavioural Insights Team) or are fully funded by government.

According to the NESTA/Bloomberg publication there are four major functions of i-teams with most of the actual teams engaging in several of these:

- **Creating solutions to solve specific challenges:** these i-teams focus on solving high priority problems, and developing usable and scalable solutions, often in collaboration with colleagues in government agencies. These i-teams are developers and creators of innovations;
- **Engaging citizens, non-profits and businesses to find new ideas:** these i-teams focus on opening up government to voices and ideas from outside the system, often adapting the open innovation and challenge-led approaches more commonly seen in the private sector and making use of strong communications and engagement strategies. These i-teams are enablers, creating the conditions for innovations from outside government to thrive;
- **Transforming processes, skills and culture:** these i-teams focus on changing the way that actors (in the publication, governments) approach innovation, often through consultancy and training, as well as through secondments and placements, to develop the skills and mind-sets of actors. These i-teams are educators, providing the insights and knowledge needed to empower others to innovate;
- **Achieving wider policy and systems change:** these i-teams focus on bringing about transformation, looking beyond specific interventions to the wider policy context and complex systems that need to change, for example in healthcare, energy or education. These i-teams are architects, creating the designs and blueprints that others can follow.

This classification relates very well to the six roles set out earlier where the emphasis regarding the roles is indicated in the table below.

Table 13: classification of innovation support teams

Role	I-team classification			
	Creating solutions to solve specific challenges	Engaging citizens, non-profits and businesses to find new ideas	Transforming processes, skills and culture regarding innovation	Achieving wider policy and systems change
Activators: initiate process (put forward a need, a trigger)				X
Browsers: search for information, throughout the process	X	X		X
Creators: produce ideas (new concepts, possibilities, solutions) at any point of the process	X	X		X
Developers: turn ideas into products/ services (invention)	X			X

Executors: bring innovation to the organisations that will use them and to the market (implementation)				X
Facilitators: approve funding / deblock process (instrumentation)	X	X	X	X

Another NESTA publication (2014, Innovation teams and labs: a practice guide by Ruth Puttick), situates these i-teams also in a large collection of “labs” that can be found in universities, social innovation parks and several hundreds “living labs” around the globe that focus on involving users in shaping new technologies. These are sometimes connected in networks such as the European Network of Living Labs or the Design for social innovation and sustainability network (p. 7). Chapter 2 d) 6) already discussed this approach in the context of transition management. However, as already discussed there, the type of i-team that wants to achieve wider policy and systems change is out of the scope of the publication.

However, NESTA (2014) makes a larger point that some kind of “labs” are needed, not just in government but in all sectors, because everywhere most staff are usually focused on day-to-day activities, there is limited time to think about new approaches, mainstream budgets support existing approaches and of bureaucracy (in government but also elsewhere) can reject and hinder experimentation and change. (p. 10) “Governments, like business and other organisations, need dedicated structures, capabilities and space to allow innovation to happen”. (p. 10)

B Levels of support

How many and what kind of staff is needed depends on the choice made regarding what kinds of tasks are effectively taken up by the ESIF authority. Three degrees of intensity are possible corresponding with a different focus as an i-team.

1) Intensive support: browsing, creating, developing and facilitating

This function corresponds to the i-team function of “creating solutions to solve specific challenges”.

In the case of going for an intensive support service, the example of Mindlab in Denmark as an i-team is quite illustrative.

MindLab is a cross-governmental innovation unit which involves citizens and businesses in creating new solutions for society. They are also a physical space – a neutral zone for inspiring creativity, innovation and collaboration. They are a part of three ministries and one municipality: the Ministry of Business and Growth, the Ministry of Education, the Ministry of Employment and Odense Municipality and there is a collaboration with the Ministry for Economic Affairs and the Interior.

Generally, a project that is taken up by Mindlab is operated by a number of public servants seconded to the Mindlab project by the sponsoring ministry/ministries. Mindlab then augments their knowledge of the public sector issue with its own expertise in qualitative research and design thinking. Mindlab’s approach is based on a process model which passes through seven phases: project focus, learning about users, analysis, idea and concept development, concept testing, the communication of results

and impact measurement. Working in this way allows to break down silos between government departments and (re)develop policies from a citizen perspective.

Mindlab supports on average one project per year per member of staff that acts as a project manager (as stated in DG Enterprise, 2012 Financing social impact). In 2015, there were 9 such persons at Mindlab, supported by a director and a secretary. The following information is also based on data from a study visit to Mindlab.

There is also a head of innovation who is in charge of the knowledge programme to link knowledge and the latest research to the projects Mindlab is working on. This happens through Ph.D. theses on citizen-centered innovation in the public sector, seminars on development of the administration in the public sector and collaborations with researchers, think tanks, experts and national and international knowledge environments. Mindlab also attracts quite a lot of interns and students (5 in 2015).

A project at Mindlab is executed typically by a team of 2 project managers and an intern, who can work on 2/5 projects at the same time (as some of the projects will for some of the time not demand attention).

Mindlab recruits its staff in a very informal way: they actively look for certain people, with relevant skills and value-sets. Competencies at Mindlab are a mix: social science (sociology, anthropology/ethnography), design, public administration as well as a mix between user interested people and expert knowledge. A third of the staff comes from within the public service, a third has a more qualitative research based profile (coming from consultancy, academia, design firms) and the rest are “wild cards” (coming from the private sector, artists, etc.). They invest heavily in professional education of their staff (twice the amount that a regular public servant would receive).

Mindlab acts, together with a “client” team, as a browser, creator and developer. This constitutes a very intensive support service. In addition, they also act as a facilitator as they will also themselves stop projects if they feel conditions for success are not fulfilled. However, in an ESIF context, a strict separation of the facilitation role in terms of appraising concepts and deciding on funding versus browsing, developing and creating should be maintained.

2) Intermediate support: browsing, creating and facilitating

It is also possible to act mostly as a browser, creator and facilitator. An example of this are the Flemish Innovation Centres. The information below is based on interview data from the Flemish Innovation Centre in Leuven. These centres provide the following support to potential innovators:

- they help them to clarify their innovation and its potential (facilitating);
- they help them to find and access relevant funding sources (incl. assistance in writing a proposal) or experts and partners via their extensive networks (browsing and facilitating);
- they can provide (limited) support in terms of organizing and participating in creative workshops (creator).

Per member of front office staff, the following workload is typical for an average year:

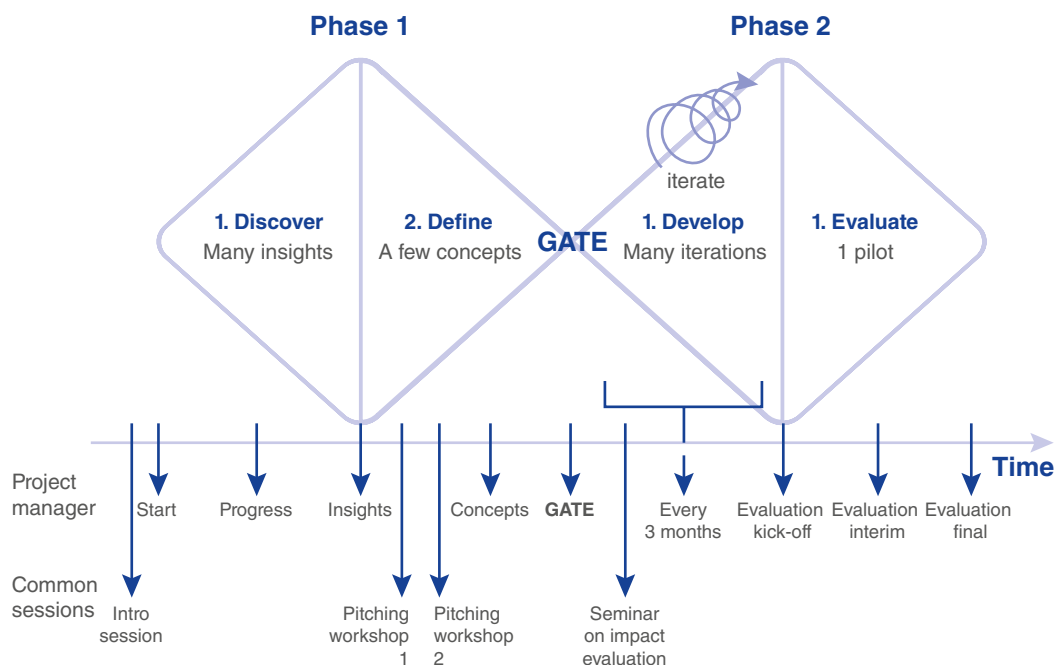
- intakes: +/- 60 new contacts (lasting +/- 1,5 hours each);
- follow-ups: +/-60 contacts taking from an hour up to half a day;
- creative workshops: +/- 32 taking up to a day;
- helping prepare dossiers for funding (mainly by IWT, the Flemish Institute for Science and Technology that holds a large share of the public finance for innovation): +/- 12 dossiers with time required varying considerably per dossier.

An ESIF authority could envisage to ensure this kind of support function for its specific areas of interests and its own funding. Again, in an ESIF context, a strict separation with the facilitation function in terms of appraising concepts and deciding on funding should be maintained.

3) Minimal support: facilitation only

Finally, it is also possible to take a minimalist approach where the ESIF Authority only takes up a narrow understanding of only one role: facilitator limited to approving or declining funding, based on appraisal of the project with a set of criteria. This requires little extra resources above regular programme management. Still, following up on an innovation project is more intensive than for a mainstream project (see figure below).

Figure 38: phases in the Innovation through exploration call and support actions



The ESIF project manager should in the first phase (e.g. lasting 6 months) of the project meet with the project team at least three times. At the start of the project, to discuss what will happen in the exploration phase of a project. Next, once insights have been created (in the explore phase of phase 1, these, along with an overview of how these insights were gained, should be presented to the ESIF project manager to make sure no paths are taken that would lead to a concept that would not be approved. There could also be a meeting in between the latter two, in case there is a problem.

Next there should be a meeting once concepts have been identified (in the define phase of phase 1) to give some feed-back on these. At the end of phase 1, the concepts are formally presented and judged. This is not done by the project manager alone, but by a group of experts.

In the develop phase of the project's second phase (which as a whole can last up to e.g. 18 months), a meeting should be foreseen on average every three months to assess progress and to make agreements on next steps. This provides milestones for the next meeting, hence detailed planning is done on a 3 monthly rolling basis NOT on an annual one. Early in the develop phase of a project, there should be a discussion about how to organise the impact evaluation. Drawing up the evaluation plan is a point of attention throughout development, as the final phase of phase 2 is the impact evaluation.

In addition to individual meeting with the project manager, there should be some common sessions in phase 1: a start session where what is expected, both in terms of the process and of financial and administrative requirements is explained, a workshop on how to pitch a concept (incl. a bit of practice) at the end of phase 1 and another workshop where participants can practice their final pitches on each other again. In phase 2, a seminar on impact evaluation should be organized early on.

As stated, in this case, the ESIF authority plays a role of facilitator only. However, there should also be support to build capacity for actors interested in innovation (e.g. with training) and keep the innovation process flowing. Staff (e.g. call manager, project manager, dedicated expert) can be called on to help project partners sort out any conflicts that may arise, but there is no active involvement in browsing, creating, developing or executing.

This therefore corresponds to the i-team role of “transforming processes, skills and culture regarding innovation”, where in an ESIF-context financial resources are also a main means to facilitate this.

4) Moving beyond supporting service innovations towards supporting societal transition

One i-team role that still remains to be discussed is the most intensive one: “Achieving wider policy and systems change”. In this case, the “lab” takes on all of the roles to work on what is referred to as “system innovation”, as described in the chapter on transitions. This is beyond the scope of this publication which focuses on service innovation.

However, it should be noted that as ESIF are only “funds”, not policies, it can be argued that ESIF is particularly well-placed to provide resources for initiating and supporting transitions. It can cut across traditional “policy domains” and fund both the platform (consisting of the broader set of transition management activity clusters) as well as the experiments that are initiated and / or nurtured by the platform. In this way it can indeed take up all of the roles as suggested in Table 13.

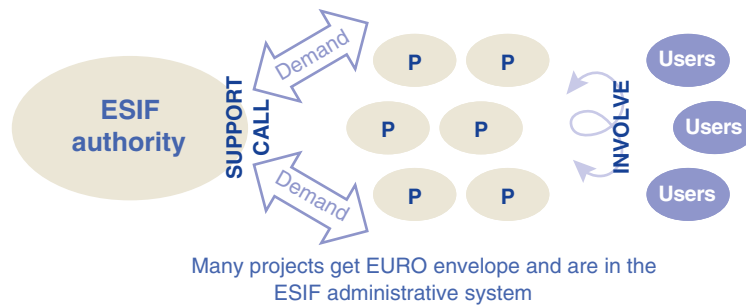
C In a separate ESIF funded project or within the ESIF programme management organization?

Once it has been decided what kind of intensity of support an ESIF authority will offer, the appropriate organization structure has to be decided on. One key element in the decision is whether the technical assistance budget of an ESIF programme is sufficient for funding the support, or whether the support would qualify as an intervention in its own right and hence be funded as a project. Obviously, the more intensive the support, the more appealing it is to qualify it as a project.

1) Within the ESIF Authority

The traditional approach would be to just launch a call for proposals directly towards innovators. This is depicted below.

Figure 39: organizing innovation support within the ESIF Authority



In this approach, there are many “projects” (“P”) in the ESIF system. Indeed, the ESIF authority has to engage with all of the potential beneficiaries directly and support them. A choice also has to be made whether to reserve the funding for all of the projects that start in phase 1 so that, in the case of approved concepts, they can all go into phase 2, or whether there will be only a limited amount of concepts that will be able to move forwards into phase 2 (implying that even good concepts can be dropped, with only the best ones accepted).

The more intensive the support, the more resources are required from the technical assistance budget of the programme.

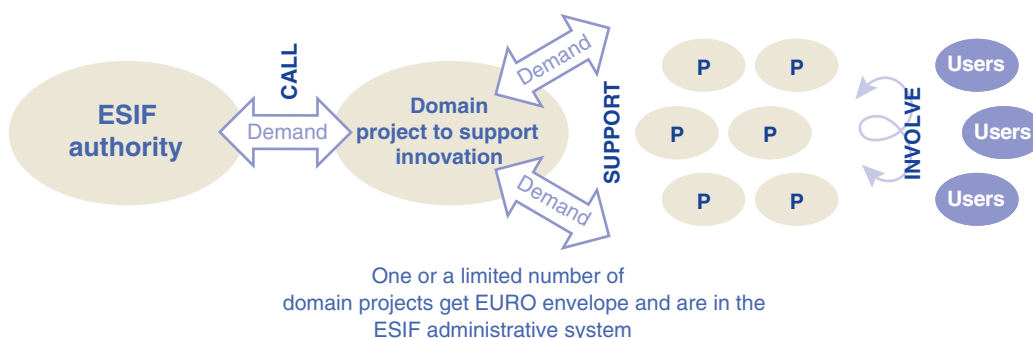
This approach requires also a decision on how to organize the support inside the ESIF authority. Either the task of supporting innovation can be given to colleagues in units who are also in charge of regular projects. The person can then either be assigned to only innovation calls and projects, or receive a mix of calls and projects to work on. Another option is to create a unit that only deals with innovation calls and projects.

The advice given earlier that running innovation process should be done by other people than running normal operations also applies here. Hence, a person should rather be dedicated to innovation projects only. In addition, establishing a separate unit has as an advantage that the specific and different way of dealing with innovation will be better understood and colleagues can support each other. However, this requires sufficient scale (enough projects). If such scale does not exist, efforts should be made to link colleagues dedicated to innovation to each other across unit boundaries.

2) As a project

An alternative approach is for the ESIF authority to launch a call for proposals for a limited number of innovation “domain” projects.

Figure 40: organizing innovation support as a project



This establishes an intermediary who can take up the desired support functions for projects. This can include a full facilitator role incl. selecting concepts and approving investments, where the financial resources for these investments are also part of the domain project budget.

This approach has several advantages: first, the number of projects in the ESIF system is limited to only the domain projects. This can greatly reduce the administrative burden for innovators as well as the workload for the ESIF Authority, as reporting and auditing needs to be done by and for only a limited amount of domain projects. Second, within the project, support can be organized in a highly flexible way. Third, the support can be made very intensive, without the constraint of the limited budget present in technical assistance.

There are also some dangers of course: organisations with enough expertise in a particular domain or likely to already have ties with many potential innovators. Therefore, transparency must be well organised to avoid (even perceptions) of unequal opportunities.

In Poland, such a model is being implemented for the 2014-2021 period. The ESIF Authority is launching, under its social innovation priority, a call for “operators”, for four different “themes”. Their tasks are to:

- organize calls for applications;
- manage the grants for innovations and support on every level of innovation incubation (incl. testing and evaluation);
- mainstreaming.

They must achieve a minimal number of 30 chosen innovations, which can receive up to 100000 PLN (+/- 25000 EUR)

A key element is that these “operators” are not just redistributing funds, but are to play the role of an “incubator”. For this they must have at a minimum:

- 3 years of experience within the selected theme;
- experience in the use of various financial and non-financial resources for supporting innovations;
- proven cooperation with other organisations who have similar aims and/or are addressing similar target groups and hence the potential to create a real innovation hub/ innovation-friendly eco-system, which will be sustainable after the project;
- key personnel in the project must have minimally 3 years’ experience in innovation incubation and research.

In any case, regardless of whether an innovation domain project set-up is used or a more traditional one, innovation operations can be greatly facilitated by using the new programming period regulation’s possibility of wage costs + 40% (article 14 of the ESF regulation). The wage costs themselves can be simplified by making use of the possibility of standard scales of unit costs (e.g. based on civil service salary brackets according to years of service and degree). Innovators then can join the domain project as partners at any time (open partnership). Only time sheets then need to be ensured by anyone (whose organisations should then become partners in the domain project) who is making expenditure under the project to justify the expenditure. Alternatively, there could be a prize system installed by the domain project as described in TOOL 6.

8. Implementation plan

The 2014 NESTA publication (Innovation teams and labs: a practice guide) mentioned earlier details a generic approach to setting up i-labs/teams that is useful to draw on.

- [Step 1](#): determine why an innovation team is needed, what current issues and opportunities are that innovation could help tackle and assessing current innovation capabilities and gaps;
- [Step 2](#): designing your team model;
- [Step 3](#): building your team;
- [Step 4](#): implementing and delivering;
- [Step 5](#): measuring impact.

The issues that are raised in relation these steps will be related to the content already presented throughout the publication you are holding now.

A Step 1: establishing the rationale and starting point

The first step is to determine why an innovation team is needed. Why the team would be there was presented in Table 13.

Next, how much resources should be and could be at the disposal needs to be considered. The required amount of staff and resources required depends on the intensity of the innovation support, connected to “why” the team is there, as discussed in chapter 7 b). If not enough resources are available to cover all phases and roles and a model of less intensity is chosen, then it always needs to be reflected on who will carry out the other elements (as discussed in chapter 7 b)).

Then, assessing current innovation capabilities and gaps along the entire innovation process and roles, in line with the chosen intensity, requires some more guidance.

It is first necessary to acquire sufficient knowledge about innovation in the first place. Here we can follow the advice set out by DG REGIO in its Guide to social innovation (2013) as described in its step 1 in setting up regional innovation strategies (see annex 2 for the steps). A recommendation there was to identify who would be the “leaders” who could be interested to use social innovation to tackle societal issues. While this guidance was aimed at a regional level, it can also be applied within an ESIF programme.

Next, knowledge on social innovation should be sought (incl. from academics, experts, NGO's, etc.). A crash course on social innovation can then be given to these leaders. In many cases, a social innovation system already exist, both in the public, private, academic or non-profit sectors.

For example, in Flanders the ESF Managing Authority set up a network with existing actors active in innovation, public (e.g. Design Flanders which is part of the Agency for enterprise) or NGO's (e.g. Ashoka), private actors (e.g. “7-e team” which are independent experts using behavioural theory for social innovation) and academia (e.g. researchers at the University of Gent on societal transitions).

Colleagues interested in social innovation and willing to take up (informal) leadership role were identified by sending a broad invitation to the Flemish Managing Authority for four lunch time debates around several thought provoking videos on innovation (see Video 1, Video 2, Video 3, Video 4 in the publication you are holding).

Several study visits were undertaken (to MINDLAB, La 27ième region and the Malmö Social Innovation Centre) to look at different models, as suggested by NESTA (2014) (p. 14). This provided a good opportunity to identify what was interesting to learn more about in further training.

Training seminars were then organized with some of the actors from the Flemish innovation ecosystem as speakers. These seminars were at a very practical level (practical tools and methods in running innovation processes) as well as at a more conceptual level (why social innovation, who should be involved, key aspects and current debates on social innovation) (see annex 6 for the content of these seminars).

In addition, an online training course was used (IDEO's human centered design course freely accessible via Acumen at <http://plusacumen.org/courses/hcd-for-social-innovation/>).

The learning by doing element of the practical seminars and especially the online training was of huge importance to understanding what innovation is really about and ending up with ways of working that would be recognizable to the Flemish innovation ecosystem. It should be remembered that these actors can afterwards also themselves be partners in projects to be funded by ESIF or can help others to set up and run these. Involving them early on is therefore also of direct instrumental value. However, it also help with streamlining social innovation action (optional step 2 in the DG REGIO guide on social innovation of 2013) at a particular geographical level (e.g. by coordinating with complementary programmes and services).

Next, as in step 3 of the DG REGIO guide on social innovation of 2013, it would be useful (but not crucial) to determine what current issues and opportunities are that innovation could help tackle and start to communicate these into the ecosystem. This was covered in 7 a) 1) (in terms of the role of activator) as well as in 7 a) 2) (browsers). At this stage, situating social innovation in a smart specialization strategy would also be helpful (step 4 of the DG REGIO guide of 2013).

Also, as suggested by NESTA (2014), what counts as success, why and for whom, should be answered. This is related to the question of "impact evaluation" tackled in TOOL 12. But evaluating the impact of innovations is only one side of the story. The other side is to what extent the innovation support team is having added value. Process evaluation is more suited to that. Outputs that matter are described below under step 4.

Finally, a key question in NESTA (2014), is to think about what follows after innovation: how will scaling, diffusion or dissemination happen. This is also closely connected to understanding who are the other actors in the innovation ecosystem. For example, in Flanders, there are other actors responsible for further scaling pilots that have demonstrated their potential for becoming a (part of a) social enterprise. However, some innovations will require long term support while policy-makers work on changing, for example, legislative frameworks that are limiting the potential of these innovations at a larger scale. Otherwise, these innovations may disappear. Here, we sometimes reach the boundary of service innovation and need to engage in system innovation as discussed in chapter 2 d).

B Step 2: designing your team model

In this step it needs to be determined where funding resources will come from, what will be the relationship with (other parts of) government and who could be partners.

As to where funding could come from, in an ESIF context, there are project and technical assistance resources that can be drawn on to set up the innovation support team. This was discussed in chapter 7 c).

In some cases, it may be possible to move beyond ESIF and to access other direct government funding, contract funding or endowments, to complement the ESIF-funding to run the innovation support team.

In addition, the ESIF programme funds can be used to fund initiatives (incl. staff) that are created due the processes installed by the innovation support team. But it is also possible to help potential innovators access other funding sources (like philanthropy, Corporate Social Responsibility programmes, other public funds, ...) and support them in their use of those sources.

In terms of the relationship with the rest of government, NESTA (2014) puts forward the following issues:

- Who puts forward the agenda for innovation e.g. politicians? Civil servants? At local, regional, national level?
- Is the innovation support function based inside the government department or agency that manages the programme or policy? Or outside?
- Is it co-owned, with more than one department/agency setting the agenda?
- Is the team independent but the agenda set by or wholly funded by government?
- Is the team in an independent organization, outside the public sector, funded partly by government, but with autonomy to set the agenda?

This was also discussed in 7 c) where a choice was put forward whether to make innovation support itself as a project, that could be carried out by an actor outside government or by a governmental one. However, it could also be part of the ESIF entity managing the programme.

Being closer to government has as advantages that it is easier to stay abreast of political priorities, there is also greater influence over these, greater legitimacy and authority as well as protection to try new things and take risks. On the other hand, if government is risk adverse, then it could more easily block radical experimentation and there could be continuity problems when there are shifts in political and executive power. Also, being a non-governmental actor may make it easier to complement ESIF resources with other resources. In addition, it may give greater freedom in terms of who to hire as staff (not being restricted to internal pools of public servants).

As was made clear in chapter 7, innovation support teams will not in the end actually be the ones who implement the new services. That will remain the responsibility of a government actor, (social) enterprise, civil society, ... Therefore, being transparent and making sure the innovation support itself (not the funding for innovation) is free and accessible will build trust and engagement.

C Step 3: building your team

Political sponsorship is a critical part of setting up the team. It focuses attention on priority problem solving and provides authority and credibility. It can also shield the team to help take risks, be creative and to stop ineffective initiatives.

Ideally, the leader of the innovation team should have access to these political sponsors and understand how government works, while also having access to new forms of knowledge and networks from outside government to bring in new perspectives. Of course, skills related to certain roles have already been elaborated in chapter 7.

However, the NESTA (2014) publication provides a useful overview of recruitment tips:

- Leaders with experience in both the private and public sector is an important feature;
- A mix of insider-outsider backgrounds extends to the team itself, with staff actively recruited from private, civil society, as well as government backgrounds;
- Key skills that innovation teams can rely on such as design, venture experience, anthropologists or technologists;
- Traditional skills, including strong project management, data analytics and communications;
- Networks of associates should be drawn on for particular projects, including specialists in particular fields like ethnography, data, social psychology or understanding citizen experience. This enables the team to have a smaller core team, and pivot between priority areas;
- There may not be the available talent locally, so you may need to recruit internationally to find people with the required skills;
- Be prepared to train staff on the job;
- Establishing secondments for staff in other areas of government will help engage them in your work, and they can take back innovation skills and methods when they return to their agency.

Finally, it is recommended to have governance arrangements that include representatives from inside and outside government to foster buy-in and benefit from extra expertise and advice. It is also important to be clear how resources are spent and when results can be expected. Communicating clearly how the innovation support team functions and with whom it work is also of importance.

For example, MINDLAB agrees an annual work programme with its cross-ministerial and multi-level board members where 80% of its resources are allocated to specific tasks and 20% kept as free resource for ad hoc and flexible requests.

D Step 4: implementing and delivering

Holding unique expertise and knowledge in terms of techniques and approaches that is rare in the system will help unlock resources and mobilise political capital. This is of course where the tools, supported by the videos and cases presented in the guide (reading level 1) you are reading right now come in. Learning as fast as possible how to use these tools to help others is the key task of any starting innovation support team.

Running seminars, training, engaging others to build innovation capacity is in itself worthwhile but also helps to increase the chances of success in terms of the previously mentioned output. This corresponds to step 5 (engage new people into the community and empower them) that DG REGIO (2013) recommends.

In terms of what is delivered, the focus should not be on reports and papers. It should be on supporting the creation and testing of prototypes, influencing policy via research (incl. on users, trends, etc.), evaluating impact and the potential for scaling/ diffusing/ disseminating and backing new social ventures that can sustain themselves. Also, actively helping to spread the innovations incl. via events and other communication mean is of importance.

When starting up, ensure some quick wins to help build momentum and confidence, hence some projects should show progress in a matter of weeks or months, while of course, actual impact can only be demonstrated in two or three years.

It is also important to ensure that you continue to build support from external parties. Who can you draw on to help champion the innovation team and make its case to others? What networks can you tap into? Who can assist if problems arise? What about the media? How can you deal with your critics? A useful way to get support is to share credit, widely and freely. Give others a stake in what you are doing.

Finally, time must be set aside to reflect on the model and methods used. The best teams have re-invented themselves a number of times to stay relevant. The reflexive level of reading (level 2) the publication that you are now holding is a way to support this.

One element in this reflection can be to think about when could be the time to set up a broader transition platform or not, as put forward in chapter 2 d). This is also recommended by DG REGIO's (2013) guidance as step 6. Of course, this step could be skipped and the focus could just be on incubation in general (step 7 in DG REGIO's guide), without setting up such a transition platform first. As was discussed in chapter 2 d), this has also worked in some cases, by afterwards clustering and making sense of what is happening across initiatives and then relating this to an overarching transition. However, in both cases, at some point, a transition platform may be needed to really move forward at an appropriate scale.

This is the time when the deep knowledge on innovation (reading level 3) as presented in the guide you are reading now can also help take the next steps.

E Step 5: measuring impact

Ultimately, what is key is whether all the output produced makes a difference in citizen's lives. Therefore, impact evaluation is again emphasized.

Annex 6 contains detailed guidance.

Three more steps that are recommended by DG REGIO (2013) at a regional scale and directed more specifically at social enterprise are listed in annex 2.

ANNEXES

Annex 1: societal trends as discussed by DG REGIO

Demography: Migration and ageing of the EU population

- **Migration:** The United Nations estimates that nearly 200 million people worldwide lived outside their country of birth in 2005. One-third of these international migrants resided in Europe which has a population accounting only for 8% of the world population.
- **Ageing:** Median age in Europe will increase to 52.3 years by 2050 from 37.7 years in 2003 (Brookings Institution); Ratio of retirees to workers in Europe will double to 54% by 2050 (IMF); Only 49% of men between the ages of 55 to 65 work (OECD).

Environmental Trends: Water, climate change and energy

- 20% of surface water is at serious risk from pollution; 60% of European cities overexploit their groundwater resources; 50% of wetlands are endangered.
- If the climate of the 2080s occurred today, the annual damage of climate change to the EU economy in terms of GDP loss is estimated to be between €20 billion for the 2.5°C scenario and €65 billion for the 5.4°C scenario with high SLR.
- The EU has set itself some ambitious targets to become a low-carbon economy, known, as the 20-20-20 targets. In some community-led initiatives, citizens get together and invest in renewable energy installations.

New Community Trends: Diversity and the new community providing IT solutions (digital society)

- 83% of European companies with 'diversity' policies see business benefits (EU Commission): Resolving labour shortages (42%) and enhancing reputation and standing in the community (38%).
- 150 million Europeans – some 30% – have never used the internet. This group is largely made up of people aged 65 to 74 years old. Bridging this digital divide can help members of disadvantaged social groups to participate on a more equal footing in the digital society (including services of direct interest to them such as eLearning, eGovernment, eHealth) and increase their employability and quality of life (Europe's Digital Agenda).

Poverty-related Trends: Poverty , social exclusion and child poverty

- Europe is one of the most prosperous regions in the world. And yet poverty remains a huge problem, affecting an estimated 84 million people. This means that one in every six Europeans lives below the poverty threshold, with some 7 million people surviving on less than €5 a day (European Commission).
- Children (0-17) have a particularly high rate of poverty at 25%, compared to 16.4% of the total population (2010). Poverty is also high in groups facing social exclusion, especially Roma, immigrants, undocumented migrants, the homeless, people living in or leaving institutions, etc (European Commission)

Trends in health and well-being: Health inequities, happiness and caring

- In 2008, the health care industry consumed an average of 9.0 percent of the gross domestic product (GDP) across the most developed OECD countries.
- The health divide across the EU Region is unacceptably large; and there are persistently large, and in some cases growing, health inequities within countries.
- The trend of ethical goods and services: Fair trade and local production. Shoppers spent €4.36 billion globally on Fairtrade products in 2010, up by 28% from €3.39 in 2009 (ILO).

Annex 2: DG REGIO's action plan to a regional social innovation strategy

1 Learn about social innovations

Actions	
<p>Action 1 = Identify the Ringmaster(s) inside the Regional and possibly also local authority who can take leadership in pushing forwards the actions below. The Ringmaster can be a person, a group of people or an institution in the Region. The Ringmaster needs to be aware of the Region's social liabilities and drive forward social innovation with a defined strategy and concrete projects.</p>	<p>Action 3 = Diffuse Action – Tap into the knowledge base of citizens at large. Enlist ideas for social innovations, possibly addressing a high-priority challenge, from citizens at large through online (or off-line) idea jams so helping Ringmasters to broaden their view on potential social innovation in the area and gain better insight into who is active or holds high-potential ideas.</p>
<p>Action 2 = Targeted Action – Tap into the knowledge of academics (notably from Business and/or Public Policy Schools).</p>	<p>Action 4 = Competition for the most novel and relevant social innovation idea in response to one of the challenges.</p>

2 Streamline actions on social innovation (optional)

Actions	
<p>Action 1 = Select the most relevant set of criteria for evaluating 'social innovation'. These criteria need to capture the driving reasons for why Regional Government considers social innovation important and reflect how it understands the concept in its region.</p>	<p>Action 3 = Consider whether the funding vehicles themselves need fine-tuning*. For instance, Regional authorities could strive to attract private investments into socially innovative ventures through fiscal measures.</p>
<p>Action 2 = Streamline government programmes to accommodate 'social innovative ventures' and train relevant staff accordingly:</p> <ul style="list-style-type: none"> ▪ Public procurement ▪ Innovation vouchers ▪ Micro-finance solutions ▪ Codes of good practice ▪ Etc: 	

3 Get insider knowledge about future trends (optional)

Actions	
<p>Action 1 = Enable the launch of a systematic, representative panel database using responden-driven sampling method.</p>	<p>Action 3 = Ensure effective communication about the database insights (annual conference, regular briefing notes)</p> <ul style="list-style-type: none"> ▪ Relevant new insights for social enterprises to help them better position themselves and benchmark against other social enterprises ▪ Relevant new insights for mainstream business in the services industry ▪ Relevant new insights for public officials
<p>Action 2 = Analyse the insight and what is important.</p>	<p>Action 4 = Integrate the new insights into the Regional strategy.</p>

4 Develop a smart specialization strategy including SI

Actions	
Action 1 = Develop a clear Regional innovation action plan and strategy , as part of the operational programme. It should have a clear vision state which areas the Region considers a priority (ex: e-health, urban regeneration, education; energy) and identify social challenged to be tackled.	Action 3 = Suggest different options to design and actions to implement the regional strategy to support social innovation.
Action 2 = Dedicate a budget for social innovation targeting the social challenges to be tackled.	Action 4 = Launch awareness campaign targeting policy makers at national and regional level about the importance of social innovation.

5 Engage new people into the community and empower them (optional)

There are five training concepts for social innovation:

- [An initiation class](#): To explain what social innovation is, and the value and opportunities it can offer for the Region. Imagine a 3-hour session which includes a presentation followed by a short hand-on section.
- [An idea-enrichment training](#): This is where people with an idea for a socially innovative venture develop it further. They can test it against the principles outlines in Step 2 and fine-tune it accordingly.
- [Training for front line staff running social, health, housing and other public services](#): specific training that will show a variety of options to develop Public Private Partnerships, new business models in order to be less dependent on public money and be able to offer relevant services;
- [An executive training for people running not-for-profit organisations](#): Here, participants are challenges and inspired to find alternative ways to sustain their socially innovative activities. The training can target heads of socially innovative projects that are currently 100% publicly financed.
- [An executive training for people running SMEs](#): Participants here are challenged to consider how they can streamline social innovations within their organization and practices.

Actions	
Action 1 = Link with training/educational institutions and other organisations in the area of social innovation.	Action 4 = Introduce social audit within the reporting obligations of organisations. This might also include the establishment of the European Public Sector Innovation Scoreboard.
Action 2 = Investigate how resources can be best pooled and combined to turn the four training concepts into reality.	Action 5 = Develop web-based platforms allowing socially active citizens and organisations to exchange ideas (similar to the Social Innovation Europe Initiative).
Action 3 = Initiate discussions with private sector promoting organisations (e.g. Chambers of Commerce, incubators, etc.) introducing services for those interested in social actions.	Action 6 = Promote public-private-people partnerships and exchange of ideas (LivingLab).

6 Promote transition innovation platforms

A transition innovation platform is a project-based (originated from an informally organized network, see step 1, 3 & 5) committed multi-stakeholder environment where business, academic, non- and social profit, government and lead users can interact with the goal to solve a specific societal issue. It an help solve issues like reducing CO2 emissions, use of less materials in production or better accessibility of e-health solutions. A transition innovation platform is built around 3 main pillars: Vision – Action – Networking.

Actions	
Action 1 = Take the lead in identifying in which sector or trend a critical mass for a transition innovation platform is present or can be created in a relatively short time span.	Action 4 = Play a key role in the governance of the transition innovation platform based on values of equality and neutrality for all stakeholders irrespective of their political, public or economic power or instruments.
Action 2 = Design and organise a sequence of actions to trigger cooperation among a group of key-stakeholders to work on a common theme.	Action 5 = Understand that deep multilateral engagement and expectations imply that “governance beyond government” is a necessity for transition and social innovation to fully unleash the potential to create new markets and systemic paradigm shifts.
Action 3 = Nurture the further development of a transition innovation platform with a balanced mix of incentives.	

7 Develop incubation

Actions	
Action 1 = Promote the creation of incubator(s) providing space and advice services to social enterprises, projects and potential social start-ups focused on developing social benefit. You can also do this for your public services.	Action 3 = Promote the creation funding vehicles providing funds to enterprises, services and projects with a social benefit.
Action 2 = Creation of Labs focused on specific sectors identified as important for a particular Region and the organization of “lab sessions” where selected participants are invited to co-create a workable socially innovative venture concept.	

8 Create a social innovation cluster or laboratory

Actions	
Action 1 = Identify and provide physical space/land for the park or set up a Public-Private Partnership creating such a space for social entrepreneurs and socially-minded people.	Action 3 = Link financial institutions and potential investors to the park.
Action 2 = Promote an environment supporting social entrepreneurship.	Action 4 = Ensure a viable business model of a well-managed park through the active involvement of the private sector, for example.

9 Create a special economic zone for SI (optional)

Actions	
Action 1 = Develop attractive fiscal legislation focused on social enterprises.	Action 4 = Ensure that the SEZ regime is flexible enough to allow a range of commercial as well as manufacturing activities.
Action 2 = Develop an appropriate legal, regulatory, and institutional framework to ensure adequate regulation and facilitation, requiring greater administrative facilities within host governments.	Action 5 = Promote private rather than public development of a zone.
Action 3 = Allow SEZ to exist and licensed organisations to co-locate within the same area.	

10 Promote cross-regional and international exchange (optional)

Actions	
Action 1 = Promote cross-regional and international trade through specially focused campaigns.	Action 3 = Develop cross-regional frameworks to enhance exchange of ideas, models and processes.
Action 2 = Involve all actors and all regions in the innovation cycle: not only major companies but also SMEs in all sectors, including the public sector, the social economy and citizens.	Action 4 = Develop indicators, allowing to measure the success of the region and benchmark it against other regions.

Annex 3: societal trends as discussed by BEPA

Regarding demographic change

- The world's population will be more urbanised: for the first time in history, more than 50% of the population will live in urban zones. Specifically, about 80% of European society will live in cities, which will become increasingly important actors.
- We will also observe further ageing of the world's population. This trend is already apparent in Europe and it will be the region with the highest average age globally. European population ageing will have direct consequences for the working population and social welfare systems, health services and pensions in terms of demand and expenditure.

Regarding immigration patterns

- Immigration patterns will change, becoming more inter-regional (south-south rather than south-north). However, Europe will continue to be a destination region for its neighbouring regions.

Regarding the growing middle class and the empowerment of individuals

- The growing middle class will be a structural change in the world to come. The global middle class will increase from 1.8 billion in 2009 to 5 billion in 2030.
- Gender equality and the empowerment of women will improve as a result of more egalitarian access to education and the role of technology. Greater access to further education is likely to drive and be influenced by increased individual empowerment. This in turn may generate greater support for increasing gender equality and the empowerment of women.
- Poverty will fall globally and so will inequalities and access to wealth among states. However, there is a risk that inequalities among citizens/individuals will increase in terms of revenue, especially in Europe and the United States.
- The internet divide will persist within and between countries – in terms of access to networks and the internet. This means that technological development could potentially accelerate socio-economic inequalities between individuals/countries, since it essentially benefits the highly qualified, the connected and those in the higher income groups.

Regarding the rise in inequality leading to vulnerability

- Across the spectrum of expected problems is a surge in inequality. While inequalities between European countries are decreasing, within countries they are rising.
- Earnings/gains from productivity growth tend to be heavily concentrated among high-income workers. At the same time, projections suggest a considerable surplus of low-skilled workers, which could lead to long-term and permanent joblessness among young people without secondary training and older workers who cannot retrain to meet requirements for new skills. As a consequence of this skills mismatch, income inequality is projected to expand.

Regarding quick technological development

- The development of new technologies will continue right through to 2030. Innovation will continue to depend on R&D investment, which should continue to increase in advanced economies and to further develop in China. In Europe, however, R&D expenses will decrease notably because of the increase in China, even if the 2020 objectives are met.

- In order to stimulate innovation, more than one source of funding is needed: education, cooperation among universities, business, and financial institutions organised around innovation ecosystems will be important.
- Innovation will also depend on the social and political organisation of society: democracy and open societies seem to favour innovation. There seems to be a circular relationship here, since innovation (particularly the development of technology) will also change the way citizens are organised.

Annex 4: Theory U practical tools

The following practical tools proposed by the Presencing Institute (on www.Presencing.com) are very similar to what is used in service design. They are briefly summarized for reference purposes.

1. <https://www.presencing.com/tools/guided-journaling>

PROTOTYPING

Prototyping moves the group or individuals up the right side of the U-process.

Prototyping translates an idea or a concept into concrete action. Prototypes are an early draft of what the final result might look like which means that they often go through several iterations based on the feedback generated from stakeholders.

SENSING JOURNEYS

Sensing Journeys are part of the opening process of the left side of the U.

Sensing Journeys pull participants out of their daily routine and allow them to experience the organization, challenge, or system through the lens of different stakeholders. Sensing journeys bring participants to places, people, and experiences that are most relevant for the respective question they are working on. They can also help build relationships with key stakeholders, and gain a system perspective.

The group splits up into sub-teams of about 5 participants. The group composition matters because a mix of perspectives enhances the impact of the sensing journeys. The whole group of participants should go to several places that can provide insights into:

- The different perspectives of the system's key stakeholders
- The different aspects of that system
- The 'voiceless': people in the system, those who usually are not heard or seen.

A good way to get a sense of the system is to take the perspective of its "extreme users": these can be customers who use services or products more than others or in different ways, or on a societal level, those with special requirements, such as a person living in a remote area needing access to a health system.

If the hosts agree, it is advised to take pictures and/or videos during the journey. These can be useful during reviews with the other groups and as a reminder for the participants.

Prepare as a group by discussing:

1. What is the context that we will experience?
2. Who are the key players that we will talk to?
3. What questions do we want to explore?
4. What assumptions do I bring with me? What do I expect?
5. Share your most eye-opening sensing experience to date

Start by developing a short questionnaire (7-10 questions) that guides your inquiry process. Keep updating your questionnaire as your inquiry process unfolds. Some examples are:

1. What personal experience or journey brought you into your current role?
2. What issues or challenges are you confronted with?
3. Why do these challenges exist?
4. What challenges exist in the larger system?
5. What are the blockages?
6. What are your most important sources of success and change?
7. What would a better system look like for you?
8. What initiative, if implemented, would have the greatest impact for you? For the system as a whole?
9. If you could change just a few elements of the system, what would you change?
10. Who else do we need to talk to?

To capture and leverage the findings of your inquiry process, conduct a disciplined debriefing process right after each visit. Here are a few sample questions for the debriefing:

1. What was most surprising or unexpected?
2. What touched me? What connected with me personally?
3. If the social field of the visited organization or community were a living being, what would it look and feel like?
4. If that being could talk: what would it say (to us)?
5. If that being could develop – what would it want to morph into next?
6. What is the generative source that allows this social field to develop and thrive?
7. What limiting factors prevent this field/system from developing further?
8. Moving in and out of this field, what did you notice about yourself?
9. What ideas does this experience spark for possible prototyping initiatives that you may want to take on?

A whole group debrief meeting should also take place where:

1. Everyone gets on the same page by sharing concrete information about the Journeys: Where did you go, who did you talk to, what did you do?
2. Talk about your findings and generate new ideas.
<https://www.presencing.com/tools/sensing-journey>

SHADOWING

Shadowing is part of the seeing and sensing phase on the left side of the U.

It and by doing so, gain a new perspective on your own work.

Once you arrive in the location of your shadowee, create transparency and trust about the purpose and the process of the shadowing exercise; establish a personal connection early on; use observations in your interviewee's location or return to themes that came up during the first moments of the conversation to establish a personal connection. Let your shadowee know that whatever you learn during the day is for your personal use only and won't be shared with others.

At the end of the day or during lunch, conduct a brief interview with the person you shadowed. Bring up any questions that the observations throughout the day sparked in your mind e.g.

1. What journey brought you to your current position?
2. What good and bad examples of leadership have you experienced?
3. What key challenges are you currently dealing with?
4. What is your work as a leader? What in your organization would be missing without you? What value do you add?
5. When you started in this position, what did you have to let go of (unlearn), and what new competencies did you have to develop?
6. What barriers exist in the current system that prevent your team/organization from realizing its potential more fully?
7. What personal practices do you use to tap into your best potential?
8. After all interviews have been completed, review the interview data, and summarize results.

“Debrief” and crystallize right away; using a structured debriefing process as suggested below:

1. What are your 2-3 key observations from today?
2. What are their implications for your own work?
3. What were 2-3 important leadership challenges was your shadowee facing today?
4. What was an intervention the shadowee made that changed the course?
5. Reflect on interventions that have failed.
6. Were there moments I felt uncomfortable with how things went? Why?
7. Were there moments I felt inspired during the day? Why?
8. What other things did you notice about your self?
9. Other observations or key take-aways?

STAKEHOLDER INTERVIEWS

Stakeholder Interviews can be used in all phases of the U-process. Most common use is during the preparation phase of a project.

It answers the questions: What do my stakeholders want from me? What do they need me for? This is done via interview questions such as:

- What is your most important objective, and how can I help you realize it? (What do you need me for?)
- What criteria do you use to assess whether my contribution to your work has been successful?
- If I were able to change two things in my area of responsibility within the next six months, what two things would create the most value and benefit for you?

Right after the interview, take time to reflect on key insights, capture your key thoughts in writing.

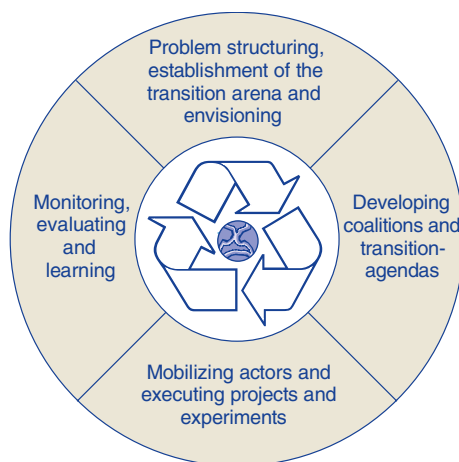
Annex 5: Guidance on transition management

This annex is based on a broad set of publications, mainly by DRIFT (2011, Urban Transition Management Manual, appendices) and van den Bosch, S. and Rotmans, J. 2008, Deepening, broadening and scaling up: a framework for steering transition experiments.

1. The transition management cycle

The figure below shows the transition management cycle.

Figure 41: transition management cycle



Typical activities within the cycle were already elaborated in the chapter on transition theory. The key idea behind transition management is to create a societal movement through new coalitions, partnerships and networks around arenas that allow for building up continuous pressure on the political and market arena to safeguard long term orientation and goals of the transition process.

Ample room should be foreseen for unexpected events, unforeseen activities and products and enough time for managing the chaos and turmoil that is associated with it. As it is an expanding process, extra resources for later in the process should be foreseen from the start.

Below, more practical tools are proposed for these activities:

2. Analysis of system and actors

The output of the analysis should be a provocative report.

To create the report, data needs to be collected. Next to desk research, usually interviews (about 20 should be a minimum) are conducted as follows:

- In person with min 45 minutes
- Aimed at fully understanding the worldview of the interviewee
- Not focused on factual info (can be collected via email or questionnaires)

A few examples are provided below.

First a generic example is provided.

Interview protocol:

- Prepare the interview. If necessary, adapt the questions to the situation or specific background of the interviewee.
- Take time to get acquainted with the interviewee and to explain the goal of the interview.
- Show interest in the person and his/her ideas.
- Try to get to core of the interviewees reasoning. Ask further questions if the rationale behind an answer is not clear to you yet.
- Also assess the skills of the interviewee during the interview (e.g. the level of associativity / inspiration / authoritativeness / detail of the answers / enthusiasm / power of coercion).
- Try to keep the flow in the interview. The questions are more a checklist to see which topics should be addressed, rather than a rigid question format.
- Discuss the confidentiality of the interview and publicity of the information discussed during the interview.
- Discuss what will happen with the results of the interview and how the process continues.

Interview questions:

1. What is your relationship with the system?
2. Which changes have you noticed in the past years? (around 5 - 15 years, further questioning with regards to personal opinion, and changes in the economic, social and environmental domains)
3. What are the strengths of the system? (further questioning on specific strengths in the economic, social and environmental domains)
4. Which problems do you see for the system? (further questioning on what he/she worries about)
5. In which ways do you expect the system will develop in the coming years? (further questioning on niche, regime and landscape developments)
6. In which way do you hope the system will develop? (further questioning on niche, regime and landscape developments)
7. Which organisations/institutions/people are important in shaping the way the system will develop, according to you?
9. According to you, what is necessary for the system to develop sustainably?
10. In your opinion, which person has, or which persons have good ideas for the future of the system?
11. What is your sense of urgency? What is for you an important challenge for the future of the system?
12. What is your message to the arena? (record the answer to this last question with the flipcamera)

Below an example used in the regional transition arena in Texel (2008)

1. What is beautiful about Texel?
2. What do you think is ugly?
3. What is your connection with Texel?
4. What did you see changing the last 25 years?
5. What remained/stayed the same?
6. How do you think that Texel will look like in 25 years?
7. What is your feeling of urgency?
8. Who are the frontrunners?
9. What are the projects that will form/determine the future?
10. How do you hope that Texel will look like in 25 years?
11. What is your message to the arena?

Another example is provided below, this time for the Neighbourhood Arena Oud Charlois (2009).

A. Topics and exemplary questions for inhabitants, institutional actors and policy makers:

1 Problem analysis and future vision

- Which problems keep returning and which ones do you think are most important?
- What could be done to address these and who should do this?
- What do you think could be your contribution?
- What works fine and should be kept that way?
- What do you think is important for the future of the neighbourhood?

2 Network

- To whom are you talking about the problems in the neighbourhood?
- Who has the biggest influence on the neighbourhood according to you?
- Did you ever meet these people personally?
- Did you ever visit a participatory event [use official name]? If so, which one?

B. Topics and exemplary questions for inhabitants

1 Background

- Personal information
- How long are you already living here?
- Are other members of your family living here as well?
- How long will you stay here?

2 Involvement

- Do you see other people of your neighbourhood regularly? If so, who and how?
- Do you once in a while chat with your neighbours?
- How often do you make use of the shops in the neighbourhood?
- Do you undertake activities together with other people from the neighbourhood?

C. Exemplary questions for institutional actors

- Are you living close by?
- How long do you have your seat here?
- How many people use your services?
- What is the percentage of clients coming from Oud-Charlois or from outside the neighbourhood?

D. Exemplary questions for policy makers

- How much and which of your tasks relate to Oud-Charlois?
- Do you co-operate with inhabitants, institutional actors and entrepreneurs from Oud-Charlois?
- Which impact did the area-based approach have on your activities?

Finally, below are the interview questions used for the Transition arena in long term care (end 2007).

1. Could you tell us about your personal history in care, especially the moments that were formative for your view of the care?
2. What are the underlying causes of the problems in the care sector?
 - 2b How pressing are the problems in the care sector? Are we heading towards a crisis? Does the current system cause massive suffering? Or should we all work on and make big steps towards better care?
 - 2c In our theory we often use the concept 'regime', meaning that a certain culture, structure and practice dominates in a sector which hinders transformative change. (1) Do you think this is a meaningful concept for the (long term) care sector and (2) what is the regime in the (long term) care sector according to you?
3. What are the fundamental directions for solving these problems according to you?
 - 3b Where should change originate, from within, from outside or bottom up? Can the (long term) care change itself? Is there a need for outside intervention of renewal? Or will small innovations make the care sector change? [ask for patterns]
 - 3c Which actors (organisations / individuals) do you consider to be currently most able and willing to take the first steps? And which parties should they think about pulling along?
4. We are busy with a transition programme in long term care. Do you have suggestions for what are the do's and don'ts for advancing such a transition in the care sector?
 - 4b At some distance of the transition programme, we would like to set up a 'care arena'. Do you have

suggestions for the practices and structure of such an arena?

[4c. If immediately evident that the person is a good fit for the arena: invite]

4d. Do you have suggestions for others/names?

5. Do you have – apart from the care arena – suggestions for people or books/reports that can teach us more over de possibilities for a transition in the long term care sector?
6. Which topics would you want to be covered in an arena?

Also, expert sessions can be useful. These bring together experts from different fields, who often have different worldviews and bring in different perspectives and hence provide a broader picture of what the weaknesses, strengths, threats and opportunities within a function or locality are, to explore the relationships between the system properties or to come to a common problem definition. The expert session(s) should last for around 2 to 4 hours. Depending on the objective (e.g. high quality discussion, or validation by a big group), the number of participants is chosen.

The contents of the report could be as listed below.

- A. Provocative quotes / propositions**
- B. Situation analysis**
- C. Historical perspective**
- D. Description of core values in the function / locality**
- E. Multi-level / phase analysis**
- F. Actor analysis**
- G. Conclusion**

Below these headings are further elaborated.

A. Provocative quotes / propositions

This contains interesting statements derived from interviews.

B. Situation analysis

- [Analysis of the system in stocks and flows \(SCENE\)](#)

This is usually done following the SCENE model (for more info see also Grosskurth, J. and Rotmans J., 2005, “The SCENE model” in Environment, development and sustainability 7, p. 135-151). SCENE refers to social, environmental and economic. It described reality in terms of relevant capital stocks in these three areas and flows between them e.g. quality of life (social), environmental quality (environment) and economic vitality (economy). It is founded upon an understanding of sustainable development as also endorsed e.g. by the World Bank.

Stocks are described in terms of:

- Quantity;
- Quality;
- Function;
- Spatial components.

For education as a stock, quantity could refer the distribution of education over a population and the numbers of years in education. Quality could be the efficiency of the education system. The function could contain how well education prepares for earning a living or taking responsibility, but also for innovation. The spatial aspect could contain the geographic distribution of education and the land surface used for it.

An example of a stock framework is presented below.

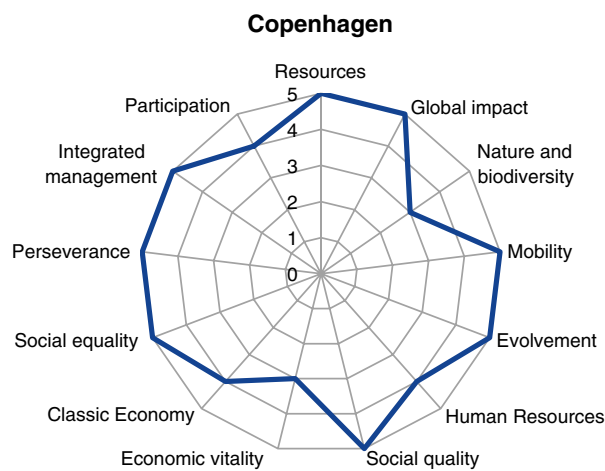
Table 14: stock analysis

Domains	Stocks	Characteristics
Environmental domain	Water	Surface water
		Floods
		Drought
	Green space	Surface forest and nature
		Public green space
		Green roofs
	Energy	Energy consumption
		Renewable energy
		Energy infrastructure
	Waste, soil and nuisance	Municipal waste
		Soil pollution
		Nuisance
	Air pollution	Air quality
		Fine particulate matter (PM)
		CO ₂ emissions
Population	Population density	
	Demographics	
	Immigration/emigration	
Housing	Ownership	
	Housing types	
	Satisfaction	
	Energy performance	
Social services	Education	
	Healthcare	
	Social security	
Liveability	Liveability	
	Social cohesion	
	Segregation	
Leisure	Sports	
	Culture	
	Lifestyle	
Participation & politics	Participation possibilities	
	NGOs	
	Political attention energy/climate	
Mobility & infrastructure	Transportation means	
	Infrastructure	
	Mobility services	
Economic vitality	Income	
	Unemployment	
	Educational level	
Economic sectors	Harbour or Trade sector	
	Knowledge institutes	
	Services sector	
Knowledge & innovation	Knowledge economy	
	(Green) investments	

Next one (or more) indicators are defined for each characteristic.

The stocks can be scaled and weighted to provide overall indices per domain, leading to a picture as given below.

Figure 42: overview of stock indices



Deciding what characteristics to include and how to measure and scale them should not just be up to one researcher. The concept of sustainable development is highly ambiguous and hence democratic decision-making may be better in order to make clear the ambiguities and be transparent about how they are dealt with. This is done as follows:

- First, describe the diversity of opinions from expert but also other stakeholders, including especially the end-users of the study;
- Differences in viewpoints should be explained and debated;
- Make sure des research is used to counter-balance the tendency of stakeholders to focus only on current issues.

Next, flows are analysed. Flows can be autonomous (from outside the system) or inter-flows.

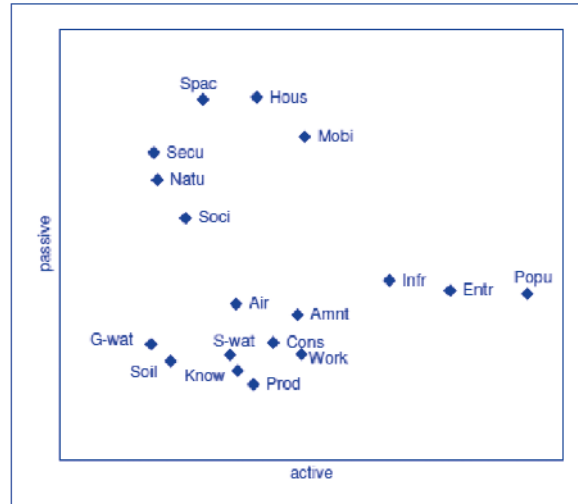
For inter-flows an analysis is usually done with an influence matrix. The numbers in the matrix signify weak (1), moderate (2), strong influence (3). The sum of the row values indicate the influence of a stock or “activeness”, the sum of a column indicates its dependency or “passiveness”. The scores are usually derived from interaction with experts.

Figure 43: influence matrix

↗	Stock a	Stock b	Stock c	Stock n
Stock a		3	2		1	1	
Stock b	1				3	3	2
Stock c	2						
...		1	2				
...		3		3			
...	1		3	2			
Stock n			1		2		

Plotting the stocks relative to their activeness and passiveness creates the table below.

Figure 44: leverage points in the system

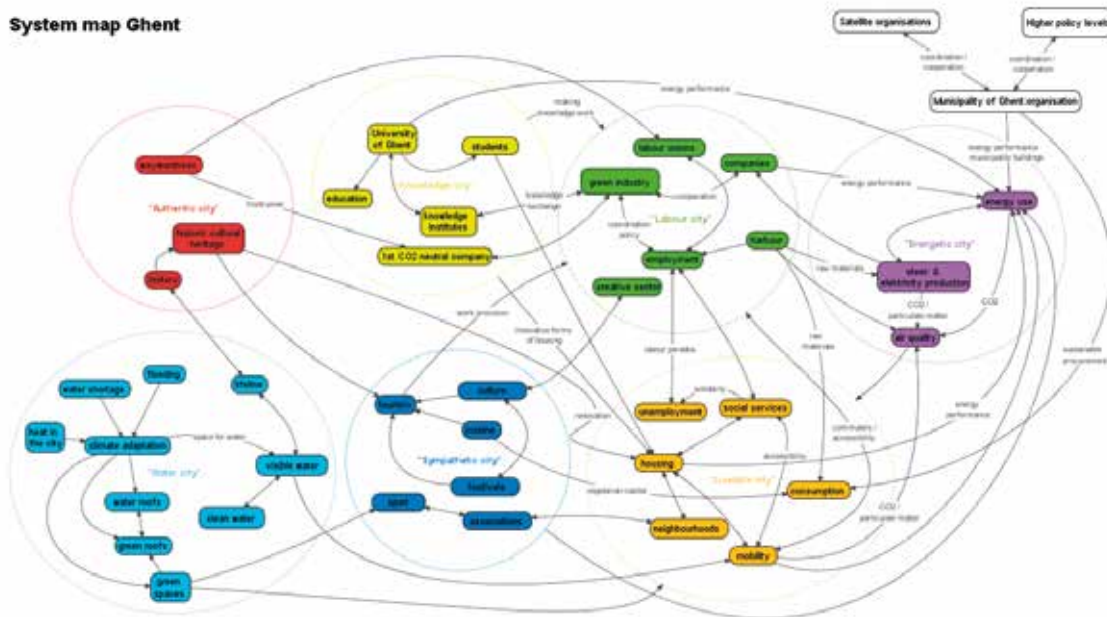


Stocks that are high in terms of both axes are called “critical”. In the chart above, only “Mobi” would qualify. They are the least stable part of the system.

This analysis is used to think about “leverage” points in the system.

- [Problem analysis \(cause-effect diagramme\)](#)

Figure 45: causal loop analysis of city of Ghent



C. Historical perspective

This can be done in two ways:

- Looking back hundreds of years at major developments and trends in the past that have shaped the function or locality;
- Looking at a few decades in greater detail e.g. at all key stocks and how they evolved. Important events should be noted.

It is important to visualize trends and differences over time to communicate these.

D. Description of core values in the function / locality

Looks at what key terms and concepts have been used and what dominant paradigms of thought have been and are now.

E. Multi-level / phase analysis

This is a direct application of the key concepts from transition theory. Developments in all three levels are analysed.

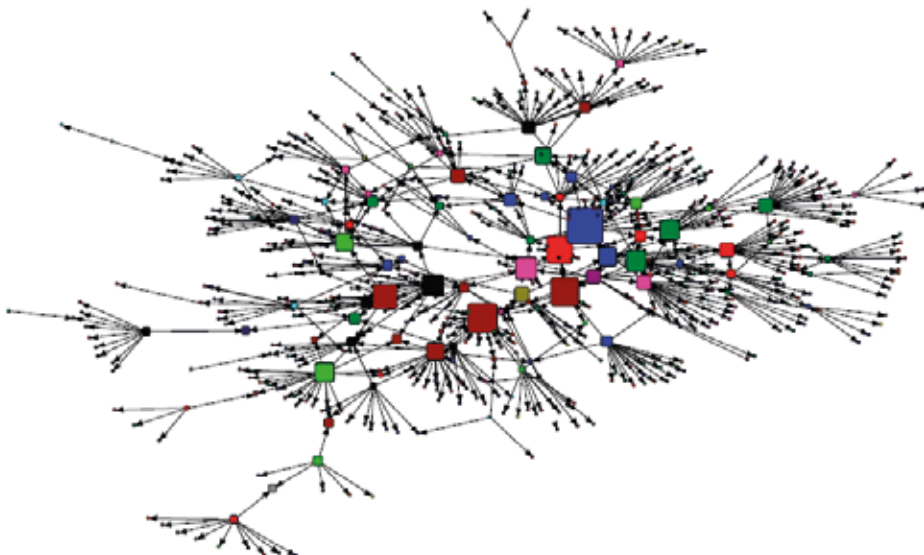
The multi-phase analysis is used to find out if a (historical or ongoing) transition can be identified and if so, in which phase it is or whether it failed and the system experienced a backlash, lock-in or even a system breakdown.

F. Actor analysis

In the main chapter on transition, it was already made clear what an actor analysis is. Some useful tools are:

- Social network analysis

Figure 46: social network analysis



▪ Actor / system analysis

System imperfections block learning and innovation by actors (Van Mierlo B., Leeuwis, C., Smits, R., Woolthuis, R.K., 2010, "Learning towards system innovation" in Technological forecasting and social change 77, p. 318-334 and van Mierlo, B., Regeer, B., van Mastel, M. et al, 2010, Reflexive monitoring in action). Such imperfections are:

- Physical infrastructural failure (physical and virtual access e.g. roads, ICT,...);
- Knowledge infrastructure failure (access to development of research and knowledge)
- "Regime" failure both hard (laws, regulations, standards) and soft (norms, values, implicit rules);
- Interaction failure (too strong networks, meaning actors are so intertwined no one can take a first step and their view of reality is distorted, or too weak networks which means people are unaware of each other's visions);
- Capability failure (entrepreneurship, adequate labour qualifications, etc. as well as related market phenomena in terms of monopoly, oligopoly, supply and demand, etc.).

In the figure below, an example analysis (derived from van Mierlo, B., Regeer, B., van Mastel, M. et al, 2010, Reflexive monitoring in action) is provided that links these imperfections to actors in the system.

Figure 47: actor/system analysis

- Actor force field analysis where actors are listed, relative to the goals of the transition process as below:

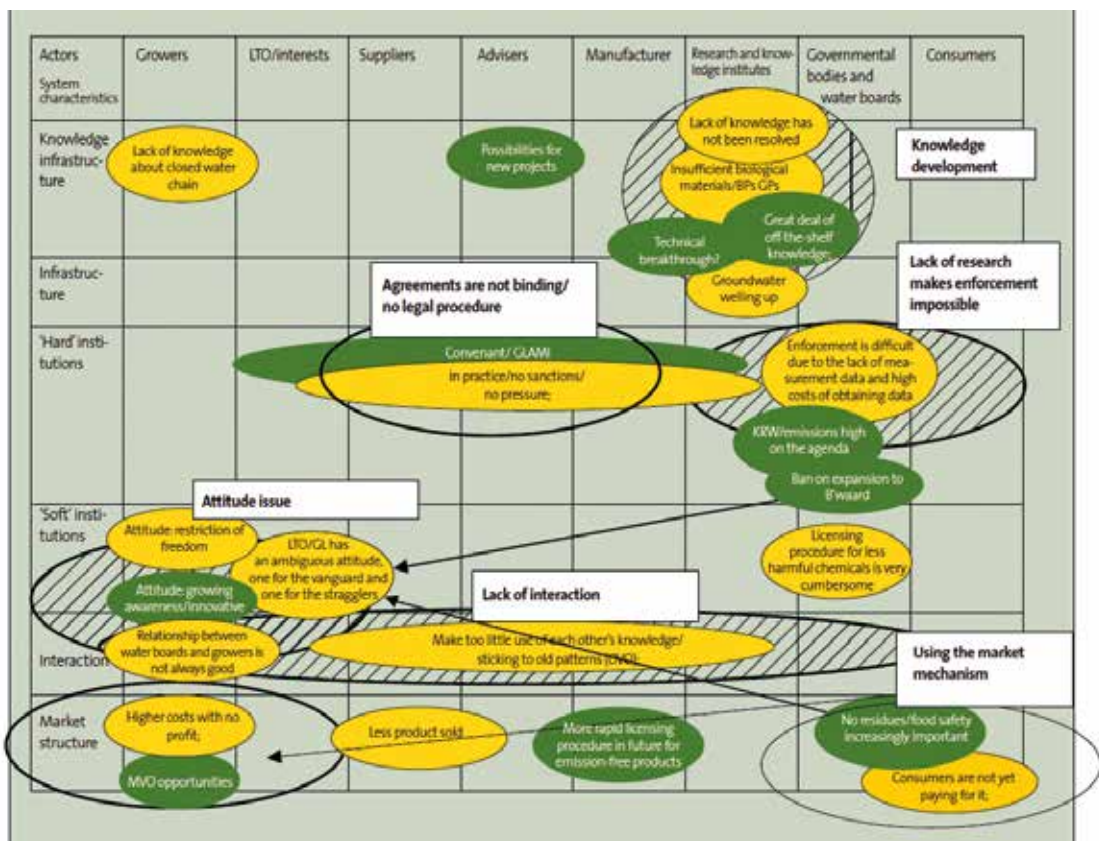
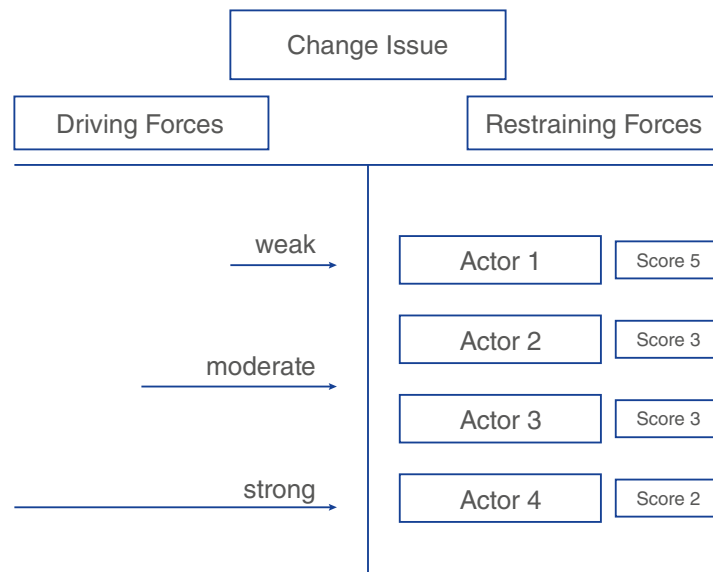


Figure 48: actor force field



G. Conclusion

Ultimately, the goal of the report is to provide a clear view of whether a transition is needed.

The example of Stichting MAAT (SM), an organization in the region of Nijmegen (Netherlands) provides an example that will be used also in the following steps (for more information see Sondejker S., 2009, *Imagining Sustainability*, p. 171-211) under the label of “case 8”. SM is a niche-based network organization in the region of Nijmegen with the intention to stimulate cooperation between various organizations that provide services related to care, housing and well-being.

SM foresaw a looming future in which the demand for care would further increase while at the same time the supply for care would decrease. Together with trends like ageing and individualization, they believed this could lead to a lock-in of the current care system.

Hence, it was decided to engage in a transition project.

The initial scope and the conclusions of the situation analysis conducted for them by DRIFT (University of Rotterdam) can be summarized as follows:

CASE 8 A: **STICHTING MAAT:** SCOPE AND SITUATION ANALYSIS CONCLUSIONS

Scope and set-up

In advance of the actual start study, the DRIFT team the main contacts within Stichting MAAT, Jelle de Visser (Advisory Board ZZG Zorggroep, part of Stichting MAAT), Peter Weyers (Director of Stichting MAAT) and Ton Moors (Senior adviser of Stichting MAAT). During these meetings their rationale for the project was discussed. The intention was to develop transition scenarios for the system of care and housing in the region Nijmegen focused on enhancing the quality of life for the disabled, referring to people with physical or mental defects. On the basis of this, concrete short term actions were to be deduced based on which niches could be started.

A proposal was written that covered a period of six months, from January 2008 to July 2008. The process would focus around several events.

For each session, an inspiring venue was arranged in the region of Nijmegen. This underlined the focus of the project on the region itself and provided the appropriate atmosphere for developing unusual and innovative ideas. The general set-up of each participative session was more or less the same. First the facilitators provided a plenary presentation in which the processed outcomes of the foregoing session were explained in terms of their function and role in the eventual transition scenarios. This was always done on the basis of the same visual drawing, as a means to provide consistency, structure and overview. Since the outcomes were structured in terms of analytical ordering frameworks underlying the transition theory, the participants gradually became acquainted with this terminology as well as with the overall aim of the project. After this presentation there was room for feedback and questions after which the subject matter for the session was explained. Most of the time, due to the amount of participants, the discussion activities were carried out and facilitated in various groups. This was the time during which the facilitator could support the creative process with various techniques. Finally, when the discussions were rounded off the group gathered and recapped the outcomes plenary. Each session closed with an informal dinner.

Situation analysis

At the national level, the Dutch care system has become rigid due to the many institutions, regulations and structures that currently exist and which increase the lack of sensitivity and flexibility towards ongoing societal developments. These structures were, however, once initiated based on well-intended purposes and have enabled accurate functioning of the care system for a long time. In the seventies, however, the first cracks in the care system became visible when the environment changed dramatically (due to trends like globalization, liberalization, ageing, individualization etc.), which led to tensions between the care system and its environment. It appeared that the former was inflexible in light of the changing requirements the environment posed. The cramp-like response of the care system focused on increasing control and mechanization. Hence, medical manipulation became central in the care system and since then the ideology prevails that any question regarding care can be dealt with. On the supply side this resulted in excessive professionalization, specialization, fragmentation and progressive medicalization. On the demand side it resulted in passivity of clients, overestimation of the care question and consumerism. The underlying structure is hierarchical, bureaucratic and dense, which strengthened the rigid and unsustainable direction the care system was already heading for.

Currently, three main reasons can be mentioned why it is presumed that the current care system is not sustainable anymore. First, if the existing scale and impact of the care system are extrapolated to the future, the image looms that, when holding on to the current state of the care system, chances for qualitative care for following generations will be decreased. Indeed, much of the demand for care is not related to problems concerning health but originates from a lack of other primary societal needs, e.g. social contact, peace of mind, a job, safety etc. This lack can, when ignoring the underlying causes of the problem, slowly but surely develop into physical or medical problems for which people are sent to the care system. Thus, problems which originate out of stressful societal circumstances are translated into health problems at the expense of the care system.

Secondly, on the surface the care system shows many symptoms of unsustainability, e.g. low level of internal cooperation, lack of external societal integration, lack of satisfactory employees etc.

Thirdly, the current care system is worrying in light of ongoing and anticipated societal developments that determine the music and rhythm of future care. Trends like decreasing social cohesion and the increased level of luxury, wealth and status that are associated with the ageing population will destabilize the care system.

3. Frontrunner selection

A useful tool is the competence list to identify frontrunners. These do not have to possess all competences listed below, nor all the backgrounds listed in the main chapter. However, they will always fit the interest profile that was given in the main chapter.

This tool is used on the basis of information gathered during the analysis phase.

Table 15: competences of front-runners

	Process competences	Substance competences
Strategic	Networking skills Communication skills Decisiveness Determination Leadership Vision	Systems thinking Creativity and imagination Problem structuring skills General knowledge Large network Abstract thinking
Tactical	Negotiation skills Communication and consensus building Thinking in terms of co-production Open to new combinations Coalition building skills	Strategic thinking Analytic ability Specific knowledge Innovative ideas

The group should include actors:

- from different backgrounds;
- with different competences (strategic or tactical, depending on the process phase);
- that are frontrunners with the full interest profile;
- that go beyond the usual suspects and are part of different networks (e.g. as visualized by social network analysis);
- with driving force and restraining force (for transition arena) or rather low restraining force (for the coalition building) (as derived from an actor force field analysis)
- with innovative (to create new resources via experiments), transformative (to create new structures, practices and culture i.e. new regimes or change existing ones) and some reinforcing (of the regime) power. The latter because of legitimacy, financing and embedding of results, even if they do not fit fully in the frontrunner profile. But it is best to avoid a politician or a director directly and go for an advisor or assistant. However, typically people with transformative power are active in the regime but are innovative and change inclined and are in fact at the same time niche players. The majority of participants should be off regime niche players;
- with different age, gender and cultural background.

In general, it will take a few iterations before a stable, diverse and representative constellation has formed. Some leave, new ones enter.

Next to this group a team of people experienced in running transition processes should be established as arena processes are quite emotional and intense, full of tensions with participants and tensions between the arena and its environment. Especially in regional arenas people tend to have emotional connections to place. Informal aspects are at least as important as formal ones.

The arena should be a relatively safe, free and protected environment with no power hierarchy. Typically, this makes reinforcing regime actors nervous who then want to install “steering” processes (e.g. a steering group or an advisory board). However, this should be resisted. Direct links can be made between the arena members and regime actors but they should always make sure the autonomy of the arena is preserved.

It is key that the participants are empowered. They need resources to engage in inevitable power games with regime actors, for example, by developing new regulation and changes in funding scheme conditions can open up more space for innovation. But also by supporting them in gaining more insight into the societal challenge, making it actionable (via vision, pathways, actions) and in developing their own networks.

CASE 8 B: **STICHTING MAAT**: SELECTION OF PARTICIPANTS

Based on the interviews held in advance of the development process and the selection process that followed, the people outlined below participated throughout the development process. During the interviews information was gathered concerning the interviewees in terms of their personal drive, expert knowledge and background, visionary qualities and level of creativity. Also, the team found if the formulated scope of the transition project scenarios, which was perceived as necessary by our main contacts within Stichting MAAT, was also shared by the participants engaged in the development process. Finally, the interviews were used to gather different perspectives that were synthesized into an overall problem sketch in a starting document that formed a shared basis for the development process.

The core team consisted of people that were permanently engaged in the development process. These people were suggested by Stichting MAAT and stemmed from their network in the region of Nijmegen. Some of these people were partner in Stichting MAAT, others had direct relations with Stichting MAAT, and in two cases the people had indirect relations with Stichting MAAT and were put forward due to “snowballing”.

The members of the steering group had an advisory role at a meta level and consisted of two of our main contacts for carrying out this project. They had the role to follow the participative process from a distance and ensure that the eventual transition pathways actually reflected the scope that was set out in advance of the development process. Although the name steering group may remind people of things related to the exertion of control, in practice this choice to appoint a steering group implied that these people participated two times in the development process while being very constructive and open for suggested changes in the scope of the transition scenarios when this appeared necessary.

Finally, the experts assisted the core team by sharing their knowledge about a specific field of expertise that had not been touched upon till then but was relevant for covering the scope of the transition scenarios. These people were suggested and attracted by various members of the core team at times they believed their knowledge was necessary. In the end, several experts participated in one or two sessions of the entire development process.

Clearly, most of the people who participated in the development of the transition scenarios were (closely) related to Stichting MAAT. This does not imply, however, that their visions regarding sustainable care and housing were comparable or in line with each other. We ensured that various perspectives on sustainable care and housing were present in the group. The importance for Stichting MAAT of only involving network relations related to their ambition to initiate a regional transition process. This process was a means for them to perceive how different actors in the region can strengthen and complement each other in starting a transformative change process.

Members of the core team:

- Petra Eshuis – Manager Estate and Accommodation ZZG Zorggroep
- Gerard Kersten – Director Dichterbij, Region Rijk of Nijmegen
- Hans Goeman – Advisory Board RIBW Nijmegen and Rivierenland
- Ton Moors – Senior Consultant Stichting MAAT
- Marion Pieters – Architect BNA, Interior Designer BNI, Pi.unlimited BV
- Kees Knipscheer – Em. Prof. Social Gerontology VU Amsterdam

Members of the steering group:

- Jelle de Visser – Advisory Board ZZG Zorggroep
- Peter Weyers – Director Stichting MAAT

Experts:

- Angela Thissen – Senior Consultant Stichting MAAT
- Lood Arons – Municipality Nijmegen, Policy associate Department Residents
- Wim van Geffen – Medical Director Dichterbij
- Bram Hakkenberg – Advisory Board MEE Gelderse Poort
- Sarine van der Klis – Regional Director Nijmegen Zuid-West, ZZG Zorggroep

Facilitators:

The facilitation team consisted of two people. They took on the responsibility to organize the sessions and determine which type of techniques would be used in what phases of the development process. In terms of facilitation, they guided the sessions and analytically structured, enriched and integrated the outcomes after each session. Furthermore, they used the processed outcomes of a session as a starting point for the following session. This ensured that subsequent sessions built on one another and that the contribution of each session was integrated and captured in the eventual transition scenarios. Also, they wrote the final document that included the transition scenarios.

One person was responsible for the actual facilitation of the discussions and group dynamics throughout the sessions, whereas the other focused on methodologically preparing and organizing the sessions and providing overview, integration and synthesis by processing the outcomes according to an analytical ordering of transformative change.

4. Arena

The arena consists of a series of meetings (usually 4). The objectives are listed in a table and some supporting tools are offered. Usually, meetings last for ½ day (3-4 hours). There should always be:

- written input for participants to prepare;
- an internal script (incl. facilitation methods);
- minutes.

Ideally, session outputs are used to start the following session.

Below, some tips for facilitation of these sessions are provided (based on Sondejker, 2009, *Imagining Sustainability*):

- there needs to be variation between openness, broadening discussions to incorporate different viewpoints, and focus, framing and integrating the discussions in an analytical ordering structure;
- the facilitators should focus on stimulating the willingness of participants to initiate structural change in practice; the development of the transition pathways is a valuable aid in this respect as they provide insight into how a transition can be realized and what specific role participants can play in this;
- with regard to a possible resistance to constructive participation in the development process, a facilitator should be able to inspire trust and create confidence in an emergent and unpredictable process; in this respect it is valuable to provide practical examples of comparable problem situations to the one the participants engaged are dealing with and explain how that situation benefited from the development of transition scenarios;
- processing the outcomes of a session is time consuming and may even take more time than the organization and facilitation of a session itself; the team that facilitates the process will be required to do most of this work as a means to ensure dynamic interplay, analytical structure and integration of the developments played out in the transition scenario, hence, the participants can freely devote as much time as possible to the interaction with each other, reflection on emerging documents and drawing the attention to fresh viewpoints and novel discussion subjects;
- it is important to organize sessions frequently; in the beginning of every session, participants have to try and let go of their daily work and current barriers for change that can block their imagination; when a session comes to an end and people step back into the real world again, it is difficult to hold on to the feelings and ideas that have come across, hence, it is crucial that the time between two sessions is not too long as only then can the participants still relate to the ideas and pick up the momentum.

The table below shows the objectives of the typical first two meetings.

Table 16: objectives arena meetings 1 and 2: problem structuring and selection of key priorities

Substantive (Content)	Process (Group)	Individual
1. The system analysis has been discussed, validated and enriched	7. The participants got to know and connected to each other	11. The input of the individuals has been appreciated
2. The most urgent issues & change-topics are indicated	8. The participants exchanged knowledge and perceptions	12. Individuals have learned about sustainability & systems perspective and have an increased awareness about sustainability issues in their city
3. A shared problem perception & conceptual framework is reached	9. The group has an increased awareness about sustainability issues in its city	13. Individuals have tasted the “arena-feeling” – they feel part of whole to which they want to commit
4. The system perspective has been introduced	10. The group commits itself to a continuation of the process	
5. Sustainability aspects are introduced & potential sustainability principles articulated		
6. Barriers for sustainable behaviour are identified		

Structuring the problem and coming to a joint problem perception is often cumbersome and time-consuming. Tools for these sessions consist of mainstream facilitation and dialogue methods. Key information from the MAAT case is given below.

CASE 8 C: MAAT STICHTING: PROBLEM STRUCTURING

First, participants had to be introduced to one another and become acquainted with each others' perspectives, the overall aim of the project had to be outlined, the transition approach and its usefulness had to be explained.

After this was finished, the subject matter (in the form of an assignment/task) for the first session was clarified. The aim was to define the scope of the system we ought to be looking at, by discussing the conditions underlying the transition challenge. Since our starting point was the recent development that Governments were steering towards the separation of care and housing, the precise question we discussed plenarily was: what entails the challenge of sustainably realizing the separation of care and housing for people with mental and physical defects?

This created a constructive and optimistic atmosphere as participants had all kinds of ideas about what the future could bring. The most noteworthy remarks were, that the separation of care and housing is a euphemism for all kinds of financial cuts. Since we are reasoning from a client perspective, the ambition is to combine care and housing and let this be the responsibility of society again. People in need of care want to be able to identify themselves with the living environment they grew up in or have been living in for a long time. Institutions and nursing homes have an alienating effect and disentangle people from these roots. Thus the conclusion was reached to visualize a different regime for the arrangements regarding care and housing, reasoned from a client perspective and their associated perspectives on the quality of life. Another remark was that different categories of people handicaps can be distinguished, each having their own specific needs in terms of care and housing. Since we decided earlier on to imagine the consequences of the transition process for the client involved, it seemed useful to select the groups we wanted to capture as cases in the eventual transition scenarios. It was decided to select several so-called 'symbolic clients' that each represented a group of clients with specific needs in terms of care and housing.

We subsequently set these results against the background of the current situation as described in the problem sketch. In this respect, an additional question was taken up: What persistent problems, inside and outside the care sector, prevent the realization of the transition challenge? Although the participants agreed upon the elements illuminated in the problem sketch, they approached it from an optimistic viewpoint. They mentioned that in spite of the fact that current structures are rigid and have become insensitive for their environment, the chances for niche developments to scale up, compete with the current regime and initiate a more sustainable direction for change are higher.

Overall, by initiating a discussion about different time intervals, the conclusion was reached that the care sector had reached a lock-in and structural change was necessary. Additionally, that MAAT was one of the few parties in the region of Nijmegen which could provide the space for many niche activities to develop and scale up, thereby facilitating the initiation of a transition process.

The session was summarized as follows:

1. Focus transition scenarios

Preserving autonomous functioning and self-chosen life fulfilment as a source of happiness for disabled people.

2. Current persistencies that address sense of urgency

- Societal environment: The acceleration of society and the decrease in social cohesion stimulate that people with handicaps can no longer take care of themselves or can no longer be taken care of by people living in the same district.

- An unbearable care system: The anticipated doubling of the elderly demands that the production of care increases with 70% in the next two years. Disutility results in terms of quality of care.

3. Scope of the system going through transition: care and housing

- a. Housing refers to 'accommodation' and is defined as the material surroundings that people can experience as their home.

Problem: corporations lack the knowledge and sensitivity to realize necessary care-infrastructures for accommodations and districts.

- b. Care refers to 'support structure' (steunstructuur) and is defined as the societal arrangements that are explicitly employed to provide support.

Problem: informal networks fail to provide the support that was once relied upon. Family, friends and neighbours are not always prepared to provide care for loved ones in need of care.

Conclusion: independent from each other, care and housing do not seem to be capable of providing disabled people with the care they need to preserve autonomous functioning and self-chosen life fulfilment. Thereof, the joint cooperation and alignment between organizations related to care and housing is urgently needed to initiate a movement and direction for structural change that can realize a breakthrough with regard to the lock-in the system is heading for.

4. Broader societal transition challenge for 2030 in the region of Nijmegen

Although the ultimate aim of the transition is focused on individual persons, imagining desirable future images and directions for more sustainable solutions forces us to explore how we can structurally influence the societal environment surrounding the system of care and housing. This is exactly why the transition perspective is valuable. The transition challenge is defined as follows:

“How can society by means of intentionally organized and as legitimate experienced accommodation and support structures contribute to assist disabled people to preserve their autonomous functioning and self-chosen life fulfilment?”

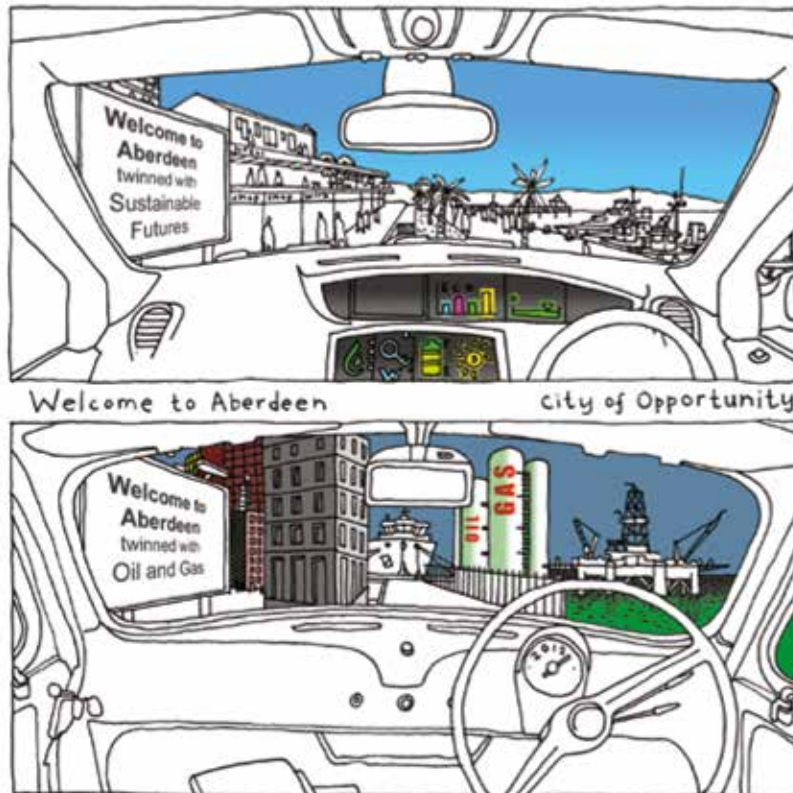
Table 17: objectives arena meeting 3: participatory vision building

Substantive (Content)	Process (Group)	Individual
1. Problem structuring and the identification of change topics are consolidated 2. Guiding sustainability principles are confirmed 3. Input for vision and visionary images is collected 4. Optional: a sub-group volunteered to elaborate the vision further (incl. sub-topics)	5. Vision is used as tool for learning about system thinking and radical system change 6. Agreements and disagreements on vision are exchanged 7. Initial group endorsement for vision is given	8. Individual learning took place 9. Individuals identify with the vision and endorse it 10. Individual needs, capabilities and strategies are related to future image/vision

Developing the vision goes often surprisingly fast. Tools for this session consist of:

- Creative work forms:
 - Brainstorms responding to the question “how can we...?” and then clustering the idea into broader concepts. This can be done via the web e.g. with concept mapping software;
 - Future Search, Visioneering, ...
 - World Cafés, Lego Serious Play, ...
 - Using creative professionals such as writers, designers, artists e.g. in the Aberdeen transition project (see http://www.themusicproject.eu/_doc/292-Transition-Newsletter-Aberdeen-december-2014_608943306.pdf)

Figure 49: Vision for Aberdeen



- [Using the vision assessment checklist as at this point in time, it becomes useful to assess the quality of the vision:](#)
 1. Is it visionary, containing elements of surprise? How different is the vision from business as usual? Is it holistic and farsighted? Does it have a specific temporal and spatial scope?
 2. Is it in compliance with sustainability principles (e.g. as used by the natural step approach at <http://www.thenaturalstep.org/our-approach/>)
 3. Is it systemic? Showing drivers and their impacts, discussing hidden connections, how sub-systems are interlinked in the future e.g. how much attention is devoted to culture, practice and structure in the vision? They provide richer pictures of the future. Serious gaming tools like Lego Serious Play can be used for this. This contrasts with “laundry lists” of e.g. objectives and issues;
 4. Is it coherent? Does it elaborate on and reconcile obvious tensions rather than hide them behind vagueness and abstraction? Again, serious games can help here.
 5. Is it plausible? Is there some evidence base that (using experience from the past, elsewhere or from concept tests) the vision has indeed potential to be realized?
 6. Is it tangible? It should entail quite a bit of detail (as opposed to abstract goals and values), providing enough substance for imagination to flourish. Hence, thresholds, tipping points and other normative reference points should be integrated. The vision should also be contextualized and embedded through narratives, stories and visuals in order to make it experiential and meaningful. One needs to be able to “see” the future state. How attractive is it and how easy to communicate to stakeholders? Finally, it should indicate a sustainable state.
 7. Is it relevant? Who (real people) is doing what, where, why (motives and rules, roles and responsibilities), how and with what consequences?
 8. Is it nuanced? Not all elements are equally desirable: priorities should be clear.
 9. Is it motivational? Is it thought provoking (challenging assumptions, opening up new perspectives) while at least potentially possible? Can people see their role in it? Are narratives, stories, games, videos and other engaging forms of communication used?
 10. Is it shared? This does not imply unanimous consensus but it does imply that key stakeholders can, on the basis of it, agree on actions.

A methodology that is very closely related to transition management is Outcome Mapping (Sarah Earl, Fred Carden, and Terry Smutylo, 2001). To show the similarities with the MAAT case and transition tools, an adapted case (based on materials provided by Terry Smutylo) will be described.

First a project team should clarify and reach consensus on the macro-level changes they would like to support and to plan appropriate strategies. The team should clearly express the long term, downstream impacts that they are working towards, bearing in mind that the project will not achieve them single-handedly. A “vision” guides, motivates and inspires and is an ‘accountability-free zone’. It does require good knowledge of the situation.

CASE 9 A **OUTCOME MAPPING:** BACKGROUND OF THE CASE AND VISION

The Context

Compared to men, women in the relatively inaccessible and disadvantaged sub-regions “name” of “country name” are disempowered. Official statistics and multi-sectoral research illustrate the magnitude of women’s inequity. For example:

- Literacy rates among women are far lower than for men.
- Women have little control over their health and fertility and they disproportionately suffer from malnourishment and anemia.
- Women are discriminated against in term of exercising legal rights.
- Women receive unequal pay for their work.

The Intervention

This project aimed to benefit women and their families by empowering them to address their own health and socio-economic needs.

Starting in 2000, the project is a 5-year initiative involving nine partner organizations working in poor rural areas of “country”. The lead “NGO name”, together with its partner NGOs, formulated the vision and mission for the project, planned its implementation, designed its monitoring and evaluation framework. The National Women’s Rights Centre (NWRC) played an active role in project implementation with the lead NGO. Financial support was provided by both the European social Fund and the Research Centre. During the project, the lead NGO provided funding, training and advice to the locally based partner organizations, coordinated their activities and reported on progress to the NWRC and the ESF MA.

Project objectives included:

- To develop and strengthen a network of government, non-government, and community-based organizations working for women’s health and empowerment;
- To improve the gender responsiveness of primary health and reproductive health care at the local level;
- To increase the responsiveness to gender equity in families and community institutions;
- To decrease the workload of women and girls by reducing the drudgery in their tasks and by transforming gender norms governing the allocation of work;
- To improve the access to and control of financial services for women;
- To strengthen the use of monitoring and evaluation in the management of rural development projects by the NGO project partners.

The project focused on forming and strengthening women’s self-help groups and similar Community Based Organizations (CBOs). Participatory and learning-oriented capacity building of women CBO members, project teams and participating organizations formed a key strategy of the project. The women’s capacities to respond covered a broad spectrum. For some, merely attending a women’s meeting or looking a visitor in the eye were significant achievements. Other women, however, were more ready to take on leadership roles in their communities.

The project intervention strategy was based on the principle that empowerment cannot be granted – it must be claimed; that no agency, NGO, or research team can empower women – they can only facilitate the processes or conditions for women to empower themselves.

Project teams worked directly with 4941 women and 1133 girls from more than 600 community-based groups to:

- Expand their views of what changes were possible for their lives;
- Build their capacity to work on making those changes; and
- Make the social environment receptive to change.

In practice, this was a multifaceted process of increasing women's knowledge and building their confidence, as well as enhancing their ability to use this knowledge (both individually and in groups). The project focused on enabling women to make decisions about important issues in their lives – whether economic, social, cultural, or political – and to act on those decisions.

One of the project's core tenets was that collective action is key to building confidence and solidarity. When the project began, a micro-credit movement was already well established. Many project teams worked with women's savings and credit groups or self-help groups (SHGs) as a platform for collective action. The project explored the use of SHGs to enable women to gain access to economic resources, as well as to bring women together to explore, question, and develop new visions of gender roles, women's rights, and citizenship in their communities.

By focusing on women's empowerment, the project was not suggesting that men are not struggling, poor or marginalized. For example, in one area where the project is active, 98% of families live below the poverty line. However, even within these systems that oppress both men and women, women face greater inequities.

The project was complex. It engaged in the processes of social change and women's empowerment by mobilizing nine partner organizations, each working in five to ten villages in remote rural areas. The stakeholders in each area differed and the partners needed different strengths and approaches to bring about the hoped-for behavioural changes. Partners used participatory processes within the community at large and among the women with whom they worked directly, to establish and strengthen community-based organizations and to strengthen their own capacities.

For monitoring and evaluation, the project teams adopted a self-assessment approach to guide project implementation and to motivate project teams to reflect on their performance and the results. Through self-assessment, the project teams expected to:

- generate learning about innovative ways of doing things;
- design new strategies;
- make changes in their plans of action; and
- reflect on the fit and adequacy of their resources, objectives, and activities.

The planning approach: outcome mapping

The process of applying OM in the field was started by the staff of one of the partner organizations (a state NGO). Using role-playing and animated discussions with their primary partners, women's self-help groups (SHGs), the partner organisation went through the first five steps of the 'intentional design' process to create **vision** and **mission** statements as well as **outcome challenge** statements and **progress markers**. Subsequently, the partner organisation used these and other outcome mapping tools to monitor changes in SHGs and other community players.

One of the first outputs was the common vision:

"Across remote rural areas in "country", women and girls utilize and benefit from appropriate health care, education, food and water security and freedom from violence. Women earn their own liveli-

hoods, accessing freely the markets, credit, banking and municipal services they need to pursue their economic goals. They use drudgery-reducing technologies and agricultural inputs that contribute to personal well-being and to ecological sustainability. Villages are fully served by public transport, are well lit at night and police enforce all laws fully and equitably. Girls attend school full time and families have the information and resources to make informed decisions regarding their health, safety and social needs. Women identify and articulate their own needs and concerns to all levels of government, from local to national. As elected representatives and as pressure groups, they participate in and influence decisions, policies and programs affecting their communities and have the support of community-based organizations working for women's empowerment. Gender equity governs household labor and decision-making; and men in the community understand and support gender-responsive laws. Women's groups help others coping with similar problems and working for women's empowerment elsewhere by sharing their learning and influence with them."

The case of MAAT is further elaborated below.

CASE 8 D: **MAAT STICHTING**: FUTURE IMAGES AND FUTURE STATE CHARACTERISTICS

In a second session, the aim was to develop future images by elaborating on the transition challenge for three different symbolic clients. These clients were selected by the participants themselves based on their existing client record. The group thus dealt with real clients in need of care. A short description of each client was provided, giving insight into the condition and restrictions of the client in question.

To ensure the utopian character of the future images, the facilitators chose to use a technique that is supposed to stimulate a change in mindset. A thought experiment was held in which the central idea was to imagine that care and housing currently do not exist and can be built from scratch in any kind of form desirable in light of the client perspectives. The underlying question posed was: what are the conditions under which Mr Pieterse, Jowie and Peter ultimately live in 2030? Several triggering questions were posed during the discussion to focus the dialogue if needed. Examples of some of these questions are: Who is affected in what?, Who works where (together)?, Who provides care where?, Who lives where?, Who meets where?

Relevant points of attention resulted from the discussions which the facilitators then integrated into three different lively and animated stories of clients in need of care living in 2030. Below, one such image is given.

Future image for Mr Pieterse:

"It is a beautiful morning in May 2030. Mr Pieterse wakes up in his own bed, in his own apartment, in the district where he has been living for a long time. He realizes that it has been two years already since his wife died. Despite the fact that a lot of love, support and attention disappeared when he lost his wife, he has regained a lot from society and the district he is living in. Life is indulgent, society is tolerant and people live in solidarity, much more than they used to. Mr Pieterse has a lot of life experience and acquired wisdoms and notices that the ever increasing individualization has come to an end. He assumes that this trend has been necessary to free ourselves from tight relations. Ties that were prescriptive, stimulated dependency and restricted individual deployment. Today, people look after each other again; not from a materialistic standpoint, but based on the desire for spirituality, solidarity and fraternization. People make emancipated choices and choose self-chosen social surroundings.

Despite the fact that a strong digitalization has taken place and Mr Pieterse can consume the world from behind his frontdoor, he feels the urge to make a personal contribution to society, just like others in his district. People make more explicit choices about what they want or do not want to use from digital media. This preserves a balance between physical and virtual life and contact. Solidarity has emerged bottom-up, not stimulated by bureaucratic institutions. Network ties and an intensification of associations determine the rhythm of today's society. There is a balance between work and leisure. People work less and more at home, thereby saving time to invest in society. There is more time for emotional involvement. Also within schools there is the tendency to make societal internships part of the education. Even performance standards at work have changed, paying more attention to societal commitment. It has become part of the policies of organizations to invest in these values that deal with sustainable and societal entrepreneurship. In short, in 2030 social and societal living is a common responsibility.

Mr Pieterse is obviously not used to this since he is not a social creature by birth. He likes to be alone. Sometimes he experiences all the care and support from the neighbourhood as patronizing and meddling. However, Mr Pieterse is 88 years old and is becoming vulnerable. More and more he notices that his life is threatened regarding health, loneliness and income. His old teacher colleague and also neighbour saw this coming and has engaged him in a diversity of associations in the district. Mr Pieterse can get used to this at his own pace. Via TV he can observe what is happening in the district and decide whether to participate or not. Furthermore, he can communicate with other residents. These devices are so user-friendly that even Mr Pieterse, with Parkinson's disease, can use them. His Parkinson's is, however, recently operationally removed.

The medication that he needs because of this is digitally implanted. Mr Pieterse has come to a point where he can experience all the changes as pleasant and safe. There are several organized meeting places in the district. These have had a powerful role in the emergence of solidarity. Realizing meeting places and a natural mobility in the district have become dominant in the structure and plans of spatial planning. Solidarity is therefore supported on the level of the whole district.

Creating a liveable environment has gained attention in each sector. Sustainable services outreach material artefacts. These circumstances have stimulated shifts in the scope of care; from organized professional care to natural informal care. Professional care is scarce and a maximum appeal is placed on society to jointly solve problems concerning care. The essence of care has been reduced to treatment-directed diversified curative care, a broad package of preventive care and professional care.

Besides the care and support he receives from his social living environment, he is observed by a so-called 'companion'. This function is taken up by people in their 2nd adolescence. Through medical conditions people become older and are longer vital. When turning 60 they make revised choices concerning life fulfilment. More often this means they want to support the elderly and peers. These people have a permanent place in the district with a monitoring function. Mr Pieterse can reach them (digitally) when he needs professional care. They can subsequently transfer him to appropriate specialists. These people have a close relationship with the social environment of Mr Pieterse from which they also receive information regarding his condition. In short, they supervise the risks of Mr Pieterse by being present in the district and preventing anything from happening to him.

Despite the fact that the tendency related to the ageing population finally has become visible, the composition of the population is not changed. The number of children has been increasing, partly due to the increased multi-cultural character of society, partly because people realize that children and family have a social function in support, care, meaning, life fulfilment and communication."

In the third session, the group had to look at the necessary structural change in the system of care and housing in terms build-up and break-down of culture, structure and practices surrounding the system.

These necessary changes can be derived by contrasting the current situation with the future images. Accordingly, the facilitators decided to distil elements of culture, structure and practices from the future images they had already written. They noticed rather quickly that because of the focus on concrete living conditions of existing clients, the stories primarily dealt with elements of culture and 'practices, disregarding elements of structure that facilitate the practices at a higher level.

To enrich the future images with elements of structure, it was decided to plan several additional interviews in between the two sessions with several of the participants involved. We chose the participants that had showed to have visionary capacity, clear-cut ideas about what the future should hold and a job position in which strategic and institutional insights prevailed.

The output of this exercise is displayed below. It essentially is a "vision" of the desired future.

Elements of culture, structure and practice

Culture

- Client is central
- Informal care by districts and society
- People have an active contribution to society
- 2nd adolescence
- Sustainability in social relation
- Investing in solidarity
- Emancipated and explicit choices
- Living is visible in districts, care invisible
- Tolerance and social cohesion
- Desire for meaningfulness
- Networks and associations
- Balance between physical and virtual contact
- Family has social function

Practice

- Companion and monitoring
- Short lines
- Generalists having the function of referring clients to specialists
- Informal care = care, wellness and social environment
- Preventive form of coaching through courses
- Digitalisation supports care
- Scarce professional care
- Maximum appeal on society
- Demand driven care to active elderly

Structure

- Client central and district-oriented informal care
- Care through networks
- Safety net at the level of districts
- Prevention, presence and observation
- Balance work and leisure
- More emotional interest
- Education and internships with societal function
- Meeting places with spatial planning structures

Table 18: objectives arena meeting 4: participatory back-casting

Substantive	Process (Group)	Individual
1. Change topics, vision and visionary images are consolidated	6. Perceptions are exchanged, group awareness increased & learning took place	10. Individuals let go of the idea that everything can be engineered and begin to understand the working of complex systems
2. Backcasting analysis is done: input for agenda and transition paths are identified per change topic & visionary image	7. The group is committed to the vision	11. Individuals (at the same time) feel that they can have an impact and seize opportunities / contributions for themselves and their environment
3. Tipping points of the system are defined	8. Increased awareness of potential changes, mechanisms and actor contributions	
4. Expected drivers and barriers are identified	9. The group realized the possible, collective impact of the shared narrative.	
5. All input for writing up the transition narrative is collected		

Bridging the vision to the current situation through multiple pathways is often the hardest part of the process. Tools to support this meeting are:

- Backcasting (more info can be found in Quist, J. and Vergragt, P. 2006, “Past and future of back-casting” in Futures 38, p. 1027-1045):
 - Collective:
 - after presenting the future vision including its goals the questions for group work are some variation of:
 - WHAT changes (cultural, structural, institutional, organizational, technological,...) are needed to bring about the future vision and the included goals?
 - WHAT changes are needed at the individual level (needs, capabilities, strategies)?
 - HOW have these changes been brought about, through what kind or process?
 - WHO is needed to realize these changes and what should they do as a next step (use different societal groups as a checklist: government, business, research/knowledge, citizens/public, ngo’s);
 - self-facilitating sub-groups who report back in plenary:
 - e.g. using a table with one column per what, how, who
 - defining different pathways towards the vision on the basis of this
 - defining activities and development for a certain period (e.g. periods of 10 year).
 - Individual:
 - the participants individually reflect on how (s)he feels, what (s)he needs, which experiences (s)he has made/wants to make in the “last” step towards the vision, how culture/values/strategies to fulfill needs have changed, etc.
 - this gives them a feel for the pathways.

It should be clear this is not about forecasting, which is based on dominant trends and hence extrapolating the past into the future. That is fine as long as the trends are leading to a desired future. But when trends lead to a problematic future, a more creative approach is needed, involving a broader range of stakeholders (not only experts). By starting from a view of the future and then extrapolating this back into the present, it works on our perception of what is possible or reasonable as this is otherwise a major obstacle to change. Backcasting should therefore broaden the scope of solutions to be considered by describing new options and different futures. This can then be compared to forecasts. Backcasting can then also be used also for analysis of the degree to which undesirable futures can be avoided or responded to.

Pathways can be described in a very limited way or very elaborate. Examples are given below:

Three pathways to better household nutrition:

- Intelligent Cooking and Storing (ICS) is about a household characterised by high-tech, convenience, do-it-yourself and a fast lifestyle. Kitchen and food management is optimised with help of intelligent technology, which also organises ordering (electronically), and delivery with help of a so-called Intelligent Front Door. Water and energy are re-used where possible through cascade usage. Meals are either based on a mixture of sustainable ready-made and pre-prepared components (including vegetarian foods replacing meat) or ready-made meals containing a microchip communicating cooking instructions with the microwave oven;
- Super-Rant (SR) combines elements from the present supermarket and restaurant shaped into a neighbourhood food centre within a compact city. Here you can go for a meal (e.g. by a subscription to the neighbourhood cook), for food shopping, to purchase a take-away meal or to eat together for different prices. In many households only the microwave oven, a water cooker and a small fridge are left. Waste is collected for local energy production. Food is grown in a sustainable way;
- In Local and Green (L&G) household members grow a considerable share of their foods themselves. Additionally, they buy and eat seasonal foods that are locally grown and purchased at local shops, small supermarkets, or are bought direct from the grower or hobby garden as ‘fresh’ unprocessed ingredients. Regional specialities are important and are consumed in the region by both inhabitants and tourists. Imported products are still available but expensive, because environmental costs are incorporated in the price. Furthermore, there is a strong green consumer demand in this scenario.

Once the pathways are described, it may be useful to subject them to a user acceptance (e.g. using a user focus group, economic credibility (e.g. a questionnaire) and environmental gains (e.g. using indicators) assessment.

- Outcome mapping also offers tools that are useful in this phase:
 - mission
 - boundary partners, outcome challenges and progress markers
 - a strategy map

The mission describes what you do, produce in the project: it identifies your principle collaborators – referred to as “boundary partners” and tells how you work with them. Of course, the project’s boundary partners may also have their own boundary partners (some of them are the ultimate beneficiaries) they are trying to influence. And then there are also strategic partners that are exerting influence that is deemed useful already so the project does not need to exert any influence towards them.

A next step is to formulate for each boundary partner an outcome challenge. This describes how one boundary partner is contributing maximally to the vision, formulating its ideal actions, relationships and activities.

Progress markers which are used to track performance, are developed for each boundary partner. Each progress marker describes a change in the boundary partner’s behavior and can be monitored and observed. As a set, progress markers are graduated from preliminary to more profound changes and describe the change process of a single boundary partner.

After clarifying the changes the project intends to influence, the team should select activities that maximize the likelihood of success. This entails drawing up “strategy maps” that reflect actions to be taken towards influencing each boundary partner or their environment in a variety of ways. Finally, it also entails drawing up organizational practices that reflect how a project team or organization aims to stay relevant, viable and effective (e.g. concerning knowledge sharing).

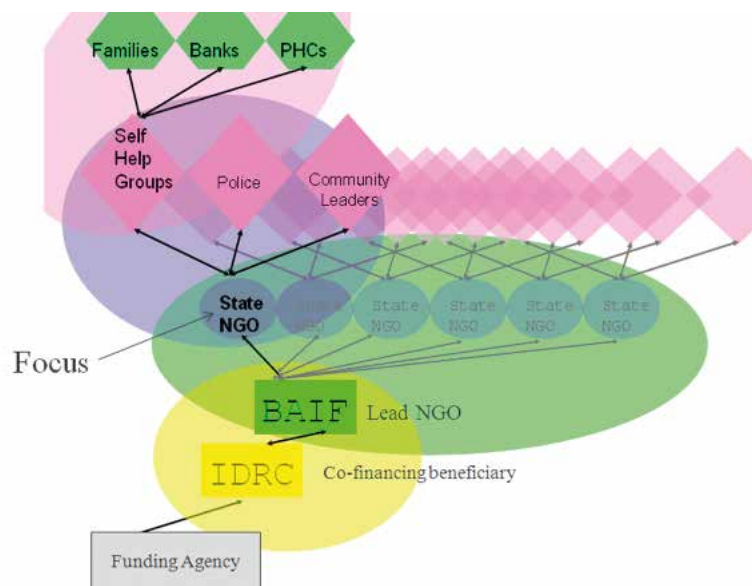
The case of the Outcome Mapping project is further elaborated below.

CASE 9 B: **OUTCOME MAPPING** MISSION, BOUNDARY PARTNER CHALLENGES, PROGRESS MARKERS, STRATEGY MAP AND ORGANIZATIONAL PRACTICES

After the vision is elaborated, a mission statement is up next. In this case it stated:

“The project works with governments, NGOs & CBOs to improve women’s health and empowerment. It facilitates the development of women’s self-help groups, providing them with funding and training to help them influence community and government services to be more responsive to their health and livelihood needs. It fosters linkages between self-help groups and banks, police, health and social service providers, local officials and regional and national government agencies to build mutual respect and joint action to improve women’s well-being. It researches and promotes the application of ecosystem approaches to human health in agriculture and in the provision of health and sanitation services. The project addresses equity issues in all its activities. It uses participatory methods to monitor progress, to learn how to become more effective in supporting its partners and to report on its results.”

The mission already contains quite a few actors that the project will work with. Outcome mapping as a method usually maps out all of the various stakeholders and refers to those stakeholder the project team will actually work with directly as “boundary partners.” In this case, the project teams were located in the State NGO’s. They were supposed to interact with women’s self – help groups, the police, community leaders etc.



Next, for each such boundary partner, an outcome challenge statement should be formulated. Below is such a statement for women’s self help groups:

“Women’s self help groups are taking action to make community and government services more responsive to the health and livelihood needs of women and girls. They influence banks, police, health and social service providers, local officials and state and national government agencies in relationships of mutual respect and joint action to improve women’s well being. Women’s self help groups arrange bank loans for members and for life skills training for girls to be included in the school curriculum. They influence local, regional and national government policies and expenditures on community improvement and transportation and support women candidates to run for election to local government office.”

Such outcome challenges should be formulated also for the police etc. Here we will only continue with the women’s self help groups for illustration of the method.

Next, each outcome challenge is to be made more concrete by so-called progress markers. These reflect various ambitions in terms of what one hopes to observe at the level of the boundary partner, in the case below, the women self help groups:

“Expect to See Women’s Self Help Groups:

1. Holding meetings regularly
2. Discussing a list of shared concerns
3. Opening and contributing to a group bank account
4. Acquiring skills in managing credit programs
5. Soliciting training in maternal & child health for members from NGOs

Like to See Women’s Self Help Groups:

6. Forming grain banks
7. Lending money to members to finance income generating activities
8. Seeking ration cards from local authorities for needful women
9. Arranging for health check-ups by the public health clinic (PHC)
10. Lobbying police to close down illegal alcohol vendors
11. Calling upon outside expertise to help identify drudgery-reducing technologies
12. Pooling finances to purchase drudgery-reducing technologies
13. Conducting maternal and child health education sessions for their communities

Love to See Women’s Self Help Groups:

14. Arranging bank loans for members
15. Arranging for life skills training for girls to be included in school curriculum
16. Lobbying local government for expenditures on community improvements
17. Approaching the Transport Dept for bus service to their villages
18. Taking action responding to the incidence of violence in their community
19. Lobbying national government depts. to invest in local development projects
20. Putting forth candidates for election to local government council”

Finally, to contribute towards making progress such as indicated in the progress markers, a strategy map is drawn up.

	Causal	Persuasive	Supportive
Aimed at individual boundary partner	<ul style="list-style-type: none"> ▪ Fund collection of monitoring data ▪ Take women’s photos ▪ Take women to banks to open accounts 	<ul style="list-style-type: none"> ▪ Provide training in organizing and conducting group meetings ▪ Training in needs identification sessions for SHGs ▪ Training sessions on dealing gov’t departments ▪ Conduct knowledge sessions on maternal and child health ▪ Provide training in maintenance & repair of technologies ▪ Leadership training for local leaders 	<ul style="list-style-type: none"> ▪ Linking with active, successful SHGs in other communities ▪ Link SHG work to national health program ▪ Exposure visits to income generating projects elsewhere
Aimed at external environment of boundary partner	<ul style="list-style-type: none"> ▪ Provide training for health careworkers ▪ Fund creation of Sanitation Planning community-based group ▪ Conduct training for PHCs on reproductive health ▪ Training and placing researchers in the communities ▪ Provide bicycles for girls 	<ul style="list-style-type: none"> ▪ Conduct community info sessions on: violence, women’s rights, sustainable agriculture ▪ Home visits to educate families ▪ Visit banks, discuss with, educate officials ▪ Conduct community forums on SHGs ▪ Information sessions on new technologies (toilets, agricultural tools for women) 	<ul style="list-style-type: none"> ▪ Link PHCs to others delivering gender-based services ▪ Initiate regular Parent/Teacher group meetings

This concludes the main planning tools as used in Outcome Mapping.

The case of MAAT is also further elaborated below.

CASE 8 E: **MAAT STICHTING**: PATHWAYS TO THE FUTURE

From the third session onwards the group started working on the pathways that led to the future images. This is more analytical work than in the previous sessions which were more creative.

The first part of the session started with two questions:

1. **Breaking down regime:** What culture, structure and practices currently exist that have been broken down in the future images?
2. **Building up niches:** What culture, structure and practices need to be initiated/emerge throughout the transition process but do not yet currently exist?

This discussion was aided by a visualization of the entire transition process (the S-curve); the beginning of the S-curve was marked by the problem sketch and the end by the culture, structure and practices underlying the future images. The intention was to add red cards (break-down) and green cards (build-up) to the S-curve, displaying the structural change process in between.

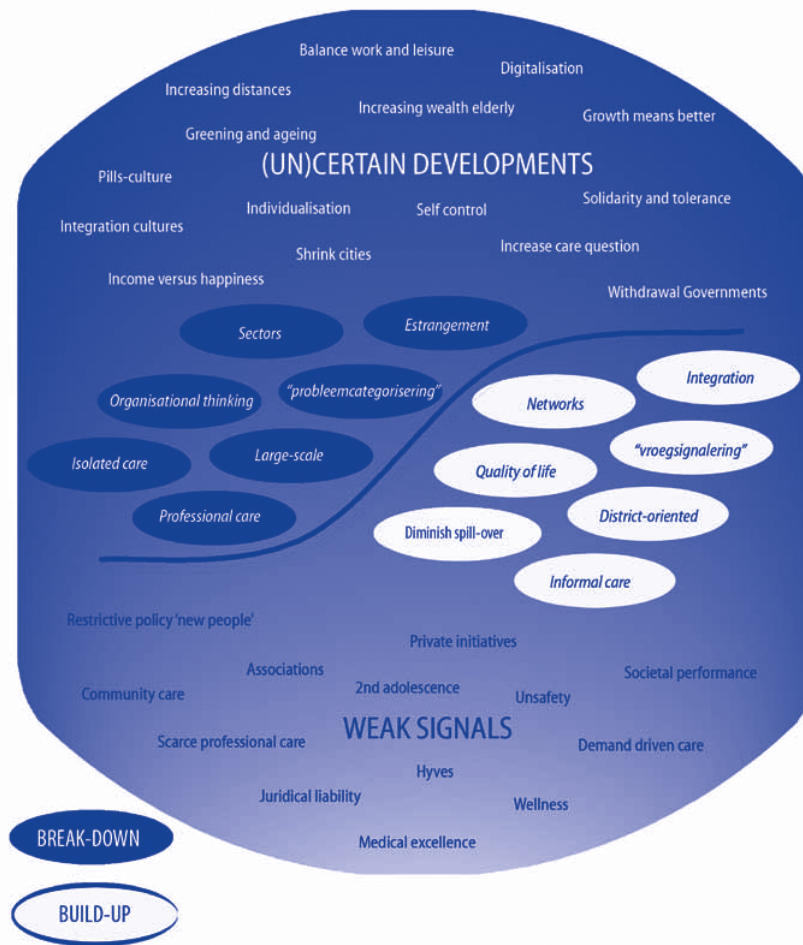
In the second part of the session the group tried to deduce the drivers for structural change that were implicitly mentioned within the future images. The drivers were categorized into certain developments, uncertain developments and weak signals.

Weak signals are today's events that may seem unimportant from a current perspective and seem to exist in isolation, but which are extremely important when perceived from the perspective of the future, desirable state of the system. These weak signals should subsequently be scrutinized and considered in the context of long-term processes, especially uncertain developments of which the direction can still be influenced in a more sustainable direction. This leads to the possibility of imagining and spelling out various interactions between weak signals and uncertain developments, resulting in a characterization of several discontinuities with today's trend.

A plenary brainstorm was held to explore and add additional relevant drivers to the list. Several new participants who were experts in ongoing trends and developments surrounding the system of care and housing were now also invited.

The newcomers had not been introduced to anything related to the transition approach before and they felt that the future images were too idealistic. In view of this, the facilitators tried to explain the purpose of the development process and the phases the group had already gone through as a means to familiarize them with our ambitions and course of action, with the intention to stimulate a more considerate attitude.

The end result of one specific session is displayed below. The text in the final document also describes various examples of how the drivers can initiate processes of build-up and break-down.



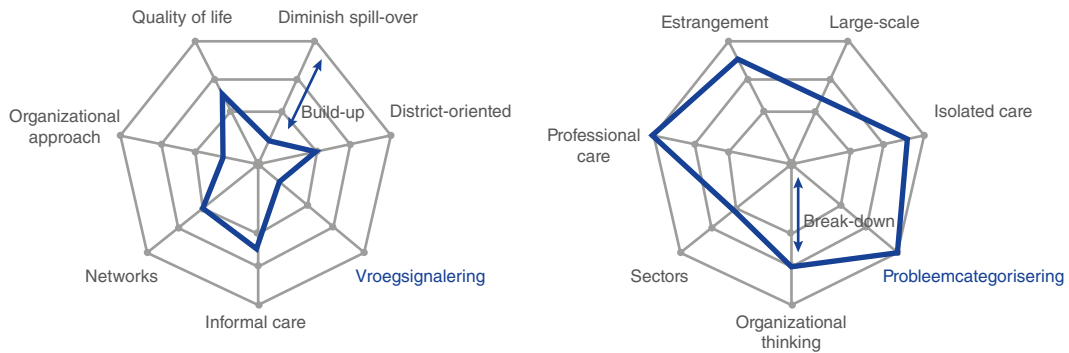
Before the fourth session, the facilitators e-mailed the participants (a week in advance) with a homework assignment. They were supposed to think freely of bold and relevant actions of interested parties in the region of Nijmegen in light of the transition challenge. They brought these ideas with them and during the session tried to contrast them to and integrate them with the outcomes already developed. As throughout the development process the facilitators were also engaged in writing the final document, piece by piece, adding new findings after each session, they now handed each participant randomly a few pages from this document, outlining for instance the problem sketch, the transition challenge, the future images, the structural change or the drivers for change. They had to read these pages individually and underline sentences which implicitly indicated necessary innovations or actions. More specifically, they had to mark the sentences for which actions were needed in order to realize them and also which actor groups would execute them.

They had to define this action and think of actor groups which could be held accountable for this. In doing so, they first had to consider if the results of their homework already addressed some of the necessary actions and actor groups. If not, they had to write down additional actions on post-its.

After the break we all the outputs were listed and it was explored if certain actions could strengthen each other in one and the same direction. The group ended up with several such clusters of actions. These clusters constitute the different embryonic “pathways” to the vision.

Of course, the work had not been done on the basis of the output of the third session which was an explicit choice made to avoid restraining creativity. This means also contradictory ideas could emerge that could enrich the pathways. However, this did mean a lot of work still had to be done to ensure coherence with that output by:

[1] addressing the necessity of the actions in light of the gap between the current state of affairs (persistencies and renewal) and the desirable future system state. This led to the “transition-stimulation-profile” depicted below. The first figure shows the various elements that were identified in session 3 that had to be “built-up”. The second shows what had to be broken down. In both figures, the dark line shows what the current situation is. The facilitators used a business case, data and information for a specific district in Nijmegen, to distil these current situation lines.



[2] perceiving the actions in light of the drivers for structural change and the processes of build-up and break-down. We subsequently merged the actions and unravelled strategies that anticipate drivers for structural change and activate processes of build-up and break-down. This led to a so-called “strategy table” depicted below for build-up (a similar one was constructed for break-down). For each action there is of course a description which makes clear what actor (group) is supposed to take charge of it.

Weak signals	2nd adolescence	Associations	Safety	... Etc.
Build-up				
Quality of life ←	Redefinition of work: personal growth and pleasure	Transform institutions to demand driven care	Companion with function risk aversion	
Diminish spill-over ←	Offer alternative jobs for elderly people	“Meeting” instead of “thinking”	Spatial planning facilitates safety	
District-oriented ←	Presence at the level of districts initiated by private initiatives	Hyves at the level of neighbourhoods	All houses built for disabled people	
... Etc.				

5. Agenda setting

Table 19: Objectives agenda setting meeting

Substantive (content)	Process (Group)	Individual
1. The arena is split up in sub groups according to transition paths	5. The group is eager and committed to continue with specific actions	7. Individuals are committed to continue with specific actions
2. Transition agenda is set up: specific actions are agreed upon	6. The group feels responsible for realizing the vision	8. Individuals know what they can do to contribute to a realization of the vision
3. A date is set for publication & dissemination of the transition narrative		
4. Strategy for broadening of and support for the arena. 'Closure' of original arena process		

Tools to support agenda setting are:

- Open Space;
- A series of consecutive meetings can be organized with smaller groups to build coalitions for action

6. Transition experiments: contributing to tackling societal challenges

6.1. Introduction

Transition experiments should not be used as isolated instruments, but as part of a broader governance approach put forward by transition management. While the short term goal of the arena process was indeed to create a network of innovative front-runners who have formulated breakthrough projects that contribute to a broader vision, other indirect effects are equally important: a new discourse, a new élan, a joint language (on transitions), renewed trust, a shared perspective.

The starting point of a transition experiment is not technological innovation but a societal challenge as defined in the chapter on transition theory.

Hence classical innovation projects that start typically from a well-defined problem or a possible solution are not possible. Furthermore, solutions cannot be found within the dominant way of thinking. Hence the need for a challenging question and not a preconceived solution.

Examples of concrete experiments that already took place were directed at finding sustainable ways to fill the need for housing and care for the elderly, mobility in urban areas, nutrition for school children, water management ...

Transition experiments are a form of system innovation. They aim to fulfill an existing or emerging societal need in a fundamentally different way, rather than merely in a new way with new products, services or processes. These societal needs exist at a very large scale, for example a sub-sector such as water, energy, mobility. The experiments themselves will take place at a smaller scale, e.g. one or several organisations, a neighbourhood or municipality, but can contribute to transitions at sector or regional level.

These experiments hence also happen in a real life societal context. To be useful, they need to have adequate learning processes:

- **broad:** enable to learn about many dimensions of a problem;
- **reflexive:** questioning underlying assumptions such as social values and expectations regarding the nature of the problem while also willing to change course in terms of possible solutions;
- **social:** multiple actors interact to enable “re-framing”, changing the frame of reference and perspective of actors involved by confronting them with each other’s perspectives

All of the characteristics of transition experiments are summarised below.

Table 20: transition experiments versus classical experiments

	Classical Innovation Experiment	Transition Experiment
Starting point	Possible solution (to make innovation ready for market)	Societal challenge (to solve persistent societal problem)
Nature of problem	A priori defined and well-structured	Uncertain and complex
Objective	Identifying satisfactory solution (innovation); no significant change in regime	Contributing to societal change (transition); radical, break with regime
Perspective	Short and medium term (2-5 years)	Medium and long term, beyond the experiment itself
Method	Testing and demonstration	Exploring, searching and learning
Learning	1 st order (no reassessment of fundamental assumptions), single domain and limited to a few key individuals	2 nd order (reflexive, learning about structural and cultural obstacles to change), multiple domains (broad) and collective (social learning). Findings are translated to the experiment AND the larger environment.
Actors	Specialized staff (researchers, engineers, professionals, etc.)	Multi-actor alliance (across society, organisations, domains)
Experiment context	(partly) controlled context	Real-life societal context
Management context	Classical project management (focused on project goals)	Transition management (focused on societal ‘transition’ goals): aimed at preserving the radical character of the innovation, creating change-oriented coalitions, creating new structural and cultural conditions.

An example of how this looks in real life is provided below. This also serves to show that in practice, projects can exhibit characteristics of both types for example when a traditional project becomes part of a “transitioning process”.

Table 21: application of difference between transition and traditional experiments

	People Mover: Classical Innovation Experiment (pilot)	People Mover: Transition Experiment
Starting point	Sensor technology, traffic mix, municipal parking policy (Almere)	To an environmentally friendly, cost effective, attractive and safe mobility system
Nature of problem	Technological and embedding in municipal parking policy and infrastructure	Complex: scaling up and embedding in mobility system (3P's)
Objective	Technological innovation and municipal market for people movers	Contributing to (sub)transition to 'customer directed collective transport'
Perspective	2-5 years	>10 years
Method	Testing and demonstration on site in Almere	Testing and demonstration on site in Almere, learning for (sub)transition and other applications
Learning	New (technological) insights, behavioural change municipalities	Changing societal perspective on mobility, reflection on objectives of experiment
Actors	Project group	Project group + new parties (companies, governments)
Management context	Project management, adjusting project goal	Transition management (process), Transumo (vision and (sub)transition), adjusting societal- and project goal

The people mover project started as a classical innovation, technology push project. It involved the development of self-steering vehicles (without a driver), that are technically speaking safe, cheap, environmentally friendly, fast and efficient to transport people within a city or municipality. The testing place was the city of Almere in the Netherlands.

During the project a 'transitioning' process was started by another project – TRANSUMO – in which the central question was: "How to transform such a largely supply-driven project into a more demand-driven transition experiment in such a manner that it might contribute to a more sustainable mobility system?"

This broadened the objective of the project from testing and demonstrating a technological innovation, to exploring and learning about how a people mover could contribute to a (sub)transition to sustainable mobility. The initially short and medium term perspective on the project was added with a long term perspective and Transition Management (as a process approach) was incorporated in the project management. A concrete outcome of this 'transitioning process' was that this different way of looking at the project resulted in changing the working packages of the project.

Furthermore, the reframing of the project from a technological concept to a broader concept about sustainable mobility in general, created opportunities to incorporate people movers in the political agenda of Almere.

6.2. How to “transition” experiments?

Three key mechanisms exist to help experiments contribute to transitions:

- **deepening:**
 - this is all about learning about the perspectives of other actors in a “niche” environment (a type of societal subsystem different from the dominant selection environment hence enabling experimentation and learning) via the experiment
 - hence, the experiment also contributes to developing different perspectives (social learning) which may result in shifts in culture, practice and structure (see transition theory for elaboration of these concepts), resulting at some point in a “deviant” local constellation of culture, practice and structure;
 - the niche is therefore both the place that allows experiments to happen while it is also developed and shaped further by these experiments via “deepening” which relates to a sequence of experiments that reinforce the deviant constellation
 - this deviant constellation is, in comparison to the dominant regime, due to its locality and immaturity, characterized by low influence, instability and low dominance;
 - the learning in the niche environment is contextual and partial (limited to and by the specificity of the context and the small scale);
 - guiding principles are to take into account uncertainty, to create space for intermediate adaptations, to formulate learning objectives in advance and build on the lessons from other projects;
 - a key management challenge is to balance the achievement of short term results, with searching and learning and hence moving from mere incremental innovation to developing new ways of thinking and doing;

- **broadening:**
 - this concerns the diffusion or adoption of the new or deviant culture, practices and structure in a larger variety of contexts (e.g. in other sectors, regions or domains such as policy, technology, consumption, ...) or their use to fulfill more and different societal needs (e.g. also responding to the need for mobility, energy next to housing and recreation);
 - it recognises that before there can be a breakthrough in the mainstream context, the deviant constellation of culture, practices and structures may need to be developed in a larger variety of contexts at niche level;
 - if broadening remains limited, then an experiment will just be an isolated event; with limited potential to empower the niche to develop into a niche regime;
 - key principles are making sure that previous lessons learned are incorporated in new experiments, that experiments are set up with a high potential to be repeated in a broader context, using the transition vision to bind and direct a portfolio of projects and to organize feed-back loops between the projects and the pathways they are part of,
 - a key management challenge is to move from establishing coincidental links towards directed linking;

- **scaling:**
 - this concerns not the diffusion of experiments (as this is part of broadening) but rather the displacement of a previously dominant constellation of culture, practice and structure by a new / deviant niche regime
 - the niche regime was developed via the succession of experiments and their deepening and broadening in several niches as well as the clustering of these niches, that in this way enhances the power of the niche regime to challenge the dominant regime;
 - we can tell this shift happens by the share of meeting the societal need that this competing constellation displays, where at some point what was deviant becomes more the norm;

- we can also tell that there is such a displacement when a growing share of incumbent regime players become aware of and takes up key elements of the niche regime, although it is also possible they are displaced by other actors;
 - this requires a considerable amount of time (5-10 years);
 - in any case, one of the key factors in scaling is whether powerful actors (politicians, ministries, protocol and standard developers, ...) can be persuaded to directly influence the existing culture, practices and structures, alongside the (in)direct influence of other interested stakeholders who are more broadly advocating for change (e.g. NGOs, frontrunners in a sector, ...) without necessarily having much power;
 - also institutional embedding, gaining structural support, overcoming institutional barriers and making the experiment part of a broader process of change are guiding principles;
 - a key management challenge is to move from simply handing over results to actually affecting ways of thinking and doing in the dominant regime;
- it is important to understand that transition managers need to work on these three aspects at the same time: there is no sequence. Creating the conditions to learn in a specific context needs to happen at the same time as creating the conditions to extend into other contexts and functions as well as involving regime players in scaling up (or displacing them with other actors).

In the “People Mover” project in Almere, these concepts can be applied as follows:

- deepening concerns the formulation of explicit learning objectives, with regard the potential of new solutions for sustainable mobility, and to monitor these;
- broadening concerns:
 - the exploration of different functions for the people mover (individual transport, goods and services) and to include other domains than transport (like recreation and tourism, trade and industry and agriculture). This would require the involvement of different stakeholder partners from outside the transport sector (such as tourism agencies, banks and societal organizations). This provides opportunities for increasing the share of sustainable mobility (and related domains such as housing and trade and industry) in Almere;
 - exploring opportunities to repeat the experiment with People Movers in other contexts (different cities);
- scaling up would involve an incorporation in the future mobility policy plans, a cultural acceptance of people movers by the citizens of Almere and a structural role of people movers in the mobility system in and around Almere;

Next to the three key mechanisms for experiments to contribute to transitions, also four niche related conditions exist:

- there must be alignment within the niche: the degree to which strategies, expectations, beliefs, practices, visions etc. associated with niche actors all move into the same direction;
- at local level, niche power must exceed the power of the regime, hence challenging the regime; in this powerful actors play an important role;
- pragmatic system builders need to work on a certain alignment of the niche regime with the dominant regime: some compromises may have to be made to help translate some niche practices into a form amenable to actors in the regime;
- the niche needs to align with events and developments at landscape level.

6.3. Assessing transition experiments with criteria

Process criteria:

- room in budget and planning
- space in the process: this space or “protection from short term pressures” comes from legal (ability to temporarily suspend rules, procedures, taxes, etc.), institutional (e.g. commitment of powerful actors to protect the space and to block interference) or mental sources (e.g. inspiring environment);
- quality of learning processes, ensuring double loop learning (about hidden assumptions) receives due attention;
- supportive incentives / assessment mechanisms not oriented towards short term results (incl. financial gain) but at stimulating learning and broader societal impact;
- motivation, resources and competences of all key stakeholders involved in the project (incl. transition competence such as an open mind, ability to look beyond boundaries, communicating insight and results, ...);
- strategic management: as the experiment is aiming to contribute to a broader societal challenge, it is at some point needed to be able to link up with other projects and developments that are oriented to the same challenge. In addition, “landscape” trends that put pressure on the “regime” but support the niche should be taken advantage of. Finally, powerful actors that may want to hinder the project need to be taken note of.

Substance criteria:

- connection to societal challenge (how the project goals fit with societal ‘transition’ goals);
- connection to promising paths of development (transition paths);
- innovativeness (in terms of deviating from dominant structures, culture and practices);
- sustainability of explored solutions (in terms of a balance between economic, social and ecological development).

6.4. Management guidelines for transition experiments

Table 22: transitioning managerial guidelines

Steering dimensions	Deepening	Broadening	Scaling up
Success Criteria	Actions aimed at learning as much as possible from the experiment in the specific context	Actions aimed at repeating the experiment in other contexts or connecting to other functions and domains	Actions aimed at embedding the experiment in dominant ways of thinking, doing and organizing
Process			
Room in budget and planning	<ul style="list-style-type: none"> ▪ allocating resources (time, money, knowledge, etc.) to an open search and learning process for a consortium of partners; 	<ul style="list-style-type: none"> ▪ allocating resources to interaction with other domains, projects and partners; 	<ul style="list-style-type: none"> ▪ allocating resources to (early) involvement (transfer of results) of key actors at a strategic level (who have power, influence and willingness for longer term regime change);
Space in the process	<ul style="list-style-type: none"> ▪ building in space for reflection on and adjustment of the vision and learning goals; 	<ul style="list-style-type: none"> ▪ building in space for joint reflection with potential partners on the connection of the project to the broader context; 	<ul style="list-style-type: none"> ▪ building in strategic reflection on barriers and opportunities in dominant ways of thinking, doing and organizing and infrastructure (the regime);

Quality of learning process	<ul style="list-style-type: none"> organizing a broad, reflexive and social learning process (on starting points, regime, project goals,...); 	<ul style="list-style-type: none"> focusing the learning process on identifying various experiments and how they can reinforce each other; 	<ul style="list-style-type: none"> focusing the learning process on how learning experiences can be embedded in dominant ways of thinking, doing and organizing and infrastructure (regime);
Supportive incentives / assessment mechanisms	<ul style="list-style-type: none"> developing supportive incentives / assessment mechanisms that increase the quality of learning; 	<ul style="list-style-type: none"> developing supportive incentives / assessment mechanisms that stimulate interaction and learning with other domains and partners; 	<ul style="list-style-type: none"> developing supportive incentives / assessment mechanisms that stimulate feeding back results to key actors at a strategic level;
Competences of project participants	<ul style="list-style-type: none"> selecting project participants with an open mind and willingness to learn, next to expertise; 	<ul style="list-style-type: none"> selecting project participants that are able to look outside the borders of their discipline, open to experiences of others and are strong 'connectors'; 	<ul style="list-style-type: none"> selecting project participants that are able to communicate and 'anchor' project results at a strategic level with key players;
Strategic management	<ul style="list-style-type: none"> the management guarantees that project results are related to the societal challenge; 	<ul style="list-style-type: none"> the management guarantees the interaction with other domains and partners; 	<ul style="list-style-type: none"> the management guarantees connection to key actors and developments at strategic level;
Substance			
Connection to societal challenge	<ul style="list-style-type: none"> connecting project goals explicitly to societal (transition-)goals; 	<ul style="list-style-type: none"> cooperating with other projects and developing new partnerships to realize shared societal goals; 	<ul style="list-style-type: none"> adapting to sense of urgency with regard to societal challenge and taking advantage of landscape trends and new developments;
Sustainability vision / future perspective	<ul style="list-style-type: none"> project participants share a long term sustainability vision; 	<ul style="list-style-type: none"> developing an overarching sustainability vision to provide guidance to different experiments; 	<ul style="list-style-type: none"> drawing attention to the sustainability vision at a strategic level (external regime players important for longer term structural change);
System analysis (dominant culture, practices, structure in sector)	<ul style="list-style-type: none"> project participants share perspective on dominant ways of thinking, doing and organizing in the sector (from which the experiment deviates); 	<ul style="list-style-type: none"> identifying similar experiments and potential new partners, application domains and functions; 	<ul style="list-style-type: none"> identifying key actors with power and willingness to influence dominant culture, practices and structure;
Learning goals/ desired changes (innovation)	<ul style="list-style-type: none"> formulating explicit learning goals with regard to desired (inter-related) changes in culture, practices and structures; 	<ul style="list-style-type: none"> repeating the experiment in other contexts and experimenting with new functions is part of the learning goals; 	<ul style="list-style-type: none"> anticipating and learning about barriers and opportunities in dominant culture, practices and structures is part of the learning goals;
Intended results	<ul style="list-style-type: none"> distinguishing results in generic and context specific; 	<ul style="list-style-type: none"> sharing results with other experiments and potential application domains; 	<ul style="list-style-type: none"> results from the experiment and the reflection around it are shared at strategic level and lead to stimulating structural (regime) support and resources for results;

6.5. Monitoring and evaluation

This entails:

- following the process over time;
- describing what happens using transition indicators;
- reflecting collectively (with other stakeholders) on the process, putting it into a bigger picture, asking oneself if one is doing the right things (double loop);
- recommending interventions.

Learning from experiments should focus on culture, practices and structures as well as landscape developments.

It is important to be reminded WHY learning is so important in transition management. One should remember the definition (see chapter 2 d) of a societal challenge as being: “a question related to a persistent societal problem” which is complex as:

- it is deeply embedded in dominant practices, culture and structure of society;
- both nature of the problem (e.g. the scale of the problems relating to the ageing population for health care provision) and their solutions are uncertain.

Hence the whole idea is that under such circumstances the only sensible thing to do is to search and explore. This search and exploring cannot be just about the past (as the past reveals what is problematic but not how to resolve this) but must focus on experiments that can teach us lessons about what could help us move into the direction of a new vision which entails changes in fundamental assumptions underlying the persistency of the current challenge (the dominant practices, culture and structure of society).

This kind of learning is called second order or double loop learning by Bussels, M. and Happaerts, S. (2014, *De lerende transitie manager*, p. 5-6). These authors also point out some barriers to this kind of learning in the context of transition management:

- personal experiences are very important to enable learning as people need to feel engaged on a personal level and issues/problems that trigger this are serious, urgent and visible;
- however, if the link between what we do and the consequences of this is not very clear e.g. because cause and effect or very distant over time as in many sustainability issues, then this means persons are less engaged and hence learn less;
- also, people tend to become more engaged if they have negative experiences (failure, unpleasant surprises, ...) but in the case of societal challenges such negative experiences can be quite damaging to oneself and others (e.g. learning a particular idea that was tried actually does more harm than good is problematic);
- people also unconsciously employ defensive routines when their own fundamental assumptions (that could be part of the problem) are challenged, as this challenge is uncomfortable. Hence their learning is impeded;

Social learning processes have been put forward as one way to enable experiential learning without having to have a direct exposure to the problematic reality. Indeed, when a diverse set of actors comes together to look at an issue from a variety of different perspectives then this enables each participant to become conscious of the (potentially problematic) nature of deeper assumptions. Social learning happens if participants adapt their mental models to each other. Social learning is connected to so-called soft-systems approaches as stated by Van Mierlo B., Leeuwis, C., Smits, R., Woolthuis, R.K. (2010,

“Learning towards system innovation” in Technological forecasting and social change 77, p. 318-334). They define (double loop) “learning” as “a change in perception which leads to new patterns of effective coordination of action”. The changes in perception concern:

- perception of reality (knowledge);
- balance/ trade-offs in terms of different aspirations/goals (relating to technical, economic, cultural, relational, emotional dimensions e.g. money versus family);
- perception of risk;
- belief in own capacities;
- perception of own role and responsibility;
- trust in social environment;
- experience of social pressure.

They also explain how people, due to their different world views also have different interpretations of problems, goals to be achieved in relation to these as well as the boundaries of the system itself. Hence, efforts to changing the system must be geared towards reaching agreement on relevant models of reality, problems, ends and boundaries with the view of identifying desirable, feasible and acceptable options for action. Dialectical debate and joint learning are the main route to achieving that:

- via forging shared perceptions (collective cognition), which is more likely for homogenous groups;
- via forging complementary action while significant differences in perception can still remain (there may be partly overlapping or different but congruent or mutually supportive perceptions) which is more likely for heterogeneous actors (distributed cognition).

This kind of “integrative” negotiation is in contrast with the typical “distributive” negotiations where everyone holds on to their existing perspectives and the negotiations are mainly about how to “divide the cake”.

Social learning can take place at the level of the aforementioned knowledge and aspirations. A mere change of perception regarding the way a given goal can be achieved or regarding the cause of (and hence the solution of) a problem is still single loop learning. It is rather a change in the perceptions on the basis of which solutions and problems are evaluated which qualifies as double loop learning. “Social” single or double loop learning occurs if a (temporary) network aligns their perceptions to a certain degree.

Next to this shift in perceptions of goals and reality, social learning is also characterized by shifts in the perception of one’s own role and capacities and that of others:

- [at individual level:](#)
 - people feel responsible, involved and are confident in their own capabilities and in their possibility to exert influence / to have room for manoeuvre;
 - they feel that their social environment gives space to different perspectives;
- [network level:](#)
 - people feel dependent on others for solving the issue and have feelings of joint responsibility and mutual involvement, trust in the efforts, competence and capacity of others.

Finally, social learning is characterized by individual changing their behavioural patterns and by coordination action by network actors, inspired by both the learning effects in terms of perception of role. According to Bussels, M. and Happaerts, S. (2014, De lerende transitie manager) motivation to learn is of the utmost importance to engage successfully in such social learning. People need to have a high degree of inner drive (more intrinsically motivated) to want to go through the not so comfortable

process of challenging one's own deeper assumptions. If there is no such motivation, then double loop learning only happens by default via a (strong enough) personal confrontation with the consequences of one's own (in)action.

The following learning patterns exists:

- **formal learning:** activities explicitly oriented towards learning and formally linked to goals in a setting that is explicitly linked to these goals and learning;
- **informal learning:** these activities are also oriented towards learning but not within a formal setting and not linked to formal goals;
- **implicit learning:** this is unconscious. It happens in the margin of activities that were not set up for learning. This happens when we participate in group processes, collaborate, engage in advising, take on challenging tasks, work on problem solving, experiment, consolidate results, are in contact with "client", ... Implicit learning hence also derives from the context e.g.:
 - how work is allocated and its nature impedes learning:
 - pressure and stress, lack of time for reflection;
 - little autonomy;
 - little variation in tasks, low complexity of the job;
 - the nature of the relations at work enhances learning:
 - there are lots of opportunities to network inside and outside the organization;
 - there is a lot of informal dialogue;
 - there are formal consultations;
 - there is openness in communication and a collegial atmosphere;
 - the lay-out of the workspace is conducive to meeting and communicating;
 - when we feel we are making (personal) progress towards our goals we are more open to learning more.

Tools in transition management for learning are participatory monitoring frameworks, audio-visual learning histories, transition indicators, frequent critical reflection, timeline and eye opener workshops. These tools are explained and illustrated in the publication by van Mierlo, B., Regeer, B., van Mastel, M. et al (2010, Reflexive monitoring in action).

Outcome mapping also offers several tools for monitoring and evaluation:

- monitoring with outcome, strategy and performance journals;
- evaluation strategy.

Outcome and performance monitoring provides a framework for monitoring actions and boundary partners' progress towards outcomes/goals. The performance monitoring framework builds on the progress markers, strategy maps and organizational practices developed in the intentional design stage. There are three data collection tools: a) an outcome journal monitors boundary partner actions and relationships; b) a strategy journal monitors strategies and activities; and c) a performance journal monitors the organisational practices that keep the project relevant and viable.

Table 23: outcome monitoring journal example

EXAMPLE OUTCOME JOURNAL		
Work Dating from/to: Jan.– Mar. 2000		
Contributors to Monitoring Update: A. Scott, S. Caicedo, S. Harper		
<p>Outcome Challenge: The program intends to see local communities that recognize the importance of, and are engaged in, the planning of resource management activities in partnership with other resource users in their region. These communities have gained the trust of the other members of the partnership and the recognition of government officials so that they can contribute constructively to debates and decision-making processes. They are able to clearly plan and articulate a vision of their forest management activities and goals that is relative to their context and needs. They call upon external technical support and expertise as appropriate. They act as champions for model forest concepts in their communities and motivate others in the partnership to continue their collaborative work.</p>		
LMH (Low = 0–40%, Medium = 41–80%, High = 81–100%)		
EXPECT TO SEE LOCAL COMMUNITIES		WHO?
OOO	1. Participating in regular model forest (MF) partnership meetings	
●OO	2. Establishing a structure for cooperation in the partnership	Chile
OOO	3. Acquiring new skills for involvement in the MF	
OOO	4. Contributing the minimum human and financial resources necessary to get the MF operational	
LIKE TO SEE LOCAL COMMUNITIES		
OOO	5. Articulating a vision for the MF that is locally relevant	
OOO	6. Promoting the MF concept and experiences with MFs	
OOO	7. Expanding the partnership to include all the main actors	
OOO	8. Calling upon external experts when necessary to provide information or meet technical needs	
OOO	9. Requesting new opportunities for training & extension	
OOO	10. Producing and dissemination concrete examples of benefits arising from MF activities	
OOO	11. Identifying opportunities for collaboration with other institutions and actors	
OOO	12. Identifying opportunities for, and successfully obtaining, external funding	
LOVE TO SEE LOCAL COMMUNITIES		
OOO	13. Playing a lead role in resource management with view to long-term benefits	
OOO	14. Sharing lessons and experiences with other communities to encourage other MFs	
OOO	15. Influencing national policy debates and policy formulation on resource use and management	
<p>DESCRIPTION OF CHANGE</p> <p>Progress Marker (PM) 2: On June 30, 2000, all MF partners in Chile signed an initiation agreement formalizing a structure and process.</p>		
<p>CONTRIBUTING FACTORS AND ACTORS</p> <p>The World Wildlife Fund (WWF) held conferences at which the Chile MF was showcased as an example of local partnership. MF members wanted to go to one of these conferences with the formal agreement in place, and did so. The Program Officer provided technical advice on the formulation of agreements based on examples from other MFs worldwide.</p>		
<p>SOURCES OF EVIDENCE</p> <p>Minutes of Chile MF meetings discussing content of agreement (January 14, June 29, September 14, and December 20, 1999)</p> <p>Copy of agreement (Jan. 7, 2000) in program file and on MF Web site at <http://www.mf.ch>.</p>		
<p>UNANTICIPATED CHANGE</p>		
<p>LESSONS / REQUIRED PROGRAM CHANGES / REACTIONS</p> <p>Formal agreements take time to negotiate (one year in this case). To establish ownership and ensure an agreement that reflects the type of partnership wanted by the entire group, a “nurturing” phase is required.</p>		

Table 24: strategy journal

STRATEGY TO BE MONITORED:		STRATEGY TYPE:
DESCRIPTION OF ACTIVITIES (What did you do? With Whom? When?)		
EFFECTIVENESS? (How did it influence the change in the boundary partner(s))		
OUTPUTS		
REQUIRED FOLLOW-UP OR CHANGES		
LESSONS		

Table 25: performance journal

WORK DATING FROM/TO:
CONTRIBUTORS TO MONITORING UPDATE:

PRACTICE 1. PROSPECTING FOR NEW IDEAS, OPPORTUNITIES, & RESOURCES

<p>EXAMPLE OR INDICATORS</p> <p>SOURCE OF EVIDENCE:</p> <p>LESSONS:</p>

PRACTICE 2. SEEKING FEEDBACK FROM KEY INFORMANTS

EXAMPLE OR INDICATORS

SOURCE OF EVIDENCE:

LESSONS:

PRACTICE 3. OBTAINING SUPPORT OF YOUR NEXT HIGHEST POWER

EXAMPLE OR INDICATORS

SOURCE OF EVIDENCE:

LESSONS:

PRACTICE 4. ASSESSING & (RE)DESIGNING PRODUCTS, SERVICES, SYSTEMS, AND PROCEDURES

EXAMPLE OR INDICATORS

SOURCE OF EVIDENCE:

LESSONS:

PRACTICE 5. CHECKING UP ON THOSE ALREADY SERVED TO ADD VALUE

EXAMPLE OR INDICATORS

SOURCE OF EVIDENCE:

LESSONS:

PRACTICE 6. ORGANIZATIONAL REFLECTION & SHARING YOUR BEST WISDOM

EXAMPLE OR INDICATORS
SOURCE OF EVIDENCE:
LESSONS:

PRACTICE 7. EXPERIMENTING TO REMAIN INNOVATIVE

EXAMPLE OR INDICATORS
SOURCE OF EVIDENCE:
LESSONS:

PRACTICE 8. ENGAGING IN ORGANIZATIONAL REFLECTION

EXAMPLE OR INDICATORS
SOURCE OF EVIDENCE:
LESSONS:

These tools provide workspace and processes and help the team reflect on the data they have collected and how it can be used to improve performance. Within this framework, the team can identify a broad range of monitoring information, possibly more than they can feasibly use.

Consequently, they may have to make choices, selecting only the information that they can afford to collect.

Evaluation planning helps the team set priorities so they can target evaluation resources and activities where they will be most useful. At this stage, evaluation planning outlines the main elements of the evaluations to be conducted. More info on evaluation approaches is provided in annex 6.

7. Avoiding empowerment pitfalls in transition management

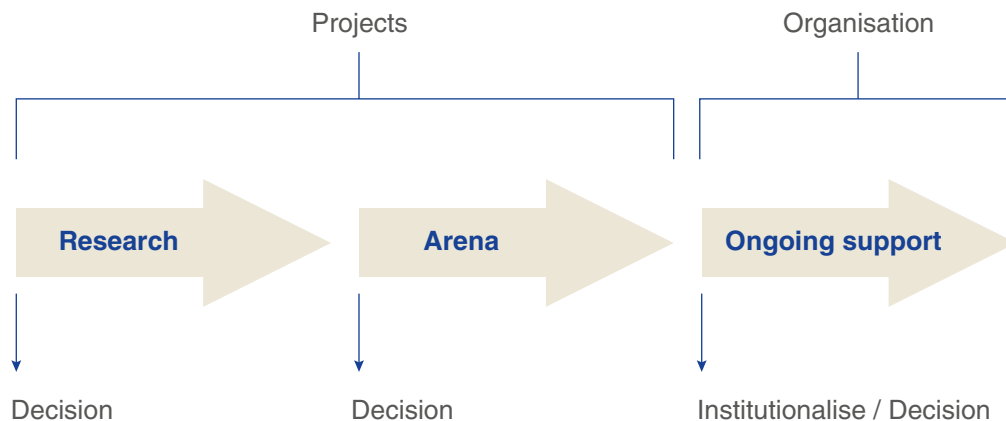
Avelino, F. 2009, "Empowerment and the challenge of applying transition management to ongoing projects" in *Policy Sci* 42, P 369-390, highlights a number of important pitfalls when using transition management as an approach.

- It should be considered whether transition theory and management terminology is considered as appropriate and useful by participants themselves. It may be needed to translate the terms into a context specific local language rather than promote dependence on transition experts. It must also be avoided to "impose" transition management and to inflate expectations (hence positioning it as unrealistically ambitious);
- An arena is a shift away from what for many participants may be a traditional hierarchical environment. However, for the arena to become empowering, a long exposure to the safe environment that it is meant to be is needed. However, participants, and especially transition project leaders, will most of the time still be exposed to hierarchical common and control settings. Hence, they should be supported in a tailored way on how to deal with this tension, rather than with one size fits all training in transition concepts;
- The risk is that regime actors become identified as "bad" or "enemies of change". They should rather be seen as individuals that can change regime structures but need to be challenged to do so.
- One sided stakeholders demands (e.g. business) should be refused outright. At the same time, weaker segments of society (victimized most by unsustainable practices) should not be forgotten but be actively involved to increase the sense of "impact";
- When transition management is brought in to support already existing projects and actions, care should be taken not to reinforce existing hierarchical command and control mechanisms (e.g. forms, reports, ...). The tools should be presented as an available set that people can dig into to help themselves affect change. Moreover, one should not make already participating actors feel inferior by making clear what competences, listed in the front-runner ideal profile, they are lacking. One should focus on those competences they do have.

8. How to operationalize this in an ESIF context?

As the focus of this publication is not systems innovation, this is not as well elaborated as the operationalization of service innovation. However, it will provide a good starting point for ESIF authorities interested in supporting transitions. The figure below shows the various proposed (funding) stages of a system innovation project.

Figure 50: stages in a system innovation project



A) The research phase: proposal and criteria to access this phase

The call could focus on a broad themes (e.g. corresponding to societal functions such as sustainable housing) or regions or a combination but should leave scope to applicants to define this more precisely.

The idea would be that only one project is selected for each theme / region which will deliver a full transition research report. There should be a first call for producing such reports, taking at minimum 6 months and two full time equivalents.

Applicants should always be consortia between a lead “actor” (with a future oriented policy entrepreneur taking the initiative) and a research team with a background in transition management.

The output is the report as depicted before as well as a proposal for an arena (see later).

If this proposal is positively appraised at the end of the research project, then automatically the budget is approved and the transition arena project can start.

Hence, budgets for a follow-up arena are to be reserved for all approved research projects.

Key questions in the proposal could be:

- Describe the societal challenge you want to research
- Elaborate why this challenge can benefit from a transition research project
- Describe the lead actor and the research team in terms of their role in the project and towards the challenge
- Describe how you will conduct the research project and deliver the required outputs
- Describe any relevant prior or existing projects and how you take account of them

Criteria for appraisal could be as follows.

QUALITY AND ASPIRATION OF THE CHALLENGE

- Is it demonstrated sufficiently that the challenge is persistent, as it is deeply embedded in dominant practices, culture and structure of society (regime)?

- Is there sufficient evidence that the nature of the problem (e.g. the scale of the problems relating to the ageing population for health care provision) as well as of the solutions is uncertain / contested?
- Is the challenge sufficiently embedded in a relevant understanding of sustainable development, far enough into the future?
- Is the challenge sufficiently relevant to the policy objectives of (region/country)

QUALITY OF THE PLAN

- Are the tools proposed for analysis sufficiently explained in terms of method, execution as well as their purpose? Are they relevant for transition approaches?
- Are the data sources, necessary for analysis, sufficiently elaborated (e.g. sufficiently large list of initial experts to consult as well as a list of other stakeholders to engage, as specific as possible with a reason for their inclusion) and are these diverse enough (domains, organisational backgrounds, ...)?
- Are the methods that will be used to collect data sufficiently elaborated? (e.g. initial workshop outlines, interview guides, ...)
- Are sufficient steps undertaken to validate the data and the analysis?
- Is the method to select the initial participants of the transition arena sufficiently elaborated and explained? (e.g. profile of interest, competence profile, regime versus niche actors,...)
- Is there a clear planning with key milestones and adequate budgets / staffing towards delivering the required outputs (report, selection of members for Arena, planning for Arena) which also enables monitoring of the project?
- Are relevant prior / current initiatives sufficiently taken account of?

QUALITY OF THE CAPACITY

- Composition of the research team:
- Strong background in transition management and complex societal challenges
- Multi-disciplinary (e.g. sociology, political science, anthropology, environmental sciences, economists, ...)
- Strong research skills (both quantitative as qualitative)
- Position of the initiative taker(s) and the lead organisation (s):
- Do(es) the initiative taker(s) have a track record of being entrepreneurial?
- Do(es) the initiative taker(s) hold a position of sufficient credibility for others to be interested in participating? (e.g. highly networked, respected by others for expertise and experience, ...)
- Is/(are) the initiative taker(s) backed by the home organisation to engage in the project?
- Is the lead organisation (in terms of its mission) sufficiently relevant to the challenge?

B) The arena phase: proposal and criteria

One of the outputs of the transition research projects is a proposal for a transition arena. A transition arena could be funded for a year and a half again with at least two full time equivalents.

The lead actor that was involved in the research project should again be involved in the transition arena project as a pre-condition; however a broader partnership can also be part of the project now if relevant.

The output of the transition arena should be:

- Vision and pathways to the vision
- Ideas for experiments to learn about the pathways
- Broader network of actors with strategies for action
- A business model for an ongoing support platform

This proposal should contain:

- Justification of engaging in a transition arena for the societal challenge (based on the research report)
- Relevance to policy objectives
- Validation info concerning the research report incl. an assessment of its provocativeness
- List of persons who will participate in the arena (incl. letters of engagement) with relevant descriptions of their interest in the arena and their characteristics
- Description of the team that will facilitate the arena in terms of relevant experience and expertise
- Description of the partnership (if relevant) that will be involved in the project and their role
- Description of the arena process and planning (who will do what when, for what budget, what will be the outputs)
- Description of monitoring and evaluation arrangements

In appendix the full research report of the first phase should be included.

Criteria for appraisal could be as follows.

RELEVANCE

- Is the scope of the arena clear?
- Is there a clear argument that a transition is needed, based on the research report?
- Is the research report a sufficiently provocative and quality foundation for starting the arena?
- Are sufficient individuals of a varied enough background and with the appropriate profile willing to engage in the arena?

QUALITY OF THE PLAN

- Is there a clear understanding of the nature and purpose of a transition arena and the broader transition management approach surrounding it?
- Is there a well-elaborated plan (incl. event outlines, with appropriate elaboration of methods that will be used during the event as well as before/after) that leads to the required outputs?
- Will the arena have enough “space” to truly challenge the existing unsustainable culture, structures and practices?
- Are there sufficient milestones so the project can be adequately monitored?
- Are adequate budgets and resources (incl. the right team members) allocated to each task?
- Will reflexivity be supported in a systematic way?

CAPACITY

- Does the team have adequate skills in terms of participatory process facilitation
- Does the team have adequate skills in terms of relevant analytical approaches as well as synthesis of data?
- Does the team have a sufficient background in all four aspects of transition management?

C) Ongoing support phase

After the transition arena two types of funding may be required:

- Funding for experiments: this can be taken care of (in ESIF) by a dedicated “measure” to fund social innovation experiments such as described for “service innovation”;
- Funding for a support platform to help set up and guide experiments and connect them to each other and ongoing other initiatives:
 - this requires now some form of institutionalisation rather than “project” funding.
 - ideally this is a partnership based organisation with a mix of funding (project based, structural, services, ...) with ESIF funding as one possible source of funding.
 - it may also be possible to give the funding for experimentation also to the support platform hence combining two funding streams. In some way, this is what is already the case in Poland (see chapter 7 c).

A proposal for institutionalizing a platform could contain the following elements:

- Vision and pathways to the vision
- Description of broader network of actors with strategies for action
- Ideas for experiments to learn about the pathways
- Business model canvas incl. revenue streams
- Institutional arrangement (type of organisation, partners, governance)
- Monitoring and evaluation mechanisms at platform level

Criteria could be:

- Vision: Is the quality of the vision (see checklist) and pathways to the future sufficient?
- Ready for action?
 - Is there a diverse set of actions that specific actors have agreed to carry out, to influence others?
 - Is there a set of challenging experiments that has been identified and also a realistic view of how to get them funded?
- Institutionally sound?
 - Is there a sound business model with a variety of revenue streams?
 - Is the institutional arrangement such that there are at the same time links with important regime actors, but still independence for the platform without being dominated by any one regime actor?
- Are M&E arrangements sufficiently reflexive?

Annex 6: Guidance concerning impact evaluation methods

1. Introduction

This guidance is meant to support project promoters embarking on phase 2 of their innovation project (development of an innovative service and piloting it) in conceptualizing how they will evaluate their innovation. The guide focuses on the concept of “causality”: how can we tell that an innovation really creates positive changes in the lives of its intended users. This is less easy than at first sight it may seem.

The guidance is not a fully-fledged “how to” manual. It only aims to provide a good overview of relevant approaches. To execute these approaches, people with appropriate skills and experience are needed. Support on selecting the approaches and finding competent people to help execute them will be provided by the ESIF programme management authority.

2. Rigorous approaches to impact evaluation

Rigorous approaches to impact evaluation are approaches that have a well-understood and accepted foundation for making assertions regarding cause and effect relations. Pragmatic approaches deviate from these foundations (they cannot really assert causality) but are easier to execute and understand.

2.1. (Quasi-)Experimental approaches

2.1.1. Foundation of cause and effect in these approaches

The evaluation of “impact” implies an evaluation of whether an intervention (such as a project, a regulation, a communication, etc.) can be seen as (one of) the causes of an effect of interest (e.g. getting people employed, preventing crime, increased tax revenue etc.). Essentially, we are interested in establishing evidence-based cause-effect relations.

The (quasi)-experimental approaches that we will discuss below belong to the domain of quantitative research methods. Traditionally, cause and effect relations are presented with X and Y variables and a direction of change (see figure 1).

Figure 51: cause and effect relations in quantitative research



The arrow depicts the relation between X and Y. X is presumed to be a cause of Y, hence the direction of the arrow.

In quantitative research, X and Y are variables, which can therefore take different values. Gender is for example a variable, which can take two values: male or female.

For interventions, X usually denotes either the presence of the intervention ($X=1$) or its absence ($X=0$). The possible values of Y, the outcome variable, depend on what Y represents, e.g. Y refers having a job ($Y=1$) versus not having a job ($Y=0$) after participating in an intervention. Of course, if Y refers to level of income after participating in an intervention, then Y can range from some minimum level to a maximum one.

Casual relations are expressed as tendencies in quantitative research: if we have $X=1$ (presence of an intervention) we expect to have on average more cases of $Y=1$ (people in employment) than if $X=0$ (absence of intervention).

Quantitative research requires relatively large numbers of observations of X and Y, as it is rather hard to state tendencies on the basis of only a few observations.

Imagine we have data on only three unemployed persons out of a 1000 that participated in a project ($X=1$) to get them into a job ($Y=1$). We find that 2 persons did get a job and 1 did not. But this does not allow us to express tendencies about the 1000 participants. If we would get one more person's data, we could find that this person also did not get a job. Suddenly, the tendency is neutral (2 find a job versus two do not) rather than in favor of getting a job. The number of subjects in what is referred to as a "sample", has to be high enough and the required sample size and composition has to be estimated in advance by a trained statistician (using a procedure referred to as "power analysis").

However, high numbers of observations showing that indeed on average more persons get a job ($Y=1$) if they participate in X ($X=1$) than if they did not ($X=0$) does not yet allow us to be certain that X is a cause of Y.

Why not? Because people participating in or exposed to an intervention (e.g. in an employment project or a public health campaign) are all different in terms of their characteristics and live in different circumstances which means they are also affected by other influences besides the intervention. These other non-intervention related influences could also account for the observation of the value on Y (be it employment, income level or some other "goal").

This is referred to as "selection bias". Imagine that the people participating in an employment project all happened to be on average smarter, with better prior job histories and were all living in areas with more job availabilities than those who did not participate in the project. Would this not substantially overestimate the actual influence of the project on people's employment status? In fact, we could expect that the groups of participants, due to their favorable characteristics, would score better on their employment status after a period of time than the non-participants, even if there was no intervention at all.

In order to overcome the abovementioned bias we seek to establish a "counterfactual" setting: we would have to be able to put the same group of people in both the intervention and non-intervention group to make a sound comparison. Obviously, this is not possible and can only be approximated. People cannot be both in AND out of e.g. an employment project. However, the methods that will be described below all try to create an intervention group, referred to usually as a "treatment group", and a non-intervention group, referred to usually as a "control group".

Figure 52: observed progress

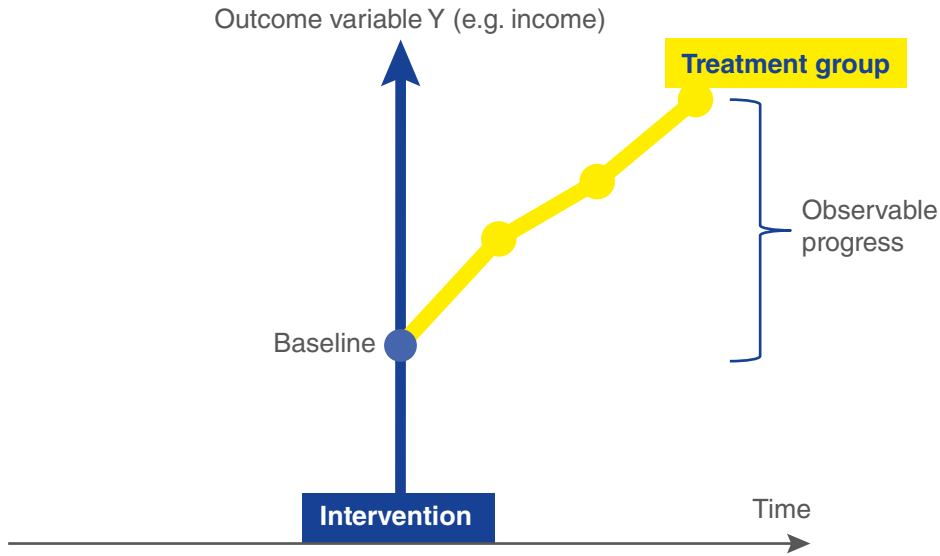
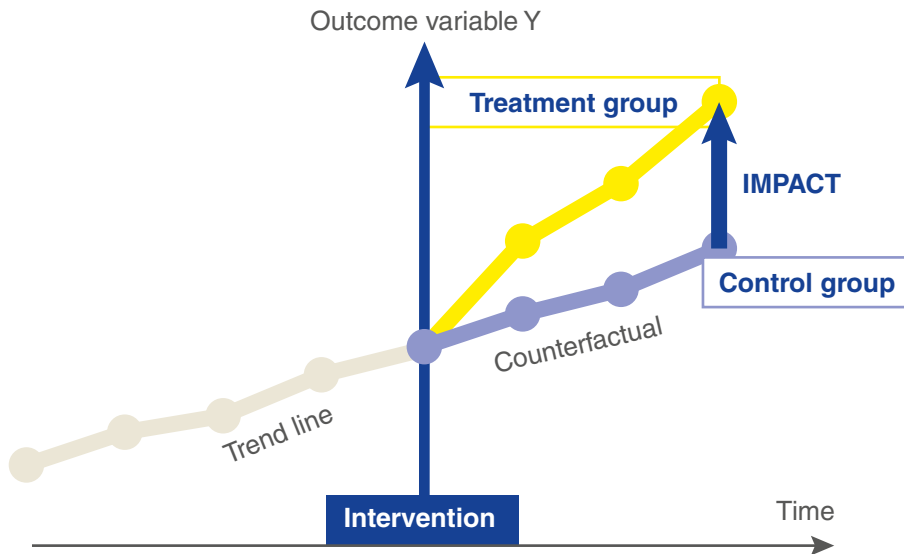


Figure 2 shows that measuring, for example, for participants in an intervention, the average level of income at the start of this intervention and comparing it with the average level after a specific period of time, does not provide a good estimate of impact. It provides only “observed” progress. But we do not know how much of that progress is due to people having certain favorable characteristics and/or being part of a favorable context. This discerned progress could possibly have been achieved anyway, in absence of the intervention, just because these people would have taken certain steps to increase their income anyway or because the economy boomed during the period under scrutiny.

The next figure shows how we can get a good estimate of impact by comparing two groups that would be identical on average in everything except that one group receives the intervention (treated persons) and the other does not (controls). As there are no differences between the groups at the start (they are ‘equivalent’), the reason for the discerned outcome difference can be attributed to the intervention.

Figure 53: counterfactual allows to estimate impact



The figure shows that, on average, the values for the outcome variable Y (e.g. level of income) were identical for both groups. Only after the intervention do the values begin to diverge. The control group continues to increase, more or less continuing the previous trend, while the treatment group experiences a trend break and rises faster. The difference in levels of Y between two equivalent groups, one of which received the treatment and one group that did not, after a certain period of time, denotes the “impact”.

The only difference between the various methods that will be described below relates to HOW exactly groups are made equivalent and compared. The ideal type is referred to as a randomized controlled trial (RCT) or true “experiment”. The other methods deviate from this ideal type and are referred to as “quasi”-experiments.

2.1.2. Randomised controlled trials (RCT's)

RCTs are considered to be the “gold standard” of impact evaluation studies as they offer the best way to construct equivalent groups. Essentially, a population of subjects (participants, target audience, ...) targeted by an intervention is selected. From these we draw a large enough sample (based on a prior statistical power analysis). The selected sample is randomly divided in two separate groups. Because we allocate people randomly to each group, we can assume that on average the two groups will be equivalent (if the groups are large enough).

Example: The UK Employment Retention and Advancement Demonstration

The UK Employment Retention and Advancement (ERA) Demonstration project involved testing the effects on the long-term unemployed and economically inactive, of extending help and support, as well as financial incentives, to those who had left welfare and entered work. Thus the ERA project extended the support provided through active labour market policies to low income groups in work.

Those eligible for two of the UK's major active labour market programmes at the time – the New Deal for the Long-term Unemployed and the New Deal for Lone Parents – were allocated at random to treatment and control groups. The control group entered the New Deal programmes as normal. The treatment group received pre-employment support (in a similar manner to the control group) but continued to receive advice and help on leaving welfare and entering a job. At the time the study ran, help and support for welfare claimants in the UK ended on entry into work. Participants were also eligible for a range of financial support and incentives to encourage training and work retention. The aim was to encourage participants to remain off welfare and advance through improving their earnings and other terms and conditions of employment. In all some 16,000 individuals were randomly allocated to treatment and control groups across some fifty public employment service offices. The random allocation process produced treatment and control groups that were very similar to one another at the point of allocation. As a result, any differences between the two groups on key result measures such as job entry, earnings, hours and job quality, subsequent to entry into the intervention, could be confidently attributed to the ERA intervention. Findings from the study show that the intervention was particularly successful among the long-term unemployed, raising both their levels of employment and earnings.

See: <http://statistics.dwp.gov.uk/asd/asd5/rports2011-2012/rrep765.pdf>

Before choosing this approach consider whether:

- large enough sample sizes are feasible in practice,
- the design can be set up before the intervention starts because randomization is required to determine the composition of the treatment group,
- you only want to know whether there is an impact or whether you also want to establish the magnitude of the impact or whether the impact varies for different sub-groups (e.g. older versus younger). In the two latter cases, the method requires a baseline measurement, which has to be planned for before the intervention starts.

2.1.3. Propensity score matching

Propensity score matching (PSM) is a method used to address instances where it is not possible to randomly allocate subjects to treatment and a control groups. It offers a statistical procedure to approximate to randomized allocation.

Imagine we have already selected unemployed participants for an intervention that aims to get them back into employment. Also, we have access to quite a bit of information about these participants. For example, we know their age, their place of residence, their gender, their prior work history, etc. Finally, we also have access to the same information for subjects that were not selected for the intervention but that were eligible in principle.

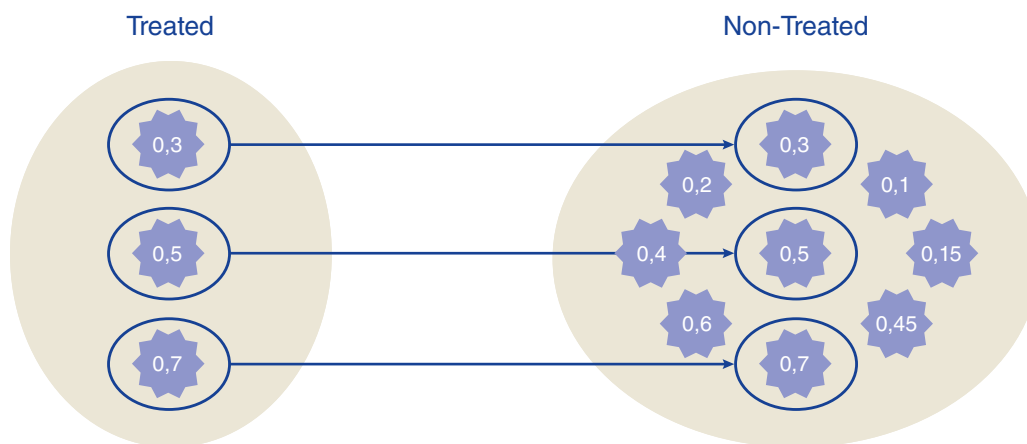
We could then find out, through a specific regression analysis, to what extent being selected or not for this intervention is associated with these person’s characteristics (e.g. if you are a man, are you more likely to be in the intervention than if you are a woman). The form of such a regression analysis is an equation: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \varepsilon$ in which X covers the characteristics such as gender, age etc. and Y refers to whether person received the treatment (with Y=0=NO and Y=1=YES). The outcome of such a regression is for example $Y = 0,1 + 0,3X_1 + 0,4X_2 + \dots + \varepsilon$ with estimated values for $\beta_0, \beta_1, \beta_2$ etc. These estimated values denote the relative influence of the associated variables X_1, X_2 etc. on Y (being in or out of the intervention).

The regression analysis we used to find out the influence of the characteristics on being selected, can now be used to estimate the “propensity score” for each person by entering the exact characteristics for each individual into the equation. We then get for example for a first person in our dataset a score of $0,6 = 0,1 + 0,3 * 1 + 0,4 * 0,5 + \dots$ where 0,6 refers to a 60% chance to be included in the set of participants. For another person we get a score of $0,4 = 0,1 + 0,3 * 0,7 + 0,4 * 0,6 + \dots$

In short, we produce scores for all of the persons in our database, both for those who were already selected as well as for the persons that were not selected for intervention.

The next step is to create a group of non-participants that are as similar as possible compared to the group that was already selected for participation. There are various ways of doing this but here we will consider the simplest approach referred to as “nearest available matching”. The example below depicts how each treated participant is matched with a non-participant with the same propensity score.

Figure 54: Nearest available matching of propensity scores



The limitations of this method should be made clear. The method can only take into account those variables for which data is actually available. If, for example, age is presumed to be an important variable determining the probability of selection in the intervention, but we have no data for this, then the possible bias deriving from differences in age between the treatment and control group will not have been addressed. In RCTs the randomization ensures that all variables are taken into account and values for these variables will be, on average, distributed in an equivalent way across treatment and control group. This points to the importance of a good understanding of what variables are really important for being selected into an intervention. It may be that we have data on many characteristics of a subject, but overlook what may be absolutely key (e.g. convenient public transport to go to the intervention location).

To conclude, conditional for a sound use of this method is:

- as much relevant data as possible concerning the characteristics of the subjects relevant to the selection into treatment, both for a group that was already selected and for a group that was not selected. Ideally non-selected persons should have been eligible but unaware of the intervention or have missed the opportunity to apply;
- a possibility to take a large enough sample both on the already selected and the non-selected groups, understanding that quite a bit of data from the non-selected will prove not to be useful as their propensity scores do not match at all with those of the participants. Hence there must be many more non-participants with available data than participants.
- as with RCTs, a baseline measurement will be necessary if we want to discern the size of the impact and/or differences by sub-groups.

The advantage of propensity score matching (PSM) compared to randomized controlled trials (RCT) is that we do not require to randomly assign subjects before the intervention starts. Hence, this approach can be used even if the intervention has already started. Of course, we still need a baseline to estimate the size of the impact. If the baseline data does not exist (e.g. employment status, is usually available in existing databases), we still need to take a baseline measurement for both the participant and for the control group before the intervention starts, which means the method loses the advantage of being applicable even after an intervention started.

Example: Effects of piped water

Jalan and Ravallion conducted an impact evaluation that measured the effect of access to piped water on the incidence and duration of diarrhea among children less than 5 years of age in 16 states in India. The study utilized a household survey conducted in 1993-94 and used PSM to create comparable treatment and comparison households from within the larger sample. For the purposes of the study, pre-exposure variables (e.g. state of residence, composition of household, assets, religion, access to public goods and village characteristics) were incorporated into a propensity score through a logit regression model. The Five-Nearest-Neighbor matching option was used to create the sample for analysis amounting to 33,000 observations. Approximately 650 households were excluded after the matching process due to the inavailability of sufficiently similar households. The authors concluded that access to piped water reduces disease prevalence by 21% and illness duration by 29%.

Source: <http://elibrary.worldbank.org/doi/book/10.1596/1813-9450-2664>

2.1.4. Difference-in-difference

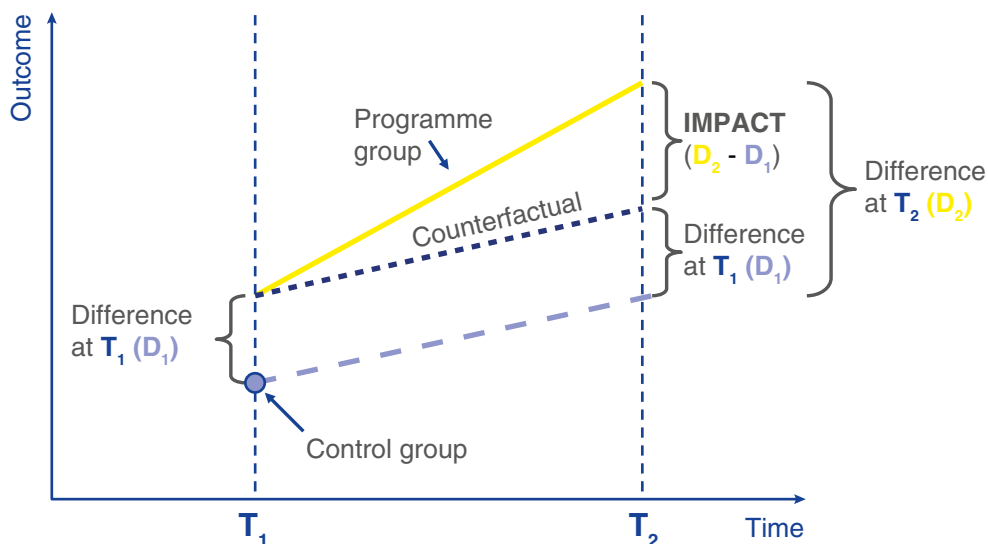
Difference-in-difference is yet another quasi-experimental method. This time, rather than trying to establish two equivalent groups (one that receives the treatment versus one that does not), the method recognizes explicitly the differences between two groups before the intervention took place.

To take differences between two groups into account a baseline measurement on an outcome of interest is taken. This typically shows that participants and non-participants indeed do not have the same starting score (in the figure below the difference is denoted D_1 at start time t_1). We therefore confirm both groups are not equivalent because if they were equivalent, they should have had statistically similar scores on the baseline.

In the difference-in-difference approach we then assume that in absence of intervention the two groups would have evolved on an identical trajectory. This is reflected in the figure below by the “counterfactual line” that runs in perfect parallel to the line that show the progress of non-participants. This shows that if there had been no intervention, we would expect that at a later time of interest t_2 , the difference between the two groups would still be D_1 , as the trend for the outcome variable was assumed to be identical

However, if there is a subsequent intervention at t_2 we calculate the impact of this intervention by deducting the initial difference D_1 from the observed difference D_2 .

Figure 55: difference-in-difference



This approach has some obvious limitations. The most important one is that it assumes that both groups would follow a common trend in absence of an intervention. This presupposes that the differences between the groups are “time-invariant”. This means that it is recognized that there are initial differences regarding both individual and contextual characteristics of the subjects and it is also recognized that the values of these characteristics may change over time. However, the changes in the values of these characteristics would occur in similar ways for both groups, thereby neutralizing whatever influence these changes might have. For example: the two groups may have different average ages when they start. Of course, people will grow older in both groups over time, but they will do so in a way that the average age difference still remains the same. Although this certainly holds for the variable age, there are many other variables for which this assumption is not straightforward.

Compared to RCTs and propensity score matching, the difference-in-difference approach does not try to create equivalent groups, but rather acknowledges the difference over time while assuming time-invariance.

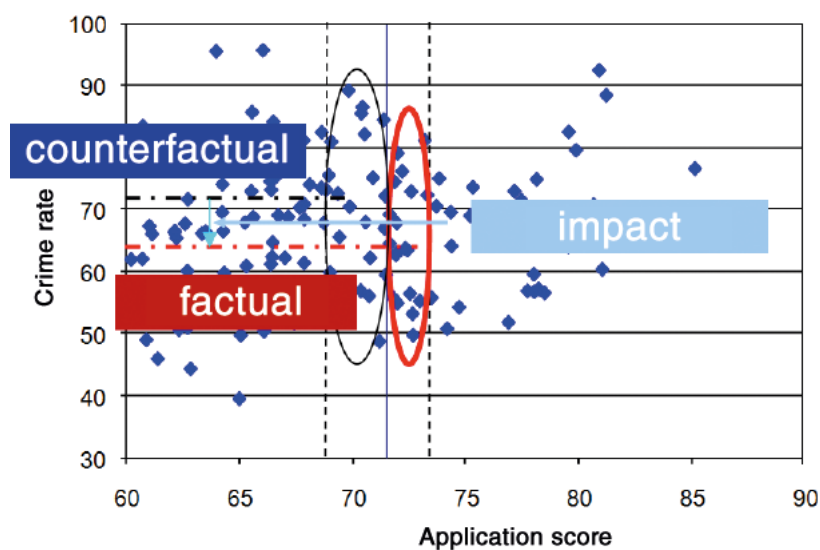
To conclude, to choose difference-in difference as a method, we only need baseline data for a large enough sample of participants as well as for non-participants. But we need to be aware that there is

a strong and sometimes unwarranted assumption of time-invariance made in this method. Hence the difference-in-difference approach is usually not used as a stand-alone method for estimating impact but in combination with propensity score matching.

2.1.5. Regression discontinuity

Regression discontinuity can be used when participation in an intervention is determined by a cut-off point along a continuous measure. For example, access to training might be determined by performance on an aptitude test with those scoring above a specified threshold (or cut-off) receiving training whilst those who score below the threshold receive no training. Another example is to use a score on an application to enter a programme for neighborhood regeneration.

Figure 56: regression discontinuity



Consider the example above where an application with a score of 0-100 is used as a cut-off, if we have a large enough sample, we could consider that those falling within the ranges of 69-74 are not substantially different.

The figure visualizes this hypothetical example where a dot represents a neighborhood. A cut-off score of 72 cuts the subjects into two groups: one group that did not receive the intervention and hence represent the counterfactual (consisting of neighborhoods scoring 69-72) versus one group that did receive the intervention and hence represents the factual (consisting of neighborhoods scoring 72-74).

By taking the average crime rate at some relevant time after the intervention for of all the neighborhoods we have data on, we can see that this average for the neighborhoods with a score on the application of 72-74 (who therefore received the intervention) is lower than that for those who scored 69-72 (who did not receive the intervention). This difference is the impact.

More sophisticated approaches exist that use regression analysis instead of comparing averages, hence the term “regression” discontinuity.

The limitation of this approach is of course that only those that are just above and those that are just below the threshold are very similar and can be compared. There is no way of knowing the impact of the intervention for neighborhoods that are farther away from the cut-off score than 69 (on the left) and 72 (on the right).

To conclude the necessary requirements for a sound use of this method are:

- a continuous eligibility index (e.g. test scores, age etc.) to rank the population;
- a clearly defined cut-off point that determines eligibility, which is part of the programme design and hence set in advance (and which does not coincide with a cause other than the intervention);
- a large enough sample to take into account that only data around the cut-off can be used to estimate the impact;
- an interest in generalizing only around the cut-off.

Example: Measuring the effects of European regional policy on economic growth

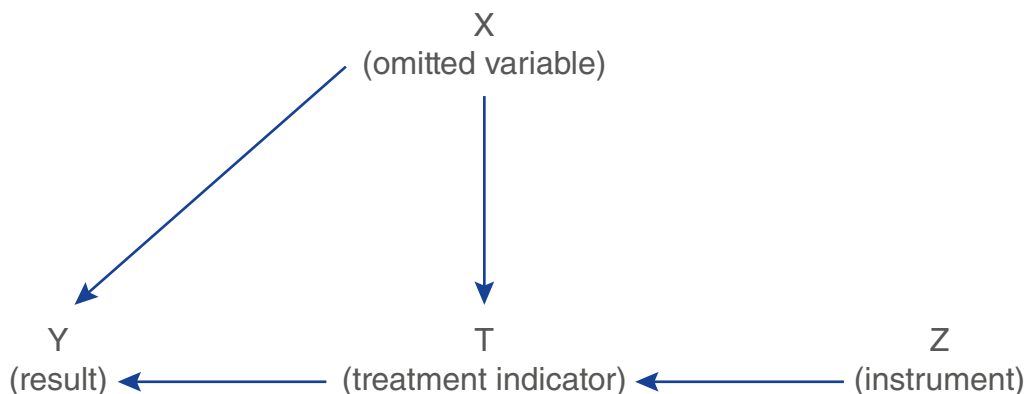
Evaluators used a regression discontinuity approach to assess the effects of EU regional funds on economic growth. Using data over the period 1995 to 2005, they exploited the fact the EU-15 regions received funds if their per capita GDP was less than 75 per cent of the EU average. Thus the rating used to assign treatment was per capita GDP and the cut-off point or threshold was 75 per cent of the average for EU regions as a whole. The identification strategy relied on the fact that regions close to the cut-off point, lying either side of it, were similar to each other but for the fact that those below the threshold received funds whilst those above did not. Findings are that EU regional funds have a small, positive impact on economic growth. Source: http://www.dps.tesoro.it/documentazione/uval/materiali_uval/european_regional_policy_Muval20.pdf

2.1.6. Instrumental variables

This approach acknowledges that the reason for seeing a change in Y (outcome) can be due to many other reasons than just an intervention X. The way this approach deals with that is by using a procedure referred to as 2 stage least squares regression.

What we do here is to first identify so-called “instruments”. These are variables that affect selection into treatment but not the outcome Y, also not indirectly (e.g. via an unknown variable X, as depicted below). This condition of not affecting Y is called the “exclusion restriction”. It is impossible to test this hence it must be assumed and theoretically argued for, which is also the greatest weakness of this method.

Figure 57: instrumental variables



Examples from the literature are:

- geographical variables, like distance of residence from college prior to enrollment;
- randomization dummies, like an encouragement letter to enroll sent to a random selection of the target group;
- characteristics of the partner/parents/relatives that may have affected the decision to participate but have not otherwise influenced Y, like the education level or income of partner/parents/relatives in return to education.

In a first stage regression, we regress the instrument(s) Z and any known variables X that we already assume influence Y, onto T. This gives us the association of Z with T. In the form of an equation $T = a + BZ + DX + \text{error}$, the association of Z with T is denoted by the coefficient B, while the association of X with T is denoted by coefficient D. B and D tells us how strong the influence of Z and X is for getting into the treatment (e.g. if Z is distance of the home to the college, then we might find that people living closer to the college tend to enroll more).

Once we have estimated these B and D coefficients, we use the equation to “predict” for all subjects that we have data for if they participate or not in the treatment.

The next step is to insert these “predicted” value for participation into a normal regression analysis of the treatment and any known X variables onto the outcome Y. This takes the form of $Y = a + CT + FX + \text{error term}$ where in this case, the coefficient C is an accurate reflection of the influence of T (being in the treatment or not) on Y as it has been purged from so called “selection bias” as 2SLS only retains the variation in T that is generated by quasi-experimental variation of Z. To draw the parallel with random selection: random selection is itself a kind of Z variable. It does not have a correlation with Y but it influences very strongly whether someone is in T or not (variation in T).

If Y is a binary variable, a simplified statistical analysis can be conducted. If Y is a proportion (e.g. % of months in employment in a given time period) then a much more complex analysis needs to be carried out.

Necessary requirements for this method are good instruments (no correlation with Y) that have a strong (rather than weak) correlation with T.

One caveat is that the estimated impact is in fact only applicable to a sub-set of the actual participants. IV estimates the average effect of T on Y for the subpopulation who participated because of variation in Z but who would otherwise not have participated. It is a LATE (local average treatment effect) of X on Y for those whose treatment status has been changed by the instrument Z.

The LATE framework partitions any population with an instrument into potentially 4 groups:

- **Compliers:** The subpopulation with $T_{1i} = 1$ and $T_{0i} = 0$. Their treatment status is affected by the instrument in the right direction.
- **Always-takers:** The subpopulation with $T_{1i} = T_{0i} = 1$ They always take the treatment independently of Z.
- **Never-takers:** The subpopulation with $T_{1i} = T_{0i} = 0$ They never take the treatment independently of Z.
- **Defiers:** The subpopulation with $T_{1i} = 0$ and $T_{0i} = 1$. Their treatment status is affected by the instrument in the “wrong” direction.

IV estimates the effect on compliers. It is assumed there are no defiers. This is referred to as “monotonicity”: while the instrument may have no effect on some people, all those who are affected are affected in the same way (the same “direction”). If there were defiers, effects on compliers could be (partly) cancelled out by opposite effects on defiers.

Let us use an example. From 1970 to 1972 random sequence numbers were assigned to each birth date in cohorts of 19-year-olds to organize the draft into the army for the US Viet-Nam war. Men with lottery numbers below a cutoff were drafted while men with numbers above could not be drafted. The draft did not perfectly determinate military service: many draft-eligible men were exempted for health and other reasons. Exempted men also still volunteered for service.

An individual's earnings potential as a veteran or non-veteran in the Viet-Nam war is assumed to be unchanged by this draft eligibility status.

The exclusion restriction would be violated if low lottery numbers may have affected schooling (e.g. to avoid the draft). If this was the case the lottery number would be correlated with earnings for at least two cases:

- through its effect on military service;
- through its effect on educational attainment.

The fact that the lottery number is randomly assigned hence does not ensure that the exclusion restriction is satisfied.

Futhermore, draft eligibility may have had no effect for a sub-group's probability of entering military service (always or never takers). But there should also be no one who was kept out of the military by being draft eligible (defiers).

Example: Effect of early retirement on mortality

The risk of all-cause mortality is significantly higher for retirees than for older workers still engaged in economic activity. This difference could be the result of some perverse consequence of retirement or simply indicate that healthy workers postpone leaving paid employment. In a recent paper researchers use an instrumental variable technique to estimate the causal effect of early retirement on mortality for blue-collar workers. To overcome the problem of "endogenous selection," i.e. that bad health leads to retirement and hence is both cause and effect, the study takes advantage of a change in unemployment insurance rules in Austria (AT) in 1988 (the Regional Extended Benefit Program, or REBP) that allowed workers in eligible regions to withdraw from the workforce up to 3.5 years earlier than those in non-eligible regions. Residence in an eligible region can be employed as an instrument for early retirement because worker eligibility for the programme is independent of health status. Using administrative data on work history and mortality drawn from the Austrian Social Security Database, mortality subsequent to the reform is compared for blue-collar workers meeting demographic and employment criteria for REBP but differing in region of residence and hence actual eligibility. For males, these estimates show a significant 13% increase in the probability of dying before age 67 for workers eligible for REBP. No adverse effect of early retirement on mortality is found for females. Data on cause of death suggest that changes in health-related behavior among male early retirees may explain at least part of the impact. The programme ended in 1993.

Source: Kuhn, Andreas, Jean-Philippe Wuellrich, and Josef Zweimüller. 2010. Fatal Attraction? Access to Early Retirement and Mortality. IZA Discussion Paper No. 5160. Bonn: Forschungsinstitut zur Zukunft der Arbeit

2.2. Case study research

2.2.1. Foundation of cause and effect in these approaches

Case study research is different from the approaches listed under (quasi)-experimental approaches. Whereas the latter focus on observations related to “subjects” (participants or “targets” of an intervention, be they persons, groups or organisations), the former can focus on a “phenomenon” of interest, for example an event, a project, a process, a particular type of change, a relation, etc. This “phenomenon” is called the “unit of analysis”. Sound case study research starts by identifying the unit of analysis. It is by no means certain that “initiative” is always the most relevant unit of analysis when doing evaluation work as is evidenced by the example presented below.

Example: Unit of analysis in an evaluation of a European Social Fund programme

In the context of the evaluation of the ESF in Flanders, an impact evaluation was conducted of one specific intervention within this programme referred to as “personal development processes” (PDP). The study defines this PDP as a “supportive process with as its goal to improve the labour market oriented personal development of the individual”. The PDP was open to unemployed as well as employed Flemish citizens, but we focus here only on employed persons. For the latter, the PDP essentially entails that a coach works with a participant to help them define how they would like their career to evolve in the future and to take appropriate action to make this a reality. The reason for supporting this with public finances is that it is assumed that the participant will be more pro-active in shaping their career, which will make them more self-reliant in the face of misfortunes such as sudden massive lay-offs.

The unit of analysis is the PDP process as implemented concretely by three different projects. As the projects are independent and reflect different contexts and target groups, it was expected the PDPs they run would be different but still remain faithful to the overall model for such a PDP. Within each of these three projects, four individual PDPs are studied. As the theory of how a PDP is supposed to work is situated at the level of individual PDPs, the project level is not the correct level to study such a PDP and hence, these four individual processes are referred to as embedded cases (with sub-units of analysis, PDPs, within a higher level overall unit of analysis, the organisation). Conclusions would also be made, on the basis of these four embedded PDP cases, for the overall organization, which happened to coincide with a project,) within which they take place. The “case” is therefore “a PDP process within a specific organizational setting”. One project could have been executing PDPs in more than one organization. In that case, the project would not anymore coincide with the case.

Source: based on study commissioned from HIVA (Catholic University of Leuven) by ESF Agency Flanders (www.ESF-agentschap.be)

The unit of analysis in the example above related to a process, namely, the personal development process (PDP) within a broader organizational context. Therefore, the organization specific process is the unit of analysis and forms the “case”.

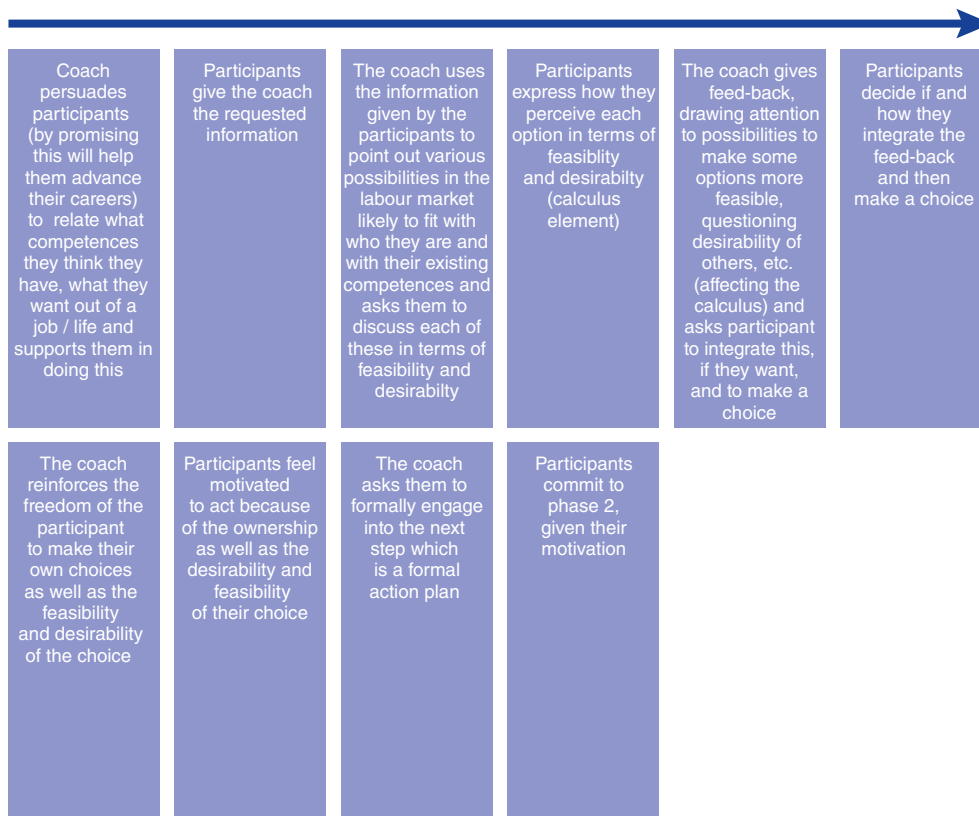
In studying the unit of analysis, case study research draws on various data collection methods ranging from open ended interviews, focus groups, observations, to questionnaires. By contrast, a (quasi-) experimental design usually relies only on a single quantitative measurement instrument.

There are several approaches to substantiate cause and effect relations in case study research. All approaches have in common that causes are defined in terms of sufficiency and necessity or a

combination of both. Sufficiency means that every time we have a cause, the effect is also present. Necessity means that every time we have an effect, the cause must be present. Let us clarify this with an example on smoking. Smoking is not sufficient nor necessary for lung cancer. Many smokers never get lung cancer and not all people who have lung cancer were smokers. However, smoking in combination with a range of other factors (e.g. genetic) is sufficient for lung cancer. But still not necessary as people still will get lung cancer for other reasons than smoking (e.g. from breathing polluted air). This makes smoking an insufficient but necessary part of an unnecessary but sufficient cause for lung cancer (INUS condition). These concepts of causality are key to understanding case study research.

In addition, process tracing uses the idea of an unbroken chain of action and reaction, also called “mechanism” between a cause and its effect. In fact, process tracing will put forward that each step in a process is itself an insufficient but necessary part of a large, encompassing but perhaps (not always) necessary or sufficient cause. The figure below uses the same, previously mentioned PDP example to clarify the concept.

Figure 58: unbroken chain of action and reaction



The chain of action and reaction relates only to the first phase of the PDP but it can be studied as a partial intervention in its own right, with as an outcome a commitment to phase 2.

Step 2 “participants give the coach the requested information” is triggered by step 1 and itself triggers the next step. If we would take out this step, then moving from step 1 to step 3 would present a mystery: it would not be clear why this “jump” from step 1 to 3 would happen. In this sense, step 2 is “necessary”. This points at the underlying logic of process tracing: if we cannot show that, for example, step 2 is indeed present, then we falsify the entire mechanism as it was hypothesized by the evaluators. Indeed, every single step is a necessary but insufficient part of the full mechanism. If we cannot find

evidence for each step, then the chain of action and reaction is not anymore unbroken and hence X (the intervention) at the start of the chain cannot have led to Y (the outcome) at the end of the chain.

The mechanism would then have to be reconceptualised (requiring some new theory formation) and research would have to be carried out again to substantiate each step of the newly theorized mechanism.

Alternatively, it is possible that we do find evidence for all of these steps. However, this does not mean that the whole mechanism is a sufficient explanation for the observed effect. Perhaps additional mechanisms are needed. Nor can we establish whether the mechanism is necessary. The same outcome may occur without the presence of the selected mechanism.

In order to be able to make statements on the necessity and sufficiency of a mechanism as a whole, we can use Qualitative Comparative Analysis, which requires to have more than one case study (see section below).

Congruence analysis is an alternative case study research method to process tracing that uses the idea of “pattern matching”. It requires finding evidence for a set of hypotheses that relate to more than one competing, or alternatively, complementary theories that attempt to explain how the intervention can produce the effects.

For example, whilst the figure above, with the unbroken chain of action and reaction, shows a typical rational choice approach (information is processed and this produces a rational decision), it could also be that what is really at play is that the PDP provided for the first time a possibility to persons in the organization to actually gain access to the development opportunities they had always wanted and desired. In this regard, the persons in the organisation are not really making any decisions about their careers but are merely going through the process with the coach as a largely useless but unavoidable hurdle to get to phase 2 of the PDP where they receive access to genuine and already sought after development opportunities.

The way causality is asserted in congruence analysis is easier than in process tracing. The set of hypotheses that make up a theory of how the intervention causes an effect does not require an unbroken chain of action and reaction. Rather, congruence operates with essential and mostly different expectations (hypotheses) regarding the reality we would expect to observe related to different theories about what is the cause of an observed outcome. For example, under the rational choice theory, we would expect that the process of reflecting and deciding is quite difficult and requires a bit of time. But under our alternative theory where people are just waiting for an opportunity, we would expect the whole phase 1 process to go very fast and with greater ease.

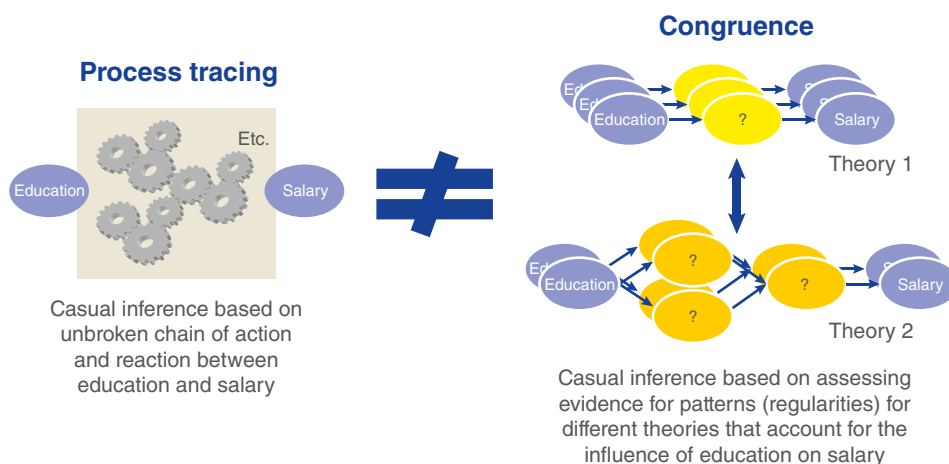
In practice congruence analysis seeks evidence for each hypothesis in each theory and subsequently assesses which theory has the most “weight” (competing theories) or perhaps complements another theory best (complementing theories). Not finding evidence for just one hypothesis among many, does not invalidate the theory as a whole. The question is rather which of the theories is comparatively more substantiated than others. This means no judgment is made concerning any single theory per se. The judgment is always relative to another theory: does one theory explain better (competing) or does it explain something else (complementing) compared to than another theory. Whilst a confirmed hypothesis is in principle necessary for a theory to hold, just like a step in a mechanism is necessary or we would discard the whole theory, in congruence analysis what matters is whether comparatively more (competing or complementing) hypotheses are substantiated in one rather than in the other (competing/complementing) theory.

Unlike in process tracing, congruence analysis requires that a hypothesis is substantiated with several empirical observations in order to discern a “pattern” e.g. in the PDP several participants should move through the process in a very fast way, which cannot be explained by the rational choice theory but fits well with the alternative explanation that people already know what they want but just need access to the development opportunities. One, single participant moving fast through the process can not be considered as a “pattern”. More observations that are in line with this theoretical expectation are required.

In this regard, congruence analysis shares the requirement for regularity with the quantitative approaches. The advantage of process tracing is that we can demonstrate a theory holds (or does not hold) even if we trace only one person. Of course, we cannot say to how many other participants this theory applies (in other cases another mechanism may explain the outcome), but we know for sure it did apply to the single participant for which we gathered data.

The figure below establishes the difference between process tracing and congruence analysis.

Figure 59: difference between congruence analysis and process tracing



The congruence analysis, depicted in the figure above, does not attempt to understand, for example, exactly how an education programme affects salary. It only tries to find more than one instance (a pattern) confirming some hypotheses (with the arrows between bubbles depicting logical “if-then” links between key hypotheses) that are either related to theory 1 or alternatively to theory 2. In contrast, process tracing focuses on how the connection between steps occur exactly and hence needs to observe this only once to prove that the connection, as hypothesized by only one theory, actually exists.

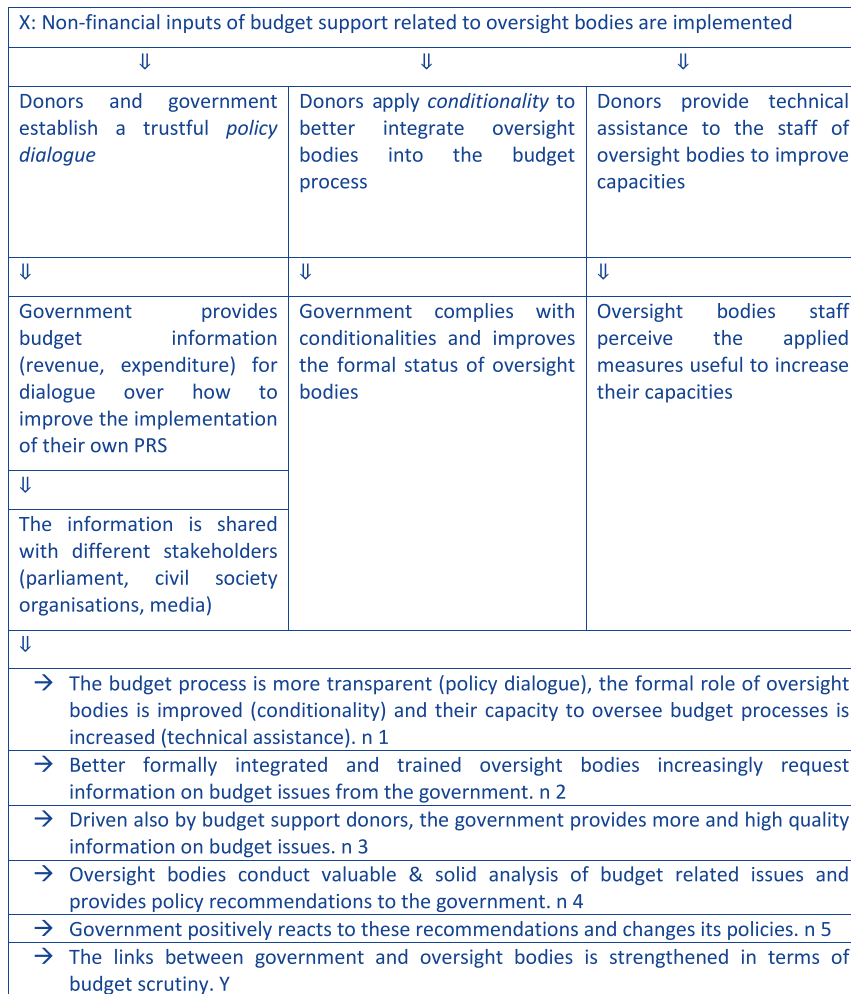
The next chapters elaborate the various approaches in depth and relate the approaches to variations commonly found in different evaluation studies.

2.2.2. Process tracing and realist evaluation

As stated above, process tracing requires as a first step a theory depicted as a mechanism which is an unbroken chain of action and reaction by actors.

Below is another example, relating to an evaluation of budget support to developing countries.

Figure 60: budget support mechanism



The above example shows how different actors are acting on and reacting to each other. Now, for each step in this mechanism, we need to look for evidence establishing that these steps indeed occur in real cases. Also very important is to reflect on the context in which the mechanism is likely to function as theorized. Indeed, not all contexts are equally conducive for a mechanism to function. The required context characteristics in process tracing approaches are referred to as “scope conditions”. For example, for the budget support mechanism to function (see figure 9), the government’s commitment to effectively pursue these policies and its political and administrative capacities are important pre-conditions. In the PDP case, it was assumed that participants would have minimum reflection and language capacities, levels of motivation and trust in coaches, etc. Context matters because unfavorable contextual conditions, can hamper the functioning of the expected causal mechanism. However, the absence of the causal mechanism does not imply that the mechanism does not function at all. Given the presence of appropriate contextual conditions the mechanism could still materialize.

In evaluation studies, we find an evaluation approach called “realistic evaluation” that shares many of the characteristics of process tracing and that can be referred to as process tracing “light”.

Realistic evaluation focuses on finding evidence for various Context-Mechanism-Outcome or CMO combinations. Below we find some CMO combinations that attempt to provide an explanation of what the installment of CCTV (closed circuit video cameras) surveillance provokes in different contexts.

Table 26: CCTV CMO configurations

(1)	CONTEXT	MECHANISM	OUTCOME
	Staff feel intimidated by shop thieves and lack confidence to challenge them	CCTV may give staff more confidence to approach suspects	By approaching shop thieves they are deterred from stealing and this reduces overall theft
(2)	CONTEXT	MECHANISM	OUTCOME
	Staff perceive CCTV, on its own, to be effective against shop theft	CCTV may decrease staff vigilance as they begin to rely on it	Theft levels increase as the surveillance by staff is reduced
(3)	CONTEXT	MECHANISM	OUTCOME
	Customer satisfaction could be increased	CCTV is used as a management tool to increase customer satisfaction	More customers frequent the store as a result and provide natural surveillance
(4)	CONTEXT	MECHANISM	OUTCOME
	Suspicious behavior is not being observed by staff	By observing the CCTV monitors, staff are effectively deployed to areas where suspicious behavior is occurring	Staff act as a visual deterrent and can apprehend offenders if necessary

In the example above, different explanations are provided for various hypothetical outcomes. The focus of the enquiry is not limited to the reduction of shoplifting but also other outcomes are considered (eg. customer attraction, staff vigilance). Evidence is subsequently gathered to verify which of these CMOs actually occur in reality.

Context constitutes and influencing factor. Contextual conditions can enable or impede the occurrence of the different mechanisms.

There are four types of contextual conditions in realistic evaluation:

- Individual capacities of key actors such as interests, attitudes, capabilities, credibility, ...
- Interpersonal relationships supporting an intervention: lines of communication, management and administrative support, union agreements, professional contracts, ...
- Institutional setting: culture, leadership, ... of the implementing organization
- Broad (infra-)structural and welfare system, such as political support, availability of funding, etc ...

To conclude on the main differences between process tracing and realistic evaluation: process tracing elaborates the causal mechanism and its different steps in an in-depth and sophisticated manner. Few causal mechanism are examined but the different steps in the causal chain are thoroughly investigated. Realistic evaluation puts less emphasis on a continuous chain of expected actions and reactions. Causality is assumed but not systematically motivated. Despite these differences the two approaches are similar in approach and assumptions.

2.2.3. Congruence analysis and contribution analysis

In congruence analysis, different, competing theories are made explicit or operationalized through sets of hypotheses. In the PDP example, discussed above, a theory could be converted in the following set of hypotheses:

- Highly motivated employees (HMEs) in the organization who want to advance their careers already have a good idea of how they want to develop their careers but could not proceed due to a lack of structured opportunities;
- The PDP triggers the organization to set up internal mobility processes;
- HMEs will swiftly volunteer to participate in a PDP to take advantage of this opportunity;

- HMEs will move more rapidly (in the PDP) through the reflection stage regarding what they want and their competences without having to be coached much,
- HMEs will execute their action plans more systematically and faster than other employees;
- HMEs will respond and apply more rapidly for new or vacant positions.

An alternative set of hypotheses based on a competing theory could consist of:

- Participants in the PDP gain more insight in their own competences;
- They gain more insight in their personal interests and in what they value in work;
- They increase their understanding of possible future career paths;
- Based on the gained insights, participants will make informed choices regarding the development issues they need to address;
- Participants will then draw up action plans that address these identified development issues;
- Participants execute these action plans and acquire or strengthen the necessary competences;
- Participants apply for other jobs or execute their current jobs better.

The second set of hypothesis reflects rational choice theory, in which consciously assessed information determines actions. Both theories and their corresponding hypotheses reflect a different logic but they do not have to be completely opposed. Certain hypotheses can overlap or cover completely different elements. The key issue is of course to search for evidence and then to judge which of the two theories and their respective hypotheses are confirmed or rejected by empirical observations.

The table below is a useful tool to interpret the meaning of observations.

Table 27: congruence analysis table			
	Observation(s) in line with expectations deduced from theory B	Observation(s) in contradiction to expectations deduced from theory B	Observation(s) beyond the expectations deduced from theory B
Observation(s) in line with expectations deduced from theory A	Conclusion A: Connections to other observations necessary for discriminatory evidence	Conclusion B: Strong evidence for preferring A to B	Conclusion C: Evidence underscores explanatory power of A
Observation(s) in contradiction to expectations deduced from theory A	Conclusion D: Strong evidence for preferring B to A	Conclusion E: Strong evidence for the need for other theories	Conclusion F: Evidence undermines explanatory power of A
Observation(s) beyond the expectations deduced from theory A	Conclusion G: Evidence underscores explanatory power of B	Conclusion H: Evidence undermines explanatory power of B	Conclusion I: Evidence for the need of expanded or other theories

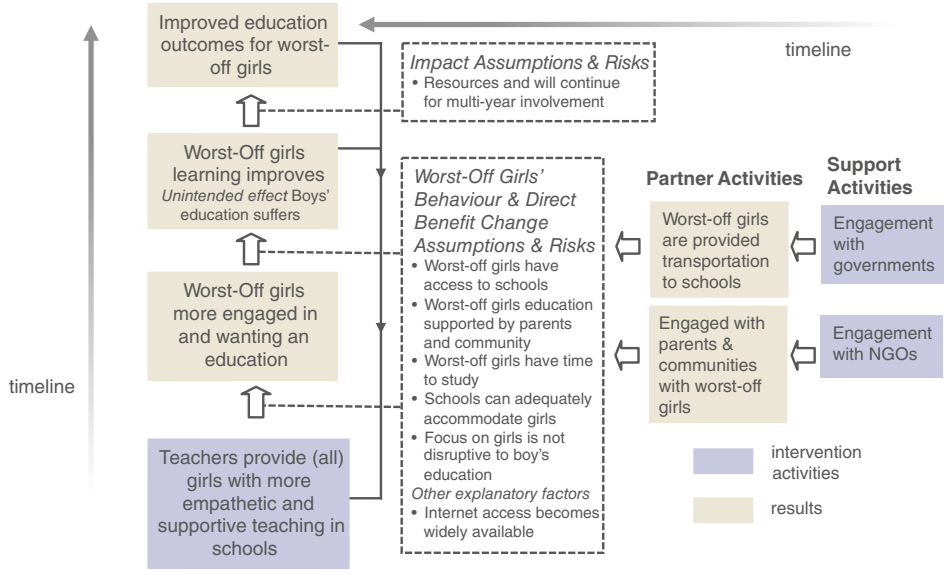
Imagine for instance that we find confirmation of the fact that many participants in the PDP project seem to proceed very fast through the reflection process. This swift reflection process contradicts what we would expect under the rational choice theory (theory B) but is congruent with the rival explanation (theory A). Hence, we have strong evidence for preferring the latter to the former theory (conclusion B in the table above). However, it must be underscored that a judgment concerning the relative congruence of the theories with observations can only be made on the basis of evidence relating to all the hypotheses in the set, not merely on the basis of one individual hypothesis.

As was the case for the process tracing approach, context also matters for congruence analysis. Some contexts may provide more supportive “scope” conditions than others.

An alternative approach frequently cited in evaluation studies is the so-called “contribution analysis”. Contribution analysis shares many features with congruence analysis. The idea is to first formulate a “theory of change” and to attribute risks to it.

An example is provided below by the originator of contribution analysis, John Mayne.

Figure 61: a theory of change for contribution analysis

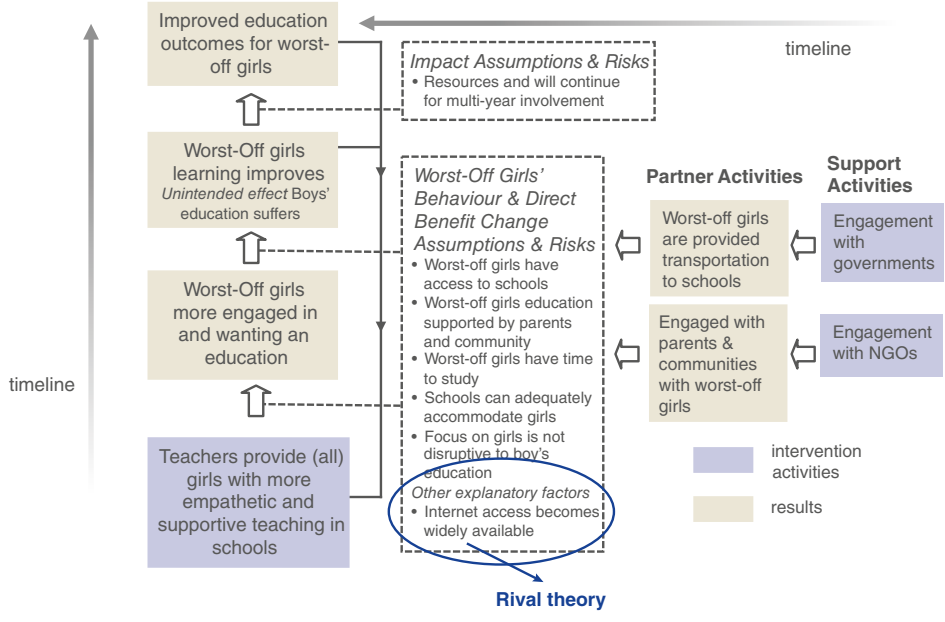


The lefthand side of figure 10 depicts the theory of change with a series of “if ... then” statements. For example: if teachers provide all girls with more empathetic and supportive teaching in school, then the worst-off girls will be more engaged in and wanting an education.

This does not constitute a mechanism equivalent to the mechanisms discussed in process tracing as there are still some unanswered questions as to how exactly the teacher action would lead to more engagement. A process tracing mechanism would fully clarify the reasons for the behavioural changes in an unbroken chain of action and reaction. In fact, the set of statements in the lefthand side boxes of figure 10 correspond more to the loosely connected set of hypotheses discussed in the section on congruence analysis. The assumptions and risks described in figure 10 are in fact context conditions, similar to those we would express in congruence analysis.

Contribution analysis requires the subsequent collection of evidence to verify if the hypothesized propositions actually exist in reality. It also requires to devote due attention to “rival theories”. This is similar to the idea of competing or complementing theories in congruence analysis. In the figure below, we see one such rival theory under the heading “other explanatory factors”, namely the presence of internet access. This could conceivably also affect learning improvement.

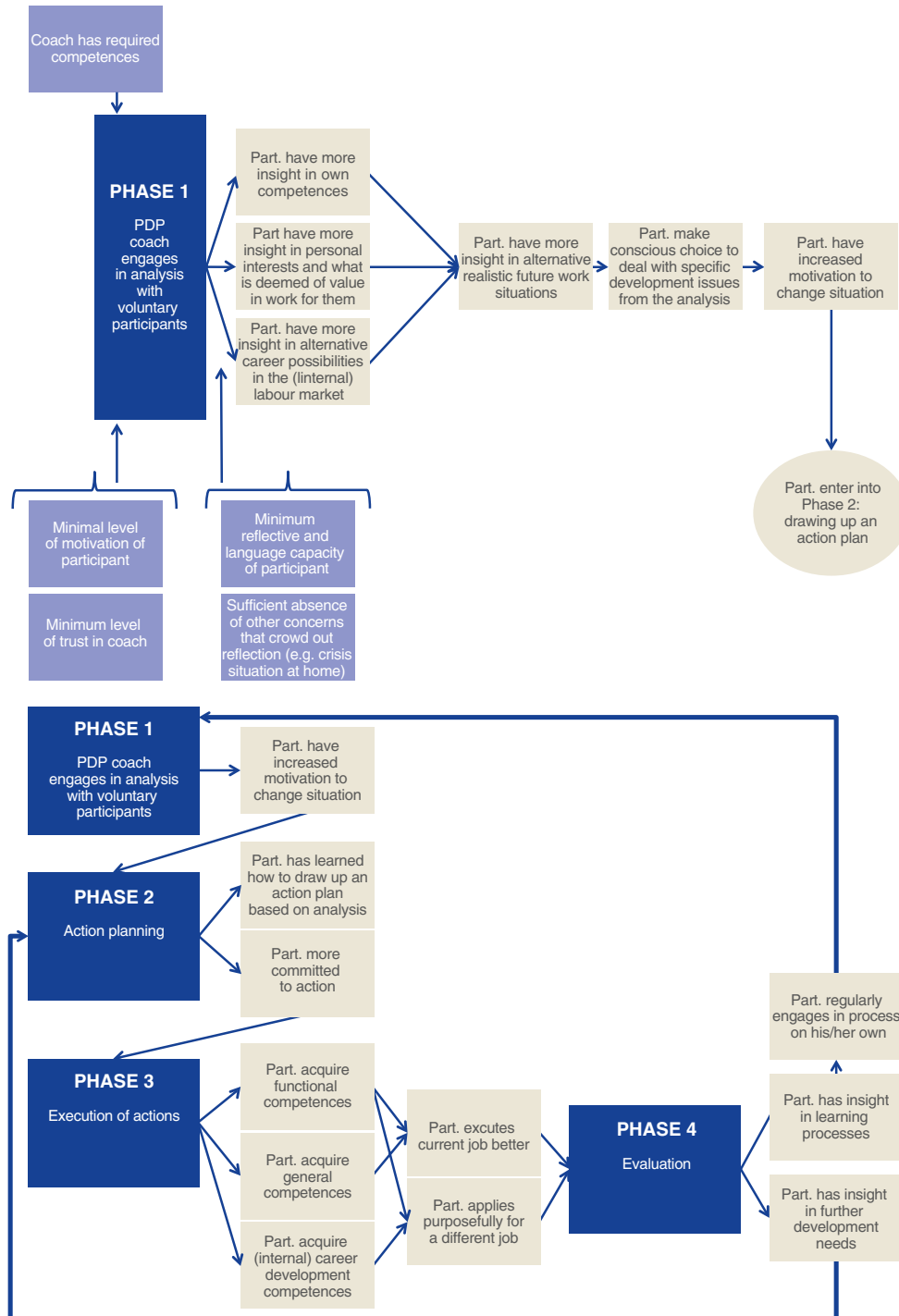
Figure 62: other explanatory factors in contribution analysis



The main difference between contribution and congruence analysis is that in the latter, only fully elaborated “rival” theories are investigated, rather than a single statement like “internet access becomes widely available.” (see figure 10).

Besides certain differences both approaches are quite similar and their combined use can strengthen the quality of the analysis. For example, the rational choice theory in the PDP can be expressed as a “theory of change” as depicted below. A similar theory of change can be also constructed for the “rival” theory.

Figure 63: PDP as a theory of change



2.2.4. Qualitative comparative analysis

So far, we have discussed approaches that focus on specific cases, such as the PDP process within a specific organization and project. We could analyse several of these cases separately and draw some overall conclusions from the separate case studies. This triggers the question how we can draw inferences across a larger number cases? Qualitative comparative analysis (QCA) can offer a useful means to aggregate insights from several, different case studies.

QCA also utilizes an understanding of causality, whereby causes can be considered as being necessary or sufficient or both. A central tool to establish causal relations is the so-called “truth table”. An example of an evaluation with the use of a QCA truth table is presented below.

Table 28: truth table in QCA

Conf ID	Institutional Capacity (IC)	Multi-Donor Basket fund (MDBF)	National Ownership (NO)	Succes (S)	No.cases
A	1	1	1	1	3
B	1	1	0	1	1
C	1	0	1	1	2
D	1	0	0	0	2
E	0	1	1	-	0
F	0	1	0	-	0
G	0	0	1	-	0
H	0	0	0	-	0

Source: Befani, *Between complexity and generalization*, Evaluation, 2013, 19, 3.

On the lefthand side (Conf ID) we find the (types of) cases (labelled from A to H). The other columns show the presence (indicated with 1) or absence (with 0) of three different conditions and the outcome (success). We see that the possible combinations of conditions E to H were not observed or found in reality.

The first question could be: is there any condition necessary or sufficient on its own to achieve a successful outcome? Institutional capacity (IC) could be necessary as every time we find success, it is also present. But it is not sufficient as we also find a (set of) case(s) where there is IC but not success (case D). Multi-Donor Basket Fund (MDBF) is not necessary (other causes can produce success too) but it could be sufficient as every time it is present a successful outcome can also be found. National ownership (NO) could be a sufficient condition because it occurs for every case with as its outcome success but it is not a necessary cause.

However, looking at individual factors has its limitation as it could very well be that a combination of factors produces the outcome rather than a single factor. QCA applies Boolean logic (there is specific software available to run a QCA) to find out which combinations produce success or the absence of it. In the example above, the answer is that success happens when both IC and MDBF are present or alternatively when both IC and NO are found. The QCA shows that different combinations of the same or different conditions can produce the same outcome (this is referred to as equifinality). Indeed,

if we would remove IC from the successful cases, it may well be that none of the cases lead to a successful outcome. There is no way to verify the importance of IC in our example as we have no cases where IC is absent in our dataset.

Conditions in QCA can be both “contextual conditions” (what we referred to as “scope”) as well as introduced “causal” factors like elements of an intervention (e.g. an intervention may include a training, a coaching, an infrastructure element etc.) that we want to consider separately and/or in combination with other elements.

Although a powerful analytical tool, as it can deal with 5-50 cases and a large variety of conditions, QCA should not be used as a standalone method to assert causality. Ideally process tracing should be used after a QCA to understand exactly what happens in those cases with a combination of factors that produced a successful outcome. Also congruence analysis could be applied as competing combinations of conditions that explain the outcome could be present in one case (as in the three cases labelled “conf ID A” in the table above).

In terms of limitations, it should be understood that QCA is very sensitive to the completeness of relevant conditions as well as to how absence or presence of a condition is defined.

3. Pragmatic approaches

The following methods are approaches that cannot be regarded as genuine evaluations of “impact” but that are frequently used under this label nonetheless.

3.1. Performance monitoring

Probably the most frequently used approach is to measure performance by means of outcome indicators. For example, we may want to get unemployed participants into work so, after some pre-defined time period (e.g. six months after leaving a programme) we take stock of their employment status (the intended outcome being that they are in work).

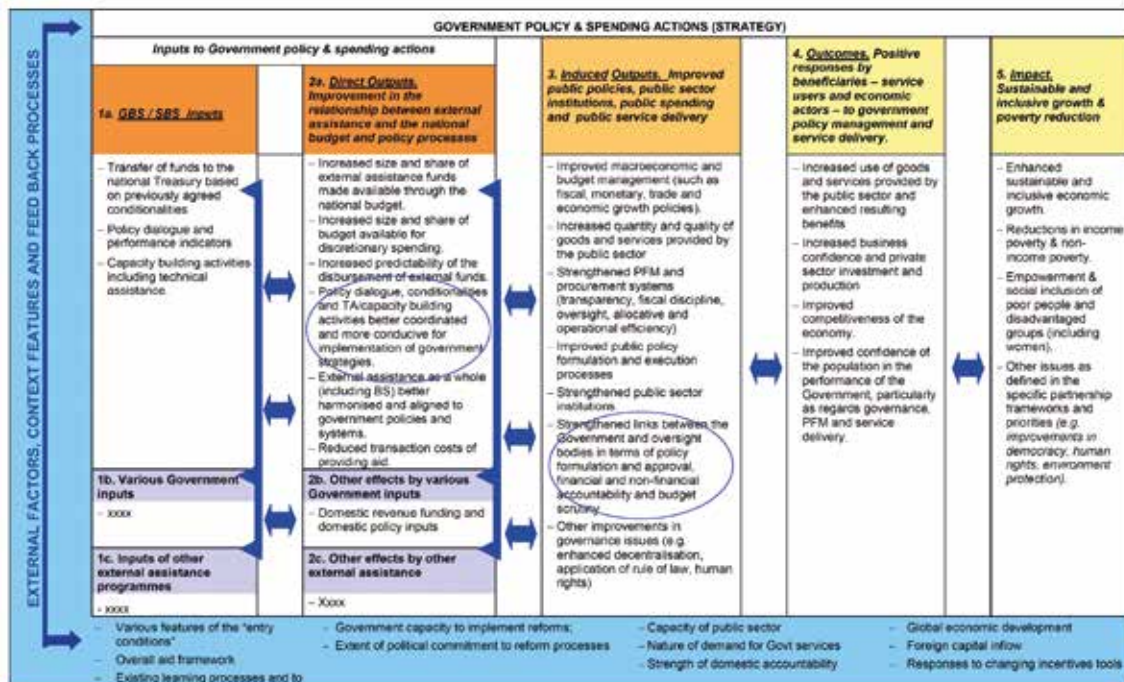
However, merely observing change by means of an indicator does not offer a means to rule out that this change is due to the characteristics of the subjects or their context rather than an intervention. This was elaborated in the earlier section on the foundation of cause and effect in the (quasi-) experimental approaches.

Such an approach does not qualify as an impact evaluation but rather as monitoring. It is a widespread practice because it is easy to execute. But it does not allow to state whether any change is due to a specific intervention.

3.2. Theory of change as a framework for data

A more sophisticated approach than just monitoring an outcome indicator is to use a theory of change as a framework for organizing data. The figure below shows the broader framework as put forward by the OECD on how to evaluate “budget support”.

Figure 64: OECD budget support “evaluation” framework



Source: OECD/DAC, Comprehensive Evaluation Framework for Budget Support

The figure shows how the “theory” of how budget support is assumed to work consists of objectives that relate to inputs, outputs, outcomes and “impacts”.

Obviously, on all of the listed objectives we can collect a variety of, usually already existing or easy to collect, information.

Typically aggregate data is presented that does not allow to distinguish differences in underlying contexts and associated cases. This means abstraction is made of what we called “scope conditions” in earlier chapters.

Also “rival theories” are typically not considered, as in the girl’s education programme where perhaps improved learning was perhaps (also or exclusively) due to e-learning.

Confusingly, many sources will refer to this kind of approach, which is really nothing more than “enhanced monitoring”, as “impact” evaluation because the term impact is also used to refer to higher level objectives, as in the figure above, that an intervention typically only can contribute to.

However, this use of the term “impact” is very different from the notion we have discussed so far where “impact” refers to substantiating a cause and effect relation.

It is easier to perform such pragmatic approaches, as compared to the rigorous ones discussed in the previous chapters. Process tracing would focus in figure 13 on just two of the objectives (for example those marked with a circle) and their connection to each other. Then connection elaborated as a mechanism was already depicted in figure 9. Mechanisms would have to be elaborated in a similar fashion for all links between all objectives.

4. Impact evaluation and the capability approach

The definition of social innovation as used by DG REGIO (2013, Guide for social innovation) is that it concerns the “development and implementation of new ideas to meet social needs and create new social relationships or collaborations. It is aimed at improving human well-being. Social innovations are innovations that are social in both their ends and their means. They are innovations that are not only good for society but also enhance individuals’ capacity to act.”

However, improving “well-being” and enhancing “individual’s capacity to act” are concepts that require some elaboration to be useful in practice. They draw directly on the work of Nobel prize winning development economist Amartya Sen regarding his “capability approach”.

The capability approach fits well with the case study research approaches to impact evaluation. They can adopt the idea that progress has to be defined by the target groups themselves regarding dimensions of their choosing and where they assess progress, in terms of closing capability gaps, in dialogue with the service providers. Also principles such as sustainability, participation and empowerment and equity can be studied within context in the framework of a case study.

The (quasi-)experimental approaches have much greater difficulty in adapting to the capability approach. They require a(n) (set of) precisely pre-defined outcome(s) measure(s). This means that by definition, this is a more top-down effort, where the choice of the measure(s) usually reflects the interest of the funders and policy-makers behind them. Yet, this is also of importance if continued support needs to be ensured from these stakeholders.

Hence, the best approach is to embed quasi-experimental methods into a broader case study approach (mixed method design). This is also the approach advocated by CRESSI (Creating Economic Space for Social Innovation), a 7th EU framework programme for research and innovation that focuses on the capability approach. However, this may conflict with the time and resources available within a project. There are no easy answers to this dilemma. An acceptable solution has to be negotiated between the ESIF authority and the project. This negotiation can be supported by making use of the framework provided by NESTA (see next section).

Another point of attention is that within the case study design, one should always look at elements of marginalization at the individual level, even if the process that is being studied is at a higher level (e.g. working with families). Hence, in many cases, an embedded case study will be required that studies a phenomenon at different (sub) units of analysis.

In terms of overall approach CRESSI (Nadia von Jacobi, Enrica Chiappero-Martinetti, Toa Giroletti, Lara Maestripieri and Flavio Ceravolo, 2015, Toolkit, CRESSI Working Papers No. 16/2015) recommend to first engage in a first, exploratory research phase to find out:

- what are the goals pursued by the social innovation;
- what are the implementation processes;
- what are the drivers of marginalization that the innovation is trying to deal with, as conceptualized by the capability approach;
- how network formation is being fostered and who (target groups, social innovators) is connecting, how much (quantity) in what way (quality of the interaction) with which kinds of other actors (similar / different ones);
- what institutions (content of rules, norms, patterns of behaviour) are playing a role (de facto versus de jure – on paper – in the case of formal ones) for the (lack of) activation, implementation and success of the innovation. How long have they been in place and (de facto) complied with? Who

(e.g. media, state, social groups, ...) is enforcing them how (e.g. what sanctions)? Which ones do not exist that could play a role? With what frequency do they exert influence?;

- what cognitive frameworks (prevalent beliefs, mental structures which filter our perception of reality) influence all of the above points?

Table 29: exploring cognitive frames and institutions in evaluation of social innovations

	COGNITIVE FRAMES	INSTITUTIONS
Exploratory Phase: qualitative data collection tools, e.g. interviews with social innovators		
identification of a list of forces that	influence goals, implementation process of the social innovation	influence feasibility and implementation process of the social innovation
identification of individual and collective behaviours that are affected	by presence or absence of certain CFs	by presence or absence of certain INST
qualifying the typology	conscious or subconscious application of CFs	formal or informal rules / <i>de jure</i> or <i>de facto</i> implementation
base of enforcement	the particular CF is shared predominantly by which type of actors/people?	the particular INST is enforced predominantly by which type of actors/people?
area of life affected	by the content of CF	by the regulating content of INST
interlinkages	relates to other CFs or INSTs: which ones? Are linkages complementary or substitutive?	relates to other INSTs or CFs: which ones? Are linkages complementary or substitutive?
duration	how long has the CF played a role?	how long has the INST been in place?
frequency	how frequent does the social innovation process deal with the particular CF?	how frequent does the social innovation process deal with the particular INST?
relevance	which groups remain outside of the CF/are not touched by its content?	which groups does the INST not apply to/remains outside of its regulating content?
influence on NTKW formation	through which mechanisms? which group affiliations are favoured?	

A second phase can then engage into confirmatory research, collecting descriptive information as depicted below in the table, but also researching casual links as discussed in the sections above.

Table 30: descriptive confirmative research questions for the capability approach

	COGNITIVE FRAMES	INSTITUTIONS
Confirmatory Phase: quantitative data collection tools, e.g. questionnaires to single beneficiaries		
For each of the list:	CF	INST
recognition	do you know the CF?	do you know the INST?
relevance	how often does this CF affect your life?	how often does this INST affect your life?
perception	do you assess this CF as helpful for achieving your goals (along a range)?	do you assess this INST as helpful for achieving your goals (along a range)?
reach	among 10 people that come to your mind, how many of them share this CF with you?	among 10 people that come to your mind, how many of them align their behaviour to this INST as you?
breach	have you ever acted against this CF? How often?	have you ever acted against this INST? How often?
enforcement	Who comes after you if you disregard this CF?	Who comes after you if you disregard this INST?

5. NESTA's standards of evidence framework

NESTA, the UK's premier innovation charity (www.nesta.org.uk) has provided a framework for determining the standard of evidence for success linked to social innovations (Standards of Evidence for Impact Investing by Puttick R and Ludlow J, 2012). Our (small) modification of the NESTA standards of evidence framework is as follows:

Table 31: NESTA's standards of evidence

1	You can explain what your initiative does, why it matters and how it will have an impact on one (or more) of our specified outcomes in a clear, coherent and convincing way	<ul style="list-style-type: none"> ▪ Theory of Change (essential) ▪ Literature Review ▪ Anecdotal evidence (e.g. satisfaction questionnaires) 	At Level 1 we expect to see: <ul style="list-style-type: none"> ▪ A description of your initiative, including: (i) the context in which it operates (e.g. the problem that it is trying to solve, information about other similar initiatives and why yours is different or better, relevant facts and figures etc.); (ii) your specific target population(s); (iii) the recruitment and referral processes for these target population(s); and (iv) a clear outline of exactly what your initiative is and does ▪ An explanation of how it could impact on the outcomes that you claim to affect ▪ An idea of how these outcome(s) could be measured.
2	You can capture data that shows an impact on the specified (intermediate) outcome(s), though you cannot show what caused this.	<ul style="list-style-type: none"> ▪ Pre- and post-survey ▪ Cohort study ▪ Regular surveys ▪ Interviews 	At Level 2 we expect to see some qualitative data (e.g. interview responses) or quantitative data (e.g. survey responses) showing that there has been an impact on the specified (intermediate) outcome(s) among the users of your initiative. However, we would not expect to be sure that this change was influenced by your initiative specifically.

3	You can demonstrate that your initiative is having an impact.	<ul style="list-style-type: none"> ▪ Randomised control trial (RCT) ▪ Quasi-experimental approaches ▪ Process tracing / Realistic evaluation ▪ Congruence analysis / Contribution analysis 	At Level 3 we expect to see more rigorous evaluation. Ideally we would like to see an estimate of the size of the impact, in principle via an RCT, with at least one long-term follow up of outcomes; however, we appreciate that this method is not always appropriate or possible (e.g. if sample sizes are too small), and are open to suitable alternatives among the quasi-experimental approaches. Also, rigorous case study based impact evaluation can provide suitable evidence of the influence of your initiative, without being able to quantify its exact magnitude.
4	A rigorous independent evaluation has validated the impact of your initiative. You can show how and why it is causing this impact. You have standardised processes for training and delivery, and high-quality documentation to support this. You know how much your initiative costs to set up and deliver.	<ul style="list-style-type: none"> ▪ Full theory based impact evaluation combining a (quasi-experimental) method with a case study approach. ▪ Detailed written guides and / or training sessions ▪ Detailed analysis of accounts 	At Level 4 we expect to see another rigorous and robust evaluation of your initiative, by an external and independent evaluator, that replicates the previous findings. We expect to see detailed and empirical (i.e. observable, not just theoretical) evidence as to how and why your initiative is having an impact. We expect your initiative to have standardised processes of setup, training and delivery, and the corresponding documents to allow it to be accurately replicated by a third party. And we expect you to have an accurate idea of how much that setup and delivery costs.
5	You can show that your initiative has been successfully scaled-up or has been by new staff and third parties, whilst still causing an impact. You have shown its generalisability to other locations/target groups and have strong evidence of its cost-effectiveness.	<ul style="list-style-type: none"> ▪ Multiple replication evaluations ▪ Societal cost-benefit economic evaluation 	At Level 5 we expect to see extensive evidence that your initiative can be successfully scaled-up, and/or successfully replicated by new staff, in new locations and with new target groups. This will require multiple evaluations (at least two, one of which won't have been undertaken by you). We also expect to see an economic evaluation that shows the cost-effectiveness of your initiative in a way that could be compared with other similar initiatives.

6. Evaluating transition platforms

Transition platforms are different types of interventions than what we usually think of as an intervention. Indeed, they are platforms: that means they themselves may be launching a variety of interventions. This section draws on Creten, T., Happaerts, S. and Bachus, K. (2014, Evaluating Long term transition programs on a short-term basis, HIVA – KU Leuven).

They state that the transition management literature focuses almost exclusively on evaluation of the process of transition management and reflexive learning among the actors involved. Of course, it is understood that the real impact of transitions can be witnessed only in the long run. However, some first results should become visible in the pre-development (where experimentation should be witnessed) and take-off phases (where first indications of systems change should become visible) of a transition.

Creten et al (2014) take as a starting point the given policy objectives of a transition process and do not attempt to define themselves what a sustainable system should look like.

Next, they drawn on the idea of a programme theory. Below is an adapted version of what they suggest:

- **Input = the transition programme:**
 - Are there actors that are aware of persistent societal challenges that require a transition process?
 - Are there niches that present a challenge to the regime? Ideally, all niches should be identified;

- **Process =**
 - Arena;
 - Vision;
 - Multi-actor-domain approach (with quadruple helix participation as well as regime and niche actors) covering the system with one actor in charge of coordination;
 - Learning/reflection moments;
 - Process conditions that may inhibit / support output:
 - societal and political sense of urgency;
 - high level political support;
 - sufficient capacity in the administration;
 - transparency, trust and respect among stakeholders;
 - shared ownership;
 - open minded actors able to think out of the box;

- **Output = crucial policy activities in the transition programme that create space to develop new or improve existing niches and build their capacity to compete with the regime**
 - Stimulating R&D for niches e.g. by reorienting R&D subsidies to favour niches (e.g. via dedicated calls, reformulated criteria, ...);
 - Levelling and turning the playing field by changing the environment in which niches operate e.g. by using the fiscal and regulatory power of public authorities (covering financial risk for niche actors, creating flexibility in rules or regulation free zones, tax incentives, increasing subsidies for niches and decreasing them for regime initiatives, creating regulation to make regime action unattractive or impossible, developing new markets, increasing information on the niches as an alternative for the unsustainability of regime action e.g. with campaigns and labels);
 - Shifting public resources in terms of investment in niche supportive infrastructure, restricting use of infrastructure for regime action, connecting policy agendas and framing win-wins (e.g. “green+”jobs”);
 - Avoiding regime reinforcement by refraining to launch new policy initiatives that favour the regime via R&D, the playing field and resources;
 - For all these policy activities it matters not only that they take place but also what the quality of their implementation is;

- **Outcome = decreasing regime resistance (niches breaking through) indicative of take-off (moving out of pre-development);**
 - Powerful actors embrace the niches (e.g. via public statements and concrete actions);
 - Niche players become powerful (e.g. via citizen initiatives);
 - Niches increase their share;
 - Niches increase efficiency;
 - Niches decrease complexity for end-users;
 - Emergence of network organisations (e.g. federations, lobby, ...) for niche players;
 - Increasing public support (e.g. petitions);

- **Longer term outcome = system change.**

This approach as proposed by Creten et al (2014) suffers from the linear thinking that goes with input/output/outcome based programme theories and monitoring. While most of what they propose is relevant to transitions, their proposed “sequence” is not implied by transition theory. For example, transition management directly targets breaking down and building up certain elements of structure, culture and practice. This is described as “longer term outcome” by Creten et al (2014). However, much of what is listed under “output” would already be system change.

However, in terms of assessing causality between the transition programme and the outcomes, they refer to similar approaches as contribution analysis and realist evaluation which were already covered sufficiently earlier. This would constitute the actual “impact” evaluation (understood as assessing cause-effect relations). This is sound advice but underdeveloped by Creten et al. (2014). However, a good attempt at how to use theory for impact evaluation of transition management is present in the case of Plan C (Case 4). This can be seen as a form of congruence analysis.

7. Extra resources

Theory based impact evaluation

Astbury B and Leeuw F (2010) Unpacking black boxes: Mechanisms and theory building in evaluation. *American journal of evaluation* 31 (3): 363-81

Beach D and Pedersen R B (2013) *Process-tracing methods*. Ann Arbor: University of Michigan Press.

Befani B and Mayne J (2014) Process tracing and contribution analysis: a combined approach to generative causal inference and impact evaluation. *IDS bulletin* 45 (6): 17-36

Biggs J S, Farrell L, Lawrence G, Johnson J K (2014) A practical example of contribution analysis to a public health intervention. *Evaluation* 20 (2): 214-229

Blatter J and Haverland M (2012) *Designing case studies*. Houndmills: Palgrave Macmillan.

Chen H (2005) *Practical program evaluation*. London: Sage Publications.

Chen H (2006) A theory-driven evaluation perspective on mixed methods research. *Research in the Schools*, 13 (1): 74-82.

Coryn C L S, Noakes L A, Westine C D, Schröter D C (2011) A Systematic Review of Theory-Driven Evaluation Practice From 1990 to 2009. *American Journal of Evaluation* 32(2) 199-226

De Rick K, Drieghe L, Jacobs L, De Cuyper P (2014) Het POP: een effectief instrument in het arbeidsmarktbeleid? Een kwalitatieve analyse van de uitvoeringspraktijk en effecten van POPs in drie cases. *Onderzoek in opdracht van ESF-Agentschap Vlaanderen*.

Delahais T and Toulemonde J (2012) Applying contribution analysis: Lessons from five years of practice. *Evaluation* 18 (3) : 281-293

Funnel S C and Rogers P J (2011) *Purposeful program theory*. San Fransisco: Jossey-Bass.

Gill M and Turbin V (1999) Evaluating “realistic evaluation”: evidence from a study of CCTV. In: *Surveillance of Public Space: CCTV, Street Lighting and Crime Prevention*. Crime prevention studies volume 10. Monsey: Criminal Justice Press, pp. 179-199

Hedström P (2005) *Dissecting the social*. Cambridge: Cambridge University Press.

Leeuw F L (2012) Linking theory-based evaluation and contribution analysis: three problems and a few solutions. *Evaluation* 18 (3): 348-363

Lemire S T, Nielsen S B., Dybdal L (2012) Making contribution analysis work: a practical framework for handling influencing factors and alternative explanations. *Evaluation* 18 (3): 294-309

Mayne J (2008) *Contribution analysis: an approach to exploring cause and effect*. ILAC Brief No. 16: Rome: The Institutional Learning and Change Initiative.

Miles M B, Huberman A M, Saldana J (2014) *Qualitative data analysis*. London : Sage Publications.

Pawson R and Tilley N (1997) *Realistic evaluation*. London: Sage Publications.

Schmitt J and Beach D (2014) Tracing mechanisms as a means to evaluate the governance effectiveness of budget support. Conference paper at 14th EADI general conference, June.

Schneider C Q and Wagemann C (2012) *Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis*. Cambridge: Cambridge University Press.

Seawright J and Gerring J (2008) Case Selection Techniques in Case Study Research. *Political Research Quarterly* 61 (2): 294-308

Stern E, Stame N, Mayne J, Forss K, Davies R, Befani B (2012) Broadening the range of designs and methods for impact evaluations. Report for the Department for International Development. Working paper 38, April.

Van Evera S (1997) *Guide to methods for students of political science*. Ithaca: Cornell University Press.

White H and Phillips D (2012) Addressing attribution of cause and effect in small n impact evaluations: towards an integrated framework. Working Paper 15, International Initiative for Impact Evaluation (3ie).

Yin R K (2003) *Case study research design and methods*. Thousand Oaks: Sage.

Yin R K (2013) Validity and generalization in future case study evaluations. *Evaluation* 19 (3): 321-332

Counterfactual impact evaluation

European Commission (2013) *Evalsed Sourcebook: methods and techniques*. Brussels: European Commission.

European Commission (2012) *Designing and commissioning counterfactual impact evaluations*. Brussels: European Commission.

Specific themes

Creten, T., Happaerts, S. and Bachus, K. (2014) *Evaluating Long term transition programs on a short-term basis*, HIVA – KU Leuven

Puttick R and Ludlow J (2012) *Standards of Evidence for Impact Investing*. Nesta.

von Jacobi, N., Chiappero-Martinetti, E., Giroletti, T., Maestripieri, L. and Ceravolo, F. (2015) *Toolkit, CRESSI Working Papers No. 16/2015*

Annex 7: content of training seminars for staff in Flanders

To build capacity inside the Flemish ESF Agency the following training courses were organized / facilitated.

Classroom teaching by

- [Oksigen Lab](#): three days on social innovation, social enterprise, innovation support strategies, roles and competences, social impact M&E and finance for social innovation
- [Flanders In Shape](#): six half days with the following topics: stakeholder analysis, personas, customer journey mapping, observation, idea generation and selection, service blueprinting
- [Sociale Innovatiefabriek](#): half a day on pitching an innovative concept to funders
- [Flanders District of Creativity](#): one day on business model innovation

Online learning (by doing) via

- IDEO human centered design (see <http://plusacumen.org/courses/hcd-for-social-innovation/>) which involves an engagement of +/- 4 days.

In total, the above represents an investment in capacities of +/- 12 days.

The project leader also participated in extra training courses on innovation:

- Lego Serious Play: 3 days
- Transition management: 1 day
- Social innovation and transition theory: 4 days
- U lab online course (see <https://www.presencing.com/ulab/overview>)

Annex 8: database of articles on innovation

As a complement to this publication a zip-file containing almost 80 fiches that summarize the content of the following articles is attached:

- 52 articles on innovation in general (numbered from 1-52)
- 10 articles on innovative cultures and creativity (labeled a1 to a10)
- 9 articles on public sector innovation (labeled b1 to b9)
- 8 articles on social innovation (labeled c1 to c8)

TOOLKIT FOR SUPPORTING SOCIAL INNOVATION WITH THE EUROPEAN SOCIAL AND INVESTMENT FUNDS

Guiding the reflection on and implementation of social innovation support measures
by ESIF programme managers

October 2015 – 396 pp. – 21 x 29.7 cm

Reproduction is authorised provided the source is acknowledged.



Gevalideerd
ESF-product