

SI-DRIVE**Social Innovation: Driving Force of Social Change**

D1.4

Comparative Analysis (Mapping 1)**Mapping the World of Social Innovation: A Global Comparative Analysis across Sectors and World Regions**

Project acronym	SI-DRIVE
Project title	Social Innovation: Driving Force of Social Change
Grand Agreement number	612870
Coordinator	TUDO – Technische Universität Dortmund
Funding Scheme	Collaborative project; Large scale integration project
Due date of deliverable	July 2016
Actual submission date	July 2016
Start date of the project	January 2014
Project duration	48 months
Work package	1 Theory
Lead beneficiary for this deliverable	TU Dortmund
Authors	Jürgen Howaldt, Antonius Schröder, Christoph Kaletka, Dieter Rehfeld, Judith Terstriep
Dissemination level	Public



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 612870.

CONTENTS

1	Executive Summary	1
2	Introduction.....	3
3	Methodology	5
3.1	Uniqueness of the SI-DRIVE Approach.....	5
3.2	First Empirical Phase: Global Mapping in Focus	7
3.2.1	Theory-based Framework for the Empirical Work	9
3.2.2	Description of the Mapping Base.....	11
3.2.3	Representativity: Reflecting the Broad Understanding of Social Innovation	12
4	Key Dimensions	15
4.1	Concepts and Understanding of Social Innovation.....	17
4.1.1	Background of the Analysis.....	17
4.1.2	Results of the Global Mapping.....	18
4.1.2.1	Growing Importance of Social Innovation on a Global Scale.....	18
4.1.2.2	Diverse and Connected Policy and Practice Fields.....	21
4.1.2.3	Innovation Streams and Embedded Innovation	25
4.1.2.4	Towards a Comprehensive Understanding of Social Innovation.....	28
4.1.2.5	Empowerment, User Involvement and Human Resources – Driving Force and Necessary Precondition of and for Social Innovation	31
4.1.3	Conclusions and Open Questions	34
4.1.3.1	Unclear Understanding of the Concept and Unexploited Potential of Social Innovation	35
4.1.3.2	Empowerment and Human Resources	36
4.1.3.3	Increasing Cross-sector Collaboration: Social Innovation Ecosystem	36
4.2	Objectives: Social Demands, Societal Challenges and Systemic Change Addressed	39
4.2.1	Background of the Analysis.....	39
4.2.2	Results of the Mapping	41
4.2.2.1	Focus on Social Demands and Societal Challenges.....	41
4.2.2.2	Varying Relevance of Policy Fields and Sectors in the World Regions	43
4.2.2.3	Cross-sectoral Involvement on all Societal Levels	50
4.2.3	Conclusions and Open Questions	52
4.2.3.1	Objectives, Content and Processes.....	52
4.2.3.2	Leeway or Systemic Change? Ambivalences in Social Innovation	53
4.2.3.3	Challenging Societal Levels and Output Perspectives.....	54
4.3	Resources, Capabilities and Constraints	56
4.3.1	Background of the Analysis.....	56
4.3.2	Results of the Mapping	59
4.3.2.1	Personnel and Financial Resources as Foundations of Social Innovations.....	59
4.3.2.2	Drivers and Barriers: Societal Challenges and Local Social Demands are the Origin of Social Innovations driven by Individuals, Groups or Networks	68
4.3.3	Conclusions and Open Questions	85

4.4	Actors, Networks and Governance	89
4.4.1	Background of the Analysis.....	89
4.4.2	Results of the Global Mapping.....	92
4.4.2.1	Type of Actors	92
4.4.2.2	Involvement of Users/Beneficiaries	98
4.4.2.3	Networks and Alliances.....	102
4.4.2.4	Actors' Functions and Roles in Social Innovation	106
4.4.2.5	Actors as Implementers	108
4.4.2.6	Levels of Governance.....	110
4.4.3	Conclusions and Open Questions	115
4.4.3.1	Actors and Networks.....	115
4.4.3.2	Governance.....	117
4.5	Process Dynamics.....	119
4.5.1	Background of the Analysis.....	119
4.5.2	Results of the Global Mapping.....	120
4.5.2.1	Acceleration of Social Innovation	121
4.5.2.2	Social Innovators' Motivations, Intentions and Strategies	122
4.5.2.3	From Invention to Impact	126
4.5.2.4	Diffusion by Imitation	128
4.5.2.5	Processes of Scaling	129
4.5.2.6	Transfer of Social Innovation	133
4.5.2.7	Social Innovation Outcomes	134
4.5.2.8	Barriers in the Innovation Process.....	138
4.5.3	Conclusions and Open Questions	139
5	Summary and Conclusions	141
5.1	Background	141
5.2	Summary of the Results: The Emergence of an Ubiquitous Concept - Increasing Importance of Social Innovation on a Global Scale	142
5.3	Conclusions - Increasing Importance and Undeveloped Potential.....	150
5.4	Implications for SI-DRIVE Research.....	155
6	References	157

Figures and Tables

Figures

Figure 1: Continuously Updated Research Cycle.....	7
Figure 2: Deductive-Inductive Approach.....	7
Figure 3: Elements of the First Empirical Phase	8
Figure 4: Key Dimensions of Social Innovation.....	10
Figure 5: Worldwide Mapping of SI-DRIVE (Region, where the social innovation was implemented)	19
Figure 6: Starting Year of the Initiative (2000 – 2015)	19
Figure 7: Starting Year of the Initiative from 2006 to 2015 (European and non-European Countries)	20
Figure 8: Policy Fields the Initiative is Addressing by Ranks	22
Figure 9: Interrelation of Policy Fields Addressed (%-values indicate the ranks 2 and 3 of the other policy field)	23
Figure 10: Innovative Character of the Solution	25
Figure 11: Innovative Character of the Solution (by Policy Fields).....	26
Figure 12: Connectedness of the Initiative with Overarching Configurations (multiple responses)	28
Figure 13: Sectors Actively Involved in the Practice Field (multiple response).....	29
Figure 14: Sectors Engaged in the Policy Fields (% of naming in the policy field).....	30
Figure 15: Partners Involved in the Initiative by Type (multiple responses, % of all engaged partners)	31
Figure 16: Cross-cutting Themes addressed by the Initiative (multiple responses, % of naming).....	32
Figure 17: User Involvement (Policy Fields – World Regions)	33
Figure 18: User Involvement in the Policy Fields, EU and Non-EU.....	34
Figure 19: Eco-System of Social Innovation	37
Figure 20: New Innovation Paradigm	40
Figure 21: First Motivation or Triggers for Initiating the Social Innovation (multiple responses)	41
Figure 22: Societal Levels Addressed (multiple responses).....	42
Figure 23: Overlapping of Sectors the Practice Field is Addressing	43
Figure 24: Ranking within the Policy Fields (rank 1 to 3)	44
Figure 25: Main Policy Fields in World Regions (rank 1)	45
Figure 26: Cross-cutting Themes in World Regions (multiple responses).....	47
Figure 27: Societal Levels Addressed in European Regions and Non-EU Countries.....	48
Figure 28: Sectoral Involvement by Societal Level (multiple responses, % of cases within the societal level).....	51
Figure 29: Sectoral Involvement in World Regions (multiple responses, % of cases within the sector)	52
Figure 30: Number of Persons, directly involved in the initiative (employees, volunteers, external advisers)	60
Figure 31: Number of Employees of the Initiative (Policy Fields)	62
Figure 32: Yearly Budget.....	63
Figure 33: Funding Sources	65
Figure 34: Funding Sources (World Regions)	67
Figure 35: Main Drivers (multiple responses)	70

Figure 36: Barriers (multiple responses)	75
Figure 37: Barriers of New and Adopted Social Innovations.....	79
Figure 38: Barriers of the Policy Fields	80
Figure 39: Main Drivers of the Policy Fields (basis: number of cases Rank 1, 2, 3 within the policy field)	81
Figure 40: Type of Partner Engaged in Social Innovation Initiatives (multiple responses)	93
Figure 41: Type of Partner by Policy Field (% of cases in policy field).....	97
Figure 42: Form of User Involvement in Social Innovation (multiple responses)	98
Figure 43: Forms of User Involvement by Policy Field (% of cases within policy field).....	100
Figure 44: Forms of User Involvement by Region (% of cases within region)	102
Figure 45: Number of Partners per Initiative	103
Figure 46: Geographic Spread of Networks	104
Figure 47: Social Innovation Alliances by Type of Partner	105
Figure 48: Actors' Functions in the Initiative (multiple responses).....	106
Figure 49: Actors' Functions in Social Innovation by Type of Actor (multiple responses, % of cases within single types).....	107
Figure 50: Central Developers and Promoters by Type of Actor.....	108
Figure 51: Main Implementing Bodies (multiple responses)	109
Figure 52: Social Innovation Initiatives Relatedness to Governance Frameworks (multiple responses)	110
Figure 53: Initiatives' Relatedness to Governance Framework by Size of Partnership (multiple responses).....	111
Figure 54: Governance Frameworks by Policy Fields (% of cases within the policy field)	112
Figure 55: Social Innovation Initiatives' Levels of Governance	113
Figure 56: Initiatives' Levels of Governance by World Regions	114
Figure 57: Initiatives' Starting Date by Policy Field (% of cases within policy field).....	121
Figure 58: Social Innovators' Motivation by Starting Year (multiple responses)	122
Figure 59: Actors' Motivations by Policy Field	124
Figure 60: Social Innovators' Motivation by World Regions	125
Figure 61: Current Project Share	126
Figure 62: Initiatives' Development Stage by Policy Field (% of cases per policy field)	127
Figure 63: Project Development Stage by World Regions (% of cases in impact/implementation resp. testing/ideation/invention stage).....	128
Figure 64: Innovative Character by World Region (% of cases in world region)	129
Figure 65: Scaling of Social Innovation by Mechanism	130
Figure 66: Scaling Mechanisms by Policy Field (% of cases within policy field)	132
Figure 67: Geographic Scope and Mechanisms of Transfer (multiple responses).....	133
Figure 68: Social Innovation Outcomes (multiple responses).....	135
Figure 69: Social Innovation Outcomes by Level Addressed.....	136
Figure 70: Outcomes by Policy Fields	137
Figure 71: Barriers by Societal Level.....	138

Tables

Table 1:	SI-DRIVE Mapping: Dimensions / Indicators, Variables.....	12
Table 2:	Main Practice Fields of Social Innovation (Policy Fields) (consisting of 10 or more cases)	24
Table 3:	Innovative Character of the Solution (World Regions)	27
Table 4:	Sectors Addressed by the Practice Fields (World Regions) (multiple responses)	30
Table 5:	Societal Level Addressed by Policy Fields (multiple responses).....	43
Table 6:	Involved Persons (Policy Fields) (Ø: average number)	61
Table 7:	Number of Employees of the Initiative (World Regions) (Ø: average number)	62
Table 8:	Funding Sources (Policy Fields)	66
Table 9:	Motivation and Triggers for Social Innovation (Policy Fields) (multiple responses)	69
Table 10:	Main Drivers of the Policy Fields (rank 1) (basis: number of cases rank 1, 2, 3 within the policy field).....	71
Table 11:	Main Drivers within the World Regions (basis: number of cases rank 1, 2, 3 within the policy field).....	72
Table 12:	Other Barriers Mentioned (N=185)	76
Table 13:	Main Barriers within the World Regions (multiple responses)	83
Table 14:	Actor Types and Roles	90
Table 15:	Summary of Main Scaling Strategies (CLR, Davies 2014, p. 71)	120
Table 16:	Scaling Activities by World Region (% of cases)	133

Acknowledgement

We would like to thank Dmitri Domanski, Jennifer Eckhardt, Maria Kleverbeck, Luise Kuschmierz, Maria Rabadejeva and Marthe Zirngiebl for their valuable contributions to the reports and data analysis.

SI-DRIVE Partners

We have to thank as well all the SI-DRIVE partners and their Social Innovation experts for their extensive work of mapping the world of innovation:

- Technische Universität Dortmund – Sozialforschungsstelle (Social Research Centre) - TUDO -, Dortmund, Germany (Coordinator)
- Applied Research and Communications Fund – ARCF -, Sofia, Bulgaria
- Australian Centre for Innovation - ACIIC -, Sydney, Australia
- Austrian Institute of Technology – AIT -, Vienna, Austria
- Bertha Centre for Social Innovation and Entrepreneurship, University of Cape Town – UCT-, Rondebosch Cape Town, South Africa
- Brunel University – UBRUN -, London, United Kingdom
- Centre de recherche sur l'innovation sociale, Center for research on social innovation University of Quebec - CRISES -, Montreal, Canada
- Corporation Somos Más - SOMOSMAS -, Bogota, Colombia
- Heliopolis University - HU -, Cairo, Egypt
- Istanbul Teknik Universitesi - ITU -, Istanbul, Turkey
- Institut Arbeit und Technik / Institute for Work and Technology, Westfälische Fachhochschule Gelsenkirchen – IAT -, Gelsenkirchen, Germany
- Institute of Socio-Economic Development of Territories of the Russian Academy of Sciences - ISEDT RAS -, Vologda, Russian Federation
- International Organisation for Knowledge Economy and Enterprise Development, FORENINGEN - IKED -, Malmö, Sweden
- Kazimiero Simonavičiaus Universitetas - KSU -, Vilnius, Lithuania
- LABORATORIJ ZA DRUSTVENE INOVACIJE UDRUGE, social innovation lab - SIL -, Zagreb, Croatia
- Lama Development and Cooperation Agency - LAMA -, Florence, Italy
- Netherlands Organisation for Applied Scientific Research – TNO -, Leiden, The Netherlands
- Ryerson University - RU -, Toronto, Canada
- Tata Institute of Social Sciences - TISS -, Mumbai, India
- The Young Foundation – YF -, London, United Kingdom
- United Nations Economic Commission for Latin America and the Caribbean - ECLAC -, Santiago de Chile, Chile
- Universidad de la Iglesia de Deusto / University of Deusto - UDEUSTO -, Bilbao, Spain
- University Danubius Galati - UDG -, Galati, Romania
- Zentrum für Soziale Innovation / Centre for Social Innovation Vienna – ZSI -, Vienna, Austria
- Zhejiang University Hangzhou - ZJU -, Hangzhou, China (People's Republic of)

1 EXECUTIVE SUMMARY

While the SI-DRIVE Critical Literature Review (Howaldt et al. 2014a) provided a general depiction of how social innovation resonates within the wider frameworks of existing innovation theory and research, the concepts and perceptions of social change and of societal and policy development, the purpose of the *Comparative Analysis* is to check the theoretical framework against the first empirical dataset of SI-DRIVE (empirical phase 1).

This first Comparative Analysis investigates *empirical data based on more than 1.000 cases* in seven major policy areas all over the world, supplemented by policy field related state of the art reports, a regional trend study including the major world regions (Australia/New Zealand, Western and South-East Asia, North and South Africa, North and South America, Russia) and first policy and foresight workshops. SI-DRIVE aiming at a *comprehensive and systematic analysis* is focusing on the *main societal challenges* reflected by *different policy fields* and combining qualitative research (reviewing and reporting social innovation relevant theories and state-of-the art) with a first *quantitative mapping of the whole world of social innovation*.

Against this background and as an *explorative* inventory of an almost unknown area the Comparative Analysis is providing an overview of various types of social innovations in the seven policy areas (education, employment, environment and climate change, energy supply, transport and mobility, health and social care, and poverty reduction and sustainable development). The report is delivering new intelligence on the diversity of social innovation approaches in different parts of the world used by practitioners, researchers and policy makers, reflecting the diversity, broadness and usability of social innovation, proving the variety of actors and their interaction and exploring the systemic character and concept of social innovation.

The conducted mapping demonstrates the need for social innovation to overcome the (policy field related) societal challenges and social demands and the broad range of practice fields covered by the initiatives. In every policy field we find an increasing number of social innovation initiatives addressing a high diversity of social needs and societal challenges, not limited to one but often work across several policy fields. *Social innovation has become a ubiquitous concept.*

The main results at a glance:

1. Social needs and societal challenges are the focus, start, motivation, trigger and driver
2. Social innovations in a sense of new practices appear in a variety of forms and concepts and high dynamics appear
3. Manifold actors and cross sector collaborations are the emerging backbone
4. Empowerment and user involvement are a core element
5. Complexity of the innovation processes needs different modes of governance
6. Emerging ecosystems in front
7. Different levels of intervention are necessary
8. Practice Field approach helps to combine social innovations

9. Resources and barriers are manifold
10. Framework conditions and enabling factors still need to be developed
11. Social Innovation Initiatives - driven by problems and depending on individuals!

The results of the global mapping reveal the importance of social innovation addressing social, economic, political and environmental challenges of the 21st century on a global scale.

At the same time there is an increased awareness of the size of the challenges modern societies are facing and the complexity of innovation processes. Like technological innovations successful social innovations are based on a lot of presuppositions and require appropriate infrastructures and resources. Moreover, *social innovations* are requiring specific conditions because they aim at activating, fostering, and utilizing the *innovation potential of the whole society*. Therefore, new ways of developing and diffusing social innovations are necessary (e.g. design thinking, innovation labs etc.) as well as additional far reaching resources, to unlock the potential of social innovation in society and to enable participation of the relevant actors and civil society.

This is not only a matter of *appropriate funding* but also of *new participation and collaboration structures, co-creation and user involvement, empowerment and human resources development*. Attention has to be paid to the invention and its development as well as its diffusion and imitation. From this innovation process and development perspective resources, capabilities and constraints, drivers and barriers are not only relevant for the invention and implementation but also for scaling and diffusion of successful innovations.

The mapping demonstrates that social innovation processes and the underlying resources, capabilities and constraints are also very much related to the actors of the different sectors of the *social innovation ecosystem*. This includes a new role of public policy and government for creating suitable framework and support structures, the integration of resources of the economy and civil society as well as supporting measures by science and universities (e.g. education for social innovation performance, know-how transfer).

A *broad spectrum of social innovations* is present in the policy fields. All Policy Field Reports notify an *unclear understanding of the concept of social innovation*, discuss social innovations in their policy fields even if they are not called social innovations, and call for further social innovations to respond to the societal challenges the world is facing.

So one of the most important insights of the mapping is that given the strong need for social innovation highlighted by the various policy field experts, and, bearing in mind the drivers but in particular also the barriers for social innovation *a social innovation friendly environment still has to be developed in Europe as well as globally*.

2 INTRODUCTION

SI-DRIVE extends knowledge about social innovation (SI) in three major directions:

- Integrating theories and research methodologies to advance understanding of SI leading to a comprehensive new paradigm of innovation.¹
- Undertaking European and global mapping of social innovation, thereby addressing different social, economic, cultural and historical contexts in eight major world regions.
- Ensuring relevance for policy makers and practitioners through in-depth analyses and case studies in seven policy fields, with cross European and world region comparisons, foresight and policy round tables.

While the Critical Literature Review (Howaldt et al. 2014a) provided a general depiction of how social innovation resonates within the wider frameworks of existing innovation theory and research, the concepts and perceptions of social change and of societal and policy development, the purpose of this *Comparative Analysis (CA)* is to check the theoretical framework against the first empirical dataset of SI-DRIVE (empirical phase 1).

The Comparative Analysis is an important part of the *Theory Work Package* (WP 1). WP 1 is the core element of SI-DRIVE and provides the conceptual framework that underpins all the other WPs. Hypotheses for further research are verified and developed by analysing empirical data across sectors and countries within the mapping exercises. WP1 examines the conditions under which social innovation takes place, unpacking and developing the concepts that are associated with this phenomenon, and explores and explains the variety of processes and networking through which social innovation occurs. This theoretical endeavour provides a general depiction of how social innovation resonates within the wider frameworks of existing innovation theory and research, the concepts and perceptions of social change, and of societal and policy development.

Two major mapping exercises are foreseen at European and global level. The first mapping, reflected in this report, provides an overview of various types of social innovation in the seven policy areas. The second mapping starting in May 2016 will include in-depth and detailed case studies of specific innovations in the policy areas (separately looked at in the world regions). The results will provide new intelligence on the diversity of social innovation approaches in different parts of the world used by practitioners, researchers and policy makers. By taking a comparative approach across regions and policy areas, SI-DRIVE research will address a substantial gap in the evidence base by facilitating a

¹ Against the background of the findings in innovation research and the clear emergence of paradoxes and confusion in prevailing innovation policies, the question arises whether the technology-oriented innovation paradigm that has been shaped by the industrial society is not becoming increasingly less functional. This sort of fundamental change process involving the entire institutional structure and the associated way of thinking and basic assumptions can be interpreted, in our understanding, in terms of the development of a new innovation paradigm (Howaldt/Schwarz, 2010). This approach opens up fundamentally new perspectives on recognized problems and thus simultaneously unlocks new possibilities for action, especially in light of the basic confusions and paradoxes in innovation policy at present. This new paradigm is characterized by three key categories: (1) The innovation process opening up to society, (2) its orientation by the major societal challenges, and (3) a stronger recognition of non-technological innovations geared to changing social practices (FORA, 2010; Howaldt/Schwarz, 2010) – being the background for the analysis in chapter 4.21.

comprehensive understanding of the roles and impact of social innovations in different cultural contexts, including (unforeseeable) social consequences and ambivalence.

This first Comparative Analysis investigates *empirical data based on more than 1.000 cases* in seven major policy areas for all European Union (EU) countries supplemented by regional trend studies that include the major world regions (Australia/New Zealand, Western and South-East Asia, Northern and Sub-Saharan Africa, North and South America, Russia) and embedding the key dimensions and cross-cutting themes as a portfolio for every policy area and region: financial resources, information and communication technologies (ICT) and social media, social entrepreneurship and social economy, social enterprises, gender, equality and diversity, poverty, governance, innovation networks, demographic change.

In particular, a comparative analysis is conducted on all cases of the seven policy fields. SI-DRIVE analyses the differences and commonalities between social innovations in these areas to understand how social innovations develop, spread and scale under different conditions and in relation to the cross cutting themes indicated above.

The *purpose of the first mapping* is:

- a) to explore key issues that are pertinent to the support/success or detriment/failure of the cases; and
- b) start exploring possible trends and drivers that will shape the future of social innovation in the respective areas.
- c) The empirical work should also lead to a classified typology of social innovation which is based on the observed characteristics.

Therefore, we analysed the data of the first global mapping against the background of the five key dimensions of social innovation, which affect the potential of social innovation, their scope, and their impact. In addition, this cross-cutting thematic analysis will enable us to identify key policy issues of citizen empowerment, access to finance, scaling-up models, skills and training, social entrepreneurship and collective creation and diffusion. On the basis of a better understanding of the features and characteristics of social innovation, its capacities for changing society will be demonstrated and an analytical compendium for its development in different thematic and/or policy fields as well as on a cross-cutting level will be provided.

3 METHODOLOGY

3.1 UNIQUENESS OF THE SI-DRIVE APPROACH

SI-DRIVE is characterised by a unique systemic approach to analyse social innovation against a comprehensive societal background incorporating the predominant cultural and historical contexts as well as the determining governance models. Therefore, the SI-DRIVE approach is going further than previous concepts which are concentrating on gathering examples of successful practices aiming at delivering concepts and methods of and for successful social innovations.

While the concept of Social Entrepreneurship - which bears a strong relation to traditional economic models (up-scaling, successful market introduction of ideas and products)² – has been the centre of attention, against the background of complex and increasing societal challenges the contribution of social innovations to systemic or transformative change is becoming more and more relevant in the last years – going beyond entrepreneurship related concepts.

Other empirical analyses focus on successful local or regional models of social innovation (Crises / Moulaert, WILCO – Welfare Innovations at the Local level in favour of Cohesion) or on specific areas or sectors (such as LIPSE, Learning from Innovation in Public Sector Environments; or INNOSERVE, Social Platform for Innovative Social Services). Again, mainly successful models are in the centre of interest, conducted and explained by *case studies*. Within the last years mapping³ approaches could be found in a growing number of social innovation projects: Pelka/Terstriep (2016) listed 17 European projects using different types of mapping, aiming on specific target groups and aspects like citizen engagement (TEPSIE) or economic underpinning (SIMPACT), management framework (CASI) or incubation (BENISI), the identification of innovative service practices (INNOSERVE) or focusing on the public (LIPSE) and third sector (CrESSI, TSI, ITSSOIN).

SI-DRIVE is going beyond and giving a ground for these specific and sector related research approaches by aiming at a *comprehensive and systematic analysis*, focusing on the *main societal challenges* reflected by *different policy fields* and *mapping social innovations all over the world*. The developed methodology is *combining qualitative and quantitative research* fulfilling the gaps and constraints of each methodology in a complementary and interrelated way:⁴ Beneath qualitative research (reviewing and reporting social innovation

² See e.g. the results of the SELUSI project about social enterprises in Europe (www.selusi.eu).

³ Coming from geography and cartography the term “mapping” is used in social sciences more and more for data gathering and graphical (special, content related) analyses and presentations in the sense of giving an overview over concepts, contents, and processes. Also within the geography science community a broader definition of “mapping” than a just spatial cartography is appearing (cf. Ball/Petsimeris 2010).

⁴ E.g. Myers (1997) and Mingers (2001) argue that although most researchers conduct either qualitative or quantitative research, some researchers recommend combining them in one study. Furthermore, Stake (1995) notes that qualitative researchers look for understanding the interrelation of the phenomenon, whereas, quantitative researchers are keen on finding the explanation for and controlling the phenomenon. Das (1983 cited in Amaratunga et al., 2002, p. 23) argues that “qualitative and quantitative methodologies are not antithetic or divergent; rather they focus on the different dimensions of the same phenomenon”. Also according to Johnson et al. (2007), the mixed research of SI-DRIVE is a synthesis that includes ideas from both qualitative and quantitative research.

relevant theories and state-of-the art) SI-DRIVE is - *for the first time* - conducting a *quantitative mapping of more than 1.000 social innovation cases all over the world*.

Thus, SI-DRIVE is mapping cases gathered from the whole world of social innovation reflecting both geographical areas and policy fields - incorporating the diversity and plurality of concepts and understanding, objectives and actors and their diverse roles within a social innovation process.

Against this background SI-DRIVE is conducting an *explorative* inventory of a growing and varying area. For the first time in social innovation research we will have an empirical dataset of 1.005 social innovation cases all over the world with a focus on Europe:

- reflecting the diversity, broadness and usability of social innovation
- proving the variety of actors and their interaction and
- exploring the systemic character and concept of social innovation.

Additionally, SI-DRIVE is also innovative in its research procedure because of its *cyclical approach* in the form of a double *iteration loop* improving theory, methodology and policy after two empirical stages. Accordingly, significant parts of establishing an integrated theory of social innovation will be delivered through *inductive* appraisal and improvement of empirically obtained data. Furthermore, on the one hand it clearly distinguishes SI-DRIVE from scientific procedures, where empirical research and practice is informed by existing theories only in a top-down manner – and on the other hand it differs as well from more practice related developments, lacking a sound theoretically based concept and framework.

The iterative research process is characterised by two empirical phases based on and feeding the three research pillars of SI-DRIVE: theory, methodology and policy. Starting with a first theoretical and methodological, as well as a first policy and foresight framework this was laying the ground for the contents and methods of the first empirical phase: the global mapping. The empirical results will feed in the improvement of these three pillars, laying the ground for the second empirical phase: the in-depth case studies. In the end, the results of both empirical phases will lead to the final theory, methodology and policy and foresight recommendations of SI-DRIVE.

Thus, the chosen triangulation and combination of quantitative and qualitative methods has also a sequential aspect: While the quantitative approach is more appropriate for the analysis of 1.000+ social innovation cases, the qualitative methodology is more relevant for the in-depth case studies (based on the quantitative and qualitative analysis of the first empirical phase).

Iterative Process: Two Empirical Phases Based on and Feeding Theory – Methodology – Policy Development

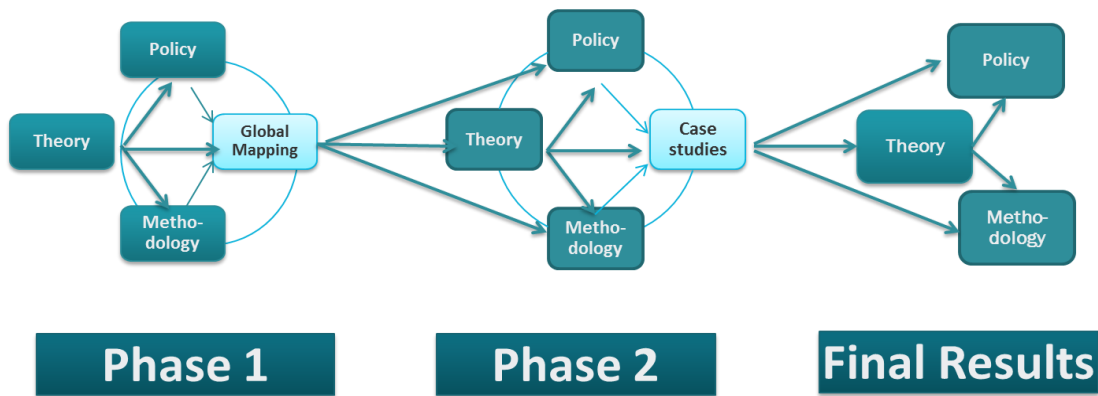


Figure 1: Continuously Updated Research Cycle

In its iterative construction the SI-DRIVE methodology will be *deductive* in the sense that a sound theoretical framework is building the ground and structure for the empirical research (mapping phases) but as well *inductive* by improving the existing theoretical framework through empirical evidence (see figure below).

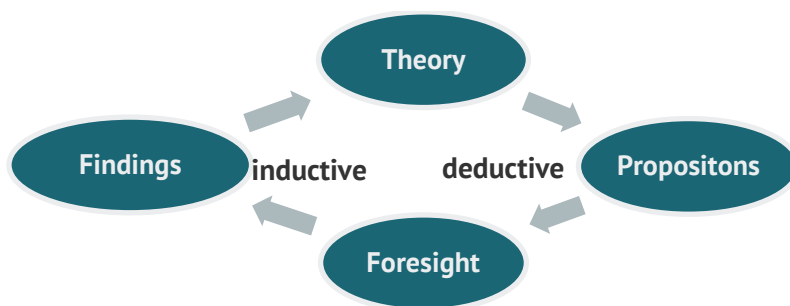


Figure 2: Deductive-Inductive Approach

According to e.g. Saunders et al. (2007) the inductive approach is used to collect data and develop a theory as a result of the data analysis, the deductive approach is used to develop a theory, and then design a research strategy for testing that theory. SI-DRIVE is integrating both perspectives: Combining deductive and inductive research will enable SI-DRIVE cross-validation and refinement of the research propositions proposed in the project.

3.2 FIRST EMPIRICAL PHASE: GLOBAL MAPPING IN FOCUS

The first empirical phase as such is based on the *theoretical analysis* of SI-DRIVE (cf. Critical Literature Review, Howaldt et. al. 2014a) providing a multidisciplinary literature review of existing theoretical and conceptual strands related to social innovation and its relationship

to social change. The critical literature review lays the foundation for a theoretically sound and comprehensive concept that includes the process dynamics of social innovation and the enhanced roles of citizens, communities, non-profits and other actors previously not prominent in the innovation process. Connecting social innovation research with experience in existing studies, explicitly including studies on technological and business innovations, helped to clarify the scientific concept and to develop a framework for the methodology and empirical analysis of social innovation in the seven policy fields. The comprehensive working definition of social innovation and the developed *five key dimensions* of social innovation have been essential in the analyses of differences and commonalities between social innovations in the *seven policy fields* and to understand how social innovations develop and spread under different conditions in relation to *cross cutting themes*.

The first empirical phase (mapping 1: global and baseline mapping) is consisting of five elements, each having a different focus:

1. Policy Field Reports:⁵ focusing on policy field related challenges and contexts of SI practices (practice fields)
2. Regional Report:⁶ focusing on general regional SI strategies worldwide
3. Data collection for Mapping 1 (Database of 1.000+ SI cases): focusing on a worldwide collection of SI cases (projects/initiatives clustered by practice fields)
4. Social innovation database screening:⁷ focusing on already existing databases and making existing cases accessible.
5. Explorative Policy and Foresight Workshops: leading to first policy briefs of the seven policy fields and an overarching international round table policy brief.⁸

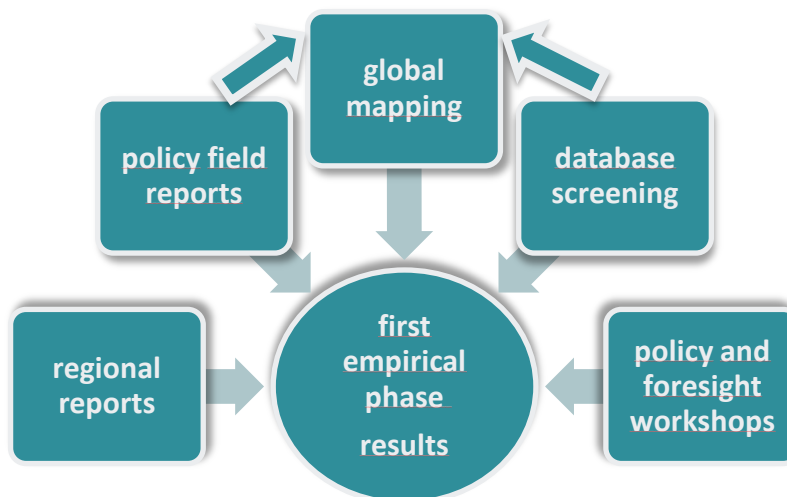


Figure 3: Elements of the First Empirical Phase

⁵ SI-DRIVE deliverable D3.4 Compiling Report (Scoppetta 2015) and deliverables D4.1 to D10.1 Policy Field Reports: Education, Schröder et al. 2015; Employment, van der Torre et al. 2015; Environment Budde et al. 2015; Energy Supply, Boonstra et al. 2015; Transport and Mobility, Butzin et al. 2015; Health and Social Care, Boelman et al. 2015a; Poverty Reduction and Sustainable Development, Millard et al. 2015

⁶ SI-DRIVE Deliverable D3.6, Boelman et al. 2015b

⁷ SI-DRIVE Deliverable D3.1, Scoppetta/Ecker 2014

⁸ SI-DRIVE Deliverable 11.3 (diverse authors 2015), 11.4 (Dhondt/Weber 2016)

There are important synergies and interrelations but no overlaps between the different activities, because each element is focusing on a different perspective; combining them provides a comprehensive picture of social innovation. The data collection survey of the mapping is mainly a quantitative description of social innovation cases (including open questions for qualitative descriptions and clarifications), the Policy Field Reports contextualize the relevant European challenges and the social innovation “answers” to them and the Regional Report is summarizing the social innovation strategies within the global SI-DRIVE regions from a regional perspective. The external database screening was a resource of already listed social innovation cases SI-DRIVE made use of for the mapping.

The *mapping* will be in focus of the following comparative analyses, because of its novelty and due to the fact that the outcomes of the other elements were already described in detail.⁹ However, their results will be reflected by illustrating and interpreting the quantitative results or showing additional or contradictory aspects.

3.2.1 Theory-based Framework for the Empirical Work

The novel empirical research is based on a global survey of social innovations mapping the “World of Social Innovation”, combining the regional perspective with the selected policy areas. Additionally, the fieldwork was designed by the developed main theoretical strands: taking the comprehensive definition of social innovation as a basis, combining initiatives and projects to practice fields, looking at the improved key dimensions of social innovation and social change and its related cross-cutting themes; focusing on the seven policy fields; and integrating different contextual facets of cultural backgrounds.

The comparable structure of all SI-DRIVE research **instruments** (for the qualitative reviews and the quantitative mapping) is based on the working definition of social innovation and the developed key dimensions. We are looking at the **new social practice defined as:**

- a new combination or new configuration of social practices
- in certain areas of action or social contexts
- prompted by certain actors or constellations of actors
- in an intentional targeted manner with the goal of better satisfying or answering needs and problems than is possible on the basis of established practices
- socially accepted and diffused (partly or widely) throughout society or in certain societal sub-areas, and
- finally established and institutionalised as a new social practices.

This working definition also foresees that, depending on circumstances of social change, interests, policies and power, successfully implemented social innovations may be

⁹ See SI-DRIVE deliverable D3.4 Compiling Report (Scoppetta 2015) and deliverables D4.1 to D10.1 Policy Field Reports: Education, Schröder et al. 2015; Employment, van der Torre et al. 2015; Environment Budde et al. 2015; Energy Supply, Boonstra et al. 2015; Transport and Mobility, Butzin et al. 2015; Health and Social Care, Boelman et al. 2015a; Poverty Reduction and Sustainable Development, Millard et al. 2015; D3.1, Database Screening, Scoppetta/Ecker 2014; D3.6 Regional Report, Boelman et al. 2015b; D11.3 Policy and Foresight Workshops (diverse authors 2015), and International Policy Round Table D11.4, Dhondt/Weber 2016.

transformed, established in a wider societal context and ultimately institutionalised as regular social practice or made routine.

Based on this definition SI-DRIVE is differentiating between the **macro level** of **policy fields** the **micro** and **meso level** levels of “**social practices**” and related “**projects/initiatives**”:

- “**practice field**” is a general type or “summary” of projects and expresses general characteristics common to different projects (e.g. micro-credit systems, car sharing).
- “**project/initiative**” is a single and concrete implementation of a solution to respond to social demands, societal challenges or systemic change (e.g. Muhammed Yunus’ Grameen Bank which lends micro-credits to poor farmers for improving their economic condition, different car sharing projects or activities at the regional-local level).

Main theoretical portfolio of the mapping and analysis of social innovation cases and the reporting are the **five key dimensions**. This means, the review and mapping of social innovation practices:

- describe **concepts and understanding** (analytical concept: social practice)
- are based on and addressed to **social demands, societal challenges** (and systemic changes, if feasible)
- describe **resources, capabilities and constraints** including capacity building, empowerment and conflict
- embed **governance, networking and actors** (functions, roles and sectors) for social change and development
- document the different phases of the **process dynamics** (mainly: mechanisms of diffusion: imitation, social learning; relationship to social change).



Figure 4: Key Dimensions of Social Innovation

Next to the definition of social innovation and the five key dimensions, **additional research dimensions** are:

- **Policy Fields:** (1) education, (2) employment, (3) environment and climate change, (4) energy, (5) transport and mobility, (6) health and social care, (7) poverty reduction and sustainable development
- **Cross-cutting themes:** (1) Information and communication technologies (ICT) and social media; (2) social entrepreneurship and social economy, social enterprises; (3) gender, equality and diversity; (4) demographic change; (5) migration; (6) empowerment; (7) human resources, knowledge; (8) governance and (9) other
- **Sectors of society:** public, private business, and civil society (including NGOs and NPOs)
- **World Regions** (Cultural Background):
 - Europe (North, West, East, South)
 - Other world regions: Russia, North and Latin America, Australia / New Zealand, South-Eastern Asia, Western Asia (Near and Middle East), (Sub-Saharan and Northern) Africa.

3.2.2 Description of the Mapping Base

The *quantification* of more than 1.000 social innovation cases all over the world was done by international experts of the SI-DRIVE consortium, embedded in and representing the seven policy fields and the different global regions and their specific context. This global selection and collection has led to a comprehensive picture of world regions' and policy fields' related cases.

The data was collected in 2015 utilising an *online questionnaire* of a set of 50 *open ended and standardised questions*, mainly structured by the key dimensions. The information and data were collected by the regional experts of the SI-DRIVE partners (see list at the beginning of this report) through preparatory desk research and short interviews of the initiatives (see the list of key dimensions and indicators/variables introducing the results of the first empirical phase in table 1 below).

It has to be acknowledged that a case was defined as a relevant social innovation (project or initiative and related social practice field) by the experts in the regions (project partners, advisory board members) based on the guidelines and instructions provided. Despite the fact that a case had to correspond to SI-DRIVE's definition, the mapping may be biased due to the experts' understanding of social innovation, their knowledge and the dependence of publicly available information on social innovation cases. However, the given framework (critical literature review, questionnaire) and the already obtained activities (policy field and regional reviews) led together with the methodological instruction to a *common* comprehensive understanding and view on the world of social innovation.

Dimension / Indicator / Variable	Quantitative	Qualitative
Basic Information		
Country of main representative/contact person of the project	X	
Gender of the main representative person	X	
Key Dimension: Concepts and Understanding		
Innovative solution / character		X
Key Dimension: Social Needs / Societal Challenges		
Practice Field	X	X
Sectors involved in the Practice Field	X	X
Ranking of Policy fields	X	
Cross-cutting-themes	X	
Societal level(s) the project is addressing	X	X
Key Dimension: Resources, Capabilities, Constraints		
People: employees, volunteers, external advisers, other involved persons	X	
Budget and Funding	X	
Drivers	X	
Barriers / Strategies to overcome barriers	X	X
Key Dimension: Actors, Networks, Governance		
Project partners: Country, sector, type, type of main support	X	
Main implementing body	X	X
Addressed target group		X
Involvement of users/beneficiaries	X	X
Coordination and management structures and objectives		X
Relation to a social movement, policy programme, umbrella organisation, network	X	X
Key Dimension: Process Dynamics		
Year the project started	X	
First motivation/trigger for initiating the project	X	
Current project stage	X	
Country/Countries the project is currently implemented	X	
Transfer and scaling	X	
Outcome		X
Spread/diffusion		X

Table 1: SI-DRIVE Mapping: Dimensions / Indicators, Variables

3.2.3 Representativity: Reflecting the Broad Understanding of Social Innovation

Social innovation is a concept which is increasingly discussed and promoted in the different world regions (cf. Boelman/Heales 2015). Although the status of social innovation activities and initiatives is varying there is a growing awareness in all parts of the world. The Europe 2020 Strategy, as well as its specific Flagship Initiatives, recognises these challenges. The Flagship Initiative on the Innovation Union clearly stipulates the importance of social innovation to successfully cope with the abovementioned challenges. Similar to the European Commission (EC), many governments of European Member States, other states (e.g. Australia, Canada, China, Colombia, New Zealand, the USA) and UN Organisations, acknowledge social innovation as essential to ameliorate future innovate on policies. This trend stresses the need for a fundamental broadening of perspective.

SI-DRIVE is fundamentally reflecting this by its comprehensive working definition of social innovation and the collecting procedure of the global mapping. Although the database is explorative and not representative in a statistical way the 1.005 social innovations are representing social innovation in its broad variety and diversity across the world regions of SI-DRIVE. The methodological combination of this quantitative data with qualitative reviews of the state-of-the art in the policy fields and the world regions' strategies is

proving the reliability and validity of the data (esp. by the following in-depth case studies, empirical phase 2).

Due to the *explorative* character of the SI-DRIVE empirical research and the *openness* for diverse understandings and concepts of social innovation it was not intended to conduct a statistically representative survey, based on a random sample.¹⁰ Because we do not know the main unit or basic population, a representative sample is not feasible. In the end, SI-DRIVE is aiming at a theoretical framework and typology defining and characterising the world of social innovation, delivering a sound ground for further research and practices.

The main objective to represent the broad diversity and variety of the world of social innovation is reflected by the *main characteristics of the population* as appearing in the global mapping:

- **Broad diversity and variety:** The broad range of practice fields and the different societal challenges and social demands covered by the initiatives are an excellent ground to develop a new typology of social innovation.
- **Distribution across all the world regions:** While all the world regions are represented, most cases are placed in Europe, because being a European funded project social innovation development and recommendations for Europe are of main interest. Nevertheless, for the comparison of social innovation in Europe with the rest of the world on an aggregate level, we find enough cases (with the exception of Australia / New Zealand) to describe first trends.
- **Current stage of the initiatives:** As most of the social innovations are already in the implementation and impact phase we have an excellent ground for analysing the development, scaling, transfer and diffusion processes, and systemic constellations and changes.
- **Existence, duration of the initiatives:** Most of the initiatives started within the last ten years (a high number was founded in the last five years); this may be a first indication of the growing importance and increasing numbers of social innovations. But for the analysis there are also long lasting initiatives, introducing a different, more institutionalised perspective. Therefore, the mapping is covering the range from recently constituted to established social innovation activities.

Again, with regard to the research interests and the methodology described above, it is evident that a quantitative analysis can only provide initial evidence for questions regarding the ambivalence of social innovation and the impact achieved. Conclusions can be drawn on the general motives and the ambitions of the initiatives' actors. But as far as societal impact is concerned, this question will be more precisely answered after in-depth case studies which do not only take a single initiative into account but which also reflect on the practice field the initiative is operating in.

¹⁰ The only guarantee to draw statistically representative conclusions for a population is to take a (random) sample of the relevant population. Therefore, you need to have a clear characteristic of the population and its societal and geographical distribution and allocation.

The following comparative analysis across the five key dimensions is a first step to an advance understanding of social innovation based on empirical data which will be complemented with in-depth cases studies (mapping 2). The primarily descriptive analysis, which in part has been enriched by plausible explanations and interpretations, provide an overview of social innovation practices across Europe and the world. Mapping 2 will deliver necessary qualitative in-depth information for the further interpretation of this quantitative data.

Except where otherwise specified, the subsequent figures and tables are mainly based on the number of initiatives mapped (N=valid cases). In some instances, percentages are calculated based on the number of naming (multiple responses) or the total number of partners represented in the initiatives (3.005 partners within the 1.005 initiatives).



4 KEY DIMENSIONS

Five key dimensions of social innovation – “Concepts and Understanding”, “Societal Needs and Challenges”, “Resources”, “Actors, Networks and Governance”, “Process Dynamics” – (cf. figure 4, chapter 3.2) have been defined in the Critical Literature Review of SI-DRIVE which on the one hand affect the potential of social innovation, their scope, and their impact and on the other hand structure and guide empirical research. Structured along the five key dimensions, this section presents the key findings of the global mapping.

As already described the mapping results are based on a dataset collected by a questionnaire containing about 50 questions to be answered for every initiative (cf. table 1, chapter 3.2.2). Some of the questions can be clearly allocated to one of the five key dimensions, while others are located at the intersection of two dimensions, and some questions are of transversal nature. For example, the question which project stage the initiative is currently in is relevant for the “process dynamics” dimension (chapter 4.5). To what extent the initiative is related to a social movement, policy programme, umbrella organization or network is certainly of interest for analyses of “actors, networks and governance” (chapter 4.4), but also relevant for questions of process dynamics (chapter 4.5) and “resources, capabilities and constraints” (chapter 4.3) the initiative is facing. The policy field of the initiative can certainly be relevant in all analytical dimensions. This is why we classify the questions in terms of the five key dimensions wherever useful, but at the same time leaving as much interpretive leeway as possible.

The subsequent chapters are structured as follows:

1. Each chapter will provide, in one way or another, (a) a background introduction, (b) an overview of empirical results and their interpretation, as well as (c) an outlook including open questions to be answered in the upcoming second empirical phase of 70 case studies.
2. Having the defined purpose of the first mapping in mind, results and interpretation will (a) explore key issues that are pertinent to the support/success or detriment/failure of the cases, (b) start outlining possible trends and drivers that will shape the future of social innovation in the respective areas, and (c) classify what can be observed in reality in order to later develop a typology of social innovation. These are the underlying orientations of the analysis.
3. The dataset is checked for answers to the eight main research foci developed in the Critical Literature Review (cf. Annex 7.1). While these comprehensive research foci can certainly be answered to a large extent only after the case studies, the quantitative and qualitative analysis of the mapping will provide first insights.
4. The seven policy fields are considered as an overarching analytical category relevant in all five dimensions as are the world regions. First empirical results concerning both the policy fields reports and the regional report are presented in this comparative analysis; an in-depth analysis of policy field results will be done by the respective work package groups. Where relevant the outcomes of the first policy and foresight workshops will be integrated as well, this is mainly concerning governance, drivers and barriers.

Key Dimensions



In sum, guided by the “probe” of the pentagon of key dimensions, the analysis will shed light on the differences and commonalities of social innovation around the world.



4.1 CONCEPTS AND UNDERSTANDING OF SOCIAL INNOVATION

This chapter provides insight into the first dimension of SI-DRIVE's pentagon and therewith lays the ground for the analysis of the other four key dimensions (chapters 4.2 to 4.5). It can be considered as a kind of “extractive distillation” of the core aspects forming the general concept and understanding of the social innovation.

4.1.1 Background of the Analysis

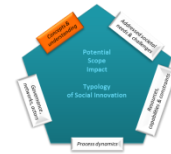
The importance of social innovation for successfully addressing the social, economic, political and environmental challenges of the 21st century has been recognised not only within the Europe 2020 Strategy but also on a global scale. So *“in recent years, social innovation has become increasingly influential in both scholarship and policy”* (Moulaert et al. 2013a, 1). This boom of social innovation is not only proven by its growing importance in public discussions (e.g. on a new innovation paradigm) but also by its supposed potential for solving recent and upcoming crises (e.g. refugee relief, economic and financial crises, unemployment) and the increasing number of (public) programmes initiating and supporting social innovations on the local, regional, national and global level (cf. the SI-DRIVE Policy Field Reports: Schröder et al. 2015; van der Torre et al. 2015; Budde et al. 2015; Boonstra et al. 2015; Butzin et al. 2015; Boelman et al. 2015; Millard et al. 2015).

However, despite the growing perception of social innovations' relevance, a sustained and systematic analysis of social innovation, its theories, characteristics and impacts is still lacking. A plethora of vastly diverging subject matters and problem dimensions as well as expectations for resolving them are subsumed under the heading *social innovation* without appropriate distinctions being made between various social and economic implications, the conditions governing its inception, its genesis and diffusion, and without clearly distinguishing it from other forms of innovation (European Commission 2013).

In light of the increasing importance of social innovation, SI-DRIVE emphasises the development of a theoretically sound concept of social innovation as a precondition to an elaborate integrated theory of innovation which considers social, business, public sector and technological innovation. This is also a precondition for a comprehensive social innovation policy.

SI-DRIVE is based on a comprehensive and analytical definition which describes social innovation *“...as a new combination or figuration of practices in areas of social action, prompted by certain actors or constellations of actors with the goal of better coping with needs and problems than is possible by use of existing practices. An innovation is therefore social to the extent that it varies social action, and is socially accepted and diffused in society (be it throughout society, larger parts, or only in certain societal sub-areas affected).”* (Howaldt et al. 2014b, pp. 151) This definition of social innovation allows integrating the many different (and sometimes conflicting) meanings of social innovation and offers a new perspective on the diversity of the concept of social innovation.

By referring to “social practices” the concept allows to understand how social innovations encompass new practices – concepts, policy instruments, new forms of cooperation and



organisation – and methods, processes and regulations that are developed and/or adopted by citizens, users, beneficiaries, customers, entrepreneurs, politicians etc. in order to meet social demands and to resolve societal challenges in a better way than existing practices. In this perspective the research focuses on analysing the process of invention, implementation (introduction to a context of use), diffusion and institutionalisation of new social practices in different areas of social action. Concerning the follow-up in-depth case studies a great deal of attention should be devoted to better understanding the relationship to technological innovation as well as to innovation oriented at creation of economic rather than social value.

4.1.2 Results of the Global Mapping

The above stated variety and diversity of social innovations are sustained and underlined by the results of the global mapping. In particular, the results indicate a growing importance of social innovations on a global scale, which are embedded in diverse and connected practice fields. New innovating and adopting innovation practices appear, often embedded in networks, umbrella organisations, policy programs or social movements.

Furthermore, the comprehensive understanding of social innovation reveals its unexploited potential and unclear perception of the concept. A common and accepted concept of social innovation has to address different sectors, various types of partners, policy fields and cross-cutting themes as well as aspects of empowerment, user involvement and human resources - stressed as a driving force and necessary precondition of and for social innovations.

4.1.2.1 Growing Importance of Social Innovation on a Global Scale

The results of the global mapping reveal the importance of social innovation addressing social, economic, political and environmental challenges of the 21st century on a global scale. Recent years have seen this new form of innovation emerging, both as an object of research and development: Social innovations appear in a variety of forms and influence people's lives. They change the way we live together, work or handle crises. Likewise, they are driven by different societal sectors and cross-sectoral networks and individuals. There is a growing consensus among practitioners, policy makers and the research community that technological innovations alone are not capable of overcoming the social and economic challenges modern societies are facing. We find a vast and growing number of social innovation initiatives all over the world, reflected as well by the global mapping of more than 1.000 cases in the different world regions of SI-DRIVE.

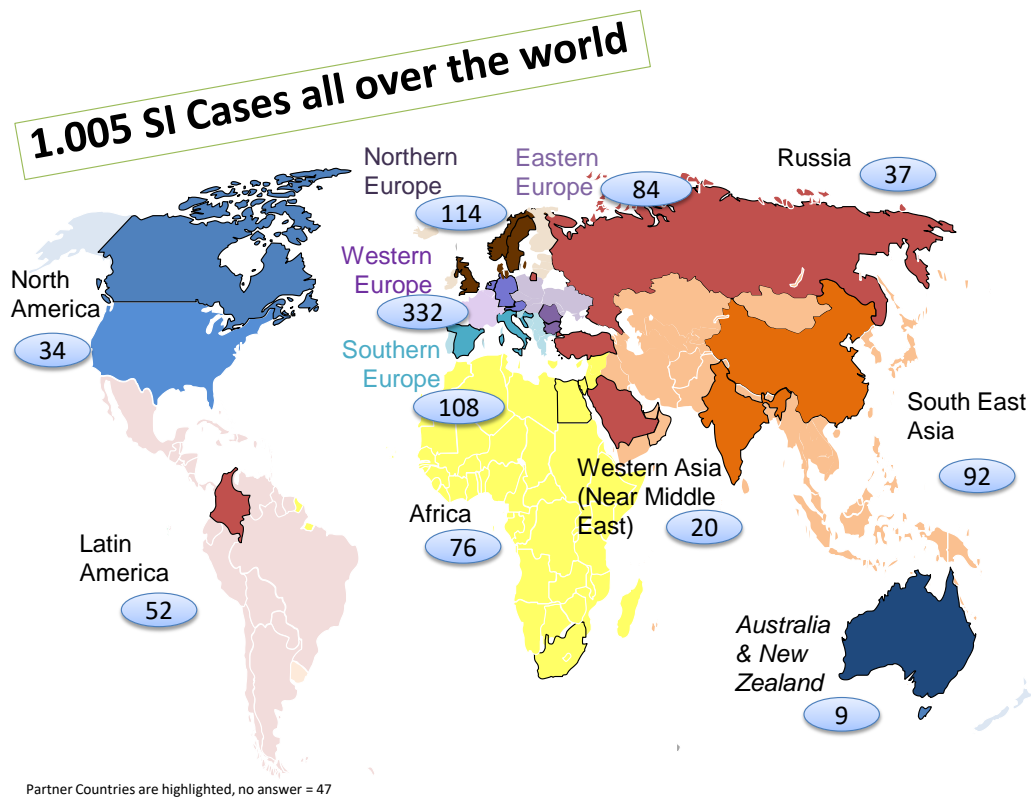


Figure 5: Worldwide Mapping of SI-DRIVE (Region, where the social innovation was implemented)

Moreover, a high number of recent initiatives (started between 2011 and 2015) point to an acceleration of social innovation. 42% of the initiatives started in the last five years, additional 30% in between 2006 and 2010, which means that about 3 of 4 initiatives in our sample were created within the last ten years.

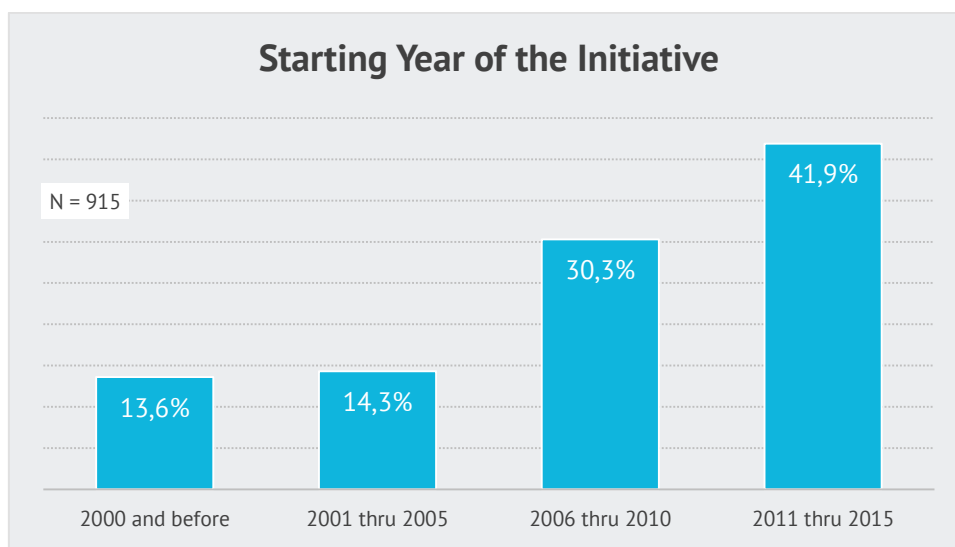


Figure 6: Starting Year of the Initiative (2000 – 2015)



Taking a closer look at the social innovations initiated in course of the past ten years, it becomes evident that from a spatial perspective the share of young initiatives in Europe (45%) exceeds the share of non-EU countries.¹¹ In particular, this applies to Eastern and Southern Europe where more than half of the mapped social innovations have been created within the last five years.

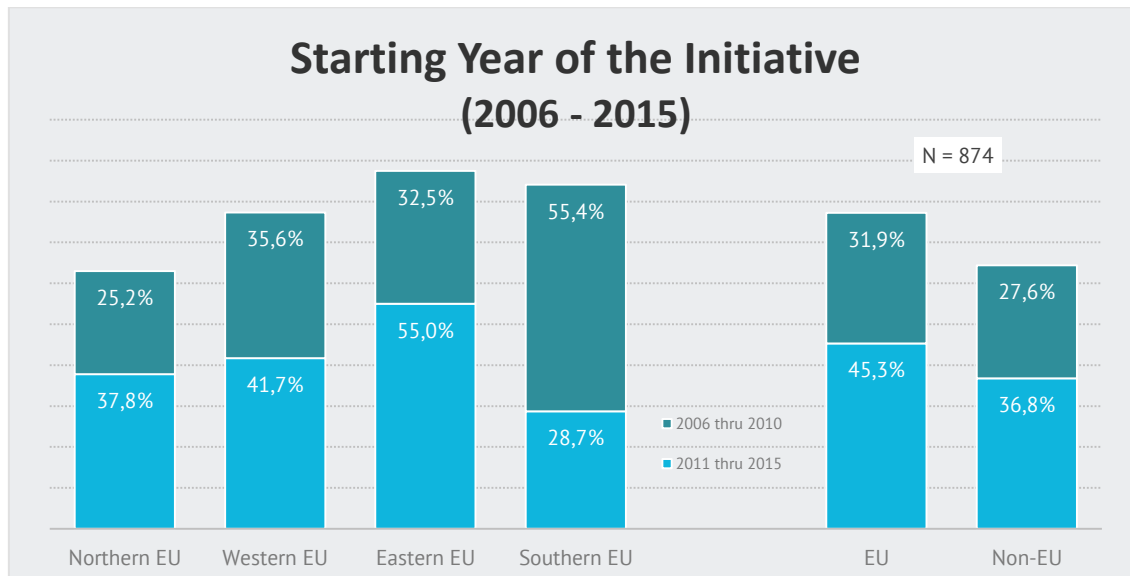


Figure 7: Starting Year of the Initiative from 2006 to 2015 (European and non-European Countries)

This result is underlined by the Regional Report (Boelman/Heales 2015, p. 7) coming to the conclusion that *“social innovation activity is growing across Europe, driven by a set of longer-standing social challenges such as demographic change or climate change, and also new and emerging challenges, such as coping with new waves of migration or the economic crisis and subsequent austerity measures. ... Despite some continuing constraints on social innovation, including but not limited to funding, there is a clear expectation and indication that social innovation will continue to grow and make an increasing contribution to tackling social and societal challenges in the coming years.”*

Besides, it has to be stated that in some of the other world regions, e.g. Latin America and the Caribbean, we can also find a clear increase of social innovation initiatives (Boelman/Heales 2015, p. 103) within the past years characterised by an high creativity. While there are a lot of well-known historic examples of successful social innovation projects in these regions, we also identified a growing number of new initiatives that started within the past 5 years (37%).

The Regional Report reveals that the status of the social innovation activities differs in the different world regions regarding the existence of a (shared) understanding of social innovation, the dissemination of the initiatives, the societal challenges addressed, the

¹¹ Because of the small numbers of cases within the different non-European world regions, the analysis is mainly based on a comparison of the four European areas and contrasting the aggregated European and non-European countries.



actors involved etc. Although there is a growing awareness of the concept of social innovation as distinct type of innovation and an increasing interest by governments only in a few countries like UK, Sweden, Germany, Italy, Colombia and USA social innovation has been taken up by politics. In most of the countries there are no policy institutions with direct responsibility for social innovation (for further details see chapter 4.5.2). Nevertheless, social innovation initiatives, while partially not being labelled as such, do exist in all world regions. But the *status of concept development* is difficult to assess: In some regions the concept of social innovation is becoming widely discussed in academia, policy and civil society, other regions either have a clear understanding of the concept, but cannot differentiate it from other concepts such as social entrepreneurship or they are not acquainted with a social innovation concept at all. Regarding the *future prospects* of social innovation, the experts of most of the regions are expecting a raising number of initiatives and a further uptake by policies and politics.

4.1.2.2 Diverse and Connected Policy and Practice Fields

With regard to the policy fields under investigation, the seven policy reports reveal a strong need for social innovation to overcome the policy area related societal challenges and social demands. In every policy field we find a growing number of social innovation initiatives addressing a wide range of distinct social needs and societal challenges. Moreover, it appears that social innovation initiatives commonly are not implemented in a single policy, but affect also other policy fields. In this regard, a distinction must be made between the motives of social innovators on the micro level, i.e. response to a local social need or societal challenge, on the one hand and the core and associated policy fields as a macro level *frame of reference* on the other hand, combining e.g. employment or environment related activities with education measures to solve a local social demand.

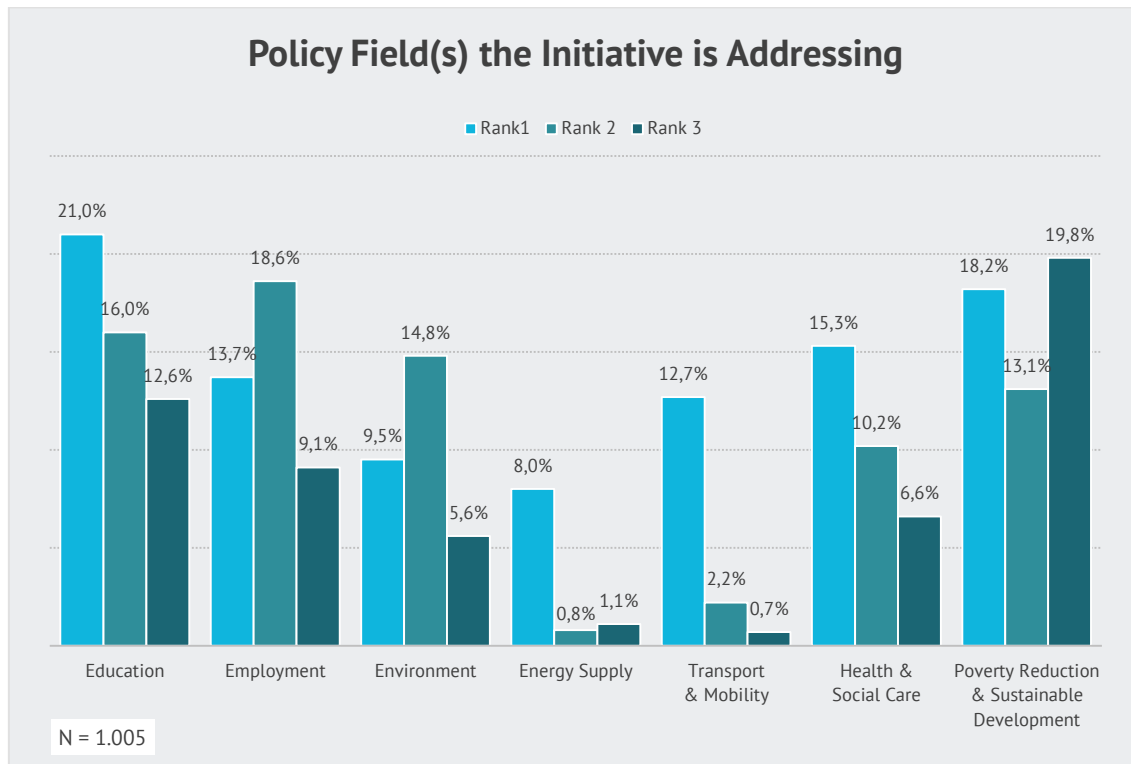


Figure 8: Policy Fields the Initiative is Addressing by Ranks

Anticipating that social innovation most likely will cover more than one policy field the mapping offered the possibility to rank the initiative to the main three policy fields (as a maximum) it is offering solutions to (rank 1 was the most important policy field). The analysis of the combinations of the ranking leads to the following interrelation between the policy fields:

- *Poverty Reduction and Sustainable Development* is a kind of cross-cutting policy field that is related to *every* other policy field, but mainly addressing education and employment, health and social care.
- A lot of cases combine solutions for *Education* and *Employment* by focusing either on employment or on education (ranking 1).
- *Environmental* initiatives are often integrating educational activities.
- *Energy Supply* initiatives and *Transport and Mobility* projects are also placed in *environmental* frameworks.
- Transport and Mobility initiatives are additionally affecting health and social care.
- Health and Social Care initiatives are also related mainly to Poverty Reduction and Sustainable Development.

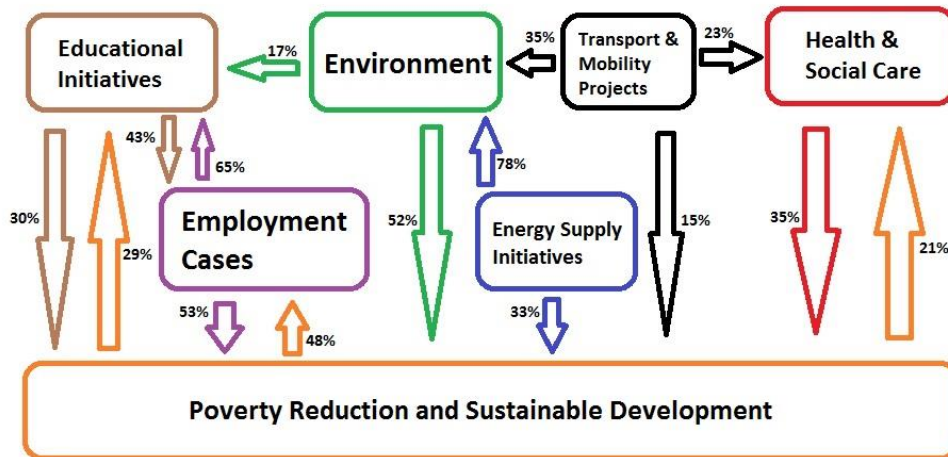


Figure 9: Interrelation of Policy Fields Addressed (%-values indicate the ranks 2 and 3 of the other policy field)

Many Policy Field Reports confirm that the societal and governance systems, in which the social innovations are embedded, are complex and the problems addressed are deeply rooted in multifaceted societal and structural issues. At the same time, we have to admit that many initiatives are small in scale: Only few of the initiatives are leaving the narrow context of the initiative and the local region, and if so, mainly scale within the own initiative (increasing target group or number of partners) or transfer within the narrow local and regional level (cf. chapter 4.5.2.6). Therefore - as we emphasized in the Critical Literature Review (Butzin et al. 2014b, p. 154) - to better understand the relationship between social innovation and social change we have to analyse the social embeddedness of any innovation in a dense network of innovation streams. In the SI-DRIVE project we have developed the concept of *the practice field* as a general type of different projects within one thematic area (cf. chapter 3.2.1). Only by taking the broader perspective of a practice field we will be able to get deeper insights into upcoming trends and emerging areas for social innovation and their impact on social change.

Based on the SI-DRIVE definition a highly diversified list of more than 90 practice fields were mapped by 1.005 social initiatives. These practice fields have to be seen *preliminary*, they will be further discussed and improved (summarised, distinguished and complemented) after the second empirical phase (in-depth case studies). The table below summarises the recently defined major practice fields (with ten or more cases) within the seven policy areas of SI-DRIVE, representing two third of all the cases). Looking at the topics of the practice fields within the policy fields, the already mentioned cross-covering of initiatives addressing more than one policy field becomes evident. In particular, this applies to the policy field “Poverty Reduction and Sustainable Development”.



POLICY FIELD / PRACTICE FIELDS	NO. OF INITIATIVES
Education and Lifelong Learning	178
Reduction of educational disadvantages	44
New learning arrangements, interactive education	41
Entrepreneurship education and promotion	18
Alternative forms of educational activities and training (towards consult, mentor)	17
New strategies and structures for lifelong learning	17
Occupational orientation, early pupils career planning	15
New digital and virtual learning environments	13
Quality improvements, setting of new educational standards	13
Employment	136
Job search support & matching	43
Training & education	31
Social entrepreneurship	26
Workplace innovation & organisational innovation	20
Working conditions and working environment	16
Environment and Climate Change	72
Alternative sustainable food production and distribution	24
Protection and restoring of ecosystems & biodiversity	19
Re-use and recycling	17
Sustainable (strategic) consuming, sharing economy	12
Energy Supply	74
Energy collectives	34
Providing examples and inspiration	16
Energy services	12
Local (domestic) production of energy	12
Transport and Mobility	59
Managing multimodality	16
Transportation for people with reduced mobility	13
Smart Working, Smart Commuting	11
Fostering alternative transport modes	10
Citizen initiated public transport	9
Health and Social Care	96
New models of care	44
E-health, m-health	21
Shift in care location	16
Integrated care delivery	15
Poverty and Sustainable Development	140
Disadvantage, vulnerability, discrimination	44
Lack of integrated support to the poor or excluded	20
Sub-standard or dangerous accommodation	15
Inadequate financial resources	14
Un-nutritious or unhealthy food	14
Unemployment or under-employment	12
Inadequate good quality work	11
Place-specific poverty or exclusion	10

Table 2: Main Practice Fields of Social Innovation (Policy Fields) (consisting of 10 or more cases)



4.1.2.3 Innovation Streams and Embedded Innovation

The internal logic of processes of imitation and social learning, which is the focus of Tarde's attention, determines the innovation process (Howaldt et al. 2014b, pp. 9). Whereas traditional diffusion research offers ex-post explanations of how individual innovations have ended up in social practice, the goal here is to develop approaches to understanding the genesis of innovations from the broad range of social practice. Special attention should be paid not so much to the transfer and modification of isolated singular innovation, but rather to multiple innovation streams, fed by an evolutionary interplay of invention and imitation. So there is a strong interactivity in the process of innovation in which imitation and adoption of solutions from other projects and initiatives plays an important role and creates new streams of innovation that mutually reinforce each other. This is underlined by the mapping results: As almost half of the initiatives are creating brand new solutions, almost the same number of initiatives is moderately or significantly modifying existing ones (see figure below).

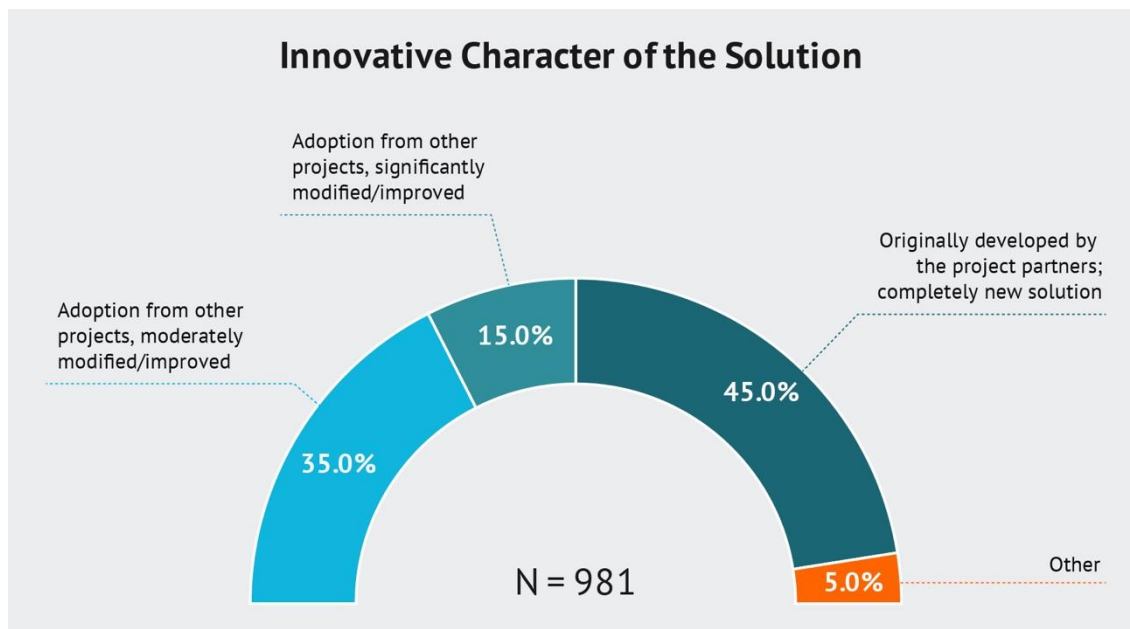
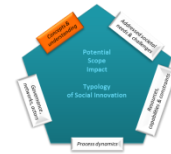


Figure 10: Innovative Character of the Solution

The descriptions of the innovative solution were collected through an open question and were summarised according to the lines of a practice theory inspired definition of social innovation and complemented by the service and technology dimension of innovations. Therewith, the classification of the “innovative” character followed the innovator's emphasis of the solution. Hence, a similar project might for example be described as a new concept by one practitioner while promoted as a new form of cooperation by another. The following innovative orientations or characters appeared:¹²

¹² It has to be mentioned, that these orientations and characters of the innovativeness are indirect and deduced by the partners of SI-DRIVE. The direct view of the innovators will be surveyed within the in-depth case studies.



- new concept, i.e. the innovative approach is highlighted
- new policy, i.e. the initiative emphasizes the establishment of new official guidelines or describes a pilot project by a governmental institution
- new form of cooperation, i.e. the initiative highlights that actors were brought together
- new usage of technology, i.e. the initiative depends on new technology such as ICT
- new form of participation, i.e. marginalized people gain access to community activities
- (user) involvement, i.e. the initiative involves beneficiaries in an empowering manner
- new service for target group, i.e. the initiative provides a service without necessarily aiming to empower the target group.

Whereas more brand new solutions are developed in Poverty Reduction and Sustainable Development (two out of three initiatives) and Education, Employment, Health and Social Care (about half of these initiatives), adopted and moderately improved solutions are more often appearing to solve challenges and demands in Environment and Climate Change, Energy Supply as well as Transport and Mobility (in each field approx. 50% of the initiatives). These findings may indicate that innovations streams are more developed and appear more often in already established and institutionalised practice fields of these policy fields (e.g. car sharing, sharing economy, recycling and reuse, sustainable food production and distribution, decentralized energy production).

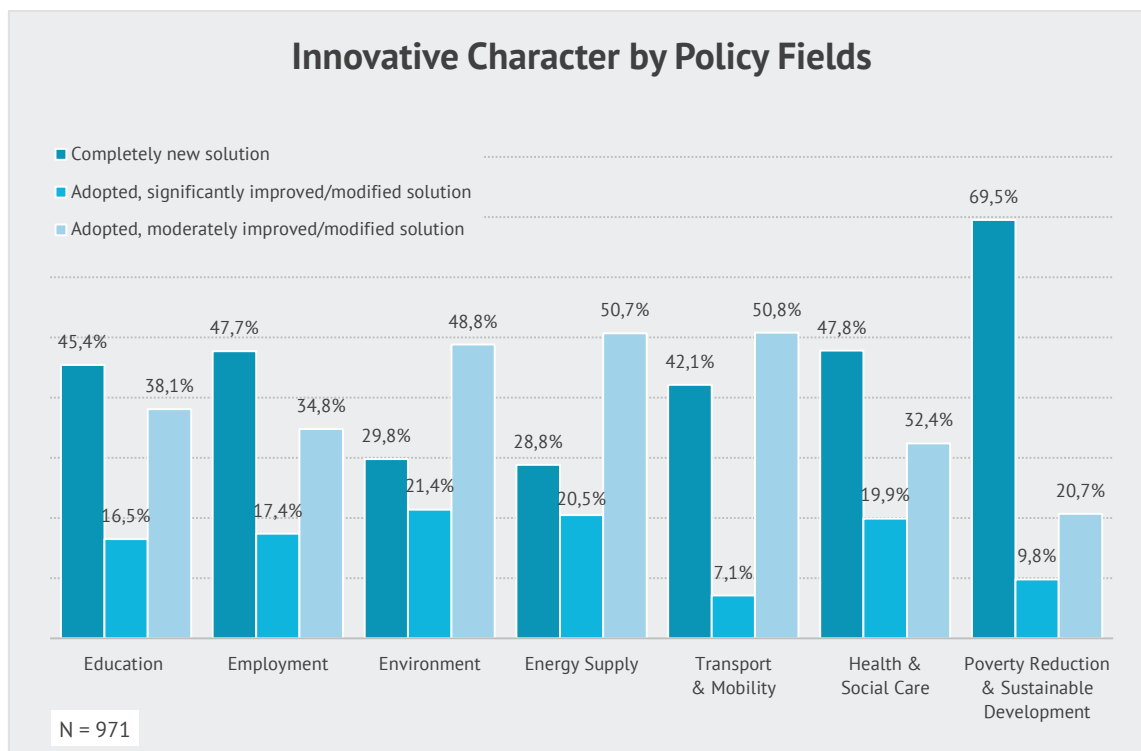
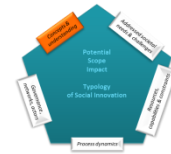


Figure 11: Innovative Character of the Solution (by Policy Fields)



As illustrated in the following table, new solutions are developed more often in Non-European countries (54%) compared to Europe (42%); within the European Union the Northern countries show a higher innovativeness with regard to new solutions than the other European regions. Europe as such, but this is especially related to Eastern and Western Europe, are more often moderately modifying or improving adopted solutions from other projects than the rest of the world. Southern Europe is more often than the other regions taking over existing solutions, but with a significant improvement.

	EU Regions				EU - non-EU	
	North	West	East	South	EU	non-EU
The solution has been originally developed by the project partners and did not exist in other areas.	51,8%	39,3%	33,3%	44,2%	41,6%	53,8%
The solution has been adopted from other projects and has been moderately modified/ improved.	28,1%	43,0%	50,6%	26,9%	38,5%	28,2%
The solution has been adopted from other projects and has been significantly (!) modified/ improved.	15,8%	11,5%	8,6%	20,2%	13,4%	14,9%
Other	4,4%	6,2%	7,4%	8,7%	6,5%	3,2%
Total	100%	100%	100%	100%	100%	100%
N	114	321	81	104	620	316

Table 3: Innovative Character of the Solution (World Regions)

No further relevant differences exist in the other variables whether it is a brand new or adopted solution, except for user involvement and barriers (chapter 4.3 and 4.5) which show slight differences: Significantly improved or modified adopted solutions involve to some extent more often users and beneficiaries (72%) than new (66%) or moderately improving ones (65%); as well they are facing more barriers in general (85% vs. 74% of the new ones), especially legal restrictions (26% of these initiatives, 17% of the brand new ones).

Social innovation initiatives are often related to overarching configurations, namely networks, social movements, umbrella organisations, and policy programmes. Our mapping results confirm this characteristic of social innovation: Compared with the total number of mapped cases between 13 and 20% of the initiatives are at least embedded in one of the four types of overarching constitutions.

In total about half of the initiatives (47%) are part of one of the overarching constitutions. While most of these initiatives (78%) are only focused on one of them, 8% are related to all four types, 14% are in all the diverse combinations (with a low number of cases in each combination, ranging from 1 to 10 cases).

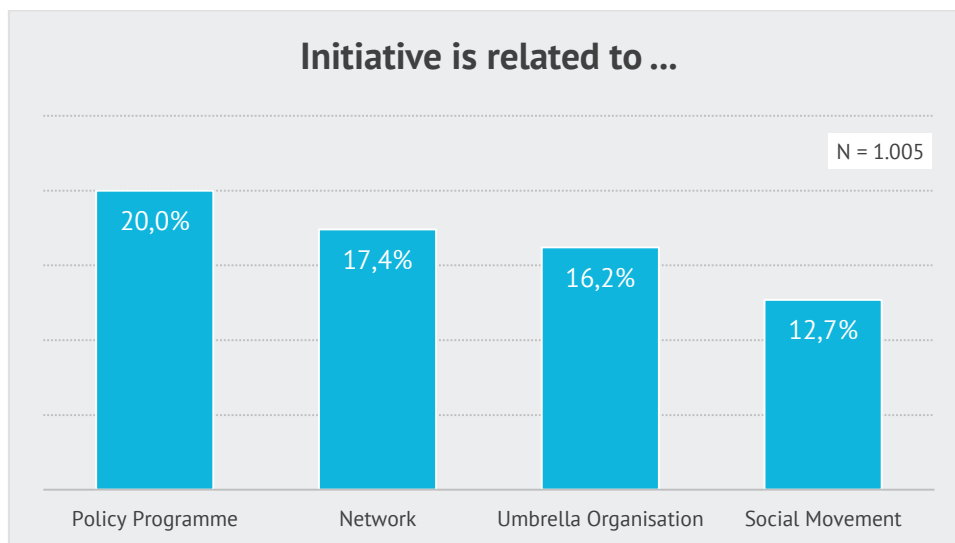


Figure 12: Connectedness of the Initiative with Overarching Configurations (multiple responses)

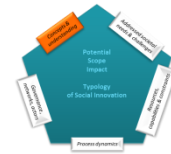
4.1.2.4 Towards a Comprehensive Understanding of Social Innovation

The global mapping uncovers countless approaches and successful initiatives that illustrate the strengths and potentials of social innovations in the manifold areas of social integration through education and poverty reduction, in establishing sustainable patterns of consumption, or in coping with demographic change. At the same time, social innovations are gaining in importance not only in relation to social integration and equal opportunities, but also in respect to the innovative ability and future sustainability of society as a whole.

Although social innovation is widely recognised as an important development phenomenon, it has traditionally been perceived as being limited in scope. One key reason for this is that for a long time, the social innovation discussion was predominantly anchored within civil society – and still is in many parts of the world (as stated in the Regional Report and Policy Field Reports). Yet such a limited understanding is not sufficient for developing the potentials of social innovation. Instead it is necessary to develop a comprehensive concept of social innovation, which looks at its various manifestations, actors and cultural contexts, and frees the term from the narrow confines of a limited rather traditional economic orientation that is focused on the concept of social entrepreneurship.

A comprehensive understanding of social innovation emphasises the different societal sectors and the surrounding ecosystem for social innovation on the scene. The ecosystem of social innovation *“is in very different stages of development across Europe, however. In all countries, though, the ecosystem is under development and there are a number of important factors enabling the development of social innovation, including important support and impetus from the EU”* (Boelman/Heales 2015 p. 7; Regional Report conclusions 2.7).

The global mapping reveals that one of the core elements of the ecosystem perspective is already very well reflected through the participation of partners from all sectors (cf. figure



below). All three sectors (public, private, civil) are represented to a high degree – ranging from 69 to 75% - in all the practice fields.

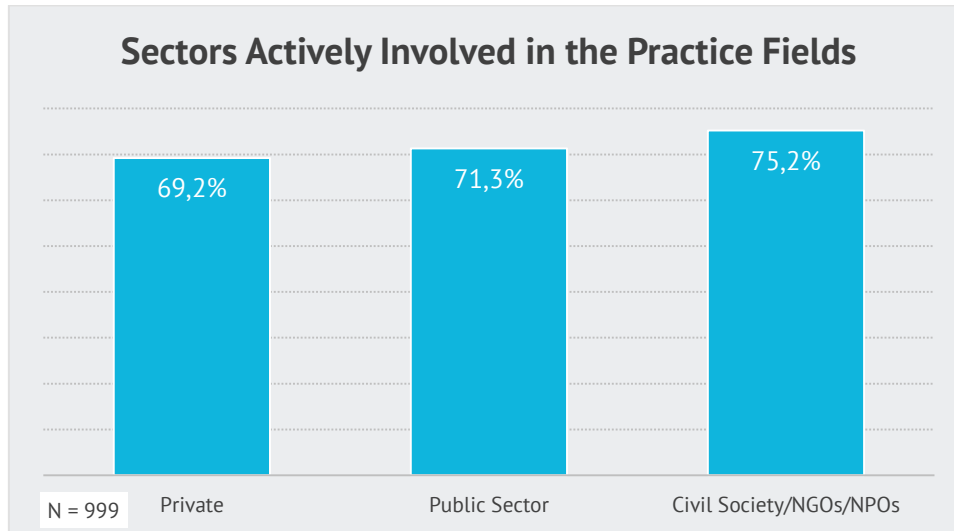


Figure 13: Sectors Actively Involved in the Practice Field (multiple response)

The cross-sectoral collaboration is underlined by the fact, that almost half of the initiatives constitute an involvement of *all three sectors* in the practice field (45%); only 23% are related only to one sector. Combinations of two of the three sectors are found in 32% of the initiatives: public sector and civil society (12%), public and private sector (10%), private sector and civil society (10%).

Although all the sectors are highly engaged in all the policy fields there are different prioritisations of the engagement in some of them (see figure below):

- While all the sectors are addressed in more or less the same way in Education and Employment,
- The *public sector* is less involved in Environment and Poverty Reduction,
- The *private sector* is more engaged in Energy Supply (and as well in Environment and Climate Change), but there is a lower involvement of this sector in Health & Social Care and Poverty Reduction initiatives,
- *Civil society* is more involved in Environment and Poverty Reduction, but less involved in Transport & Mobility.

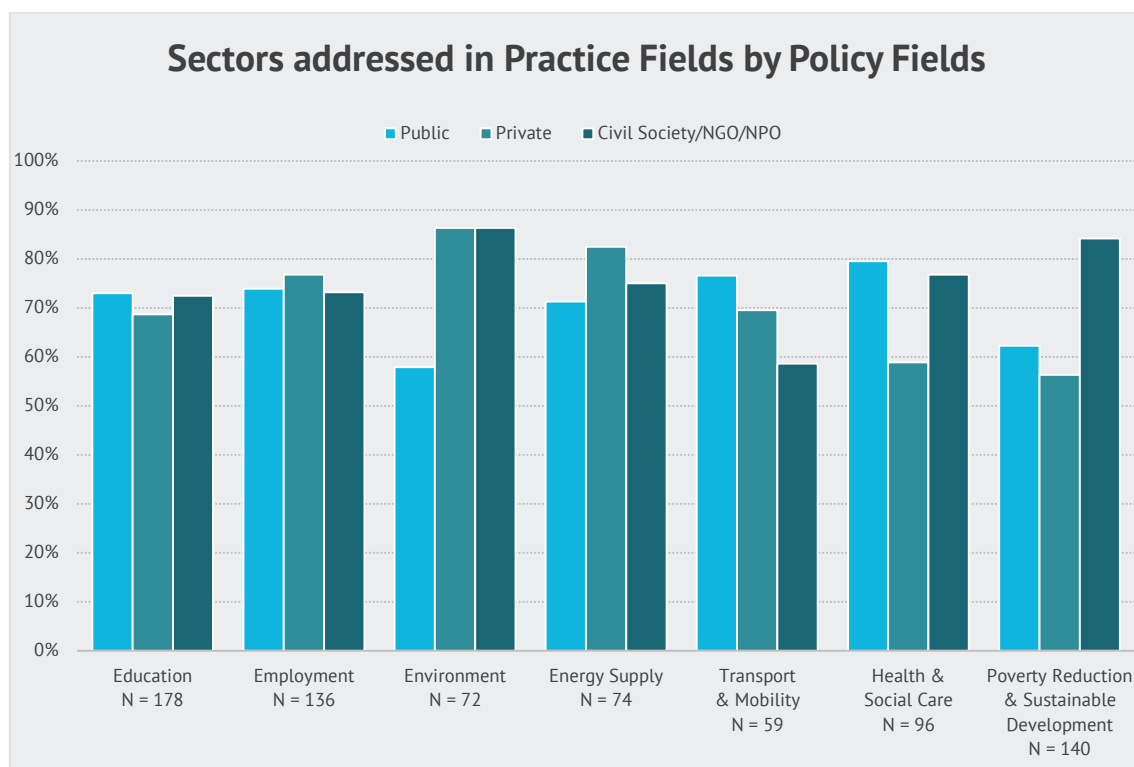


Figure 14: Sectors Engaged in the Policy Fields (% of naming in the policy field)

The cross-sectoral collaboration within the practice fields is also well reflected in the different world regions. Differences appear in the way that

- The *public sector* is more involved in Northern Europe and less often active in Eastern Europe and non-European countries.
- The *private sector* is about average represented in Western Europe and less in non-European countries.
- *Civil society* is more involved in Western and less in Northern and Eastern Europe as well as in non-European countries.

In particular the differences lead to the assumption that the cross-sectoral collaboration in non-European countries is lower than in Europe and the private sector is remarkable lower involved outside of Europe.

	EU Regions				EU - non-EU	
	North	West	East	South	EU	non-EU
Public sector	80,7	76,7	61,9	71,3	74,5	63,6
Private sector	69,3	80,6	67,9	70,4	75,2	55,7
Civil Society / NPO/NGO	72,8	82,4	71,4	76,9	78,3	70,9

Table 4: Sectors Addressed by the Practice Fields (World Regions) (multiple responses)

Considering the complexity of innovation processes, we need to focus on the cross-sector dynamics of social innovation and the diversity of actors and their roles and functions within the innovation process (including their interaction in networks etc.), on the one



hand, and the framework conditions including governance models, addressed societal needs and challenges, resources, capabilities and constraints, on the other hand.

The above is also reflected by the variety of partners engaged in social innovation initiatives as well. While in about 80% of the initiatives civil society organisations (NPO: 44%, NGO: 36%) are participating, in two of three initiatives private companies or public bodies are present too. Foundations (21%), social enterprises (14%) and ministries (13%) (as a special kind of public body) are represented on a lower level as well as universities and research institutes (together present in 21% of the initiatives).

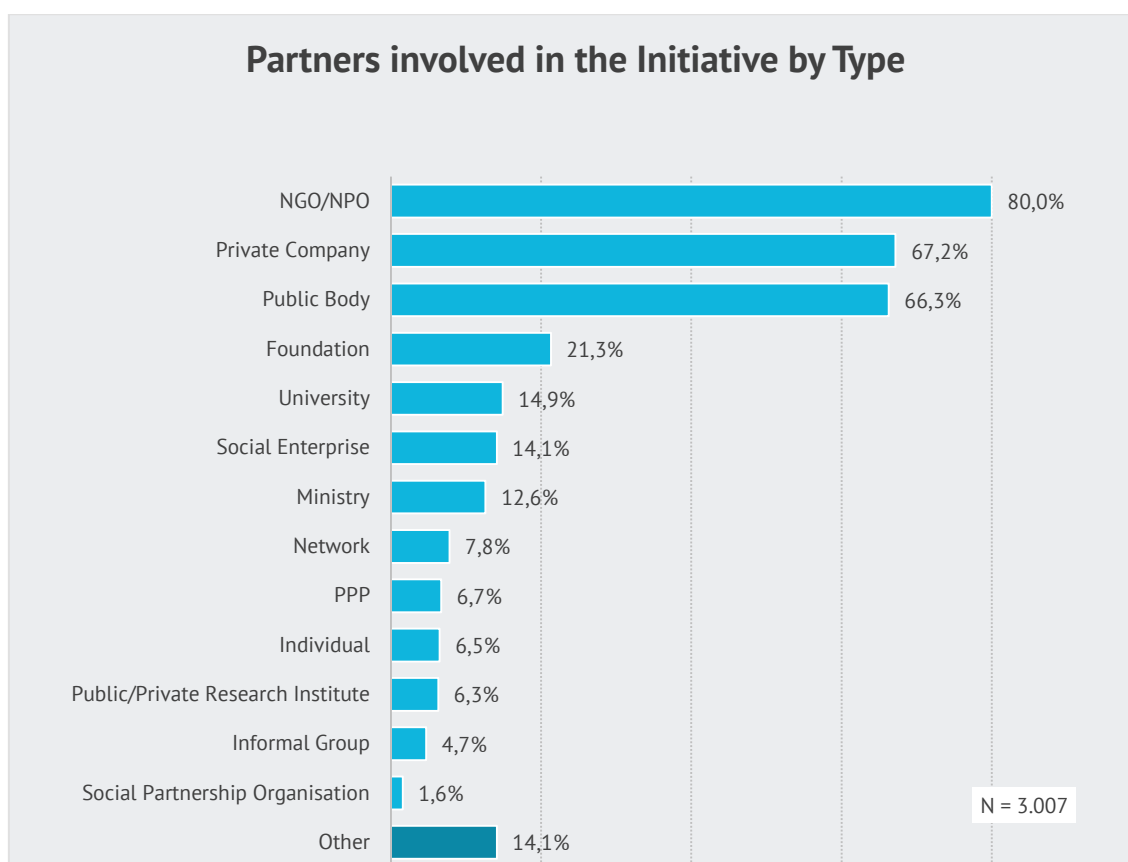


Figure 15: Partners Involved in the Initiative by Type (multiple responses, % of all engaged partners)

4.1.2.5 Empowerment, User Involvement and Human Resources – Driving Force and Necessary Precondition of and for Social Innovation

To unfold the potential of social innovation and streaming innovation the wisdom and the engagement of the crowds is necessary. This hypothesis is underlined by the mapping results concerning empowerment, user involvement and human resources.

As already mentioned, social innovation initiatives are mostly related to more than one policy field (cf. chapter 4.1.2.2), but they are also covering different crosscutting themes (see figure below). Especially empowerment (62%) and human resources/knowledge (53%) are relevant themes in more than half of the initiatives. Being high-ranked in every policy



field empowerment, human resources and knowledge are of greater importance in Education (70%/74%) and Employment (67%/65%).

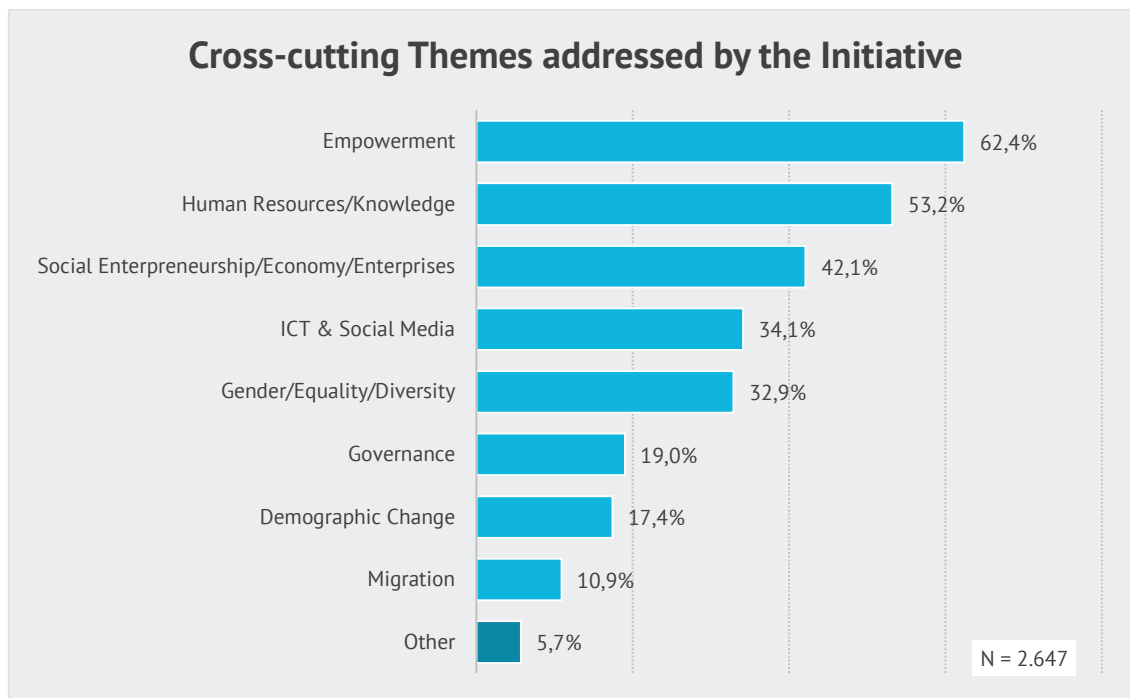


Figure 16: Cross-cutting Themes addressed by the Initiative (multiple responses, % of naming)

Next to the addressed cross-cutting themes involved partners' distinct forms of support underline the importance of human resources. The partners of the social innovation initiatives contribute to the development of the innovation not only by funding (in 72% of the initiatives, see chapter 4.3.2 and 4.4.2 for details), but also by idea development (57%) and specific knowledge (42%).

The importance of empowerment as a central component of social innovation corresponds with the integration of users as a basic principle of social innovation. While user involvement often occurs in a more indirect way, e.g. through intermediaries such as NGOs, it is particularly notable that almost half of the mapped initiatives *directly* involve user/beneficiaries, whereas only 25% do not. For additional 27% of cases no information was available.

Analysing only the cases for which information on user involvement is available results suggest a higher share of participating users in the policy fields of Energy Supply (78%), Poverty Reduction (74%), Environment and Health and Social Care (both approx. 70%), while less integration of users emerges in Education and Employment (58%, 52%) (see figure below).

With regard to the world regions, participation of users and beneficiaries is more common in Europe compared to the rest of the world (72% vs. 56%). Within the EU Northern Europe ranks first with a share of 84% of initiatives involving users/beneficiaries followed by Southern Europe (74%).

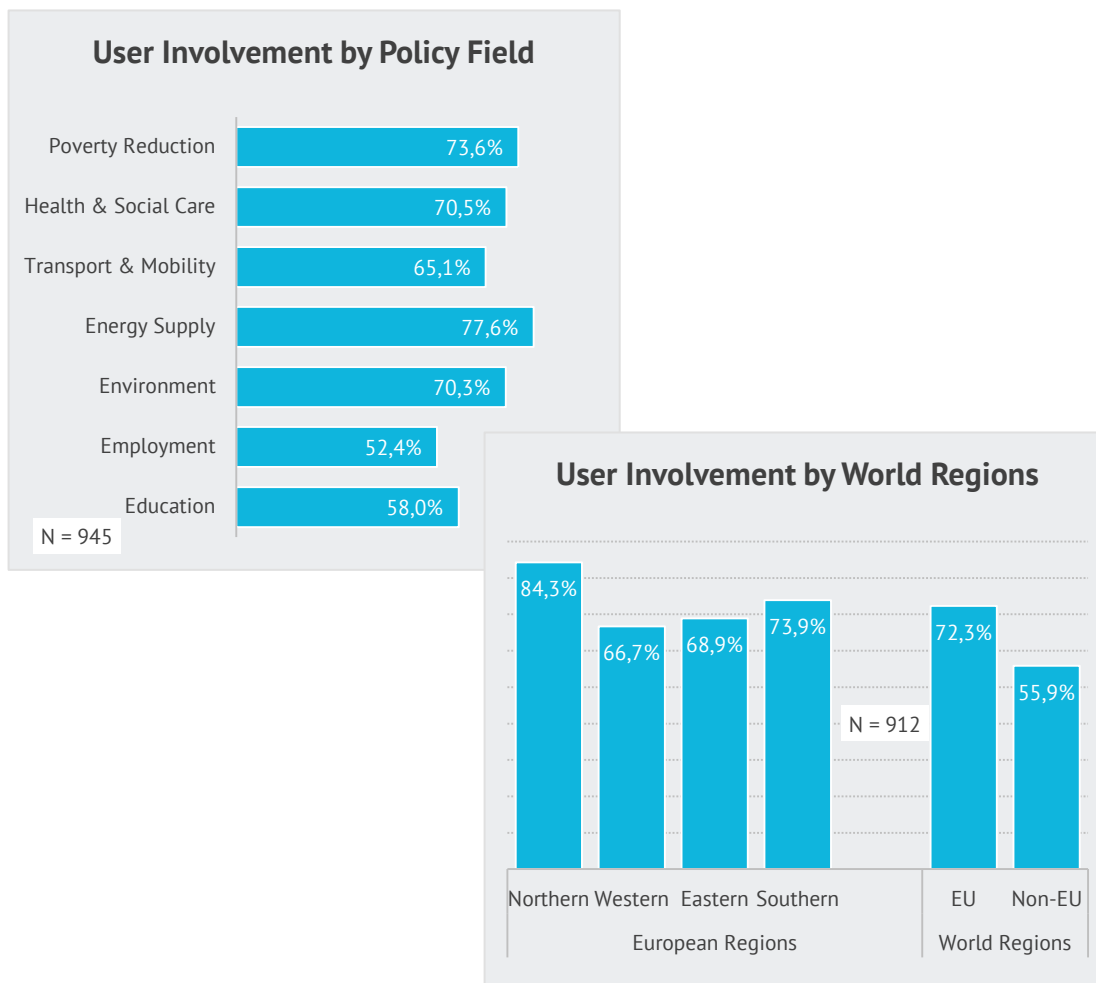


Figure 17: User Involvement (Policy Fields – World Regions)

Analysing user involvement by policy fields differentiated by European and Non-European countries (see figure below) it becomes evident that user involvement in “Employment” and “Health and Social Care” is substantially higher in Europe, while in the field of “Environment” non-European countries integrate more users/beneficiaries.

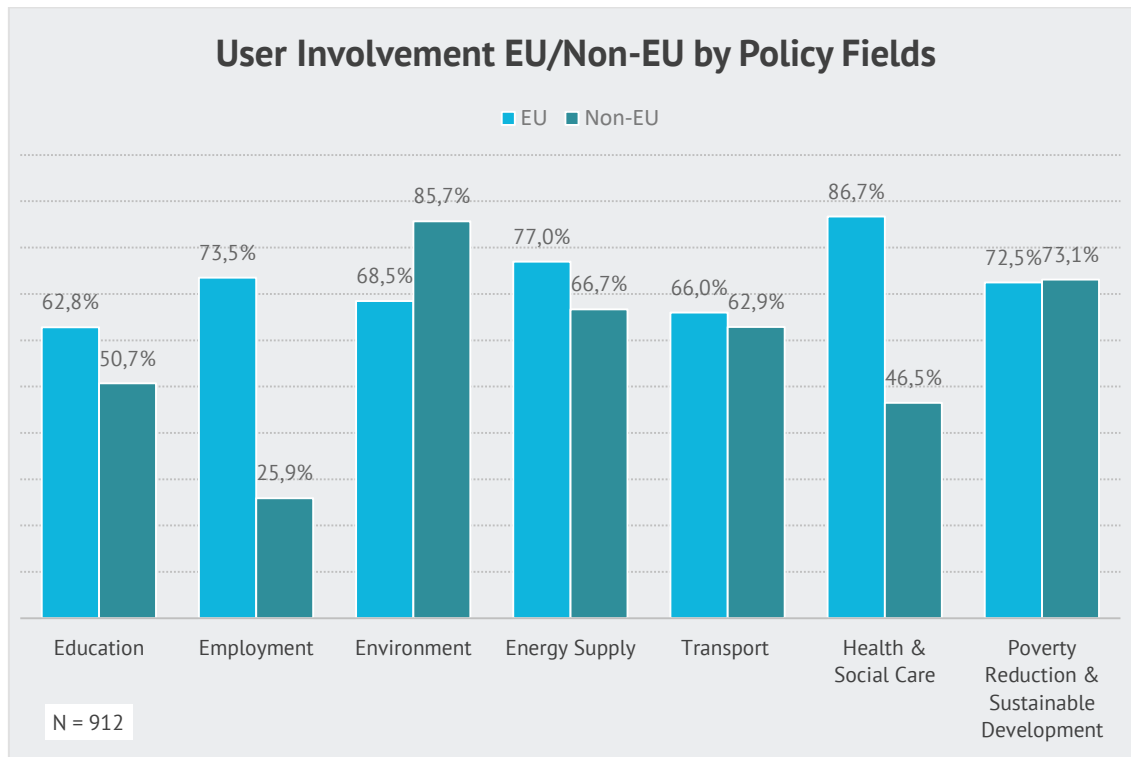
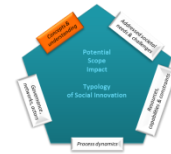


Figure 18: User Involvement in the Policy Fields, EU and Non-EU

4.1.3 Conclusions and Open Questions

Summarising the above results, the concept und understanding of social innovation is depicted so far by a growing importance worldwide on the one hand, on the other hand by an unclear understanding and an unexploited potential. A growing number of brand new as well as adopting initiatives become visible reaching impact in short term, diverse established and new practice fields appear connected with and affecting diverse policy fields causing innovation streams embedded in networks or umbrella organisations, social movements or policy programs.

According to the mapped data the growing importance and expansion of social innovations is not only indicated by the 1.005 cases and its worldwide distribution but also by several other results of the global mapping (described in the following chapters and the other four key dimensions):

- Growing variety of practice fields and related initiatives (more than 90 practice fields were defined for the global mapping, cf. chapter 4.1.2.2)
- Growing number of new initiatives (72%) within the last ten years (see figure 6 above)
- Addressing relevant and recent societal challenges and (local) social demands (chapter 4.2.2)
- High number of persons engaged (employees, volunteers, experts and advisers), including a high user involvement (chapter 4.3.2)
- High budgets of some initiatives (chapter 4.3.2)
- Growing number and diversity of participating partners (chapter 4.4.2)



- Increasing cross-sector collaboration, enhanced social innovation ecosystem collaboration (chapter 4.4.2)
- Scaling and transfer activities (chapter 4.5.2)
- Producing impact (cf. chapter 4.5.2).

As the common practice fields are widely reflecting an active involvement and cross-sectoral collaboration of civil society (including NGO/NPO) and the public and private sector (with different priorities and importance of single sectors in the policy fields and the world regions), so are the single initiatives characterised by participating partners coming mainly from civil society (NGO/NPO), private companies and public bodies.

To unlock the potential social innovations empowerment, human resources and user involvement are the driving forces and necessary preconditions of and for social innovation.

But all these activities and characteristics of social innovations alone cannot overcome the necessity for a comprehensive (and common) understanding of social innovation and its conceptual framework as fostered by the SI-DRIVE definition.

4.1.3.1 Unclear Understanding of the Concept and Unexploited Potential of Social Innovation

In contrast to the growing importance of social innovations (cf. chapter 4.1.2.1) the policy field related documents of public authorities such as the European Commission, the United Nations, the OECD, the World Bank, etc. in former times often did and to some extent still do today not refer to social innovations (exceptions are e.g. Horizon 2020 documents as well as publications of other DGs such as DG Employment, Social Affairs and Inclusion and DG Internal Market, Industry, Entrepreneurship and SMEs). Some Policy Field Reports even inform that the term social innovation almost never appears in high level policy related documents (for instance reported from the Policy Field Report of Education (Schröder et al. 2015), Environment and Climate Change (Budde et al. 2015) and Mobility and Transport (Butzin et al. 2015). This does not mean that social innovations do not exist in the policy fields (as indicated by the large numbers of mapped cases). Initiatives often just do not call their practices social innovations. Many social innovations scrutinised in the policy fields, thus, are to be regarded as social innovations at first sight even if not named accordingly. This fact makes research on social innovations even more difficult. Although manifold social innovations are found in the policy fields, the Policy Field Reports claim the need for (further) social innovations in their domains.

At the same time the SI-DRIVE Policy Field Reports and the Regional Report illustrate that even though similar societal challenges are recorded for some policy fields in the distinct world regions (but with altering urgencies), seldom result in similar solutions across territories. Thus, a broad spectrum of social innovations and practice fields exists in the seven policy fields (cf. chapter 4.1.2.2). In addition, all Policy Field Reports claim an unclear understanding of the concept of social innovation.

So one of the most important insights of the first empirical phase is that given the strong need for social innovation highlighted by the various policy field experts, and, bearing in



mind the drivers and in particular the barriers for social innovation (cf. chapter 4.3.2) a social innovation-friendly policy environment still has to be developed in Europe as well as globally. A European (and global) social innovation policy that enables social innovations overcoming the societal challenges in a cooperative manner between the actor groups and that drives towards social change, thus, is regarded as a necessity.

This is supported by the mapping results indicating an unexploited potential of social innovation by low scaling and transfer activities beyond the own initiative and the local level and existing barriers for diffusion (cf. chapter 4.3.2 and 4.5.2). To unfold the potential of social innovation against this background it is necessary

- To foster increasing transfer and scaling: Although mainly all initiatives are scaling there is almost no or limited (local, regional) transfer of the solution. Transfer and scaling is still done mainly within the initiatives (extending target groups and network, growth) and by the project partners.
- To overcome barriers by social innovation friendly environments: Main barriers are funding challenges, lack of personnel, knowledge gaps and legal restrictions.

4.1.3.2 Empowerment and Human Resources

Empowerment as well as human resources and knowledge are – apart from funding - the main cross-cutting themes addressed by more than half of the mapped initiatives and thus, can be considered as one of the main driving forces to unfold the potential of social innovation in a user friendly environment. Especially empowerment as the most important cross-cutting issue is closely connected to the core idea of social innovation. The BEPA report supports this view when emphasising that social innovations have the function of mobilising citizens to take an active part in innovation processes and thereby “*enhance society’s generic innovative capacity (Bureau of European Policy Advisers, 2010). According to Moulaert et al. (2005), the thriving forces of many initiatives for social innovation are the dialectics between the satisfaction of human needs, the mobilisation of resources for the local social economy and the organisational as well as institutional dynamics of civil society, including empowerment. The shortcomings of the private sector and the market “leave a place for the use of other (often pre-existing) social bonds in meeting natural, psychological and cultural needs. This is where social innovation plays an important role in the social economy: social innovation means innovation in social relations as well as new modes of satisfying needs” (Moulaert/Ailenei 2005, p. 2050). “Empowerment aims at strengthening the capability of people and groups to engage in civil society in an active way” (Scoppetta et al. 2014, p. 79).*

4.1.3.3 Increasing Cross-sector Collaboration: Social Innovation Ecosystem

Alongside with growing importance of social innovation and the growing variety of actors within the innovation process, we perceive a growing awareness of the complexity of innovation processes, along with supposed increasing demands as far as the management and governance of innovation are concerned (cf. also chapter 4.4.2).

To satisfy the given social demands and overcome societal challenges, cross-sector collaboration is crucial, actively involving public, economic and civil society partners -



including active user/beneficiary involvement in almost half of the social innovation initiatives. This shows that most of the initiatives are embedded in a social innovation ecosystem, developing new alliances and guaranteeing cross-sector fertilisation.

Thus, a systemic approach to social innovation focuses on the interfaces of the so far differentiated and largely separate self-referential societal sectors of state, business, civil society and academia, of their corresponding rationalities of action and regulation mechanisms and at the associated problems and problem-solving capacities (Howaldt, et al. 2015a). With regards to the question how these interfaces can be reconfigured in the sense of sustainability-oriented governance, established steering and coordination patterns are complemented, extended and shaped by aspects like self-organization, cross-sector co-operation, networks, and new forms of knowledge production (Howaldt et al. 2015b). Associated processes of “cross-sector-fertilisation” (Phills et al. 2008) and convergence of sectors (Austin et al. 2007) increasingly make “blended value creation” possible (Emerson 2003).

Such collaborations are picked up by at least two different heuristic models. The quadruple helix (cf. Wallin 2010) on the one hand, where government, industry, academia and civil society work together to co-create the future and drive specific structural changes, and the social innovation ecosystem (cf. Sgaragli 2014) on the other hand, which also asks for interactions between the helix actors, adds the notion of systemic complexity and looks at both the serendipity and absorptive capacity of a system as a whole. Academic knowledge on social innovation ecosystems is very scarce and the concept is still fuzzy. It is one of the key tasks of social innovation research to work on the theoretical foundations of the concept and to investigate how social innovations are created, introduced into society, diffused and sustained. Once again, a key question is about the roles and functions of different societal sectors as well as relations and interactions among them.

Ecosystems of Social Innovation Development of new Alliances / Cross-sector Fertilization

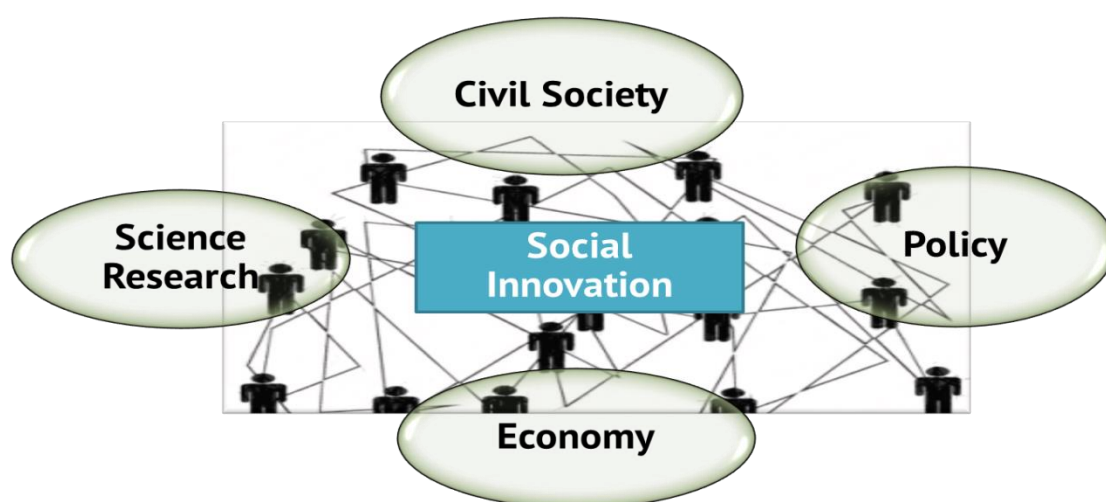


Figure 19: Eco-System of Social Innovation



Additional to the ecosystem perspective or as a part of the collaboration of different partners from different sectors the people related aggregate of empowerment, human resources, and knowledge are a main crosscutting theme. Taking into account the lack of personnel and knowledge within the initiatives (both are counted among the main barriers, cf. chapter 4.3.2) this clearly indicates that human resources are a main source for increasing impact and diffusion of social innovations.

To sum up, within the case studies of SI-DRIVE's second empirical phase the further development of the concept and understanding of social innovation has to comprise:

- Approaching a common understanding and framework of social innovation
- Looking at diverse types of social innovations and development of a typology
- Ecosystem operationalisation and optimisation, roles and functions of different societal sectors, relations and interactions among them, improving the role of sciences and research
- Factors to unlock the potential of social innovations: innovation friendly environment development for the creation and adaption of new solutions, imitation and diffusion, etc.
- Fostering user involvement and empowerment
- Analysing mechanisms of social change (Howaldt/Schwarz 2016)
- Gaining a better understanding of actors' constellations and modes of interaction in the innovation process
- Broaden the knowledge of actors' distinct roles and changes thereof over the course of time which allows to better capture the dynamics of social innovation
- Enrich the information on the impact of social innovation at the level of the single initiative, for the users and beneficiaries as well as for society



4.2 OBJECTIVES: SOCIAL DEMANDS, SOCIETAL CHALLENGES AND SYSTEMIC CHANGE ADDRESSED

This chapter and the related key dimension “social demands, societal challenges and systemic change addressed” depicts the huge diversity of the initiatives’ objectives, from often small-scale and very context-specific social innovation projects to up- and out-scaled initiatives with broader societal impact.

4.2.1 Background of the Analysis

The research dimension on “objectives and social demands, societal challenges and systemic change addressed” focuses on the desired output and motivation of social innovation and its initiatives. This dimension was introduced as one element of the five-sided pentagon, and empirical data will show the importance of this dimension.

With regard to the different levels on which output is generated BEPA (2010, p. 26) suggested that “the output dimension refers to the kind of value or output that social innovation is expected to deliver: a value that is less concerned with mere profit, and including multiple dimensions of output measurement”. In this understanding, social innovations

- “respond to *social demands* that are traditionally not addressed by the market or existing institutions and are directed towards vulnerable groups in society [...],
- tackle ‘societal challenges’ through new forms of relations between social actors, [...] respond to those societal challenges in which the boundary between social and economic blurs, and are directed towards society as a whole [...],
- or contribute to the reform of society in the direction of a more participative arena where empowerment and learning are both sources and outcomes of well-being” (ibid, p. 29).

This distinction between three different output levels has been taken up and slightly modified by the SI-DRIVE project. On the basis of the empirical data we can now take a closer look at these categories, check to what extent they allow for a more insightful look at the initiatives and consider them as a key factor for developing a typology of social innovation.

In order to appropriately reflect the complexity which derives from these three distinct, yet heavily interrelated societal levels, the triangle of the new innovation paradigm¹³ (objectives, content and process, see following figure) will be used as the underlying concept through which the results will be interpreted. It lays the foundation to understand the complexity of framework conditions social innovation initiatives are encountering, are obstructed by and are coping with.

¹³ Cf. the remarks in the beginning of the introduction (chapter 2) and the related footnote.

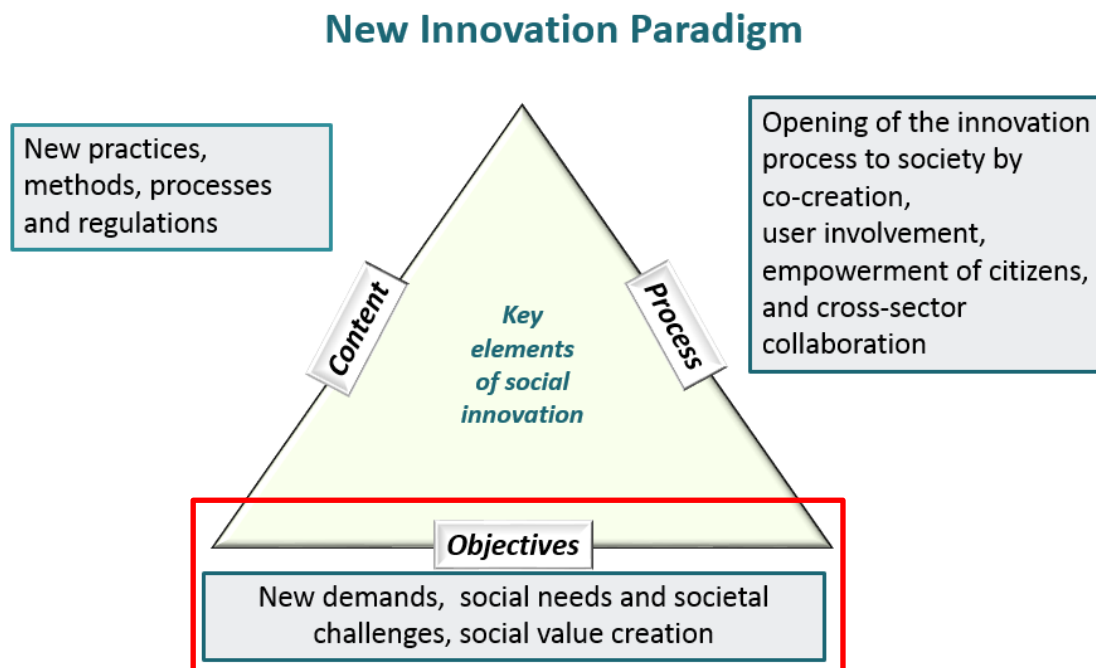


Figure 20: New Innovation Paradigm

The central observation in this figure is that actors of innovative projects and initiatives increasingly try to address social needs and societal challenges instead of focusing primarily on economic success and profit. The SI-DRIVE approach emphasises that a social innovation initially triggered by an initiative and impetus for change in social practices in some way or other contributes to solving social problems or satisfying needs of specific societal actors.¹⁴ However, it is also obvious that practitioners such as governments and international organisations tend to prioritise some social innovations over others as ‘socially desirable’ which clearly can affect social innovation research priorities. Such prioritisations are the more likely the better they align with defined societal challenges in the policy level. Following the European Commission (2013), the core societal challenges as of today are

1. Health, demographic change and wellbeing;
2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bio-economy;
3. Secure, clean and efficient energy;
4. Smart, green and integrated transport; climate action, environment, resource efficiency and raw materials;
5. Europe in a changing world - inclusive, innovative and reflective societies; secure societies - protecting freedom and security of Europe and its citizens.

¹⁴ However, it is important to notice that the outcome of a social innovation process might differ from the original intention of social innovation actors and that *their benefit and their effects, depending on the point of view, just as in the case of technological innovations, can indeed be ambivalent.*



These are reflected in the seven policy fields of SI-DRIVE. In order to meet these extended objectives, traditional technological and economic forms of innovation no longer suffice. Instead, as emphasised by the „content“ dimension in the triangle above, new pathways are being created which develop new social practices and do not necessarily involve technological innovation, though they do not preclude these.

It is a key question for the field and for the SI-DRIVE project in particular, to consider how social innovations in aggregate may contribute to social change across whole systems. What impact do they have? The policy and practice fields identified have to be taken into account when the solution of complex problems is at stake.

4.2.2 Results of the Mapping

The seven Policy Field Reports of SI-DRIVE have revealed the strong need for social innovation to overcome the policy field-related societal challenges and social demands. In every policy field we find a growing number of social innovation initiatives (cf. chapter 4.1.2.2). A high diversity of addressed social needs and societal challenges appear in the seven policy fields, while different societal levels on which output may be generated become evident.

4.2.2.1 Focus on Social Demands and Societal Challenges

The need to respond to a specific societal challenge or a local social demand are by far the main motivation and trigger for starting, initiating and running a social innovation. More than 60% of the initiatives started from this perspective. These objectives are more relevant than having an inspiring new idea (28%), a policy incentive like a policy programme or strategy (18%) or a social movement focusing on specific issues (15%). The possibility of taking advantage of new technologies for tackling social problems is a first motivation or trigger for 23% of the cases.

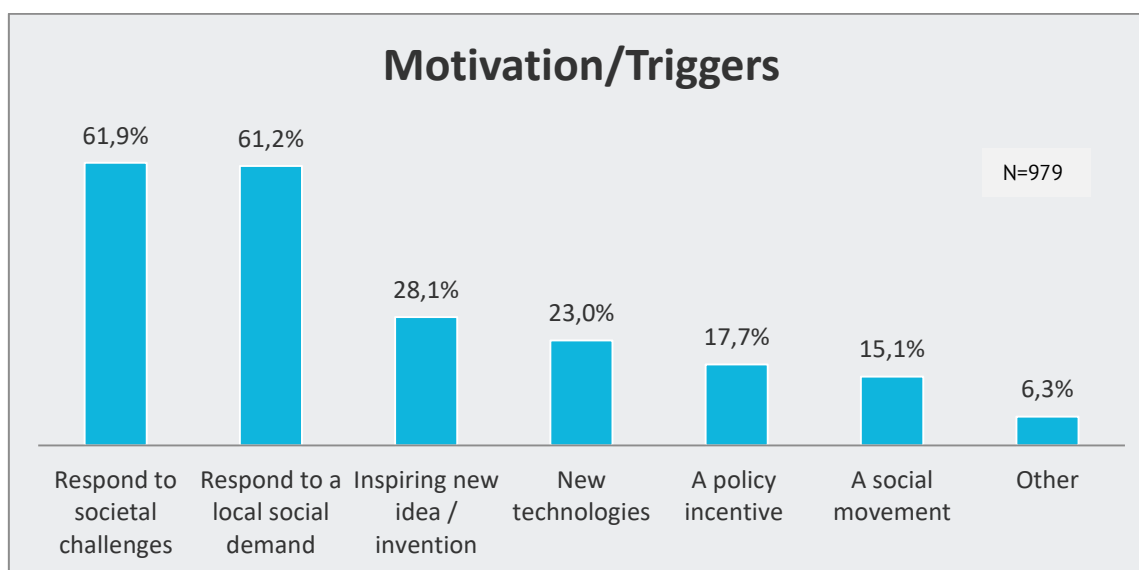


Figure 21: First Motivation or Triggers for Initiating the Social Innovation (multiple responses)

This result is underlined by the outcomes of the Regional Reports (Scoppetta 2015, pp. 2f.) stating that there is a common set of major social needs, challenges and opportunities



which are driving social innovation in almost all European countries, including the increasing awareness and promotion of social innovation: “In many countries, the promotion of social innovation itself by the EU has served as a driver and opportunity for various actors to embrace new ways of working, access new funding streams, and promote change at a national level.”

Out of all mapped initiatives, a clear majority seeks to satisfy a concrete social demand (71%) and/or tackle a societal challenge (60%), whereas a minority (32%) strives for systemic change. The latter being statistically the minority should not distract from the fact that almost one third of the mapped initiatives is “going for the max”, seeking to achieve this most comprehensive impact in the process of the innovation journey.

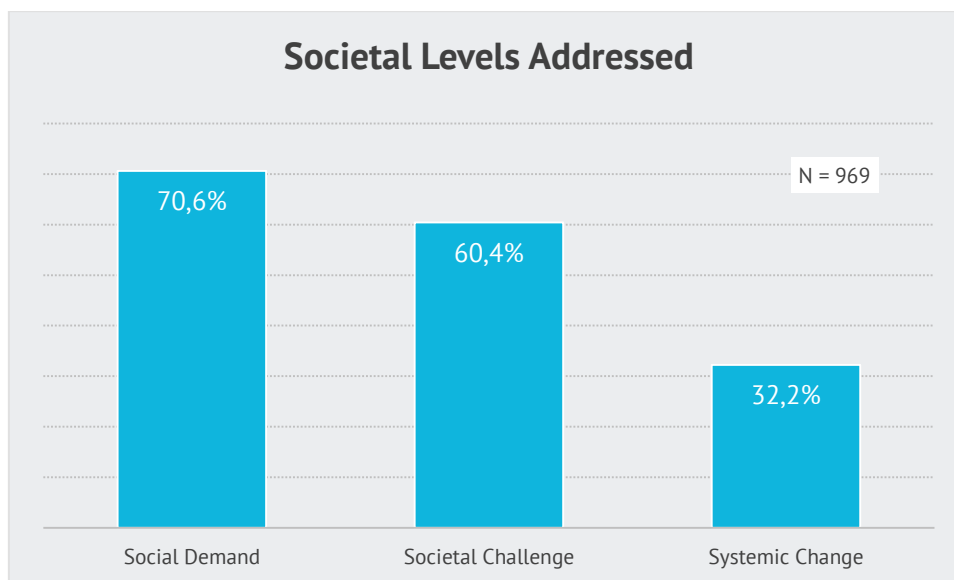


Figure 22: Societal Levels Addressed (multiple responses)

As the mapping reveals, there is an abundance of approaches and initiatives exploiting the strengths and the potential of social innovation in order to support societal integration through education and poverty reduction, to implement sustainable consumption patterns or to manage demographic change. However, social innovations do not only become increasingly important for ensuring social cohesion and equal opportunities, but also for the innovative capacity and resilience of companies and society as a whole.

As figure 23 illustrates, most initiatives do not address one societal level alone, but rather different combinations. At the same time the societal level addressed by the initiatives is varying in the different policy fields with a strong focus on social needs in the most of the policy fields, except for Transport and Mobility and Energy Supply which both have a stronger orientation towards societal challenges (cf. table 5 below). This result is also reflected in the feedback from policy workshops¹⁵ which highlights the dominant practice

¹⁵ See the policy related and one overarching policy briefs at the website of SI-DRIVE: <http://www.si-drive.eu/?p=1934>.



fields: cooperatives and well-connected neighbourhood initiatives in the field of Energy Supply are mostly working on an agenda which goes beyond concrete and local social demands, and so do mobility clusters of inclusiveness/access dimension and greening mobility in the field of Transport and Mobility. Global developments such as oil prices, environmental change and standard of living are considered a central driver in both policy fields.

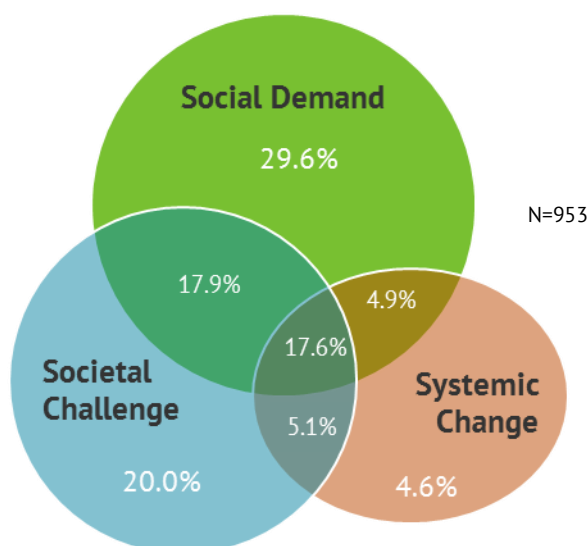


Figure 23: Overlapping of Sectors the Practice Field is Addressing

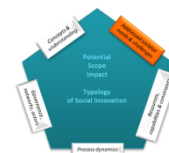
Although systemic change plays a minor role in all policy fields, differences between policy fields are considerable. There seem to be policy and respective practice fields whose initiatives will more likely target satisfying a social demand (*Health 83%, Poverty Reduction and Sustainable Development 78%*) or tackling a societal challenge (*Environment 72%, Energy Supply 87%*). While initiatives in *Education (48%)* and *Environment (46%)* strongly address social change, the objective of systemic change is less pronounced in *Employment (19%), Transport and Mobility (20%),* and *Energy Supply (25%)*.

	Education	Employment	Environment	Energy Supply	Transport & Mobility	Health & Social Care	Poverty Reduction
	%	%	%	%	%	%	%
Social Needs	72,3	67,5	59,8	64,9	57,0	82,5	77,8
Societal Challenge	51,0	55,3	71,7	87,0	47,7	62,3	64,4
Systemic Change	48,1	18,7	45,7	24,7	19,5	29,9	29,4

Table 5: Societal Level Addressed by Policy Fields (multiple responses)

4.2.2.2 Varying Relevance of Policy Fields and Sectors in the World Regions

Differentiating perspectives on policy and practice fields are of critical importance in order to better understand the demands and challenges initiatives are facing. As the “Compilation of the State of the Art Reports” (Scoppetta 2015) has elaborated, policy fields report a huge diversity of needs for social innovation. Manifold social needs and distinct societal challenges have been identified and are addressed by social innovation initiatives.



In order to better understand the extent to which not only concrete and often local social demands can be solved by social innovation initiatives, but also impact on societal demands, *practice fields*¹⁶ were introduced as an additional category for the mapping.

First, what was stated across all policy fields is that the societal challenges described in the seven Policy Field Reports often are cross-policy challenges. For example, a societal challenge like the development of energy-efficient mobility concepts is not addressed by policies and actors of the policy field Transport and Mobility alone, but it is often interlinked with the policy fields of Education and Poverty Reduction and Sustainable Development. Accordingly, policy fields, challenges and related practice fields often overlap (as for instance pointed out in figure 9).

Core and Complementary Challenges in World Regions

From an overall perspective, the seven policy fields play different roles in the world regions. Additionally, some policy fields are almost always the primary or even sole focus of initiatives - no matter which societal level they aim for - while others often are complementary. Challenges in policy fields like Energy Supply or Transport and Mobility are much more often the core challenge an initiative is addressing, while other policy fields' challenges often serve as a secondary or complementary objective. The figure below indicates the shares of frequencies policy fields were *ranked number 1*, which means the challenges associated with the policy field are considered central for the initiative. Percentages were calculated on the basis of all initiatives *in one policy field*. This ranking could be a measure of concentration of a case on one particular policy field.

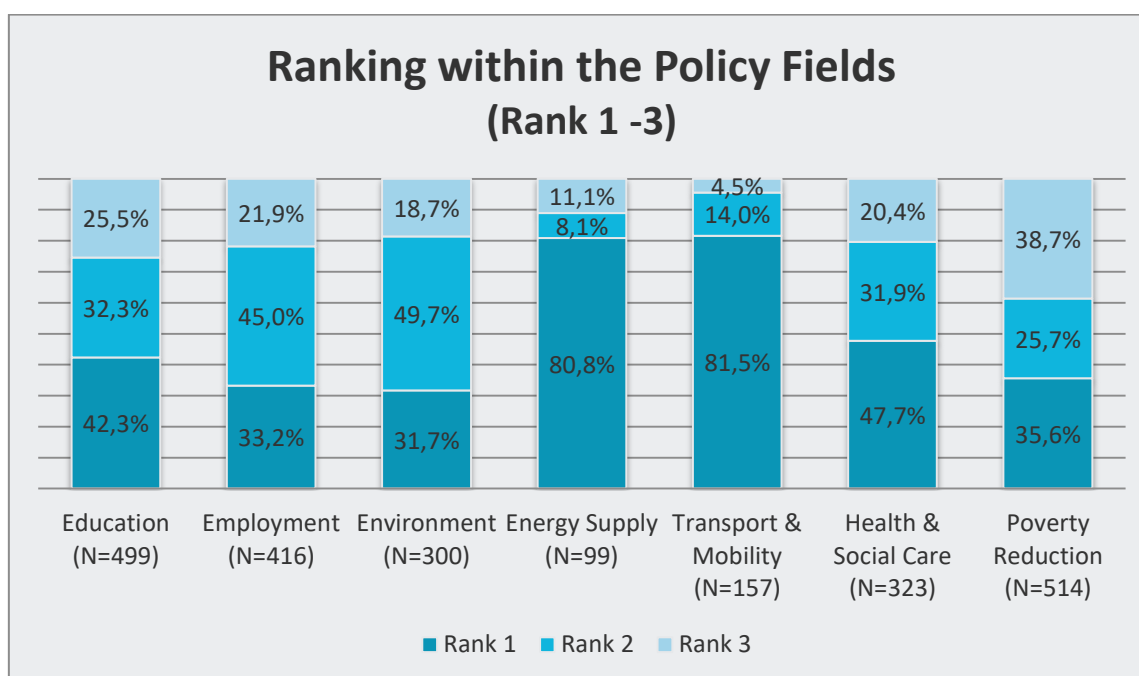
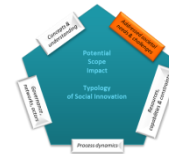


Figure 24: Ranking within the Policy Fields (rank 1 to 3)

¹⁶ See definition in chapter 3.1.



Energy Supply and *Transport and Mobility* are emerging as core challenges. The two are very clearly not topics initiatives address by “rushing through” while having a different challenge in mind. They are definitively “all-or-nothing” policy fields. That is, in most cases, Energy Supply and Transport and Mobility are either given the main priority by a social innovation initiative or they do not play a role at all. The other policy fields’ challenges are often complementary – this is true especially for *Employment*, but also for *Environment* and *Poverty Reduction and Sustainable Development*. This means that many initiatives which focus, for example, on new strategies and structures for lifelong learning, on the reduction of educational disadvantages, on new models of care or alternative transport modes, also contribute to poverty reduction.

Different Challenges in European Regions

The figure below shows the percentages to which the seven policy fields were considered central for initiatives in the four European regions. The chart cannot be compared directly to the one above because here shares were calculated on the basis of all initiatives *in one region*. So the figure shows how all initiatives, for example in Western Europe, spread across the seven policy fields.

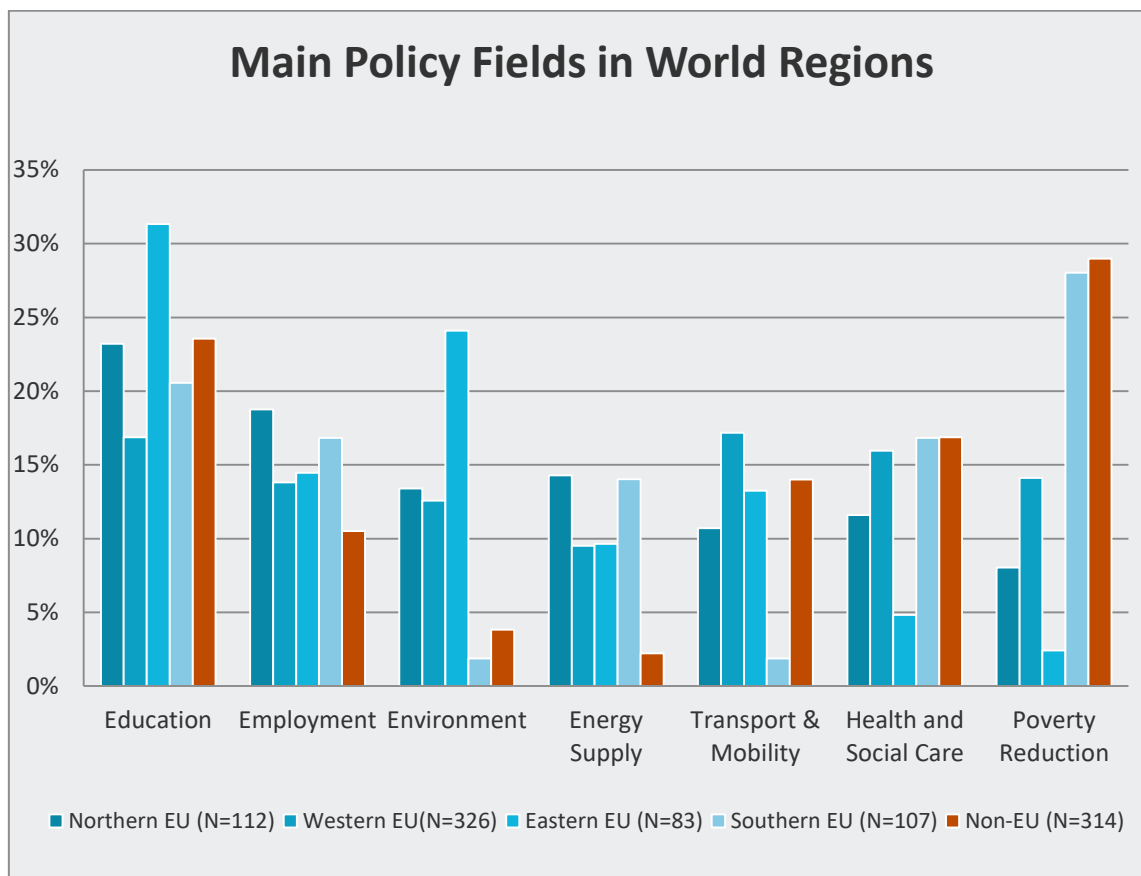


Figure 25: Main Policy Fields in World Regions (rank 1)

The empirical results indicate that *Education* plays an important role in Eastern Europe and in non-European countries, where it is ranked first as the most important policy field. Education can be the main objective of social innovation initiatives, but it also serves as a



complementary target in many cases. The Regional Report on Education and Lifelong Learning (Schröder et al. 2015) has indicated that here are more or less the same challenges and social needs not only in Europe but in every global region, differing mostly by the status of development within the (formal) education system. Other differentiations comprise priorities depending on the different national challenges and the cultures (change from a state dominated system to regional responsibilities, e.g. Gulf States, former communistic Eastern countries).

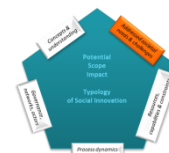
Societal challenges associated with *Environment and Climate Change* also play a considerable role in Eastern Europe, but only a minor one in non-European countries. Additionally, it is often a secondary or tertiary focus; so many initiatives do not consider it the main challenge, but state that it also plays a certain role. While the overarching challenges addressed by the initiatives are similar on a global scale, their concrete motivation and possible effects differ considerably between the world regions (e.g. floods in some regions vs. droughts in others).

Social innovation initiatives focusing on *Education and Employment* are prominent in the Northern European Union. They can also be found more often in the EU than in non-EU countries. Although the challenges in the field of employment are reported as quite similar in different countries, the dimension of the challenges is quite diverse, making more radical change (policy reforms on a central level) necessary, for example, for the Mediterranean and Eastern European countries whereas in Germany and Austria there was less need for radical systemic change, but a better inclusion of specific target groups or a better alignment and coordination of different educational institutions.

Transport and Mobility challenges can equally be found inside and outside the EU and in all parts of the European Union, with a slight emphasis on Western and Eastern Europe and minor interest in Southern Europe. The two central challenges, sustainable and inclusive transportation systems, influence the mobility and transport regime in almost all of the analysed countries. According to the regional report, overcoming both challenges requires deep behavioural change, which can serve as an explanation why initiatives focus very clearly on these challenges and seldom address them as complementary topics.

Initiatives working on *Health and Social Care* are located both in- and outside the EU, with less importance in Eastern Europe. Some areas of the world, including Southern European countries, are still struggling with health problems arising from poor nutrition and sanitation, including communicable diseases, and a lack of access to basic health and social care. While this is more often the case in African and Latin American countries, it is remarkable that Europe shows an equal share of initiatives addressing such issues.

Finally, *Poverty Reduction and Sustainable Development* is by far the most important policy field for initiatives in Southern Europe and non-European countries. According to the Regional Report (Boelman/Heales, 2015), poverty in Europe has increased by a factor of two to three times since the 1980s and especially since the financial crisis, which is an explanation why there is still a considerable share of European initiatives, comparable with the prevalence of this topic for non-European countries (more than half of the mapped cases in this policy field come from non-European regions).



Some remarkable differences can also be shown for the *cross-cutting themes* playing a role for the initiatives. These differ in some respects especially between European regions. For example, although Demographic Change is a much more relevant topic for Western and Southern European initiatives compared to Northern and Southern Europe, but it plays a minor role compared to the other cross-cutting themes. The most important ones are Empowerment and Human Resources and Knowledge development, which are related to one another. Together they show the core challenge of social innovation initiatives all over Europe (and other world regions). A central concern of the initiatives is about the people involved, be it promoters or users, and increasing their competences and capacities to act. ICT and social media also play a central role as a cross-cutting theme (especially in Northern Europe), and so does Social Entrepreneurship.

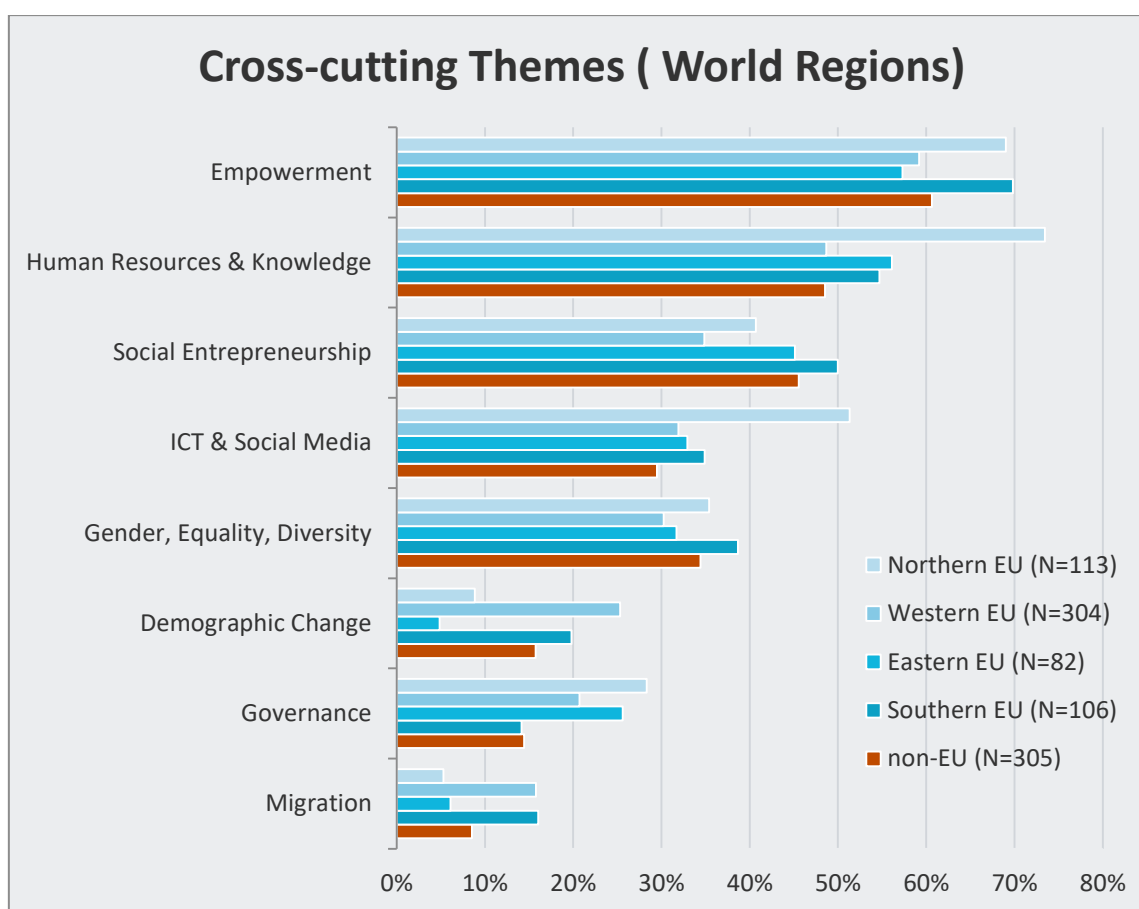


Figure 26: Cross-cutting Themes in World Regions (multiple responses)

Again, societal levels addressed by the initiatives do not play a role when it comes to the importance of the cross-cutting themes.

Societal levels addressed in European regions

While correlations of societal levels addressed with many other variables do not provide too many results in terms of quantitative differences, a remarkable result is that (besides non-European countries being represented near the average percentages) social innovation



initiatives in different European regions strive to achieve output and impact on fairly different levels.

First, initiatives in *Northern Europe* very often seek to address more than one level. For example, a social innovation project would satisfy a concrete social demand, but also aim to overcome a societal challenge on a broader scale. At the same time, many initiatives also envisage to achieve systemic change. The Northern European region shows by far the most comprehensive ambition to achieve multi-level output, followed by Southern European initiatives.

Second, *Western Europe* shows by far the fewest number of initiatives which seek to achieve systemic change. One explanation could be that the level of agreement and satisfaction with the prevailing sub-systems relevant for the initiatives and the policy field as a whole appear, all in all, reasonable and appropriate. Another possible reason would be that a profound impact on systems with such a long-standing institutional history, especially when compared to Southern and Eastern European countries, is considered unrealistic. More insights into these results should be obtained through the in-depth case studies (cf. chapter 4.2.3).

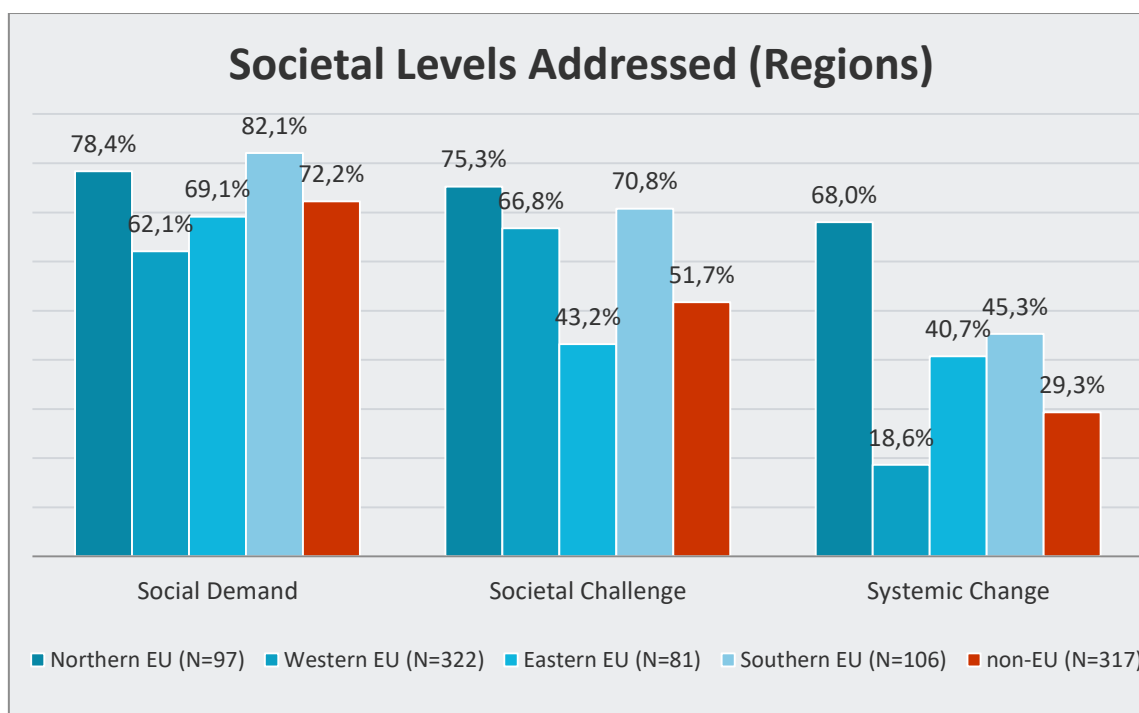
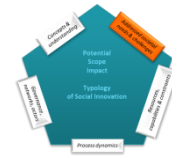


Figure 27: Societal Levels Addressed in European Regions and Non-EU Countries

The regional reports provide some explanations for the above results: While a common set of major social needs, challenges and opportunities driving social innovation was found in almost all European countries - including demographic change and ageing societies, social inclusion and cohesion, tackling poverty, environmental issues, energy consumption and transport solutions - the promotion of social innovation itself by the EU has served as a



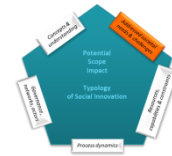
driver and opportunity for various actors to embrace new ways of working, access new funding streams, and promote change at a national level in quite different ways.

According to the Regional Report Summary, social innovation in *Eastern Europe and the Western Balkans* is often targeting political change, including a shift to more democratic forms of governance. This is also often associated with a drive to raise standards, for example, in education, to increase the ability of the country to compete in a free, global market. Also economic reform is often in the scope of desired results. Many Eastern European countries have recently seen large-scale reform of economic policy and public service delivery. These have led to new social needs, challenges and opportunities to change the state of play.

In *Sweden*, a wealth of social innovations has responded to the presence of weaknesses in the mainstream educational system providing alternative forms of learning support or access to new learning models. The unmet needs of the rapidly growing community of elderly people constitute another sort of driving force, as do the needs of other disadvantaged groups with a special health situation. Similar examples of initiatives trying to achieve not revolutionary but still thorough systemic change can be found in other *Northern European countries*. In many cases, initiatives are organized bottom-up on families and friends level, but with a strong determination to contribute to systemic solutions to the underlying problem.

Policy goals in different policy fields set by governments in *Western Europe* frequently refer to social needs and societal challenges and are related to general topics such as inequality and cohesion (often focused on poverty), unemployment of specific groups in society (employment), sustainability (environment), skills mismatches (education) and demographic change (education and employment). Many social innovations are small scale initiatives which contribute to different policy goals simultaneously – but in line with the empirical data presented above, they mostly do not aim to achieve systemic change, except for the policy field Education where many initiatives are also targeting systemic change, since education is governed by the state. Compared to Southern and Eastern Europe, most Western European countries have smaller social and economic problems (unemployment, poverty) and relatively more financial means to address them. This does, however, not mean that all social problems in Western Europe are small or insignificant. There remain large issues of inequality to be solved, for example, the labour market position of migrants, elderly and unemployed youth, the gender pay gap, and the limited access to social securities and proper housing for lower income groups.

Inefficient reforms in the education sector in *Southern European* countries and low investments in both education and research and development (R&D) resulted in a non-inclusive education system and education programmes that are not adjusted to market needs, meaning that education reform is too lethargic for a rapidly evolving market and the changes it brings. Skills gaps are evident across sectors (transferable and soft skills in particular). The quality of education is in decline, which results in an under-qualified and under-skilled labour force.



Southern Europe was deeply affected by the economic crisis starting in 2007. As a result, many initiatives emerged which tried to overcome the disastrous situation on the labour market and in Southern European communities. Ageing population, is another major social challenge social innovators are responding to in many Southern European countries. This is particularly the case for Spain and Italy where major impacts on the labour force, pensions, health and social care, among other issues, are to be expected. This situation leads to initiatives primarily targeting social demands (82%) - highest proportion in all European regions. At the same time, many initiatives (45%) seek to achieve systemic change, which is the second but largest proportion in the European regions.

Social innovations in the region of *Eastern Europe* are mainly connected with the activities of civil society organisations, introduced either in response to social needs or in order to address certain challenges. They mainly occur in the field of education and environment and seldom in the field of energy or healthcare. Initiatives in this region, as in all other regions, mostly address social demands (69%). These initiatives show by far the lowest intention of targeting societal demands – a fact which should be investigated more closely in the case studies of SI-DRIVE.

4.2.2.3 Cross-sectoral Involvement on all Societal Levels

Cross-sectoral cooperation is obviously a field-tested strategy for many innovation initiatives. In the Critical Literature Review, Dhondt and Oeij argue: “Two challenges come to the fore. First, the connection between micro and macro initiatives to upscale social innovations. Second, the connection between public, private and intermediate partners in the realm of social innovation (the helices) to speed up social innovation and make social change happen.” (Dhondt/Oeij 2014, p. 140).

The analysis results indicate that all societal sectors play an important role in social innovation initiatives, and there is no distinct dominance of the civil society, but cross-sectoral cooperation with the public and also the private sector on an almost equal footing (cf. chapters 4.1.3.3 and 4.2.2.3). In addition, the quantitative analysis shows that sectoral involvement does not notably change on different societal levels where the initiative seeks to achieve impact (cf. figure below).

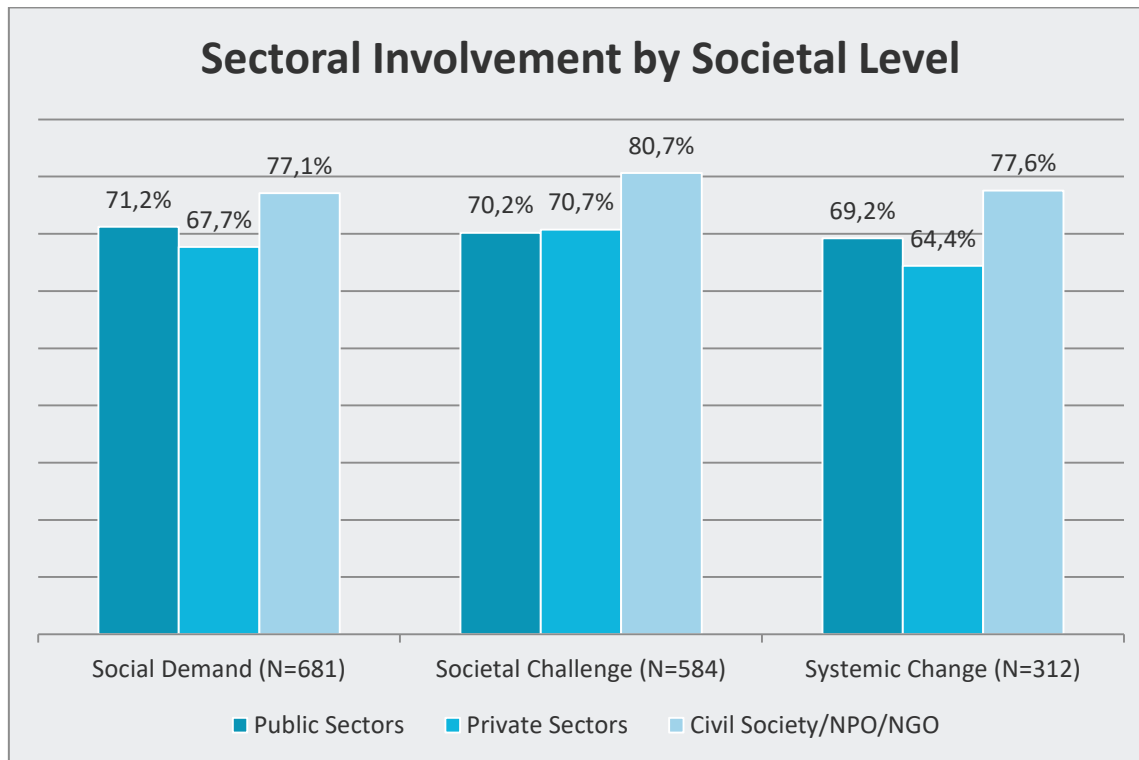
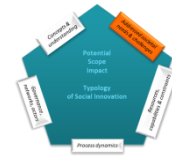


Figure 28: Sectoral Involvement by Societal Level (multiple responses, % of cases within the societal level)

We can see that cross-sectoral cooperation can be called a default setting for social innovation initiatives, no matter which outcome on which societal level is targeted. Obviously, initiatives want to have broad access and reap the innovative potential of multiple sectors in almost all cases. Policy is an important partner, along with civil society and the private sector. Taking into account that (public and private) universities and research centres are also partners in social innovation initiatives in more than 21% of the cases (cf. figure 15, chapter 4.1.2.4), it is assumed that social innovation initiatives are deeply embedded in cross-sectoral cooperation networks in which all strands of the quadruple helix play an important role. The concrete role(s) of universities and research centres (cf. also chapter 4.4.2) - as knowledge provider, consultant, facilitator or other not only for single initiatives, but also for the practice fields – need to be further investigated in the second mapping phase, i.e. case studies.

Looking at sectoral involvement in different European regions (cf. figure below), the *public sector* is more involved in the Northern and Western EU and less often in the Eastern EU and in non-European countries. The *private sector* plays a more central role in social innovation initiatives located in Western Europe. For initiatives outside the EU, this sector is - compared with the others - the least relevant one (only 56% of the initiatives involve enterprises or other actors of the private sector). Civil society is highly involved in all countries, playing a major role especially in Western and Southern Europe. In Western Europe there is also the highest rate of private sector involvement (81%). The public sector is also participating in the majority of social innovation initiatives in all European regions, but its involvement is the lowest in non-European countries and in Eastern Europe. This



corresponds with the Regional Report, stating that service provision, quality and trust in the public sector are limited.

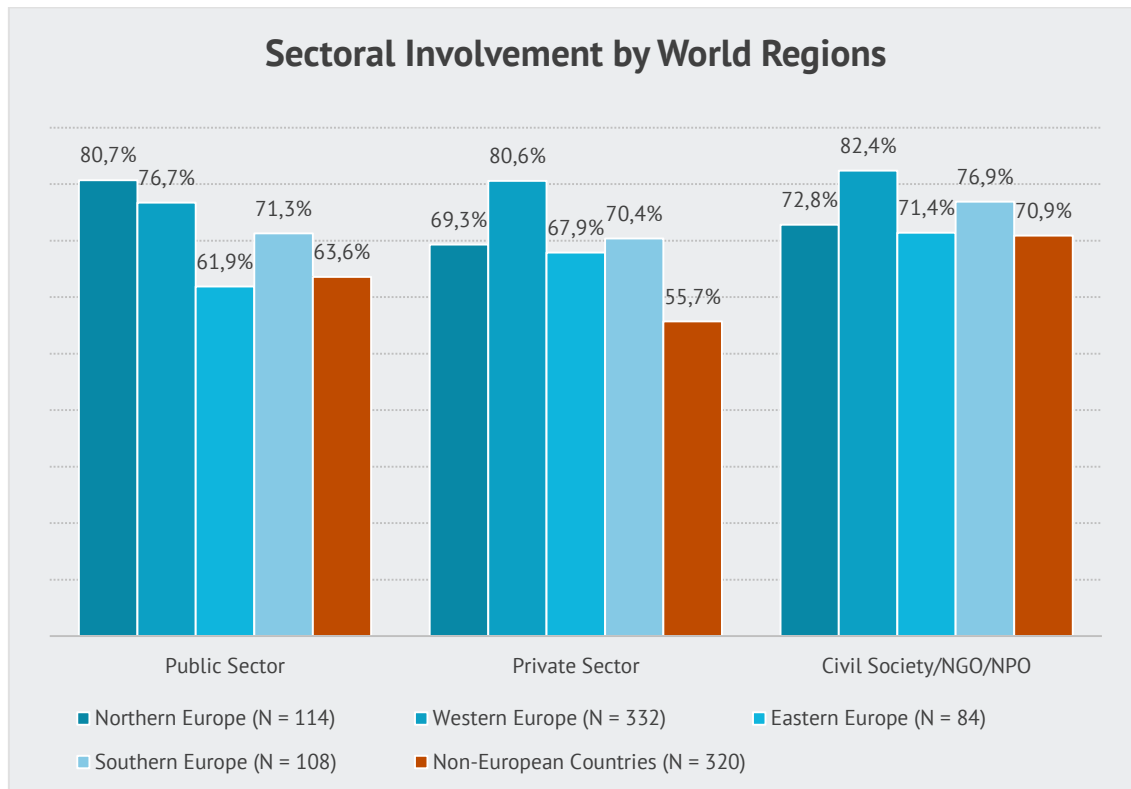


Figure 29: Sectoral Involvement in World Regions (multiple responses, % of cases within the sector)

4.2.3 Conclusions and Open Questions

In this chapter we have analysed social innovation initiatives' objectives. Initiatives do not primarily aim for profit and economic competitiveness, but pursue a variety of goals beyond economic imperatives. The diversity of objectives, structured here along three societal levels addressed by the 1.005 social innovation initiatives, are immense.

4.2.3.1 Objectives, Content and Processes

The analysis results indicate that the *objectives* (see the new innovation paradigm triangle) of the initiatives vary greatly. While most initiatives address social demands or societal challenges, still a large proportion (32%) is seeking to achieve systemic change. Taking into account that most of these cases initially respond to local demands and, looking at the actor constellations, can be described as grassroots initiatives, the practice field level where such initiatives collaborate, network and try to achieve synergies and greater impact becomes crucially important for the upcoming case study work.

In the *content* dimension the empirical findings illustrate that in order to achieve these far-reaching goals, traditional technological and economic approaches of innovation are no longer sufficient. This was exemplified by both, the policy field and the regional reports, whose input was used to contextualize the empirical results.



In the *process* of social innovation journey the results reveal that the initiatives open up – or are conceptualised this way from beginning – to society. Both, information on user involvement and cross-sectoral collaboration highlight this aspect. Taking a closer look at those initiatives targeting systemic change, it becomes evident that these initiatives involve their beneficiaries slightly more frequently than other initiatives, which could be interpreted as a strategic decision to better cope with the complex challenge faced. The orientation towards more ambitious and complex impact seems to influence different strategic decisions in terms of actors involved in the initiatives. And we have seen that actors from all societal sectors are involved in the initiatives.

While the mapping data analysed here only show the involvement of the sectors, the case studies are expected to provide a deeper explanation on the collaboration between them. Especially, those initiatives seeking to achieve systemic change should be thoroughly scrutinised in order to answer the question whether the public sector plays a special role in such initiatives, how the stronger user involvement can be explained and to what extent this may serve as one factor for the development of a social innovation typology.

4.2.3.2 Leeway or Systemic Change? Ambivalences in Social Innovation

As the mapping has shown, social innovations are characterised by addressing a high diversity of social needs and societal challenges associated to different policy fields (cf. chapter 4.1.3). These include demographic change and ageing societies, social inclusion and cohesion, tackling poverty, environmental issues, new ways in the fields of energy and transport, and many more. The majority of the initiatives is trying to respond to concrete social demands or to overcome societal challenges. Their approach is not to strive for fundamental systemic change, but use the existing leeway the current system allows for.

On the other hand, almost one third of the initiatives is seeking to achieve systemic change (cf. figure 22). This comprises initiatives which try to promote a change in general values in society, and also those who want to change a concrete social (sub-) system, for example, the education system of a country. Initiatives with such ambitions are likely confronted with more ambivalent opinions, with a higher level of resistance and support. For example, the quantitative mapping results show initiatives which develop better governance of schools by extending the school functions and teachers' capacity or try to overcome the separation of different educational phases and institutions (policy field Education). Or they want to change the system of health care delivery, for example, by educating home care professionals in a new way or enabling new groups to provide informal and formal care (policy field Health and Social Care).

Such initiatives questioning and challenging the current state of play often find themselves in situations where partners of the initiative may have conflictual goals, and where also external support will be accepted or declined also because of the assumed interests of the external party and the potential threat the initiative poses for them.

Policy is playing an ambivalent role social innovation, and so are other types of actors. They are engaged, in many different ways, in initiatives which do not only try to use the leeway existing social systems allow for, but which aim to achieve systemic change. They participate in a broad diversity of cross-sector collaborations. In order to better understand



not only the motivations of initiatives' actors and the complex framework conditions they are operating in – which can be achieved in case studies - but also get a grip on the concrete outcome of the initiatives' work and the impact they have on society, we need an elaborated social innovation assessment methodology, something researchers in the Impact Assessment for social innovation¹⁷ and the SIMPACT¹⁸ project have started to work on.

The “ambivalence of the outcomes of social innovation” (Butzin et al. 2014b, p. 153) was announced as one of the research foci in the Critical Literature Review. The empirical data provides only first insights into the complexity of social side effects the initiatives may have, their unforeseeable consequences and different actors' perspectives need be further analysed in the upcoming case study phase.

4.2.3.3 Challenging Societal Levels and Output Perspectives

Although the mapped initiatives have different foci in terms of their desired impact, many cross-tables actually show no considerable deviations between the three levels. Barriers faced by the initiatives, funding sources used, or even types of scaling do not differ noteworthy when checked against the output levels. Even the question whether and how the solution of the initiative has been transferred to other territories or contexts shows relatively homogeneous results.

This can be interpreted in two ways. It can either challenge the typology of societal levels as such: Maybe the distinction between social demand, societal challenge and systemic change is not as clear as expected. It has to be considered that the boundaries especially between the two categories 'social demand' and 'societal challenge' are somewhat fluid which makes it difficult to assign one or the other category to a single initiative which might result in the assignment of both categories to an initiative. In addition, it is more likely that the accumulation of multiple social innovations with similar objectives leads to systemic change rather than the single solution.

The other explanation is that the intention of the initiative and its main actors is not a determining factor for the way a social innovation initiative is functioning. Differences between initiatives could then be interpreted primarily as results of the position of an initiative in its practice field(s), of complex interrelations with other initiatives and a general context-dependency, and as emergent effects in the innovation ecosystem the initiative is operating in.

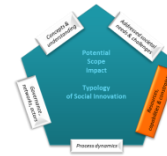
A question which derives from the *output* perspective, and which goes beyond the three societal levels, is whether initiatives have managed to successfully increase the innovative capacities of (local, regional) communities on the one hand, and if their work has led to a greater serendipity of these communities on the other hand. Have communities become more innovative? If yes, is it due to the empowerment of people through the initiatives or

¹⁷ See <http://ia4si.eu/>.

¹⁸ <http://www.simpact-project.eu/>.



a bundle of initiatives? Have the initiatives become some kind of role models and initiated consecutive innovations, thereby increasing the serendipity level as a whole? And has this process led to institutionalisation? These are questions which can also be answered only on the basis of a deeper case analysis.



4.3 RESOURCES, CAPABILITIES AND CONSTRAINTS

The potential and development of social innovations is based on the resources, capabilities, drivers and constraints they have. The theoretical and empirical based articulation of future oriented policy recommendations has to reflect this, to scale-up social innovations and to foster and support methods and means to overcome and achieve social change: The emerging issues to be addressed by social innovation, the potential for social innovation to deliver real benefits, and the levers and constraints related to its further development.

Resources, capabilities and constraints are a relevant part of the SI-DRIVE pentagon and to a great extent related to another key dimension: actors and networks, civil society or citizen engagement, user and volunteer involvement and the embedding of the social innovations in policy programmes, networks, umbrella organisations and social movements. Resources, capabilities and constraints include also cross-cutting themes like (1) funding, financial resources and regulations, legal conditions, (2) human resources, knowledge, empowerment and (3) scientific research and obtainable results (comprising external expertise for the development, professionalization and diffusion of social innovations).

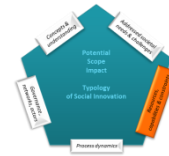
4.3.1 Background of the Analysis

There are relevant results concerning resources, capabilities and constraints, drivers and barriers of innovations from different perspectives: innovation studies, business innovation and social innovation studies are delivering classifications with more or less relevance for SI-DRIVE.

Analysing the relevance of **innovation studies** for SI-DRIVE (Butzin et al. 2014a, p. 116f) resources, capabilities and constraints are mainly focusing on the broader infrastructure (policies, finance, research institutions), the regional context and geographical proximity; not to forget the relevance of intermediary structures and the local level (Domanski et al. forthcoming). In this perspective, resources, capabilities and constraints of social innovations are relevant drivers and barriers based on the cooperation of actors, (supporting) networks, cross-sector triple and quadruple helix collaboration,¹⁹ new combination of knowledge backgrounds, user involvement, and institutional conditions.

Resources, capabilities and constraints are closely related to the social innovation *ecosystem and infrastructure* for social innovations (and the related practice field). This is "... corresponding (to) rationalities of action and regulation mechanisms and the associated ... problem solving capacities" (Domanski et al. forthcoming, p. 15). Appropriate supporting structures are relevant to exploit the potential of social innovations (ibid, p. 16).

¹⁹ "Inter-organizational collaboration is a way to increase the capacities of organizations and to apply leverage to existing resources so as to solve social problems more effectively by pooling together resources, skills and knowledge" (Harrisson et al. 2012).



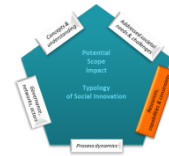
Beside social networks, actors and institutions “*knowledge*” is one of the main building blocks of innovation development and imitation, transfer and diffusion (Butzin et al. 2014, p. 112). (tacit and implicit knowledge, differentiated knowledge bases, and knowledge dynamics). For technological innovation National Innovation Systems (NIS)²⁰ are seen “as a system of interconnected institutions to create, store, and transfer the knowledge, skills, and artefacts which define new technologies” (Butzin et al. 2014a, p. 108; Metcalfe 1995 cited in OECD 1999). In this respect NIS are systems of forming, spreading knowledge and combining knowledge, be it internal, implicit, or external, they are “structures for dealing with knowledge” (Welsch 2005, p. 69). Not having such a structure in social innovation nevertheless “knowledge” is an important resource and driver.

Increasing knowledge intensity is also mentioned by Stehr (2007, p. 65) for economic activities and actions as well (Butzin et al. 2014 a, p. 112). Knowledge is seen here as the most important input factor for innovation often supported and catalysed by the formation of industrial clusters to enhance innovation capacity. Reviewing literature on **economic innovation** it becomes evident that the focus of the companies is more on existing *barriers* than capabilities. According to the Silva et al. (2007), barriers to innovation from a business perspective can be classified according to (1) economic factors: (e.g. economic risk, high costs), (2) company internal factors (e.g. lack of financing, organisational rigidities, personnel and knowledge gaps, missing technological possibilities and know-how, inefficient market information), and (3) regulations and supporting systems (National Innovation System), lack of customers’ responsiveness.

Enablers of economic innovations are a match between innovation objectives and user needs, a strong management support, adequate innovation funding, a clear organisational benefit from its innovating activity (profit/return), customer/user participation, clear objectives as to what to innovate as well as an appropriate incentive system (e.g. Orcutt/AlKadri 2009). Orcutt/AlKadri stressed as well communication and empowerment of people. According to Lawson/Samson (2001) beside the fundamental vision and strategy of an innovation - competences, innovation culture and climate and new technologies are sources for innovation capabilities that are closely related to the SI-DRIVE philosophy.

Not at least **social innovation** literature is listing a lot of obstacles and barriers. While the BEPA report (2010) defined barriers around their approach of social demands, societal challenges and systemic change the TEPSIE project stated “vicious circles” and “traps” of innovation dynamics as well as action and actor related barriers (Mendes et al. 2012). Caulier-Grice et al. (2010) categorized four main areas of barriers: (1) access to finance, (2) availability of scaling models, (3) insufficient skills and formation, and (4) missing networks and intermediates. Power relations and control forms, administrative burdens, aversion to risk and failure of the public sector innovations and participations mentions Chapman (2004) as system failures. Problem complexity, the lack of networks and

²⁰ According to Metcalfe (1995, as cited by OECD, 1999, p. 24), a national innovation system can be defined as the „[...] set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and which provide the framework within which government form and implement policies to influence the innovation process“(Metcalfe 1995. This perspective “[...] highlights interactions and interfaces between various actors and the workings of the system as a whole rather than the performance of its individual elements” (OECD 1999, p.24).



intermediaries (connection of social innovation initiatives to established networks), protection and risk aversion (conservative decision making) are claimed by Chalmers (2012). Dufour et al. (2014) identified practice conditions facilitating or hindering the implementation of a social innovation by stressing the *quality* of training and support, collaboration, and *organizational* problems like the voluntary participation, staff stability, and collaboration with existing structures as well as *individual* constraints such as decreasing motivation, lack of professional skills.

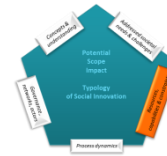
To sum up: As shown in innovation studies, national and regional innovation system research (Fagerberg et al. 2005; Butzin et. al. 2014a), and in economic innovation it is evident that successful (technological and economic) innovations are based on a lot of presuppositions and require appropriate infrastructures and resources. This is evident for social innovations too, but while there are a lot of technological oriented innovation studies there is a lack of research on these preconditions in relation to social innovation. And yet, social innovations are requiring specific conditions because they aim at activating, fostering, and utilisation of the innovation potential of the whole society, just to name user involvement, citizen engagement, co creation, open innovation, empowerment. New ways of developing and diffusing social innovations are necessary (e.g. design thinking, innovation labs etc.) as well as additional far reaching resources, to unlock the potential of social innovation in society and to enable participation of the relevant actors and civil society.

This is not only a matter of appropriate funding but also of new participation and collaboration structures, co-creation and user involvement, empowerment and human resources development. Attention has to be made to the invention and its development as well as its diffusion and imitation (Tarde 2009). From this innovation process and development perspective resources, capabilities and constraints, drivers and barriers are not only relevant for the invention and implementation but also for scaling and diffusion of successful innovations. Appropriate resources are necessary to stimulate not only brand new inventions but also processes of imitation and diffusion of social innovations, to foster new social practices and social changes better coping societal challenges and social demands than before.

The main question evolving from the theoretical literature review is: How can we enhance the 'innovation capacity of society' and 'how can we empower citizens'? Which resources and capabilities are necessary for the development of brand new innovations? How can these resources and capabilities be used for diffusion, adaptation and imitation of innovations?

To be more concrete the following hypotheses could be drawn from the general and SI-DRIVE related background:

- Based on the variety and high number of partners (cf. chapter 4.4) diverse funding and support possibilities are possible and necessary to succeed in the implementation and impact / institutionalisation of the initiatives.
- Because of the far going development of the initiatives (cf. chapter 4.5) institutionalisation is already far reached (shown by the participation of partners



from all sectors, embedment in overarching institutions etc.), this is also reflected by a yearly budget, paid staff, etc.

- Because of the high orientation on embedding civil society, involving users and all the relevant stakeholders a high number of persons will be engaged in the initiatives (employees, volunteers, other).
- Knowledge and funding gaps are a main problem until the institutionalization of the initiatives in accepted and diffused social practices.
- Empowerment has to be seen as a quantitative participation of civil society, users, beneficiaries and a qualitative integration of diverse know how of the different partners.

While actor and governance relevant aspects are analysed in chapter 4.4, in this chapter we will prove the hypotheses in the way that we concentrate on the indicators and variables directly related to resources, drivers and barriers. Within this chapter resources, capabilities and constraints of social innovations were operationalised by the number of persons directly supporting the implementation of the project (regularly paid employees, volunteers, external advisers or experts, and other), the yearly budget of the initiative and the funding sources as well as the drivers and barriers faced by the initiative. These indicators will be mainly analysed by focusing on their relevance for diffusion and institutionalising of social innovations and the related conditions for these processes.

4.3.2 Results of the Mapping

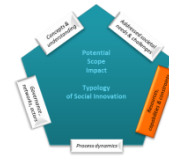
4.3.2.1 Personnel and Financial Resources as Foundations of Social Innovations

As mentioned, appropriate resources for social innovations are needed to involve almost all the relevant stakeholders of the social innovation eco-system (economy, policy, civil society and science) to reach considerable impact and diffusion of the innovative solutions for societal challenges and social demands. While in technological innovations mainly experts of science, research and development are engaged, in social innovation there is the possibility and need (and a growing practice) to involve (much more) civil society such as citizens, non-governmental, non-profit organisations and others.

Besides the already described embedding and connectedness of social innovations in networks, social movements, policy programs and umbrella organisations (cf. chapter 4.1) the global mapping asked for the number of persons directly supporting the implementation of the project (regularly paid employees, volunteers, external advisers or experts, and other persons), the yearly budget of the initiative and its funding sources.

(a) Persons directly supporting the implementation of the project

In more than half of cases it was not possible to get a number of the persons involved in the initiatives. But for those initiatives we got figures it could be said that 10% of them do not have employees, 18% are not involving volunteers and 14% act without external experts or advisers. However, for the other initiatives (those who are directly supported by employees, volunteers and external advisers) considerable inclinations are appearing and



making evident that social innovations are broadly and societal based innovation processes:

- The range of **persons regularly employed** for the initiative is ranging from 1 person up to 20.000 employees (a large Russian academy institution and an international Indian social service organisation). (44% of the initiatives in total)
- The initiatives are activating a clearly higher number of **volunteers** ranging from 1 to 50.000 people; one initiative ("Clean Bulgaria") named more than 1 million volunteers, as a part of the population of the country).²¹ (25% of the initiatives in total)
- **External advisors or experts** were classified in 23% of the initiatives, ranging from 1 to 5.000 persons.
- The initiatives are also supported by **other persons** (in 7% of the cases, ranging from 1 person to 60.000 persons (the latter again named for the Russian academy institution).

This underlines the enormous human capital related resources of these initiatives. More than 60% of the initiatives with regular paid staff have up to ten employed persons and more than one third are supported by more than 10 volunteers. About half of the initiatives are supported by up to 5 external experts and advisers. The average named number of employees is 188, supported by an average of 1.068 volunteers and 39 external advisers or experts.

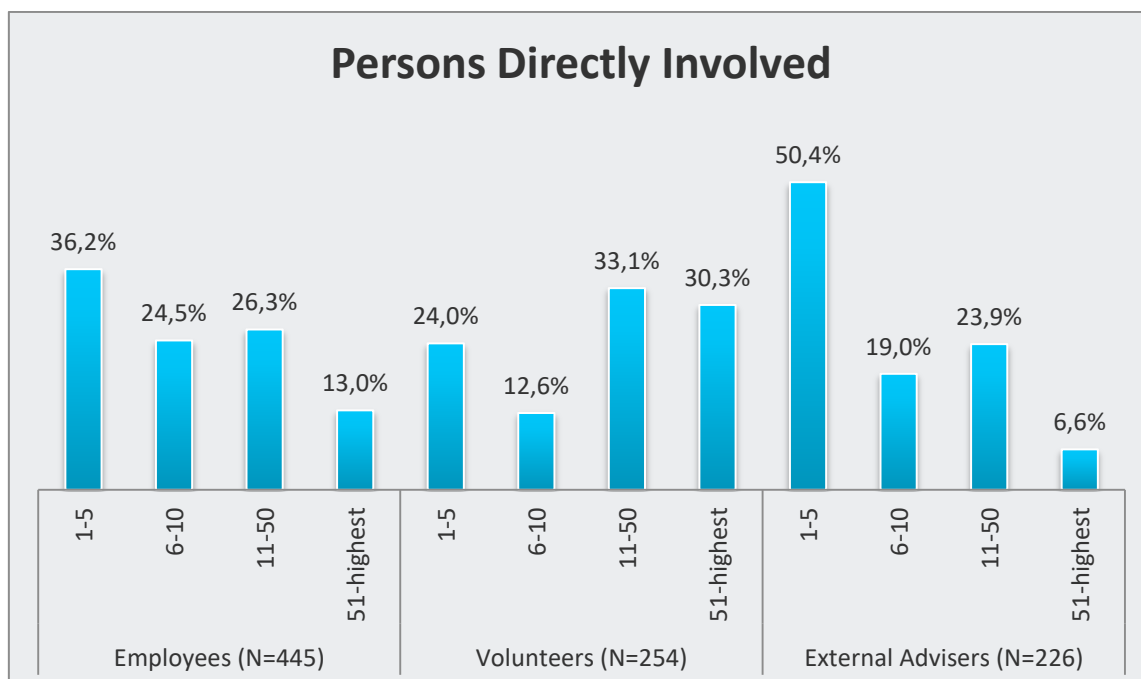


Figure 30: Number of Persons, directly involved in the initiative (employees, volunteers, external advisers)

²¹ This case was extracted from further statistical procedures because of its extremity.



Beside the broad range of persons directly maintaining the initiatives, it can be stated, that there is a high civil society support by volunteers. Even small scaled initiatives (in numbers of employees) could have a high potential of volunteers and external experts and supporters.

Looking at the policy fields it is evident that on average (see table below):

- More *employees* are engaged in Poverty Reduction (on average Ø 587 persons)²² and Education (Ø 211) initiatives, less in the other policy fields (Ø 22-85).
- More *volunteers* are supporting innovations within Transport and Mobility (Ø 4.384)²³ and Environment (Ø 2.355), less in Energy Supply (Ø 25) and Employment (Ø 62).
- External *advisers, experts* could be found more often in Education (Ø 124) than in the other policy fields (Ø 3-21).
- Other supporters are mainly found in Poverty Reductions (Ø 5.505)²⁴ and Health and Social Care (Ø 408).

	Education	Employment	Environment	Energy Supply	Transport & Mobility	Health & Social Care	Poverty Reduction
	Ø	Ø	Ø	Ø	Ø	Ø	Ø
Employees	211	63	23	39	85	53	587
Volunteers	758	62	2.355	25	4.384	1119	1.434
Experts, Advisers	124	8	3	21	7	14	19
Others	227	102	25	173	25	408	5.505

Table 6: Involved Persons (Policy Fields) (Ø: average number)

If categorised by ranges of employees (see figure below) the differences of the initiatives in scale in the different policy fields become evident too. Most of the smaller initiatives (up to five employees) could be found in the field of Energy Supply (70% of the initiatives with employed staff information) and Transport and Mobility (42%). In the Education field 68% of the initiatives have 6 to 50 employees). In the Environment field 50% of the projects have more than 50 volunteers.

As a lot of initiatives are supported by external advisors it has to be mentioned that in Environment (80%), Transport and Mobility (67%), Health and Social Care (61%) most of the initiatives²⁵ have only up to 5 external experts and advisors to support them. In contrast 35% of the cases in Energy Supply are supported with a high number of 11 to 50 external advisers.

²² This high number of employees is due to the fact that there were a few worldwide active development aid NGO's and similar national agencies related to Poverty Reduction and Sustainable Development.

²³ There are a few national transport service initiatives highly depending on and supported by volunteers (civil society).

²⁴ See footnote above concerning worldwide initiatives of Poverty Reduction and Sustainable Development.

²⁵ In all these policy fields it has to be stated that the number of cases answering these aspects is very low.

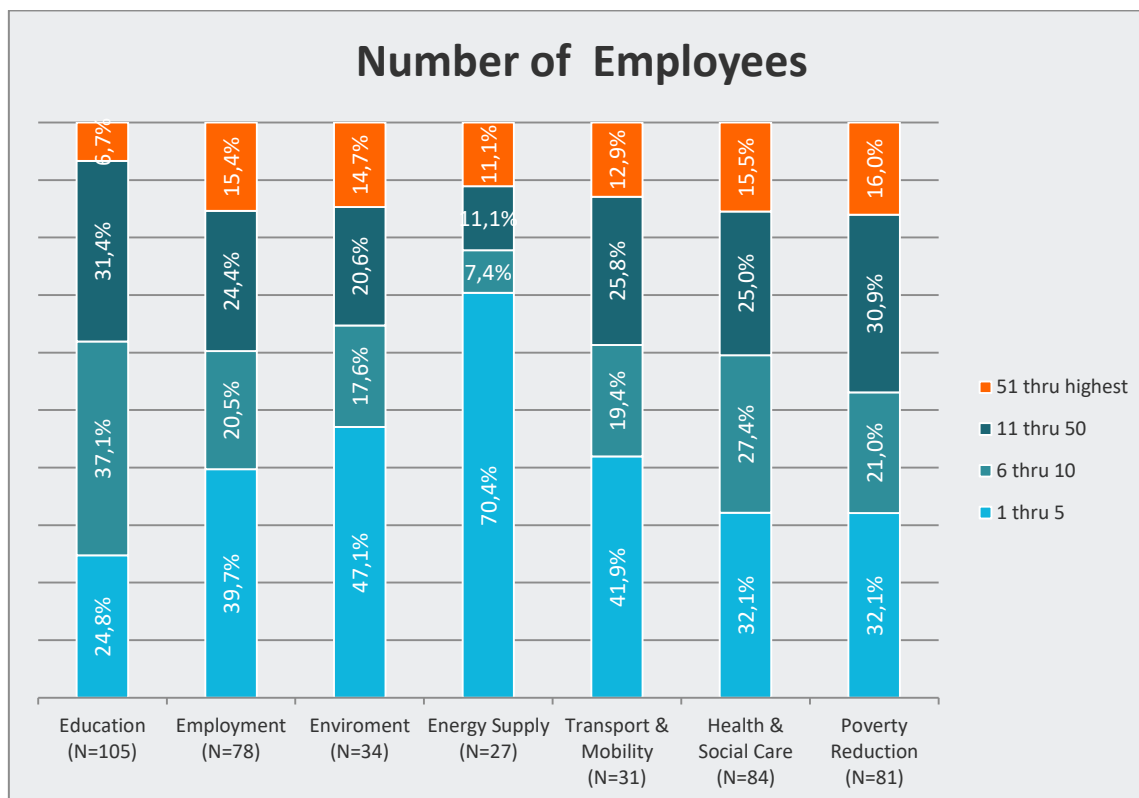


Figure 31: Number of Employees of the Initiative (Policy Fields)

From a regional perspective there is a higher number of employees, experts/advisers and other persons in the non-European countries, civil society engagement by volunteers is about at the same level (for details see table below). Within the European regions only marginal differentiations appear: on average more volunteers in Eastern and Western Europe, more experts/advisers in the East, more employees in the West and more other persons in the North.

	EU Regions				EU - non-EU	
	North	West	East	South	EU	non-EU
	Ø	Ø	Ø	Ø	Ø	Ø
Employees	33	47	18	27	36	472
Volunteers	421	1854	779	467	1023	1105
Experts, Advisers	12	11	30	16	15	78
Others	322	31	10	72	101	3156

Table 7: Number of Employees of the Initiative (World Regions) (Ø: average number)

According to the mapped data

Although there are differences in scale between policy fields and world regions the *establishment* of initiatives is reflected by a high number of employed staff, which is supported by a high volunteer or *citizen engagement*, *professionalization* is guaranteed by a remarkable number of external advisors or experts.



(b) Yearly budget of the initiative

For one of three initiatives we got the information about their yearly budget (N=334): Average of the yearly budget is about 12.3 million Euros. For those we got figures, there is a big difference in the financial resources the initiatives could deal with:

- 22% have resources up to 10.000 Euro
- 25% have resources between 10.000 and 100.000 Euro per year
- 28% have from 100.000 up to 1 million Euro at their disposal
- 12% could deal with 1 to 5 million Euro
- At least 12% have more than 5 million Euro budgets (1.5 billion at the highest).²⁶

The initiatives referring to a high budget are mainly funded by national public money and economic return. Low budget initiatives (up to 10.000 Euro) are mainly dependent on partner contributions, foundations and philanthropy capital and donations from single persons or companies. It also should be mentioned that the initiatives with a higher budget (above 1 million Euros) are more active in transfer (above 70%), done mainly by the project partners.

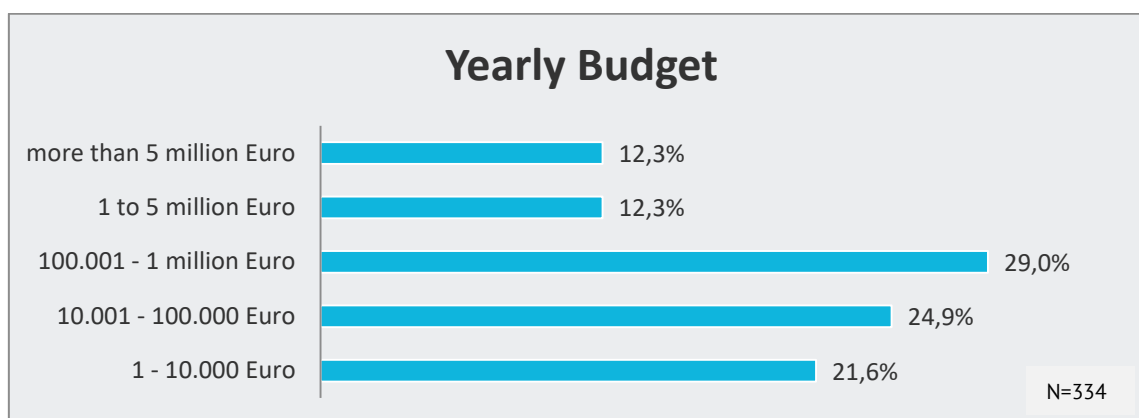
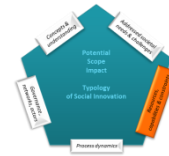


Figure 32: Yearly Budget

This shows that most of those initiatives which named a yearly budget could refer to a lot of money to develop their innovations. But the given resources have to be differentiated between policy fields, world regions, and the scale and funding sources of initiatives.

Compared with the yearly average budget of 12.3 million Euros and differentiated by the policy fields the most financial resources could be found in Transport and Mobility (Ø 76.6 million Euros, with high funded programs) followed by initiatives in the field of Poverty Reduction (Ø 29.2 million Euros) and Energy Supply (Ø 13.0 million Euros). Initiatives in Employment (Ø 4.3 million Euros), Health and Social Care (Ø 2.6 million Euros), Environment (Ø 1.7 million Euros) and Education (Ø 1.6 million Euros) have considerably less money.

²⁶ These are initiatives like the Grameen Foundation and national Microfunding programs, national or handicap oriented health care centres, national transport activities, etc.



This is underlined by the fact that 44% of the Education cases have a yearly budget up to 10.000 Euros. Poverty Reduction (74%), Employment (73%), and Environment (65%) initiatives have mainly a yearly amount between 10.000 and 1million Euros at their disposal; more than 1 million Euros do have a low number but big initiatives in Transport and Mobility (67%).

The world regions show also high differences: While 16% of the cases in Europe have less than 10.000 Euros, 35% of the non-European countries are in this category. Anyway, the highest average of an appointed yearly budget is by far found in Asia (about 113 million Euros), followed by Western Europe (17.8 million Euros) and Near East (11.6 million Euros). On average the lowest budgets could be found in Africa (1.7 million Euros), North and Latin America (about 1 million each), and Russia (0.4 million Euros).

According to the mapped data

There is a big difference in the financial resources the initiatives could deal with, depending on the policy field and the region the initiative is placed, on the one hand, and depending mainly on the scale and funding resources of the single initiative, on the other hand.

(c) Funding sources

But where does the budget come from? All in all there is a highly diverse variety of funding evident. On average more than three different sources are combined to run the social innovation. The main funding sources are:

- **Internal contributions** of the initiatives themselves comprise a relevant part of the funding: 38% of the initiatives are funded by own contributions and as well 39% are funded by partner contributions.
- **Public funding** sources are supporting the initiatives as well: National funding in 35% of the (mainly bigger) initiatives, regional funding appears in 23% and European funding in 17% of the cases.
- **Civil society funding** from foundations and philanthropy capital (21%), international (13%) and individual (23%) donors are also a highly relevant funding source.
- **Economy** related funding sources are donations from private companies which obtain 27% of the social innovation projects, economic return from own products or services generate 30% and participant fees are funding 13% of the cases. Crowd funding are used by 5% of the initiatives.

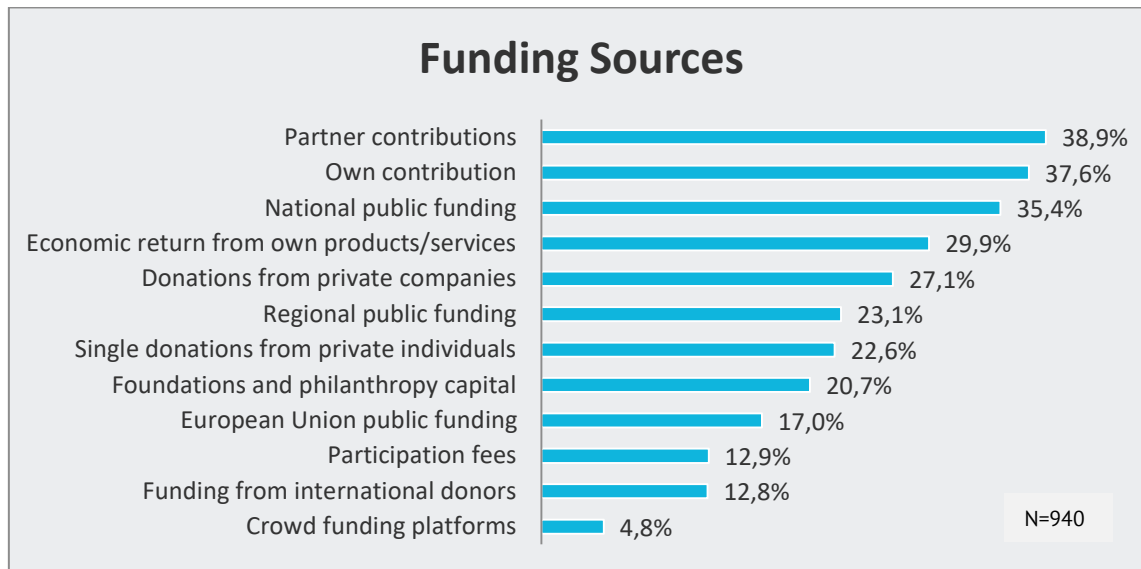


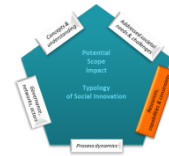
Figure 33: Funding Sources

That this is not a kind of risk diversification but a search for any kind of funding is underlined by the fact that there is a highly diverse combination of funding sources. Only a few combinations (characterized by more than 100 cases or 10% of all cases) should be mentioned:

- *Partner contributions* are often combined with own contributions (172 cases), privat company donations (158 cases) and foundation / philanthropy capital (110 cases).
- *National, regional and EU funding* are added up as well: national and regional (111 cases) as well as national and EU funding (75 cases).
- *Economic return* is often associated to own contributions (129 cases) and national funding (107 cases).
- *Single donations* from private individuals go hand in hand with privat company's donations (160 cases), foundation and philanthropy capital (109).

Across the *policy fields* there are very different priorities of funding sources:

- *Internal Funding* by *own contributions* are more relevant for environmental initiatives (53%), *partner contributions* more for Poverty Reduction (51%) and Education (51%), and *participation fees* are more supporting initiatives in energy supply (27%).
- *Public funding of the EU* is more relevant for Employment (31%), *national funding* is more supporting Poverty Reduction (45%) and *regional funding* could be more often found in Energy Supply (39%) and Health and Social Care (29%).
- *International donors* are more often received in Poverty Reduction (33%), *single individual donations* and *foundations* support Education (42%/42%) and Poverty Reduction as well (28%/29%).
- *Economic return* is of higher importance in Energy Supply (49%) and Poverty Reduction (40%).



- *Private companies* support more often initiatives in Education (50%) and Poverty Reduction (37%).

This leads also to a different combination of main funding sources across the policy fields:

- While educational initiatives are more often depending on partner contributions, foundations/philanthropy capital, and single donations from private individuals
- Employment projects are based mainly own contributions, national and European funding, and economic return from own products/services
- Environmental and Energy Supply initiatives are focusing on own and partner contributions as well as on economic return from own products/services, in the energy sector additional national and regional funding as well as participation fees are needed
- Transport and Mobility is relaying on own contribution, national funding, and economic return from own products/services
- Health and Social Care on own and partner contributions, supported by national funding
- And especially in Poverty Reduction and Sustainable Development there is a highly diversified funding scheme: almost every funding source is of relevance.

	Education	Employment	Environment	Energy Supply	Transport & Mobility	Health & Social Care	Poverty Reduction
	%	%	%	%	%	%	%
Own contributions	29,4	36,8	53,3	40,5	30,1	37,9	42,3
Partner contributions	51,3	24,8	41,1	43,0	24,4	32,4	50,9
European Union public funding	18,8	30,8	15,6	12,7	21,1	10,3	9,8
Participation fees	13,2	13,5	4,4	26,6	14,6	11,0	9,8
National public funding	34,5	35,3	20,0	40,5	30,9	37,2	44,8
Regional public funding	15,2	21,1	14,4	39,2	21,1	29,0	27,6
Funding from international donors	15,7	10,5	6,7	5,1	3,3	4,8	33,1
Single donations from private individuals	42,1	7,5	20,0	7,6	10,6	24,8	27,6
Foundations and philanthropy capital	42,1	12,0	11,1	1,3	2,4	22,1	29,4
Donations from private companies	49,7	12,0	22,2	5,1	17,9	22,8	37,4
Economic return from own products/services	16,2	34,6	37,8	49,4	31,7	15,2	39,9
Crowd funding platforms	4,6	4,5	5,6	2,5	4,9	3,4	7,4
Other	4,6	3,8	18,9	20,3	9,8	12,4	5,5

Table 8: Funding Sources (Policy Fields)

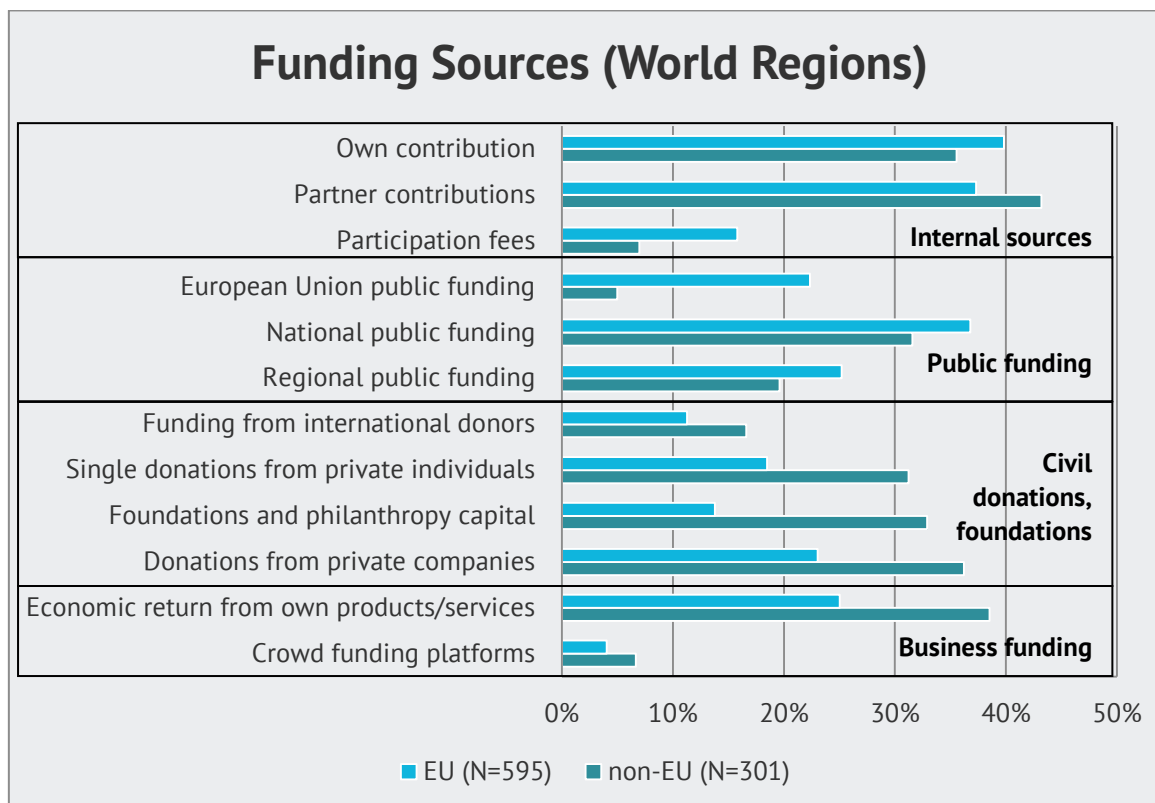


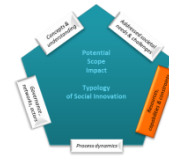
Figure 34: Funding Sources (World Regions)

In between the world regions the main differences could be found between Europe and the non-European countries: While donations from private persons, companies, international donors and foundations are by far more relevant to finance non-European initiatives, in the European countries European, national and regional public funding is as important as participant fees and own contributions (see figure above).

Within Europe funding sources are also differently allocated:

- In Southern and Northern Europe own (47%/31%) and partner contributions (46%/27%) are more important.
- Public funding has a more relevant part in Eastern (EU funding: 42%), in Northern (national public funding: 45%), and Western Europe (regional public funding: 30%).
- International donors support the social initiatives more often in Southern (25%); single individual donors are more engaged in Western Europe (22%).
- Economic return could be more often found in Southern (32%) than in Eastern Europe (19%), participation fees fund more initiatives in Western (20%) and Southern Europe (18%).

In how far this is reflecting the funding situation and possibilities of the countries has to be checked in the case studies as well as this is a matter of existence, access, difficulties, and possibilities of funding through policy programs.



According to the mapped data

There is a wide range and mixture or combination of funding sources (internal, public, private, civil society) the initiatives are based on. This might be seen as a kind of risk diversification (not to be dependent on only one funding base) but more obvious is that the initiatives are searching for funding wherever possible. Funding is still the main challenge (see barriers described in the next chapter), also due to the fact there is still no systemic support of social innovation compared with technological development environments. Especially within the policy field of Poverty Reduction and Sustainable Development almost every kind of funding source is referred to (and necessary). In Europe there is higher orientation and therefore dependency from (European, national and regional) public funding and initiative internal (co-)funding (participant fees and own contributions) while in non-European countries donations and foundations are the main (worldwide) players for funding.

4.3.2.2 Drivers and Barriers: Societal Challenges and Local Social Demands are the Origin of Social Innovations driven by Individuals, Groups or Networks

Capabilities and constraints of social innovations are mainly influenced by faced drivers (including motivation and triggers) and barriers.

(a) Drivers

While societal challenges and local social demands are by far being the main *motivation and triggers* for more than 60% of the mapped social innovations (see chapter 4.2.2.1 and figure 21) they are especially relevant for Poverty Reduction and Sustainable Development initiatives (72% and 76%) (see table below). Societal challenges are less motivating for Transport and Mobility (46%), social demands are of less interest for Environment and Climate Change projects (38%).

Also an inspiring idea (37%) and a social movement (22%) are more relevant to initiate Poverty Reduction, while it is not so important for Transport and Mobility activities comprising in many cases already more or less established practice fields (16% and 6%). Policy incentives are more relevant for Energy Supply (28%), less for Poverty Reduction (14%).

New technologies lead more often to social innovations in the field of Education (28%), Energy (27%), Transport and Mobility (27%), less in Health and Social Care (18%), Employment (18%), and Environment (17%). Beside these small differences it has to be stressed, that the possibility of taking advantage of new technologies appears in a remarkable extent in every policy field showing the relevance of technology to support social innovation activities.

While there are differences in the triggers for social innovations between the policy fields there are only minor disparities between the world regions. In general, no bigger differences between Europe and the rest of the world can be stated. Anyway social demands are above average in Southern (67%), societal challenges are a first motivation in Eastern (72%). Policy incentives and new technologies are a higher driving force in Eastern



Europe (29%), new ideas more often inspiring social innovations in Southern (36%) and Northern Europe (41%).

	Education	Employment	Environment	Energy Supply	Transport & Mobility	Health & Social Care	Poverty Reduction
	%	%	%	%	%	%	%
The need to respond to a local social demand	61,8	61,0	37,9	56,4	55,6	66,0	75,6
The need to respond to societal challenges	64,7	57,4	67,4	66,7	46,0	57,8	71,7
A social movement (large grouping focusing on specific issues)	10,6	13,2	24,2	15,4	6,3	16,3	21,7
A policy incentive (strategies, programs)	15,9	14,7	15,8	28,2	22,2	18,4	13,9
An inspiring new idea or invention	28,0	28,7	28,4	21,8	15,9	31,3	36,7
Possibility of taking advantage of new technologies for tackling social problems	27,5	18,4	16,8	26,9	27,0	17,7	23,9
Other	7,2	5,1	9,5	3,8	5,6	6,8	5,0

Table 9: Motivation and Triggers for Social Innovation (Policy Fields) (multiple responses)

Looking at the concretely named drivers for the projects or initiatives (see figure below) it becomes evident that by far individual persons, groups and networks are the main and most important force driving social innovations. For 75% of the initiatives this is a highly ranked driver (45% of the initiatives ranked these actors on rank 1). That means the other way round that the initiatives and their sustainability are highly dependent on these actors, moreover because most of the social innovations are not embedded in public innovation programmes yet. Additionally, it had to be stressed that - different from technological innovation – science and research are not having a relevant role as a trigger or driver (this is underlined by the low number of involved universities and research institutions as partners of the initiative, cf. chapter 4.4.2).

Beside the motivated actors an innovative environment is also of relevance (39% rank this topic on one) as well as solidarity (32%), governance and politics (26%). Although ICT (21%) and financial resources (21%) are of minor relevance for driving a social innovation, other results show that funding is a still a challenge (see barriers) and new technologies are relevant triggers.

A lot of other drivers (N=75) were named in this question as well, mainly concerning educational and environmental as well as health related issues, being more specific policy field related drivers.

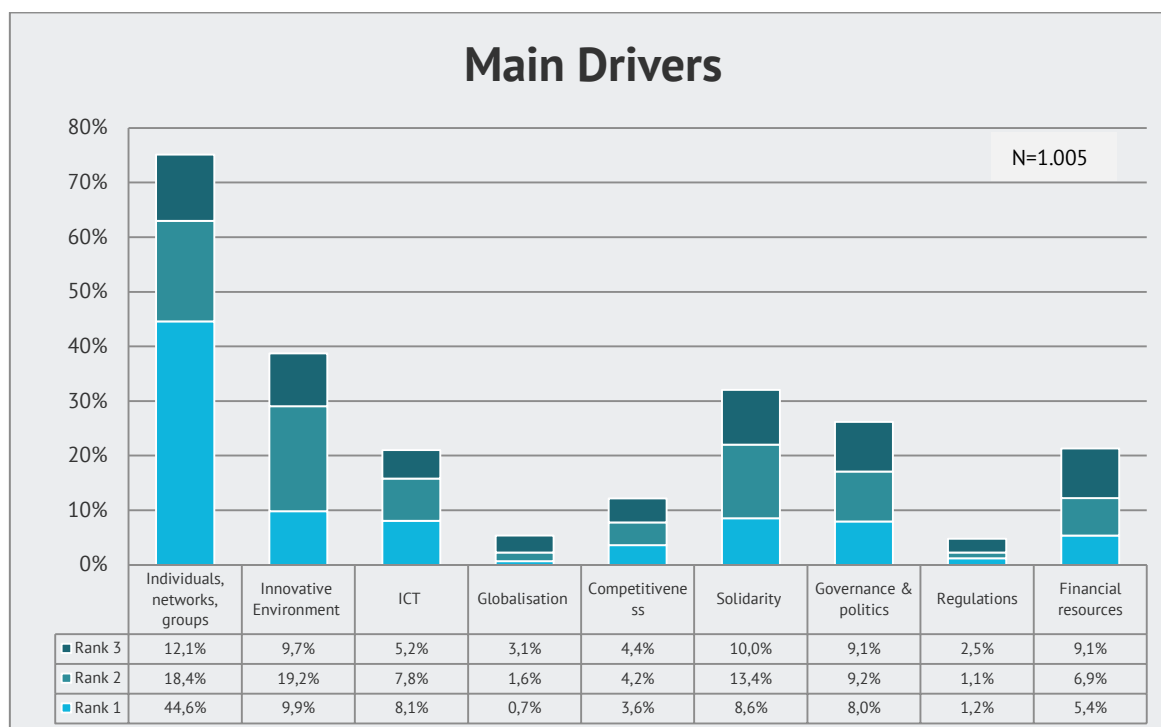


Figure 35: Main Drivers (multiple responses)

Looking at the main drivers (rank 1) within each policy field (see table below) it becomes evident that:²⁷

- Networks, individuals, groups are above average driving initiatives in Education (71%).
- An innovative environment is more relevant for projects in Energy Supply (52%), less in Education (16%).
- Information and communication technologies (ICT) are more relevant for social innovations in Education (47%) and Poverty Reduction (46%), but again they are a considerable driver in almost every policy fields (ranging from 25 to 46%).
- Solidarity is more a driver for Poverty Reduction (43%).
- Governance and politics are more a driving force for Transport and Mobility innovations (54%), less driving Education (17%), Environment (12%) and Poverty Reduction (13%).
- Financial resources are more relevant in Environment (71%, but low number of cases!) and Employment (35%), less in Education (17%), Transport and Mobility (15%), and Health and Social Care (13%).

²⁷ Globalisation, regulations and competitiveness are ignored because of the low number of cases in general.



	Education	Employment	Environment	Energy Supply	Transport & Mobility	Health & Social Care	Poverty Reduction
	%	%	%	%	%	%	%
Networks Individuals Groups	71,2	68,4	58,5	53,8	55,2	64,2	43,2
Innovative Environment	16,3	21,3	22,0	51,5	37,8	23,3	22,1
ICT	46,9	30,8	28,6	25,0	34,5	40,0	46,2
Solidarity	20,5	11,1	23,5	0,0	25,7	23,5	43,1
Governance and Politics	17,4	33,3	11,8	26,8	53,6	30,8	13,3
Financial Resources	17,1	35,0	71,4	25,7	14,8	13,0	28,9

Table 10: Main Drivers of the Policy Fields (rank 1) (basis: number of cases rank 1, 2, 3 within the policy field)

In the first SI-DRIVE Policy and Foresight Workshops drivers and barriers were also one of the main topics. The presented quantitative results of the mapping are underlined, concretised and enhanced by the *drivers* discussed within the seven policy fields:

- *Education*: Necessary social change (e.g. mismatch between economic needs and the qualifications of (prospective) graduated), the increasing general demand for education and the process of digitalization, and society's frustration about educational institutions and systems.
- *Employment*: New and effective legislation; communication between government, companies and science; education in accordance with needs of companies; technological possibilities (e.g. open source software),
- *Environment*: Counter reactions of civil society against top-down projects, technology as a mean for tailored mass communication, new scientific evidence presenting codified results and a as a major driver the idea of how to do something in a sustainable way and feeling of being responsible to do it in a sustainable way.
- *Energy Supply*: Policy and regulation (both a driver and a barrier), contribution to a sustainable energy system, prevent further negative climate change, independency from large energy supply companies, becoming 'prosumers' of energy (both producing and consuming energy), individual and personal related social values (wanting to do something good, or being part of a movement or initiative), changing lifestyle, knowledge about opportunities for renewable energy and energy efficiency, and knowledge about social innovation and how to run an initiative, technology that allows for new ways of production, more local production and more insight in energy use such as a smart meter.
- *Mobility & Transport*: Sharing economy (e.g. change of behaviour: from owner to user), technology (e.g. ICT development), environment (e.g. environmental protection), business models (e.g. quality of infrastructure), local context (e.g. social justice), and last but not least economy (e.g. costs of cars).
- *Health and Social Care*: Changing demographics, in particular the rise of life expectancy and the increases in non-communicable and lifestyle related diseases in high income countries; shifts from formal to informal care; in Europe particularly, the contraction in funding as a result of an increasing emphasis on



fiscal austerity and in addition new possibilities arising from ICT were also identified as a relevant drivers of social innovation.

- *Poverty Reduction & Sustainable Development*: Income generation, investment, resource scarcity, pollution, good training and education system, and a dynamic market, rewarding good ideas and leadership.

Summarising these drivers, it becomes evident that in all the policy fields (beside Poverty Reduction) technology is named with a relevant role as a new basis, driver and an enabler of social innovations (taking advantage of new technologies is given).

Also the analysed *world regions* show different priorities of drivers (rank 1) for social innovations (see table below):

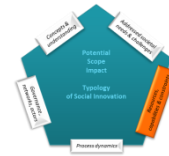
- Networks, individuals, groups are much more often driving innovations in Europe (64%) then in the rest of the world (51%). Within Europe these actors are of more relevance in the Northern (72%) and Western (66%) parts, less in Eastern (48%) and Southern (57%) Europe.
- Innovative environment and information and communication technologies (ICT) are more relevant in Eastern (29% / 39%) and Southern (32% / 41%). ICT is of higher relevance in non-European countries (44%) than in Europe (34%).
- Solidarity is of more importance in Southern (40%) and Western (34%) Europe, less in the Northern part (6%)
- Governance and politics are more a driving force in non-European countries (38%) than in Europe (28%), especially in Southern Europe this is not seen as a driver (6%).
- Financial resources are more important in non-European countries (38%) than in Europe (20%), within Europe financing is a more relevant driver in Eastern EU (39%) than it is in the Northern (13%) and Western (15%) countries.

	EU Regions				EU - non-EU	
	North	West	East	South	EU	non-EU
Networks Individuals Groups	71,6%	66,4%	47,6%	57,1%	63,6%	51,4%
Innovative Environment	20,3%	22,1%	29,4%	31,8%	24,5%	24,6%
ICT	28,1%	33,3%	38,9%	40,7%	34,3%	44,4%
Solidarity	5,7%	34,3%	27,8%	39,5%	29,4%	22,2%
Governance and Politics	36,4%	30,4%	21,1%	6,3%	28,2%	38,0%
Financial Resources	13,0%	14,5%	39,3%	23,5%	20,4%	33,8%

Table 11: Main Drivers within the World Regions (basis: number of cases rank 1, 2, 3 within the policy field)

Additionally, the Regional Report of SI-DRIVE stated a common set of factors across all *European countries* enabling social innovation (Boelman/Heales 2015, p. 5-7):

- **Active civil society, inspired and entrepreneurial individuals.** The importance of individuals and groups at the grassroots level is often at the heart of social innovation. As such a country which promotes, encourages and develops an active

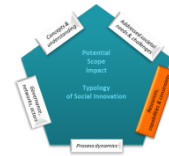


civil society and proactive individuals creates an enabling environment for social innovation.

- **Funding.** Access to finance is often crucial for developing new social innovations, but also for the other phases in the innovation cycle (sharing information for example). The increasing availability of EU funds in particular for social innovation has been an important factor across Europe. In some countries there are also financial incentives available from the bilateral donor community which contributes to the piloting of new innovative initiatives.
- **New technologies.** New technologies offer new opportunities for social innovation. The potential of social media and mobile technologies are often mentioned as drivers of social innovations.
- **Networks and platforms for cooperation** between different stakeholders. Many social needs and challenges can be regarded as wicked problems, so connecting and facilitating collaboration between stakeholders is of huge value. Networks also provide routes for sharing experiences and learning from best practice at a local, national and international level.
- **A supportive legislative environment.** Legislation can be used to force to change or to give 'space' to new experiments. In some instances, recent economic crises and constraints on public finances have also led to structural reforms, and the search for new, innovative solutions and mechanisms. In the Western Balkans and some countries in Eastern Europe, political change over the last 20-30 years has also led to positive regulatory reform.
- **A sense of urgency.** Many social innovations respond to social needs and crises which push issues up the public and political agenda. Increased focus and attention on an issue can help to enable new, innovative approaches to gain traction or acceptability in the face of the (apparent) failure of traditional solutions.
- **Political change.** This is particularly evident in the Western Balkans and Eastern Europe where the transition from one system to another, as well as the process of EU integration, have led to significant change in all areas of governance and public policy. It is also evident on a smaller scale elsewhere in Europe as different governments take a more or less supportive approach to things like the role of civil society.

Factors enabling social innovation in non-European countries are depending often on the political situation, policy programs and the possibilities for civil society to act, including also enthusiastic social innovators:

- **The Russian Federation:** Democratisation and civil society importance as well as pluralism of opinions and open discussion of initiatives, based on the developed scientific and educational sphere as well on the increasing presence of institutional prerequisites for the implementation of social innovation projects are fostering the acceptance and development of social innovations.
- **Turkey:** The EU accession process and relatively high growth rates and higher incomes compared to the past find more people involved in innovative social activities.



- **South Asia:** The involvement of local communities, decentralization and participation of the poor in the implementation of various programmes focusing on the grassroots are driving the importance of social initiatives. Government programmes, social movements, and a rise of innovative and risk taking social conscious individuals and entrepreneurs are completing the list.
 - **East Asia:** The state provides information, education and training to facilitate innovation practices and there is a growing development of technological and managerial measures.
 - **Latin America and the Caribbean:** Driver of social innovations are the social needs of very large sections of the population that have not been filled with traditional government programs or models. A key to success and the potential for sustainability over time lies in the active participation of the community.
 - **Africa:** The biggest driver of social innovation in Africa is access to, the support and the creation of networks, individuals and groups initiating and taking care of social innovations. Other drivers, though much less important, are the presence of conducive innovation and financial environments as well as achieving solidarity.
 - **Australia:** The major factor enabling social innovation is a widely scattered band of enthusiasts, often working in relative isolation.
- New Zealand:** A growing network of hubs, trusts and organisations financially supporting projects that aim at achieving positive social impact is the main driver. More capacity building organisations and institutions are evolving, with the goal to cooperatively equip initiatives with the right skills, competencies and even resources to be successful.

(b) Barriers

Concrete barriers were specified for three of four initiatives (for 23% of the cases no barriers were named). Although there is a mix of funding sources and funding is not the main driver (as mentioned above), *funding is by far the main challenge* of the social innovations. More than half of the cases which named barriers are concerned by this.

Against the background that empowerment, human resources, and knowledge are the main crosscutting themes the appointed lack of personnel and knowledge gaps could be seen as relevant barriers as well, especially because the Critical Literature Review (Howaldt et al. 2014a) stated transfer of knowledge as a key component for the diffusion of social innovations: Taking both together these human resources handicaps are hindering about one of three initiatives. Legal restrictions and missing political support are a third block of barriers, relevant for 14-17% of the cases.

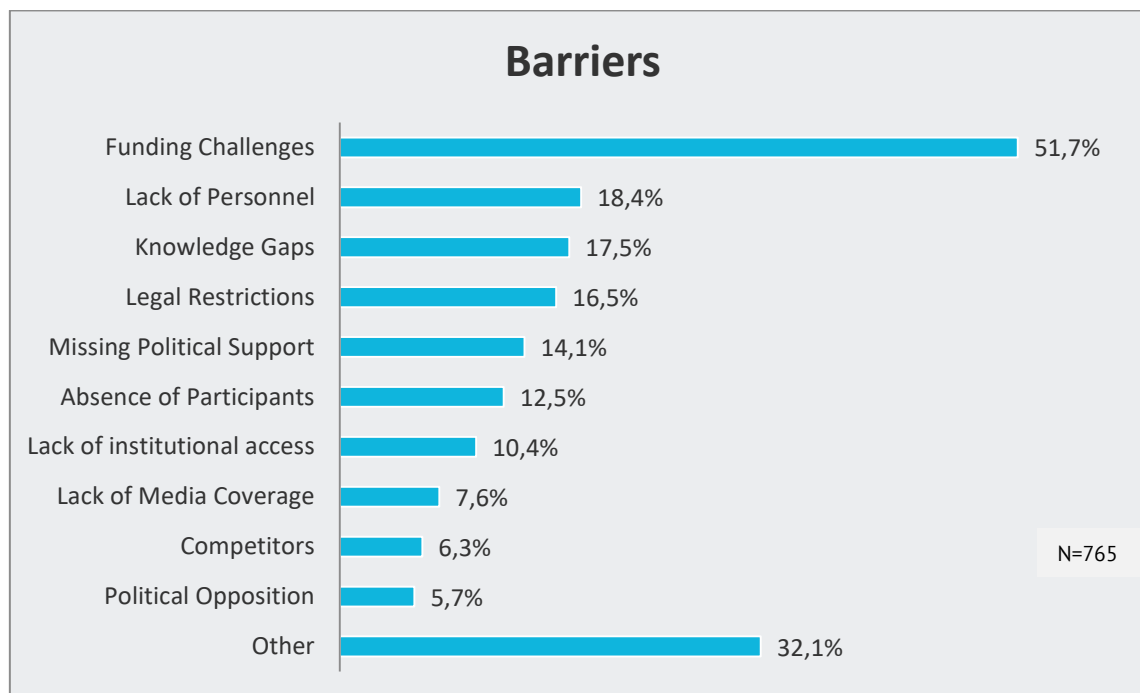
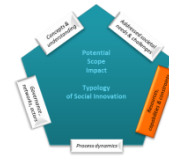


Figure 36: Barriers (multiple responses)

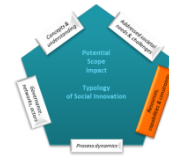
Additional to the given topics also the other mentioned barriers (done by about one third of the initiatives) - mainly named in the policy fields of Energy Supply, Transport and Mobility, Education, and Environment - are showing again the heterogeneity of barriers (beyond funding and knowledge) the innovations are confronted with:



Barrier	Description
Attitudes of consumers	Attitudes hold by customers or societal members must change in general in order to achieve higher impacts.
Conditions natural environment	Conditions in the natural environment (e.g. earthquakes) are causing a threat to the initiative's solution.
Cultural barriers	Cultural differences (within the organisation but also among participants and between the initiative and its beneficiaries) can be considered a barrier.
Economic conditions / crisis	Economic conditions, economic crises in particular, hampered the success of some initiatives.
Infeasibility of roll-out/ expansion	Scaling at the solution's current state is not a feasible solution. Reasons could be related to project's design or a lack of resources.
Infrastructural inappropriateness	Refers to locational disadvantages.
Lack of confidence or trust	A lack of confidence or a lack of trust by societal members in the potential and benefits of the solution offered can be considered a barrier.
Lack of partnership, support opportunities	Partnerships and support (e.g. by private sector actors) often are considered a benefit in order to carry out a solution. However, for different reasons, initiatives also have difficulties in entering such partnerships due to a lack of opportunity or even interest.
Language barriers	Language barriers within an organisation or between organisational members and potential participants are named as a barrier, too.
Measuring quality of solution	Measuring the impact a solution has on society is important. However, it was stated that the development of such measurement tools is a prevailing hurdle.
Public acceptance of solution	For different reasons, solutions legitimacy may not be granted by societal members (see also political opposition and institutional access).
Quality of equipment	Relates to poor equipment quality and a lack of finance to purchase newer and/or more equipment.
Support by societal members	Support by other societal members (other than politics and institutions) is missing.
Technological / technical related problems	Barriers, missing knowledge and resources concerning the use of new technologies, mainly for the publicity and reaching the target groups but also for setting up, supporting a solution.
Problem ignorance	The problem at hand is ignored; therefore society does not really see room for action taking.
Bureaucratic barriers	Bureaucratic structures within a region or country often poses. Higher burdens arise due to bureaucratic and administrative procedures.
Resource intensity	The amount of resources required to effectively carry out operations is too high.
Access to internet	Many initiatives require good internet connections in order to carry out their operations. However, not always is access to internet given.

Table 12: Other Barriers Mentioned (N=185)

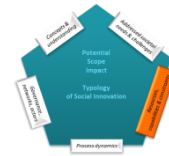
The further description of these barriers (within an open question of the mapping) illustrates the again the multifaceted obstacles the initiatives have to face:



- *Funding challenges*: lacking access to and time restricted dependence of funding and bank loans, unattractive interest rates, missing sustainable finance, cost expansions when it comes to scaling and diffusion, negative return of investment, low profit generation, and lack to finance relevant staff.
- *Lack of personnel*: insufficient number of staff and volunteers, lack of finance and incentives (working conditions, wages, etc.), difficulties in retaining qualified personnel, special treatments for some kind of employees (e.g. handicapped people).
- *Knowledge gaps*: lacking capabilities and skills (esp. business and managerial, staff training and personnel development, networking and communication skills) as well as missing experience in economy, lack of professional knowledge (e.g. information technology and recruiting staff), difficulties to get access to required information, external expert knowledge is needed in some areas.
- *Legal restrictions*: access to financial systems (application for funding and bank loans are too complicated or not possible), too strict or not formulated standards (e.g. quality or safety standards), not given congruence or weak interpretation scopes to law and regulations (“grey zone”), necessity for new laws or regulations, and limited legal structures and possibilities to establish social enterprises.
- *Political support*: governmental coordination structures, corruption, lack of government contracts and funding, lack of political will and promotion, and other political priorities or problem ignorance.
- *Absence of participants*: missing acceptance and feasibility of the solutions for (some parts of) the target group, limited coverage of the problem related to the stage of the initiative, lack of awareness and reaching the target group, and lack of interest and publicity, popularity.
- *Lack of institutional access*: acceptance by external parties; missing legitimacy, interest, practical support; no willingness to change (public) institution, ponding on institutional rationality (saving privileges, not willing to change internal structures and to take over additional or other tasks than the ones they are obliged to), and public bonds to established solutions (path dependency).
- *Lack of media coverage*: lack of publicity of the solution, lack of media interest; ineffective or no use of online tools, social media and networks, insufficient or not given collaboration with media, and no or weak media coverage.
- *Competition*: establishment of similar or alternative solutions, either by other initiatives or the private market; price competition with private market solutions, and no competitive wages.
- *Political opposition*: especially at local and regional level, doubts on the legitimacy of the solution cause political opposition, political disparities (not in the general solution but the implementation etc.), and public bonds with incumbent solution.

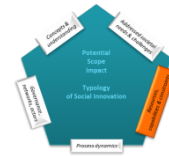
Related to the given barriers the initiatives named also a heterogeneous set of *strategies to overcome these barriers* (again in an open question of the mapping):

- *Funding challenges*: looking for possible investors from any kind, public funding from different levels (EU, national, regional, local), searching for alternative financing sources (fundraising, crowd funding), applying to awards and



competitions to receive publicity and additional funding, charging fees (from consumers, users, members), changing the financial allocation (within organizational structure, money spent on behalf of the beneficiaries, etc), minimizing costs, development of new (public) financing policies, engagement in marketing and market activities, seeking new partner- and sponsorships, establishment of a new legal entity (to get access to specific funding opportunities).

- *Lack of personnel*: Recruiting applicable staff and exchanging personnel with other initiatives or own partners (barter exchange: while the initiative often receives access to an organisation's employees and infrastructure, it offers its services in exchange), recruiting (more) volunteers (using media and networks), training and upskilling of existing staff, care or assistance for employees with specific needs, installing incentive systems (employer branding, attractive work, stimulating motivational aspects, imposing working standards), optimising the work flow.
- *Knowledge gaps*: building up skills and capabilities (upskilling and training, workshops, learning etc.), providing managerial training (e.g. administration procedures, business plan design etc.), knowledge exchange and connecting with other organisations, collaboration for learning, facilitating knowledge transfer, exchange and learning opportunities, buying in knowledge, collaboration with external experts to gain specific expertise.
- *Legal restrictions*: imitation of good practice in order to comply with legal requirements, partnering with other organisations, dialogue with official authorities to negotiate favourable legal conditions, achieving or complying with given standards, creating new legal conditions for the smooth execution of the initiative's solution, finding alternative ways of operation if it is not possible to negotiate new legal framework conditions.
- *Political support*: advocacy to influence government and politics in order to recognise as well as support and finance the solution, ensuring an overlap between political strategies and objectives with the initiative's own objectives and priorities; building networks, platforms and relationships for dialog, cooperation and partnerships at a political level; designing favourable policies for solution, using media as a tool to receive governments attention, especially if the problem at hand is not yet a political priority or the problem has been ignored.
- *Absence of participants*: awareness campaigns, app development for continuous integration of participants, implementation of communication about the project, services, and product and its solution potential, setting up a team to ensure proper communication to society, evidenced-based communication to overcome mistrust or scepticism in society, convincing the public of the effectiveness of solutions, incentivising participation, granting participants for their efforts and willingness, personalising solutions to specific target group as well as approaching specific target groups, broadening target group focus, collaboration with relevant stakeholders.
- *Lack of institutional access*: establishment of and engagement in public-private-partnerships, engage in networks or platforms in order to persuade institutions and advocate the legitimacy of the solution, collaboratively development of solutions with institutional integration, putting local demand in focus, public relation



activities as a mean to access institutional support through awareness raising and attention making, accessing institutional support as a mean to give the solution a better backing by strengthening credibility and legitimacy.

- **Lack of media coverage:** active facilitation of diverse media channels, public relation campaigns, using in-house communication capabilities, cultivation of media relations in order to have access to media support when required.
- **Competition:** adjustment, improvement or diversification of the products or services, strategical cooperation and partnerships, quality improvement, niche orientation, marketing activities.
- **Political opposition:** convincing politics by showing the effectiveness of solutions, regular and continuous information exchange and transparency, dialogue with the authorities in order to get support, building networks with stakeholders in order to build a stronger force against political opposition.

As already mentioned (in chapter 4.1) significantly improving and modifying adopted solutions are facing more barriers in general (85% vs. 74% of the new ones) and especially legal restrictions (26% of these initiatives, 17% of the brand new ones).

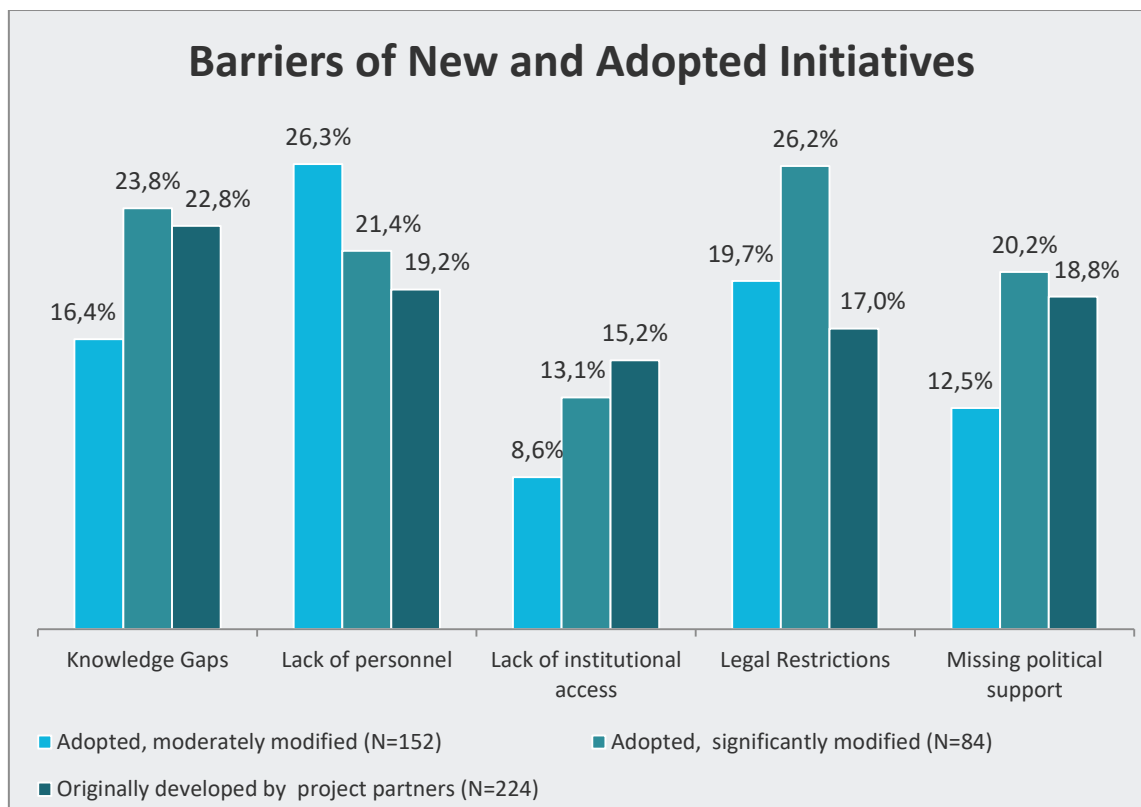


Figure 37: Barriers of New and Adopted Social Innovations

More barriers in general are also named for the policy fields Health and Social Care (85%), Energy Supply (84%), and Environment (81%), fewer barriers were recognized in Transport and Mobility (66%).

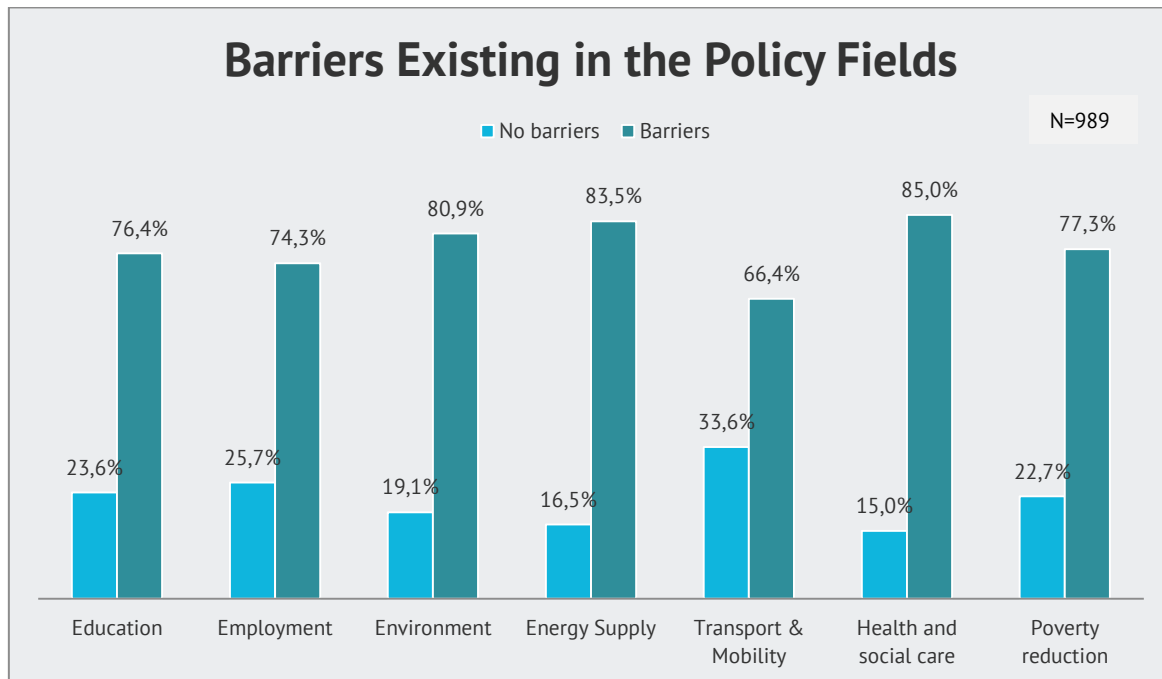
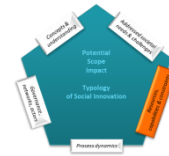


Figure 38: Barriers of the Policy Fields

Anyway, the barriers are of different relevance for the policy fields of SI-DRIVE:

- While funding challenges are the main challenge for every policy field they are more often faced in Health and Social Care (66%) and of relatively minor importance in Environment (42%), Energy Supply (35%), and Transport and Mobility (37%).
- Lack of personnel is found more in Health and Social Care (25%), less in Environment (10%) and Energy Supply (9%).
- Knowledge gaps are more often hindering initiatives in Poverty Reduction (27%), Employment (22%) and Environment (21%), less in Energy Supply (9%) and Health and Social Care (8%).
- Legal restrictions are more often blocking social innovations in Education (23%), Poverty Reduction (22%) and Energy Supply (32%).
- Missing political support is more often found in Education (19%) and Poverty Reduction (20%), less in Environment and Transport and Mobility (8%).

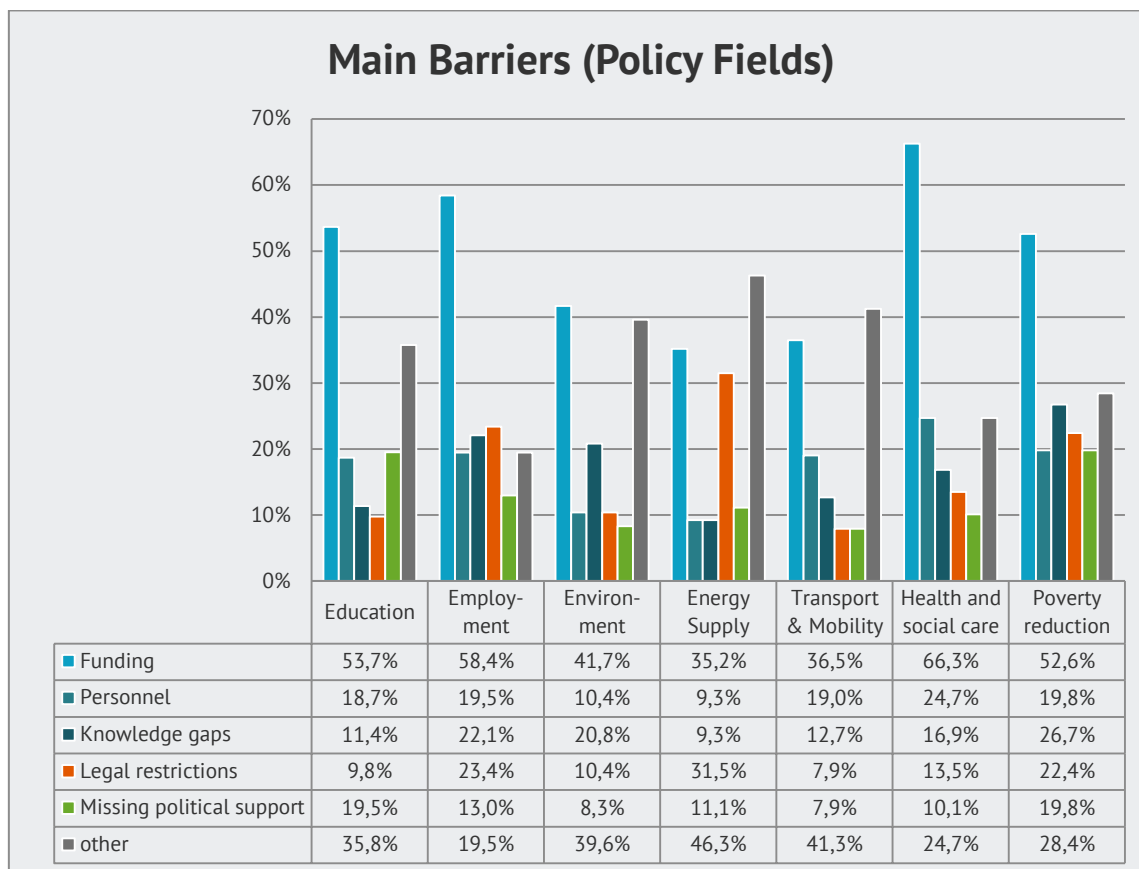
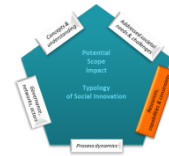


Figure 39: Main Drivers of the Policy Fields (basis: number of cases Rank 1, 2, 3 within the policy field)

As already mentioned for drivers the first Policy and Foresight Workshops of SI-DRIVE conducted within the seven policy fields delivered also a comprehensive, additional and more detailed picture of the barriers:

- *Education*: Government and fragmentation of education areas, rolling out initiatives on a regional/national scale hindered by institutional inflexibilities, policy and high degrees of bureaucracy and administration.
- *Employment*: Differing views of politics, lack of authority and leadership, a regulating government, ever changing legislation and regulations; rigid, inflexible and traditional legislation; too strict regulations and complex procedures; entrepreneurship is not valued; resistance to change and risk aversion; too much and less funding, too high and low subsidies, too much and less taxes, too high and low taxes; ineffective education; technology, e.g. high speed development.
- *Environment*: Lack of codified results concerning the positive impacts of social innovation; incumbent interests increase path dependence of “old ways”; unclear legal situations and a lack of information/ education resulting in a lack of awareness and publicity.
- *Energy Supply*: Policy and regulation (both a driver and a barrier), low trust in and acceptance of enabling technologies such as smart meters, technologies that hinder the development of social innovation, such as nuclear energy.

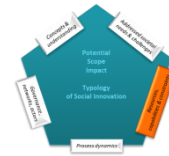


- *Mobility & Transport*: Regulation (legal barriers (e.g., UberApp) support established regime), political context and will (e.g. unstable local governments), access to mobility system (e.g. badly developed infrastructure), culture and communication (e.g. public sector lacks the experience to work with social innovation initiatives; authorities are not used to local initiatives), funding and costs.
- *Health and social care*: Changes of regulations and skills capacities, risk aversion.
- *Poverty Reduction & Sustainable Development*: Shortage of funding and resources, poor understanding of the problems and their dimensions, high level of illiteracy in the regions, hindering legal and institutional arrangements, lack of will and poor political commitment, corruption and low transparency, patriarchy and structural inequality, cultural barriers, social norms and values resisting empowerment, habits and customs, regulations and policies, prejudices; lack of finance, funding problems, lack of funds; poor government policy and local government opposition; market dominance (exploitation).

It can be summarized, that regulations and legal restrictions, public administration and bureaucracy are named by almost every policy field. And again, like in other analyses, it becomes obvious that especially Poverty Reduction and Sustainable Development is heterogeneously characterised, in this case by a widespread set of barriers.

From a global regions perspective it has to be mentioned that more barriers in general are named in Eastern Europe (37%). In detail barriers differ in the analysed world regions as such:

- Funding challenges are more a problem in Europe (55%) than in the rest of the world (46%); financial restrictions are mainly found in the South (66%) and less in East of Europe (39%).
- A lack of personnel is more limiting initiatives in Western (22%) and Southern Europe (29%), less in the Eastern (7%) and Northern (7%) parts.
- Knowledge gaps could be more often found in Northern (22%) and Southern (23%) Europe, less in East Europe (7%)
- Legal restrictions could be found more in Southern Europe (24%).
- Lack of media coverage is not an often named barrier but of greater relevance in non-European countries (14%) than in Europe (4%).
- Missing political support is more a barrier in non-European countries (20%) than in Europe (10% in total, 16% in Southern Europe).

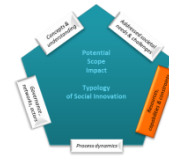


	EU Regions				EU - non-EU	
	North	West	East	South	EU	non-EU
Funding Challenges	59,8%	52,6%	39,1%	65,7%	55,1%	46,2%
Knowledge Gaps	22,0%	10,4%	6,5%	22,9%	15,1%	21,4%
Lack of Personnel	7,3%	22,1%	6,5%	28,6%	17,9%	19,5%
Lack of Institutional access	6,1%	5,8%	15,2%	17,1%	9,4%	11,9%
Lack of Media Coverage	2,4%	4,5%	0,0%	5,7%	3,7%	14,3%
Absence of Participants	11,0%	18,8%	6,5%	10,0%	13,6%	11,4%
Legal Restrictions	13,4%	16,2%	15,2%	24,3%	17,0%	14,8%
Missing Political Support	9,8%	7,8%	10,9%	15,7%	10,2%	20,0%
Political Opposition	8,5%	5,8%	2,2%	4,3%	5,7%	5,7%
Competitors	6,1%	5,8%	6,5%	12,9%	7,4%	4,8%

Table 13: Main Barriers within the World Regions (multiple responses)

The mapping results above are verified and substantiated by the Regional Report of SI-DRIVE (Boelman/Heales 2015): Inevitably (in Europe), the absence of many of the factors which enable social innovation can be considered to be a constraint (i.e. poor/unsupportive legislation, a lack of funding etc.). Nonetheless it is possible to identify a number of other factors which constrain social innovation, which are also relatively common across **Europe**:

- **Poor funding models.** Above and beyond a complete lack of funding, social innovation is often constrained by poor funding models. This particularly includes a lack of second-round financing for projects that would enable proper piloting and roll-out/ scaling of solutions. Short-term funding all too often leads to short-term projects which do not have time to achieve or demonstrate their potential impact. A related aspect is the complexity of obtaining funding, particularly from the EU or other major funders, which can often be beyond the resources and capabilities of smaller innovators. This is compounded when matched financing is required. There is a need for more innovative funding programmes that will better meet the needs of social innovators in terms of their size as well as structures (e.g. support for hybrid organisations)
- **Resistance to change/ risk aversion.** Centralized and hierarchical structures, typically government, are often identified as barriers to change. This can be due to the slow and bureaucratic nature of decision-making itself or, in some policy fields such as health, due to a high degree of risk aversion
- **Conflicts of interest.** While collaboration across sectors and with multiple stakeholders can lead to highly successful social innovations, it can also lead to tensions arising from mixed objectives. The complex social problems which innovations are trying to tackle often mean that stakeholders from multiple policy fields are involved and, for example, investments in one area will lead to benefits in others, with few mechanisms in place to recognise this appropriately
- **Poor knowledge sharing.** The social innovation community often recognises that it has still got more to do in terms of effectively sharing knowledge, examples and best practice. There is also still much to be done in terms of learning from failures so that other innovators do not repeat mistakes.

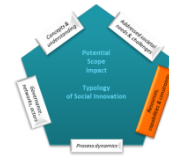


In addition, **many countries in the Western Balkans and Eastern Europe** identify legacies from previous political regimes which continue to constrain social innovation today. These include:

- **A lack of volunteering culture/ trust in social enterprises/ third sector.** In many countries the third sector was effectively appropriated by the government of the day and so even today social enterprises, cooperatives and some parts of civil society are often still associated with that period and viewed with a level of distrust
- **Lack of human capital.** Under-developed education systems, a lack of exposure to international markets and practices, and a lack of free-market experience mean that in many countries a lack of human capital is identified as a constraint, with a need to up-skill those working and seeking to work in social innovation and the third sector more broadly.

Factors constraining social innovations in **non-European countries** could be summarised on the basis of the regional report as follows:

- **The Russian Federation:** Political factors (undeveloped issue of a social entrepreneur status), psychological factors (inertia, conservative thinking of the population, fear of change, lack of risk-taking, contradictions in social entrepreneurs' psychology, differences in the logic of entrepreneurial and community activity), economic factors (difficulty to raise funds in low-income spheres of activity, etc.), and communicative factors (low level of population's awareness about innovation processes and opportunities to participate in them).
- **Turkey:** Missing government support, the level of foreign language proficiency is not sufficient, relatively lower capital, internal and external migration.
- **South Asia:** Lack of adequate funding, deep rooted social hierarchies, bureaucratic hurdles, corruption and lack of convergence across various sectors, lack of co-operation on key social innovation and development issues between different countries in the region.
- **East Asia:** Social innovation issues are often discussed only in the light of technological and managerial innovation; difficulty of developing cooperation between state and non-state actors in social innovation; limited funding for social innovation support.
- **Latin America and the Caribbean:** Lack of resources to carry out the processes required and the lack of technical assistance to accompany this process; policy decision lack to recognize social innovation as a central protagonist in the development of Latin America and the Caribbean.
- **Africa:** Funding constraints, missing political support, knowledge gaps, lack of appropriate personnel, as well as legal and institutional access barriers and lack of media coverage.
- **Australia:** The groundswell of community interest and action has been quite limited; there have been only very few, isolated, initiatives from government or business to promote a strategic approach to social innovation;
New Zealand: The major factor constraining social innovation is the absence of a proper ecosystem supporting social innovations, especially at the local level. At its



current state, it is fragmented with little cohesion. Especially the access to seed funding remains a major obstacle. Moreover, there is an immense need to develop effective intermediaries on national level that would not only provide access to financial resources but that carries out advocacy, supporting the role of social innovation.

According to the mapped data

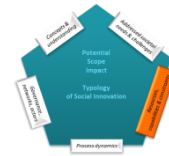
Societal challenges and local social demands are by far being the main triggers and motivation to start a social innovation, driven mainly by individual persons, groups and networks. Therefore, social innovation initiatives and their sustainability are highly dependent on these actors, moreover because most of the social innovations are not embedded in public innovation programmes yet. An innovative environment (including overcoming legal restrictions, administrative and bureaucratic burdens), is also of relevance as taking advantage of new technologies. As funding is not a main driver of social innovation it is by far the main challenge to develop and institutionalise, followed by human resources barriers (personnel and knowledge).

4.3.3 Conclusions and Open Questions

In relation to the hypotheses (chapter 4.3.1) the results of the global mapping of SI-DRIVE on resources, capabilities and constraints, drivers and barriers can be summarised at a glance:

- Those initiatives which named figures for their staff have a quite respectable number of regular employed people, activating considerably more volunteers, and are supported by a namely number of external experts and advisers.
- The yearly budget of the initiatives (if they have one) is very different, ranging from small scale initiatives with up to 10.000 Euro to big initiatives with more than 1.5 billion euros (and mainly more than 50 employees).
- Social innovations are funded by different sources: own resources and contributions of the partners as well as public, civil and private funding. Note: Economic return from own products and services are a relevant funding source as well.
- Societal challenges and local social demands are the main drivers as well as individual persons, groups and networks.
- Main barriers are funding challenges, lack of personnel, knowledge gaps and legal restrictions.

Referring to the background and the main perspective of the role of drivers and barriers for institutionalisation, diffusion and social change (chapter 4.3.1) the main results show a high innovation capacity and empowerment of society by broad and diverse financial and personnel resources of mainly in the implementation and impact phase stage situated social innovation initiatives (cf. chapter 4.5). The integration of partners of all societal sectors building an innovation related ecosystem, diverse funding sources, a high budget (of established initiatives), the diverse know-how of partners, a broad user and beneficiary involvement and a high number of volunteers could be seen as an already existing



excellent basis for further development to an ongoing institutionalization of the initiatives, their diffusion and adoption. As well as existing initiatives of such kind can become an inspiring movement / practice to develop other brand new solutions for other societal challenges and social demands by example, especially because the respond to societal challenges and social demands is the main motivation and trigger to start a social innovation. The also given integration of social innovations in social movements, networks, umbrella organisations, and not to forget policy programs is another driver for diffusion and adoption.

However, although there is already an excellent ground in principle as described above this potential is not unlocked yet to a high degree. In line with the TEPSIE project and the results of the incubator projects BENISI and TRANSITION (Davalli et al., n.d.) funding and knowledge gaps are still testified main problems and barriers, especially leading to a limited transfer and diffusion (cf. also chapter 4.5). Regarding financial resources the initiatives are very different, depending on the policy field and the region the initiative is placed on the one hand and depending on the scale and funding resources of the single initiative. Indeed, there are a lot of funding sources named, not as a chosen strategy (e.g. risk diversification, not dependent on single sources) but rather as a given necessity to look for funding wherever it comes from. Empowerment is given by the (quantitative) participation of civil society, users, beneficiaries and the (qualitative) integration of diverse know how of the different partners. But nevertheless, because individuals, networks and groups are seen as the main drivers of social innovations the initiatives are very much relying on personal engagement and persons.

The empirical results of SI-DRIVE are also in line with and supplemented by the defined barriers of the BEPA report (2010) around their approach of social demands, societal challenges and systemic change:

- *Social demand:* Financing and scaling up; governance and coordination (between various actors within the policy domain and among the other players); legal and cultural recognition; lack of skills, training and skills-development for social innovators); lack of data on the social innovation sector as well as lack of measurement tools;
- *Societal challenges:* measurement of impact; financing innovation; governance; education (greater inter-disciplinarily, stronger interplay between basic and applied research, greater accountability, deeper understanding of social impacts of technological developments)
- *Systemic change:* traditional risk-averse and cautious organisational cultures of the relevant administrations, closed systems which favour single-issue solutions developed within clusters; fragmented capacities (resources, infrastructures and intermediaries) and skills (training, design tools, monitoring, validation and evaluation) preventing the development of a rich 'eco-system' for enabling social innovations; insufficient stable, seamless and sustainable funding throughout all stages of the innovation cycle (made worse by the absence of robust scaling-up models that might act as benchmarks).



An innovative friendly environment and the possibility of taking advantage of new technologies are reflected by about one of three or respectively four of the initiatives, but this could be improved. Especially if compared with technological development infrastructures and support structures (like Nation Innovation Systems) it becomes evident that the instruments for social innovations have to be improved, if it is to improve the usage of technologies for social innovations or to integrate technological development in a social innovation process based on a social demand or a societal challenge.

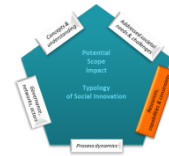
Alongside civil society, the social economy is an environment equally often mentioned as an important source of social innovation. It is thus suggested to pay particular attention to the environments of civil society and the social economy (Scoppetta et al. 2014) in order to understand their particular distinctions. Studying these distinctions is of special relevance for public decision makers, as it provides the relevant background against which supporting infrastructures can be set up. Within the mapping of SI-DRIVE social entrepreneurship and social economy as well as social enterprises are not appointed as the main part and partner for social innovations, but nevertheless they could still be seen as a relevant driver of social innovation: Beside empowerment and human resources / knowledge entrepreneurship is named as one of the main crosscutting themes in almost half of the initiatives.

Further aspects related to an innovation friendly environment taken from recommendations for NIS but also relevant for social innovations (OECD 1999) are:

- Securing framework conditions to experiment with ideas and encourage innovation activities, removing and reforming regulatory barriers.
- Encourage human as well as institutional linkages; competence development; generation, co-production, co-learning and transfer of knowledge, skills and expertise across different sectors, promoting networking and clustering²⁸ (collaboration, knowledge sharing and exchange).
- Leveraging research and development – e.g. through sustainable or customized financial support systems, financing to overcome critical events, correction of rigidities in public sector, ensuring efficiency of existent financial support programs, making greater use of public/private research partnerships and fostering of commercialization.

It is evident that the identified possibilities and constraints do have a different impact and influence on the initiatives, dependent on the stage of development, size and connectedness of the initiatives in overarching structures. Small scale initiatives are facing more problems and are more limited in transfer and diffusion. Like in economic or technological innovations barriers to innovation are very different depending on company related factors such as sector, firm size, availability of financial resources, agility and organizational cultures. There are company external (e.g. market, governmental, technical,

²⁸ Although industrial cluster are a success story for technological and economic development, this seems to be a not considered aspect for social innovation. First activities in this direction could be seen in Social Innovation Labs.



social and inter-organisational) and internal (people, structure, strategy related) barriers to innovation (Hadjimanolis 2003) that are also relevant for social innovation.

Anyway, the *innovation culture* of a company makes the difference: Barriers to innovation are also of a “subjective nature” (D’Este et al. 2012). For social innovation the intrinsic motivation of the innovators, charismatic leadership, and the stated relation to social demands and societal challenges are forming a specific innovating culture. Therefore, barriers like inter-organisational resistance to change and a risk averse organisational culture Orcutt and AlKadri (2009) identified for economic innovations are appearing in social innovations mainly in the framework conditions (legal restriction, resistance against structural changes in organisations or systems).

The policy field and world region related differences could be seen as specific and necessary differentiation and priorities of distinctive policy and regional frameworks, but the impression appears that there are general inequalities, within and between the policy fields, and by comparing the different world regions. This has to be further analysed.

Conclusions for the case studies

In order to establish a systemic view upon social innovation, we put a research focus on the drivers and barriers of social innovation. The results of the first empirical phase show the already given basis for the further development of social innovation and their institutionalisation and diffusion on the one side; on the other side serious constraints are hindering the social innovation initiative to unlock their potential for the wider society. Within the in-depth case studies we should search for further barriers and drivers, especially correlated to success and failure, the influence of power, the role of conflict, and the relation to and causes for inequalities (esp. between the different policy fields). Various concepts reflected in the Critical Literature Review (Howaldt et. al 2014a) could be taken into account to find better ways to integrate drivers and barriers (and governance) of innovations in political programs and strategies to support social innovations.

A further focus should be knowledge, *change oriented capacities* and *economic capabilities* of social innovators. Broadly spoken, the term *capability* refers in this respect to a *business’* ability to use the development process in order to marshal resources and attain desired innovation objectives (Ottaviano 2004). According to Hadjimanolis (2003), some key capabilities to innovation are technological ones, such as the capability to produce ideas, to develop them to “products”. Other skills are marketing and service skills, legal skills to protect intellectual property, the ability to network, to form alliances and to span inter-firm boundaries.



4.4 ACTORS, NETWORKS AND GOVERNANCE

This chapter focusses on *actors*, *networks* and *governance* of social innovation as fourth dimension of SI-DRIVE's pentagon. It refers to the project's research priorities 5 and 6 worked out in the Critical Literature Review which states that *"the different roles and functions of actors need to be studied during future research of SI-DRIVE"* (Butzin et al. 2014b, p. 155). The intention is to learn more about the actors engaged in social innovation initiatives and to set apart from the currently dominant focus on social enterprises. Concretely, the quest is to develop an integrated understanding of the role of various actors in social innovation.

4.4.1 Background of the Analysis

Adequately responding to the magnitude and complexity of socioeconomic challenges societies worldwide are facing transcend the capacities of single actors and sectors. From an actor-centric perspective interactive innovation models emphasise cooperation between actors and their-functions in the innovation process. Likewise, management theory and the relational view, in particular, points to the importance of networks as source of competitive advantage emphasising relation-specific assets such as knowledge sharing routines or effective governance structures for cooperation (cf. Dyer/Hatch 2007; Lavie 2006). Also, the literature on open innovation contends the relevance of networks of interrelated firms as a key factor in the ability to generate innovation (Chesbrough 2006; Brunswicker/Vanhaverbeke 2015). In this vein, the Critical Literature Review emphasises the importance of Cayannis and Campbell's quadruple helix approach for studying social innovation (cf. Butzin et al., 2014a; cf. also chapter 4.2.2.3). Moreover, it is argued that *"[a]part new actor relations and power structures in innovation processes, another important achievement of the focus on actors in innovation studies is the ambivalence connected to innovation"* (ibid, p. 111). In the sense of Schumpeter's notion of "creative destruction", social innovation can be considered an ambivalent activity which goes along with different implications generating winners and loser, success, conflict and new social problems at the same time.

Connecting various heterogeneous actors providing complementary knowledge, networks as form of organisation by which social innovation is conducted, are considered a central (knowledge) resource in the innovation process (Butzin et al., 2014a). Or in the words of Moore and Westley (2011), *"[s]ocial networks are a form of social organization defined by the patterns of vertical and horizontal relationships."*

As was outlined in chapter 4.1.2.1 and 4.2 actors engaging in social innovation come from public, private and civil society sector. In addition, the Critical Literature Review has underlined the role of individual and collective actors in developing social innovation. Several types of actors have been discussed throughout the chapters (Howaldt et al. 2014a; own compilation):



Actor Type	Role	Chapter
Social enterprises, other actors of the social economy	Developers and implementers of social innovations	Chapters 4, 5
Civil society	Brings about initiatives developing social innovations	Chapter 5
Social movements	Generate change, can spur social innovation	Chapter 5
Networks	Communities of social innovators	Chapter 4
Science, Universities and Research Institutes	Marginal role, more related to “classical” innovation studies, when involved they provide special knowledge	Chapters 4, 7
Companies	a) Are involved in social innovation processes (but not seen as main initiators) b) Provide the frame for workplace innovations	Chapter 8
Customers/users/citizens/beneficiaries	These actors are supposed to have a central role (as initiators and input givers), but it is not specified	Chapter 5
Designers	Design the process of social innovation	Chapter 6
Poor and marginalised groups	Beneficiaries, sometimes active players in social innovation processes	Chapter 3
Government actors	Are considered as providing the frame for stimulating social innovation, are central actors when it comes to public sector innovation	Chapters 5, 7

Table 14: Actor Types and Roles

The importance of an actor-centric perspective is also well-reflected in ongoing European research projects on social innovation which analyse the specifics of actors and networks with distinct foci and differing intensity, for example, SIMPACT, CrESSI, TRANSIT to name but a few). Focusing on individual and collective actors Terstriep et al. (2015, pp. 33) distinguish between actors from the civil society, the economic and political field as well as intermediaries. They find that actors’ roles as inner core, promotor, supporter, beneficiaries, follower/imitator, and opponents vary largely across social innovation initiatives, while promoters account for the largest share (41%) of the analysed social innovations (ibid, p. 34). Avelino and Wittmayer (2015) adopt a multi-actor perspective as a heuristic framework to analyse actors’ involvement in social innovation processes at the level of sectors (formal/informal, for-profit/non-profit, public/private), organisational level (e.g. organisations, groups, networks) and individual level (e.g. citizens, consumers, resident).

Drawing on the findings from the Critical Literature Review and taking into account the above outlined findings, it is distinguished between four major categories of actors, namely developer, promotor, supporter and knowledge provider which come from public, private sector and civil society including NGOs and NPOs.

The central **developers** are the inner core of social innovation initiatives initiating and operating the solution such as social enterprises, actors of the civil society and related networks, as well as customers/users. These actors are seen as being able to translate knowledge about unsatisfactory circumstances into an innovative idea in order to improve



the situation. Furthermore, these actors are seen as having the ability to not only invent but also to develop and implement the idea in order to make it a social innovation.

Promoters of social innovations, for example, private companies and government actors are involved in social innovation processes as partners providing infrastructural equipment, funding, and connect initiatives to superior policy programs. In the case of workplace innovation as a type of social innovation, companies provide the frame and organisational background of dedicated initiatives.

In addition, **supporters** refer to actors facilitating the spread and diffusion of social innovations through, for example, dissemination or lobbying activities.

Accounting for the importance of knowledge as key resource in social innovation processes (cf. chapter 4.3.1), a further category is devoted to actors that provide (specialised) knowledge in order to spur and enrich the development process, i.e. **knowledge provider**. These are actors come from the field of research and education (e.g. universities, public/private research institutes); poor and marginalised groups, amongst others involved as users and beneficiaries; designers who sometimes are involved as mediator/process designers; and external advisors (cf. chapter 4.3.2.1).

Although the above categorisation is useful to detail actors' roles in social innovation, it is important to acknowledge that no clear demarcation between the categories exists, but rather are characterised by blurred boundaries. Moreover, actors may have more than one role in an initiative which is subject to change over time.

Social movements and existing networks within communities of social innovation actors are seen as a **context** factor which can spur social innovations.

Actors and networks are governed by the modes of interaction and the institutional frame they are embedded in, i.e. the **governance system**. According to Terstriep et al. (2015, p. 2), "[s]ocial innovations challenge established institutions and thus, require an understanding of institutional order and multilevel governance that direct institutions which facilitate or impede their implementation." Modes of governance describe how decision-making, leadership and ownership are managed in social innovation. They are related to policy-making, self-regulation and co-creation of quadruple helix actors. Howaldt et al. (2014a) emphasise that from a social theory perspective, the focus is on the interfaces between quadruple helix actors with their distinct rationales, logics and modes of interaction and point to new forms and practices of governance that are becoming increasingly established. Moreover, it is acknowledged that social innovation and governance mutually influence each other (cf. Pradel et al. 2013): Socially innovative practices influence governance through the creation of new mechanisms for resource provision, new collective actors and their exercised influence on formal mechanisms of decision-making. Vice versa governance structures and practices affect actors' capacities to develop social innovations. Also post-development and human development theories "[...] underpin new understandings of governance issues that are open, transparent, participative and empowering" (Millard 2014, p. 50). In this regard, Scopetta, Butzin and Rehfeld (2014, p. 92) raise the question of which governance structures support the growth of social innovations that are set as combined actions. In



addition, Butzin et al. (2014b, p. 154) inform that “[to] understand the modes of governance of social innovation, one focus should be on networks, and their actor constellations, modes of cooperation and communication channels”.

4.4.2 Results of the Global Mapping

In the following the results of our empirical analysis of actors, networks and governance as fourth dimension of SI-DRIVE's pentagon are discussed. Issues covered comprise the type of actors, their functions and roles, the role of networks including their geographic spread, user involvement and alliances between actors, while policy field perspectives are taken into account as a transversal issue.

4.4.2.1 Type of Actors

As depicted in chapter 4.1.2.4 (figure 15), a broad range of actors is involved in the mapped social innovation initiatives, illustrated by the share of *partners* involved (number of partners as basis for percentages). As a complement, in the following actor structures as a first indication for a potential typology on the partner composition are analysed. Rather than focusing on the number of partners in total, the occurrence of the distinct types of actors is emphasised in the share of *initiatives (cases)* in which a specific type of actor is found at least once. For this purpose, actors have been partly regrouped/aggregated reducing the number of partner types from 13 to 9:

- Ministries have been classified as public bodies
- Individuals, informal groups and networks build one category
- Universities and public/private research institutes have been grouped as “Research & Education” (hereinafter referred to as research organisations)

Being engaged in approx. 46% of the mapped initiatives NPOs/NGOs and public bodies can be considered as key partners in social innovation, followed by private companies (37%). Social enterprises, individuals, networks and groups, foundations as well as research organisations' engagement clearly lag behind, with shares ranging from 13 to 15%. The analysis suggests that the engagement of Public Private Partnerships (PPPs) rather is an exception than common pattern. The following figure shows frequencies based on the level of an initiative.

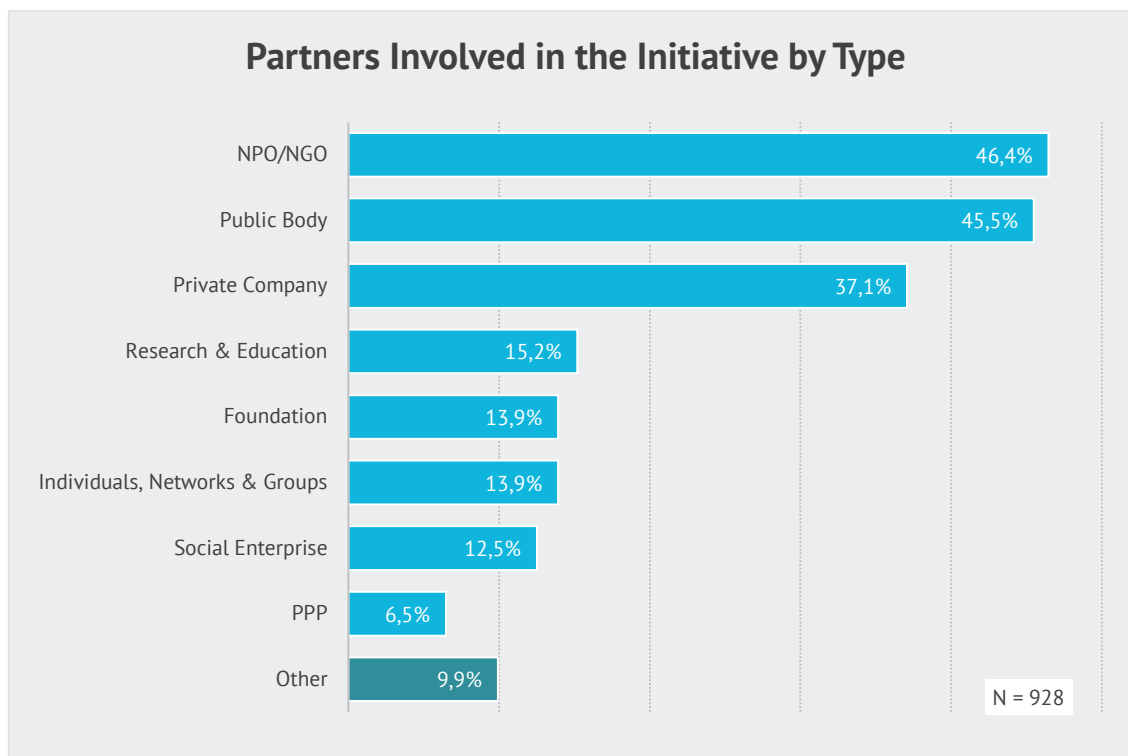


Figure 40: Type of Partner Engaged in Social Innovation Initiatives (multiple responses)

These quantitative results underpin the substantial role in social innovation initiatives ascribed to civil society organisations such as NPOs and NGOs. The large share of public sector bodies too, is underpinned by the compiling policy field report (Scopetta 2015, p. 15) which emphasises the importance of public authorities, but also states: *“Despite the important role of public authorities there seems to be a wide range of other actors involved in responding to societal challenges”*.

EXCURSUS

Excerpt of the SI-DRIVE Compiling of the policy field reports (Scopetta 2015, p. 14f.) on sectors and actors in social innovation

Civil society: Although the public is dominating in the policy field of education, participation of civil society in social innovation can be found. These are mainly parents' and students' representations, but also employers' associations as well as employment services. Civil society plays mainly a role when it comes to vulnerable groups. Also in the policy field of employment NGOs are mostly involved in concrete projects to support disadvantaged groups, which might be part of the implementation of employment policies, but they have a less important role (e.g., lobbying) in the higher levels of the policy field, compared to the other actors. In the policy field of energy supply NGOs and, in particular, umbrella organisations of the civil society (next to the consumers) play an important role: civil involvement via umbrella organisations such as the European Consumer Organization, Friends of the Earth Europe, REScoop and the International Network for Sustainable Energy is crucial for the development of social innovations. Individuals such as citizens, farmers and private homeowners are involved in initiating social innovations. And last but not least, in the policy field of mobility and transport space for social innovation is provided for the civil society related to reducing trip distances and frequency and to increase usage of resource-efficient transport modes whereas planning for compact cities by public sector actors (and private) can reduce the number of trips.



Private sector: Companies and employers' associations are increasingly engaged in influencing social changes in the educational stereotypes (e.g. to integrate women in technical occupations or concerning STEM orientations). In the policy field of employment, employers and (potential) employees (and their representative organisations and unions) are among the central actors on the labour market, although the government is responsible for defining the pre-conditions and boundaries of the labour market and takes the responsibility to deal with the challenges due to market failure. In the policy field of environment, as the numerous offices of different interest groups from industry and civil society indicate, lobbying activities play an important role within the European policy processes. The policy field of mobility and transport informs that the established regimes are maintained by "classical" actors such as large and influential automotive, transportation and construction companies, next to political and other public sector actors. In the policy field of employment, the private also comprises social entrepreneurs and educational institutions and in the policy field of environment the private includes business and industry. The policy field of mobility and transport, however, informs that "apart from the practice field of car-sharing, it is strikingly obvious that private actors are absent in social innovation practice fields in most countries" (p.17).

Social partners: In the policy field of employment the cooperation between government and social partners is considered as crucial for effective employment policies. However, the role of social partners (labour unions and employer organisations) is different across the partner countries.

Platforms/networks/interest groups: Diverse platforms, networks and interest groups with varying legal backgrounds (private, public, half-public and civil) such as the European Anti-Poverty Network, the European Platform Against Poverty and Social Exclusion, the European Innovation Partnership on Active and Healthy Ageing, the Health Technology Assessment Network, the European Patients' Forum and The European Chronic Disease Alliance, to just name some, are also important players especially in the policy field of Health and Social Care and in the policy field of Poverty Reduction and Sustainable Development. These kinds of platforms could also be found in other policy fields and areas such as Education and Lifelong Learning (e.g. Awareness Raising For Adult Learning and Education, ARALE) or Workplace Innovation (European Workplace Innovation Network, euwin).

Comparing these results against recent discussions in the literature on social innovation actors we find two major specifics of the mapped cases: First and most interestingly, our data suggests that private companies are a much more influential actor than assumed in the literature. The *strong involvement of private companies* suggests that there is an economic interest connected to social innovations, even if it might also be of more implicit nature and social value is created under the mantle of corporate social responsibility (CSR), corporate citizenship, or socially responsive business (cf. Osburg 2013; Porter/Kramer 2011). In this sense, the results illustrate that progress in social innovation is not limited to social enterprises, but might also be relevant for mainstream business community. Moreover, the share of private companies engaged in social innovation confirms the insights from the policy field reports that "*companies [...] are increasingly engaged in influencing social change*" (cf. Scopetta 2015, p. 14).

The second specific refers to the *triple and quadruple helix models*. The marginal engagement of research organisations (15% of the initiatives) is in strong contrast to their essential role as knowledge providers in classical innovation processes (cf. Miller et al. 2016; Gallego et al. 2013; Asheim 2007) and as one actor of the classical triple helix model. Forasmuch, the empirical results suggest an incomplete quadruple helix. The lack of involvement of research organisations in part can be explained by the specifics of social innovations. Distinct from, for example, technological innovation, social innovations often originate from the grass roots of civil society engagement, where user and beneficiaries



replace research institutes as knowledge provider and ‘verifying entity’. This finding corresponds with the role ascribed to users whose function is mainly related to knowledge provision, experimentation and feedback (cf. chapter 4.4.2.3). In this respect, research and education facilities have to reflect on their future role in social innovation. A particular potential is seen in the course of professionalization of social innovation processes by complementing users’/beneficiaries’ knowledge with scientific approaches, methods and tools, in evaluation, measurement and consulting.

Social enterprises are partners in only 13% of the initiatives, even though literature attributes them a central role in social innovation (cf. Davies 2014, p. 63ff.). Or as Davies (2014, p. 75) states “[s]ocial enterprises and social entrepreneurs may often act as vehicles for social innovation but do not necessarily do so.” A further explanation might be SI-DRIVE’s broad definition of social innovation which is not solely focusing on social enterprises, but on a plethora of groups and organisations.

Although the data collected on user involvement provides valuable information, they do not allow to discern users’ role as equal partner (e.g. innovator) in social innovation initiatives. It follows that users/beneficiaries as innovators are not represented in the above figures. However, to approximate their involvement related qualitative sections have been quantified (cf. chapter 4.4.2.2). The results indicate that 46% of the mapped initiatives involve users in the development or improvement of the solution.

According to the mapped data

Social innovation initiatives’ most frequent actors are NGOs/NPOs (civil society), public bodies and private companies, i.e. part of the quadruple helix of social innovation.

EXCURSUS - POLICY FIELD REPORTS AT A GLANCE: WHAT IS SAID ON ACTORS IN THE EU?

EDUCATION	(Emphasis on EU) The EU relies on Working Groups, composed of experts, nominated by member countries and other key stakeholders. This work is part of a broader cooperation, known as the Open Method of Coordination, which aims to promote mutual learning, exchange of good practices, fostering national reforms and developing EU-level tools. Different European governance “drivers” for the improvement of education and lifelong learning in the member states range from general policy inputs like the Bologna Process to cooperation platforms and concrete instruments like the European Qualification Framework.
EMPLOYMENT	A large number of government actors, social partners, NGOs and other private actors are involved, which, besides commonalities, all may have different interests at certain times. Although the challenges in the field of employment are quite similar in different countries, the sizes of the challenges are different, making more radical change (policy reforms on a central level) necessary for the Mediterranean countries whereas in Germany and Austria there was less need for radical change, austerity politics and policy reforms. In the policy field of employment, the government actors play an important role, not only in the formulation of policies and regulations, but also in the implementation of these policies. In the selected social innovative projects this dominant position of government actors is reflected.



EXCURSUS - POLICY FIELD REPORTS AT A GLANCE: WHAT IS SAID ON ACTORS IN THE EU?

ENVIRONMENT	Most of the policy approaches in the EU member states and the Nordic countries refer to the concept of sustainability. Moreover, these countries have strong public institutions to address environmental and climate issues. This typically includes a number of ministries and government agencies, but also strong NGOs and research institutes working on monitoring environmental issues and/or innovative solutions to address these challenges. Many of these organizations, such as environmental agencies or dedicated research institutes, represent the interests of the environment in stakeholder processes. In addition, the most recent policy approaches aim – at least in theory – for a broad participation, or at least representation of stakeholders, including civil society. Nevertheless, it should be noted that the level of ‘real’ participation of the civil society is subject of ongoing discussions, since many other interest groups may have a stronger role and more resources to influence these processes than civil society actors.
MOBILITY	Actors of the governance system are highly diverse, causing an extremely fragmented policy field. Actors conduct activities such as car manufacturing; maintenance and construction of roads; different modes of transport from underground to aviation; different transportation purposes from trade to passengers; different interests from profit to environmental concerns; etc. Furthermore, there are strong and long-time established interests (e.g. European car manufacturers). To a large extent, modes of interactions, networks and alliances are structured by the long-lasting physical infrastructure which is clearly a distinctiveness of mobility and transport. Transport infrastructure is likely to exist for decades once it has been built, it is highly cost intensive and central to making places accessible and connected.
ENERGY	In some countries, the energy supply is strongly centralized and in other countries energy supply is more of a responsibility for either local or regional governments. All countries of the European Union, and some of the neighbouring countries as well, have recently been through a process of liberalization of the energy markets. In some countries, this has led to a major emergence of new players and the end of state-owned companies. In other countries, several major players have become liberalized, but are still strongly controlled by the state and/or remain de facto monopolies and create a situation where it is still very difficult for new players to enter the market. There seems to be some correlation between countries where the market structure is fully liberalized, and countries where energy governance is organized on a more local level.
HEALTH SOCIAL CARE	The majority of the countries, however, report having no specific, or explicit social innovation policies or structures in place at the national level, but that the environment is well suited for promotion and implementation of social innovations. Countries such as these report evidence of social innovation at more micro, and grassroots levels, or programmatic levels. In Italy, for example, there are no specific social innovation policies and structures. However, in the private and civil society sector, social innovation is attracting increasing attention. In fact, there are several major social innovation networks aimed at promoting social innovation businesses and initiatives.
POVERTY REDUCTION	In Northern Europe, as with governance systems, the types of actors and their roles are quite mixed. In Denmark on the government side, relevant ministries exercise national responsibility alongside a number of agencies with specialised functions. At the local level, the municipalities are responsible for delivering all services related to tackling poverty, social exclusion and marginalization. The UK tends to be more centralized in fewer ministries and agencies, prominent among which is the Department for Work and Pensions and the Treasury and Inland Revenue. Both Denmark and the UK, however, have many important non-governmental actors including private actors, companies, non-profits and social entrepreneurs, under contract to the municipality or in collaboration with them, that provide many of the services



From a *policy field perspective*, it becomes evident that Energy Supply and Environment and Climate Change are exceptional concerning the actors involved (cf. Figure 41 below). In the field of Energy Supply private companies and public bodies are more and equally often (61%) mentioned as partners. The high involvement of private companies is most likely a result of the structure of the energy sector, in particular with regard to ‘renewable energy’ and infrastructures. This corresponds with the results from the policy field report which highlights “*that many local producers of renewable energy also have a central socio-economic role in local development*” (Scopetta 2014, p. 24). Although on a much lower level, in addition, there are noticeably more Public Private Partnerships (PPP) involved in the energy cases than in the other policy fields (+8 to +16%). In addition, the high engagement of Individuals, Networks and Groups (49%) confirms that “*in the policy field of energy supply, local communities, individual citizens and civic initiatives can play a major role in deploying renewable energy sources [...], in experimenting with new forms of cooperation, business models, costs sharing, and in providing policy makers a ‘proof of the pudding’ on the consistency of the regulatory systems such as network rules*” (Scopetta 2015, p. 15)

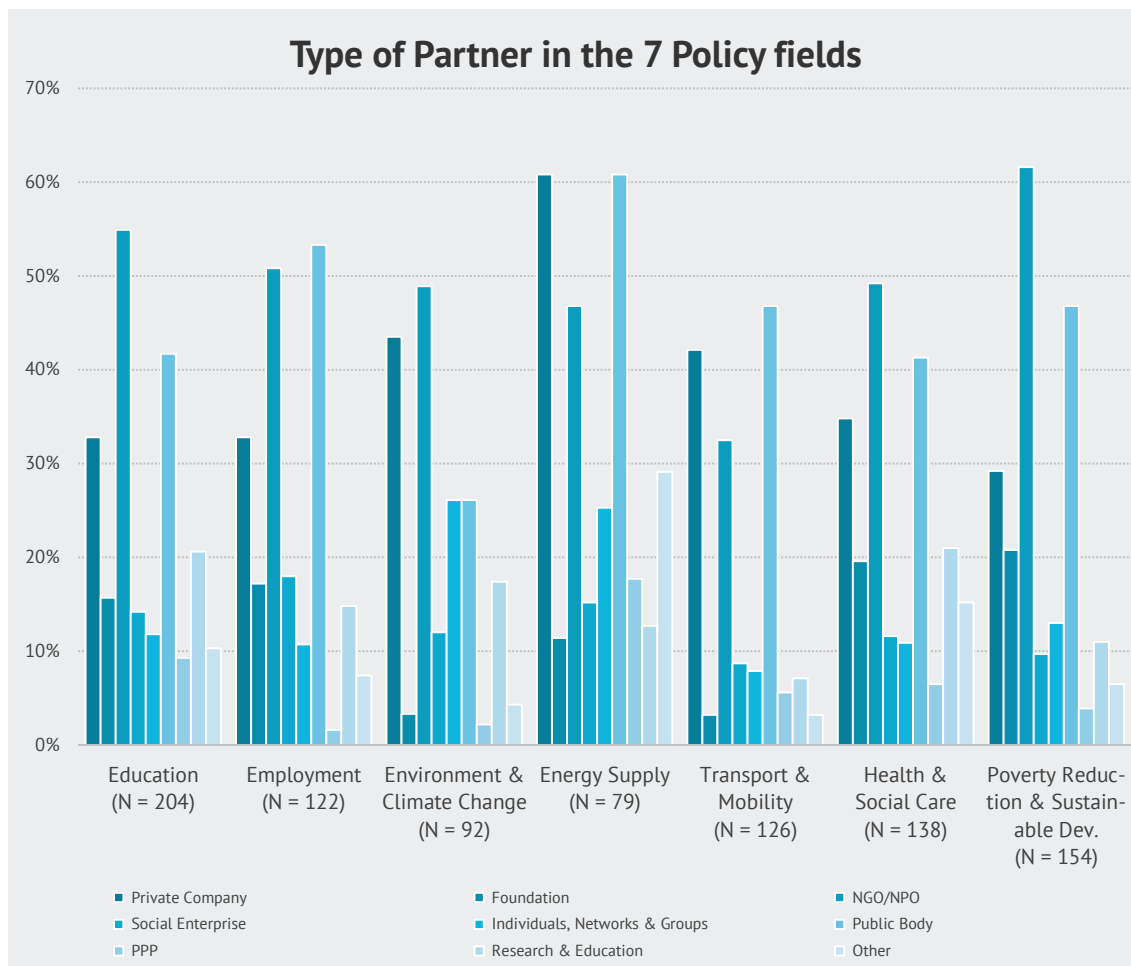


Figure 41: Type of Partner by Policy Field (% of cases in policy field)

With a share of 26% public bodies are underrepresented in *Environment and Climate Change* compared to the other policy fields (-10 to -44%). Likewise, the role of foundations appears



to be marginal well below the shares of all other policy fields except for Transport and Mobility where it is equally low (3%). In contrast, with a share of 26% Individuals, Networks & Groups' play a decisive role in Environment and Climate Change compared to the other policy fields, whereas NGOs and NPOs are as important in this policy field as in Energy Supply. Therewith, the empirical findings underpin the observation from the policy field report that *numerous offices of different interest groups from industry and civil society are involved in social innovation* (Scopetta 2015, p14).

4.4.2.2 Involvement of Users/Beneficiaries

As outlined before, users/beneficiaries (hereinafter: users) are involved in the development or improvement of the solution in about 46% of the mapped cases. To advance understanding how users are involved in social innovation, qualitative answers on user involvement have been coded, categorised and quantified. Figure 42 provides an overview of the identified six categories. It has to be acknowledged that in part of the cases users had more than one role. Forasmuch, the answers were dealt with as if they were multiple responses.

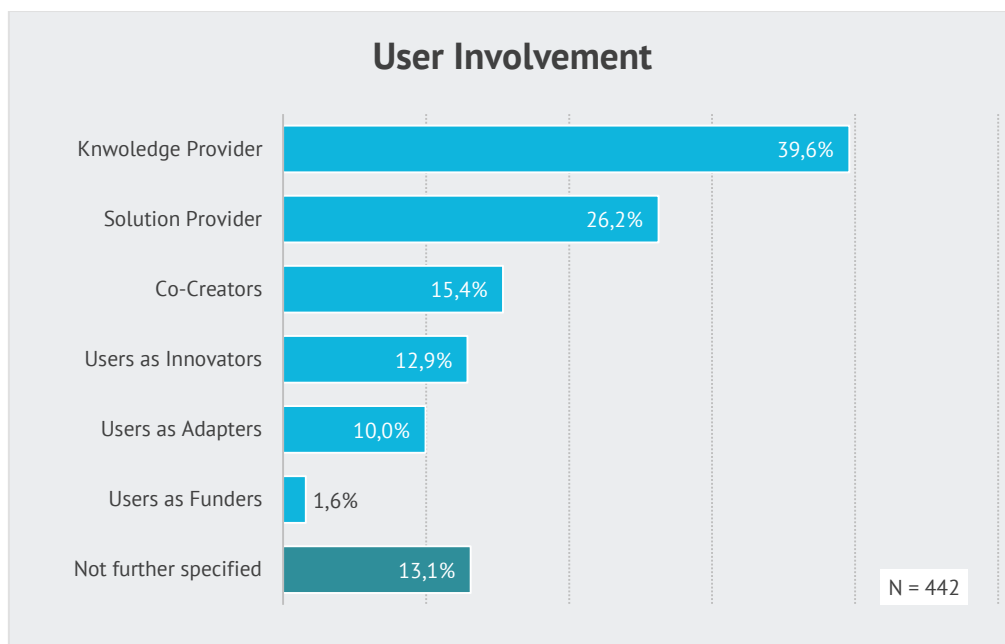


Figure 42: Form of User Involvement in Social Innovation (multiple responses)

Named in 40% of the cases, it appears that *users' as knowledge providers* is the most common form of involvement. More precisely, users provide knowledge throughout the social innovation process in form of dialogues, feedback, testing and experimentation, suggestions for further improvement as well as tutoring. These findings correspond to the observation that users have a substantial role in social innovation that goes beyond the mere utilisation of the solution provided by others. Moreover, it suggests that social innovation initiatives rely on users' specific knowledge and feedback to meet their needs properly.



This is further substantiated by the involvement of *users as solution providers*, which ranks second (26%) and *users as co-creators* which at some distance rank third (15%). Concerning the former, users are not part of the development process of the solution, but provide the readily available solution to other users. Forasmuch, it can be assumed that the success of the solution strongly depends on users' acceptance and active participation. On the contrary, the category "users as co-creators" refers to users' direct involvement in the development and/or improvement of the social innovation as one partner of many stakeholders. This category is clearly to differentiate from *users as innovators*, where the users are the initiators and core developers of the solution, while in later phases of the innovation process the social innovation may have been adopted by other organisations to advance its implementation. The share of users as innovators (13%) supports the insight from the policy field reports that "[i]ndividuals such as citizens, farmers and private homeowners are involved in initiating social innovations" (Scopetta 2015, p. 14). Besides, *users as adapters*, i.e. personalisation of readily available solutions, have been identified in 10% of the cases. Finally, and not surprisingly, users as funders are of minor relevance.

As illustrated in chapter 4.1.2.5, from a regional and policy field perspective considerable differences in the frequency of user involvement exist. By analysing the user involvement at the level of the outlined categories in the distinct policy fields reveals also marked differences across the policy fields.

User as knowledge provider play a crucial role in all policy fields, whereas they are particularly pronounced in Health & Social Care (51%), followed by Poverty Reduction & Sustainable Development and Employment (cf. Figure 43). The high relevance of users as knowledge providers may be result of the governance structures in the three policy fields. According to the compilation report they all fall into the cluster of "*government dependent social innovation*" that are foremost driven by central government and strongly depend on laws and regulation (Scopetta 2015, p. 29f.).

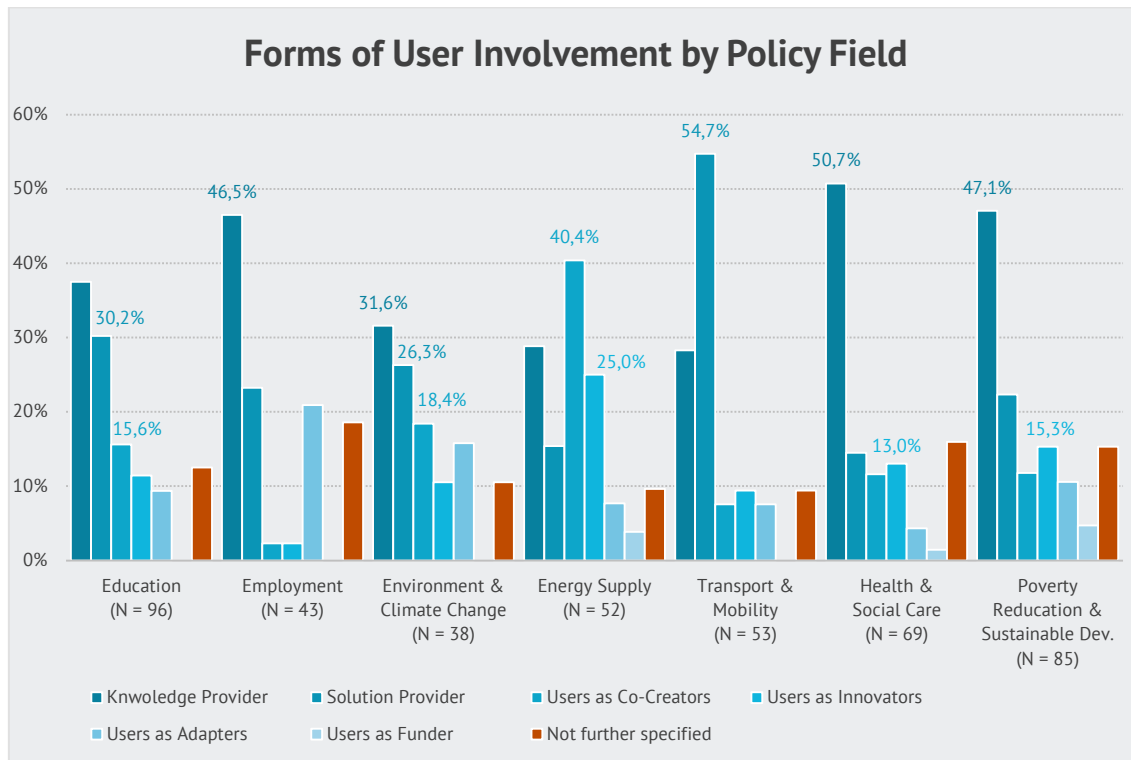


Figure 43: Forms of User Involvement by Policy Field (% of cases within policy field)

Accounting for a share of 55%, *users as solution providers* emerges as a common pattern in Transport & Mobility, which might be attributable to the broad range of social innovations addressing sustainable mobility and transport comprising practice fields such as citizens initiated public transport, walking school busses, bike and car sharing. At some distance the policy fields Education (30%) and Environment & Climate Change (26%) rank second and third. With regard to the policy field Education the compilation report emphasises “[w]hile the participation possibilities within the formal system are limited, far reaching social innovations, in the sense of social change, can be found mainly in the areas of cooperation and co-development of lifelong learning with actors outside the formal education system and social innovation grassroots initiatives” (Scopetta 2015, p. 26).

Users as co-creators at the core in the policy field of Energy Supply (40%). Accounting for the multiplicity of social innovations in the practice fields “energy collectives” and “local production” which strongly rely on the active involvement of users, this result is not surprising. This is further sustained by the relative high share of *users as innovators* (25%) which is superior to all other policy fields. Although on a much lower level, social innovation initiatives in Environment & Climate Change and Education involve users as co-creators (18% and 16%). In contrast, this form of involvement appears to play a negligible role in Employment (2%) as does the participation of user as innovators (2%).

Surprisingly, involvement of *users as adapters* shows to be most pronounced in Employment (21%). A possible explanation might be the extensive use of ICT’s in job seeking which allow for personalisation of applications. In this regard, “the policy field employment informs that ICT enables a better matching of supply and demand on the labour



market (online vacancies or ‘market places’ for self-employed) and creates possibilities for (cheaper) online education and training and online applications and job interviews.” (Scopetta 2015, p. 24).

According to the mapped data

Users as knowledge providers are an essential actor across all policy fields, while their relevance in Health and Social Care is particularly pronounced. In addition, users as solution providers have an outstanding position in Transport and Mobility.

Notwithstanding the rather small number of cases for which information on the distinct forms of user involvement at regional scale is available, Figure 44 illustrates the extraordinary role played by *users as knowledge providers* in Southern Europe. With a proportion of 61%, this form of user involvement is considerably higher than in all other European and Non-EU regions. Non-EU countries share of initiatives engaging users as knowledge providers is less pronounced accounting for a share of 35% compared to 42% in the EU.

In Non-EU regions, as opposed to EU regions, the proportion of initiatives involving *users as solution providers* is considerably higher, 31% compared to 23%, whereas this form of involvement is almost equally distributed across EU regions (21 to 24%), except for Northern Europe with a higher proportion of (28%). Users as adapters are substantially more important in Eastern Europe (28%) compared to the other regions, which also reflects the innovative character of the mapped social innovations in this region, of which more than half have been adopted from other projects with minor modifications/improvements (cf. chapter 4.1.2.3).

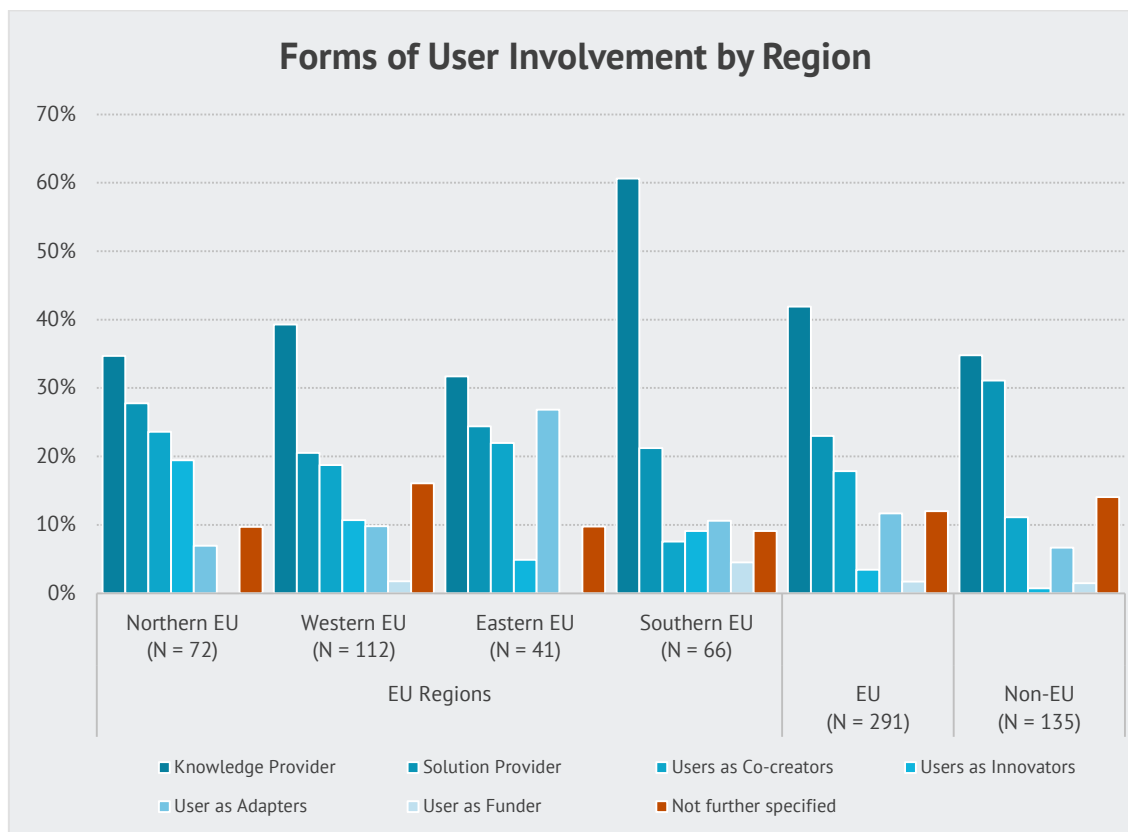


Figure 44: Forms of User Involvement by Region (% of cases within region)

According to the mapped data

Involvement of users as knowledge providers is of relevance across all EU and Non-EU regions, being particularly marked in Southern Europe. Moreover, involving users as adapters appears to be of higher relevance in regions which to a large extent adopt solutions from others. Finally, involvement of users as solution providers occurs more often in Non-EU countries.

Taken together, the above findings underpin the importance of users in social innovation and correspond to the OECD (2009, p. 9) report on user integration in “classical” innovation that states “[i]n a new nature of innovation, we will see a new balance between technology-driven, competitive-driven and user-driven innovation – with much more emphasis on the user”.

4.4.2.3 Networks and Alliances

Given the complex socioeconomic challenges societies worldwide are facing, cross-sector collaboration between individuals, NGOs/NPOs, private sector and public sector (including research organisations) is no longer an option but rather a necessity to bundle actors’ capabilities and capacities with the aim to address these challenges.

Yet, as Figure 45 illustrates, the role of networks and alliances as important (knowledge) resources in the innovation process, can only be confirmed partially. While 49% of the mapped initiatives have been developed and implemented by social networks consisting of



3 or more partners (group 1), more than half of the initiatives (51%, group 2) did not take advantage of such partnerships as the initiator developed and implemented the solution alone (35%) or just with 1 additional partner (16%).

Taking a closer look at the first group of initiatives reveals that the majority of social innovations were developed by rather small networks of 3 to 6 actors (38%), whereas additional 9% of initiatives elaborated solutions in a network consisting of 7 to 11 actors. Larger networks of 12 to 19 partners are rather an exception (2%).

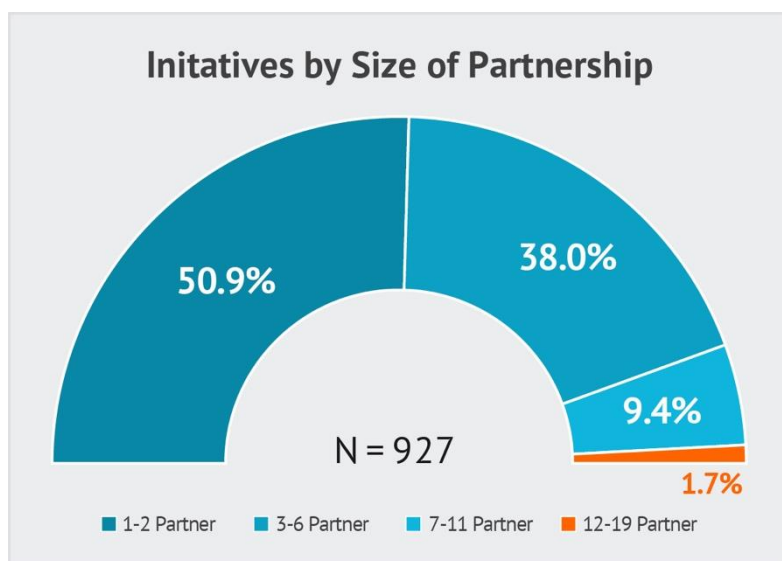


Figure 45: Number of Partners per Initiative

However, the rather low proportion of social innovation developed in networks with more than 6 partners (approx. 11%) has to be interpreted with caution as many innovators are embedded in wider networks which are not directly involved in developing or implementing the solution, but may provide access to, for example, knowledge relevant for the envisaged solution or help to build the capabilities necessary for implementation (cf. chapter 4.4.2.4). Another explanation could be the inherent characteristics of social innovations: According to the findings of the SIMPACT project, innovators' bricolage attitude and hyper-efficiency (i.e. making the most out of limited resources) are core characteristics of social innovations, while initiating or engaging in networks is a resource intensive activity (cf. Terstriep et al. 2015). Accordingly, it can be assumed that social innovators, despite the benefits associated to collaborations, often lack the necessary resource to engage in networking activities. If one adds to this the fact that for 36% of the mapped initiative a lack of knowledge and personnel was reported as a major barrier to social innovation (cf. chapter 4.3.2.2) the reasons for not developing solutions in networks should be further investigate in the framework of the case studies.

According to the mapped data

About two-third of the initiatives are composed of one or two partners, while the development of social innovations in larger networks is less common.



With regard to the *geographical scope* of the partnerships, the majority of smaller initiatives (2 partners) developed the solution solely with domestic partners (92%), while only 8% show to have a cross-country dimension, i.e. at least one of the involved partners is located in another country. In larger networks (>2 partners) the share of cross-country collaboration is considerably high, accounting for a share of 26%.

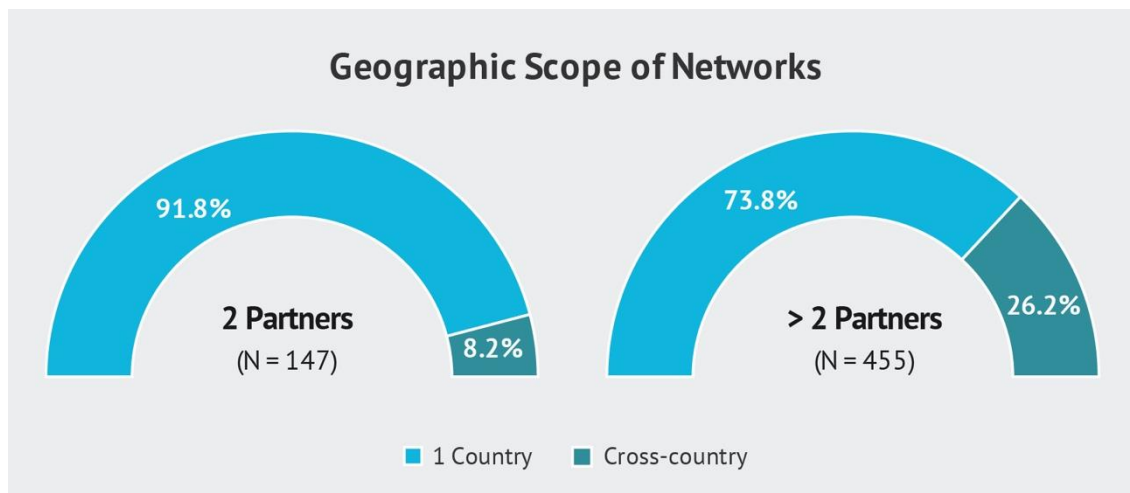


Figure 46: Geographic Spread of Networks

According to the mapped data

The vast majority of initiatives developed within social networks are constituted by domestic partners.

It has been shown that among the initiatives which are developed in networks, alliances of 3 and more partners prevail, while NGOs/NPO, public bodies and private companies appeared as most important actors in social innovation (cf. chapter 4.4.2.1). By further analysing the interactions between the actors, with a focus on the three main types of actors, alliances between specific types of actors become evident (cf. Figure 47 below).

Despite the fact that information on alliances by type of partner is available only for roughly 44% of the mapped cases, the analysis revealed some interesting findings: With regard to actor constellations, the first thing that becomes evident is that alliance comprising solely a single type of actors (NGOs/NPOs, public bodies or private companies only) are of minor relevance. These actor constellations have been identified in as few as 3% of the mapped cases each. On the other hand, 91% of the initiatives comprise alliances involving at least two distinct types of partners clearly underpinning the cross-sectoral nature of social innovations (cf. chapter 4.2.2.3).

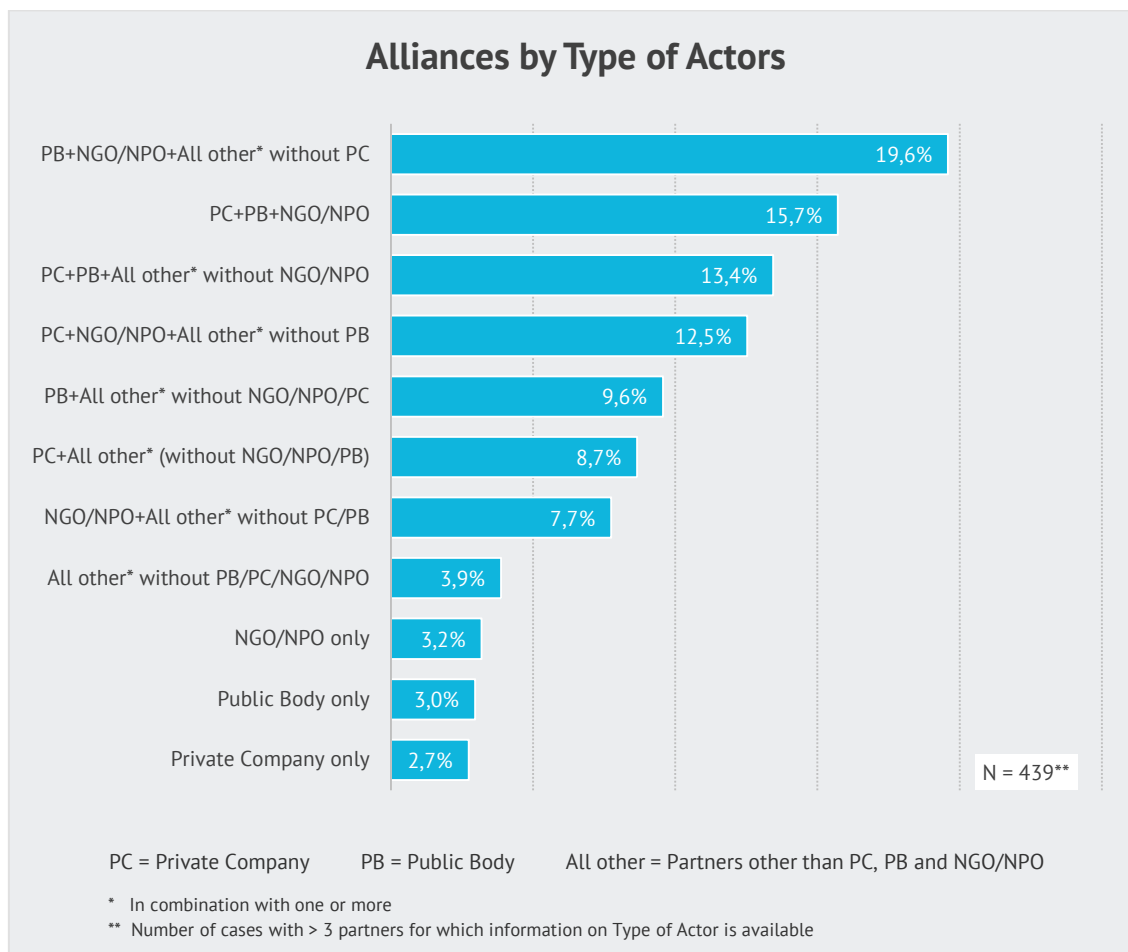


Figure 47: Social Innovation Alliances by Type of Partner

With a proportion of 20% alliances comprising public bodies, NGOs/NPOs and other partners except for private companies (Type 1 alliance) prevail, followed by networks of the three major actors, namely private companies, NGOs/NPOs and public bodies (15%, Type 2 alliances). Collaborations between public bodies, NGOs/NPOs and other partners except for private companies (Type 3 alliances) are lagging behind type 1 alliances, making up for 13% of the mapped initiatives. The proportions of networks comprising *one* of the three major actors plus other actors range from 8 to 10%, whereas alliances of public bodies with other partners excluding NGOs/NPOs and private companies rank first.

According to the mapped data

The majority of the actors' networks comprise partnerships between different types of partners, while Type 1 alliances of public bodies, NGOs/NPOs and other partners except public bodies emerge slightly more often than Type 2 and 3 alliances.

While the compilation report, inter alia, presents a typology of social innovations from an actor perspective (Scopetta 2015, p. 30), the outlined findings suggest to make use of a broader ecosystem perspective which next to actors also accounts for their interactions, underlying institutions and mechanisms driving social innovation. For example, alliances



which involve public bodies and private companies could be market-driven as well as government-driven or both.

As the knowledge on how and for what purpose the partners in Type 1, 2 and 3 alliances cooperate so far remains scarce further investigating this issue in the in-depth cases studies is expected to considerably contribute to advance understanding the nature of collaboration in social innovation. Differentiating between value creation, collaborative stages, partnering processes and collaboration outcomes, Austin and Seitanidi's (2012) *Collaborative Value Creation approach* could be useful in this respect.

4.4.2.4 Actors' Functions and Roles in Social Innovation

In the following actors' contribution in support of social innovations initiatives, i.e. their function, as well as their roles are analysed. For this purpose, it is differentiated between nine different functions ranging from idea development, funding, provision of infrastructures, knowledge and personnel to dissemination and lobbying activities.

As depicted in Figure 48 below, the empirical results reveal that actors' major contributions to the initiatives is related to idea development (46%) and funding (40%), followed at considerable distance by provision of infrastructure (22%), knowledge delivery (21%) and support of dissemination activities (19%).

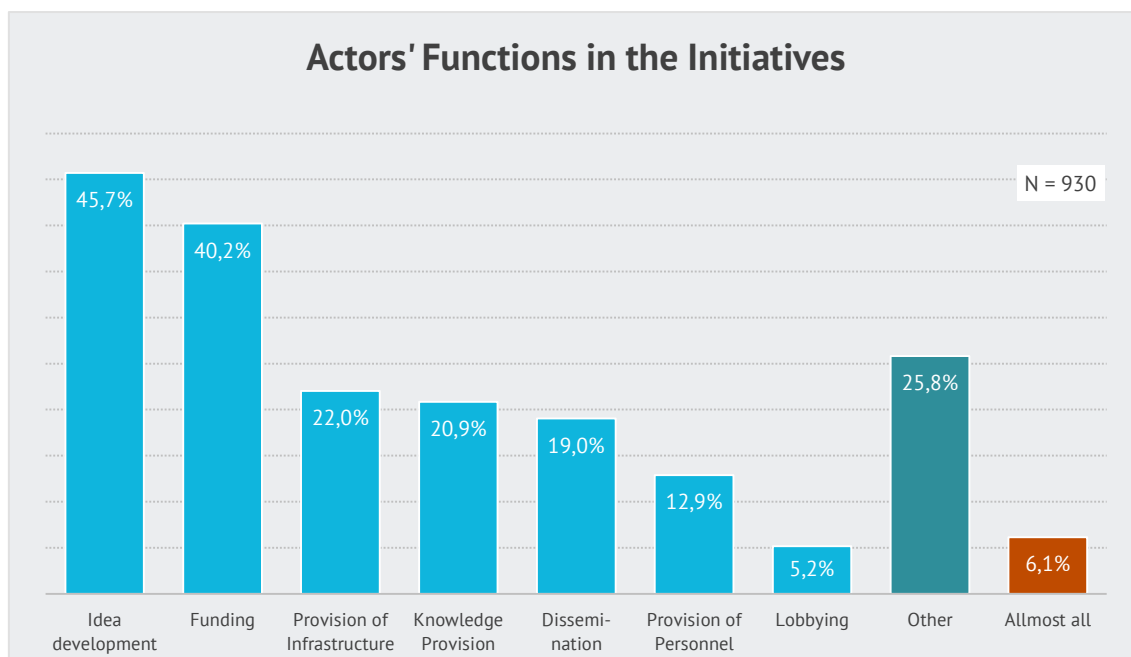


Figure 48: Actors' Functions in the Initiative (multiple responses)

Albeit the lack of human resources showed to be a major barrier in social innovation (cf. chapter 4.3.2.2), the function as provider of personnel is only taken up by a rather small share of actors (13%), and lobbying as support activity shows to be of minor relevance (6%). In additional 6% of the mapped initiatives involved actors cover almost all of the previous functions, while it remains an open question to what extent.



Detailing the different functions according to the actors providing these functions, allows for the identification of specialisation patterns (cf. Figure 49 below): First, the results indicate that private companies' function as provider of infrastructures (60%) clearly exceeds their other support activities. Although on a slightly lower level, likewise, this applies to public bodies (56%), whose function as funder (56%) and knowledge provider (55%) is equally marked. Foundations primary function is associated to funding social innovation initiatives (71%) and, surprisingly, to ideation (57%). Individuals, groups and networks' support centres on idea development (53%) as is the case for research organisations (50%). Another interesting result is that NGOs/NPOs have taken up the function of lobbying, which with a share of 80% substantially exceeds their other activities, whereas social enterprises focus is on idea development (56%) and funding (51%).

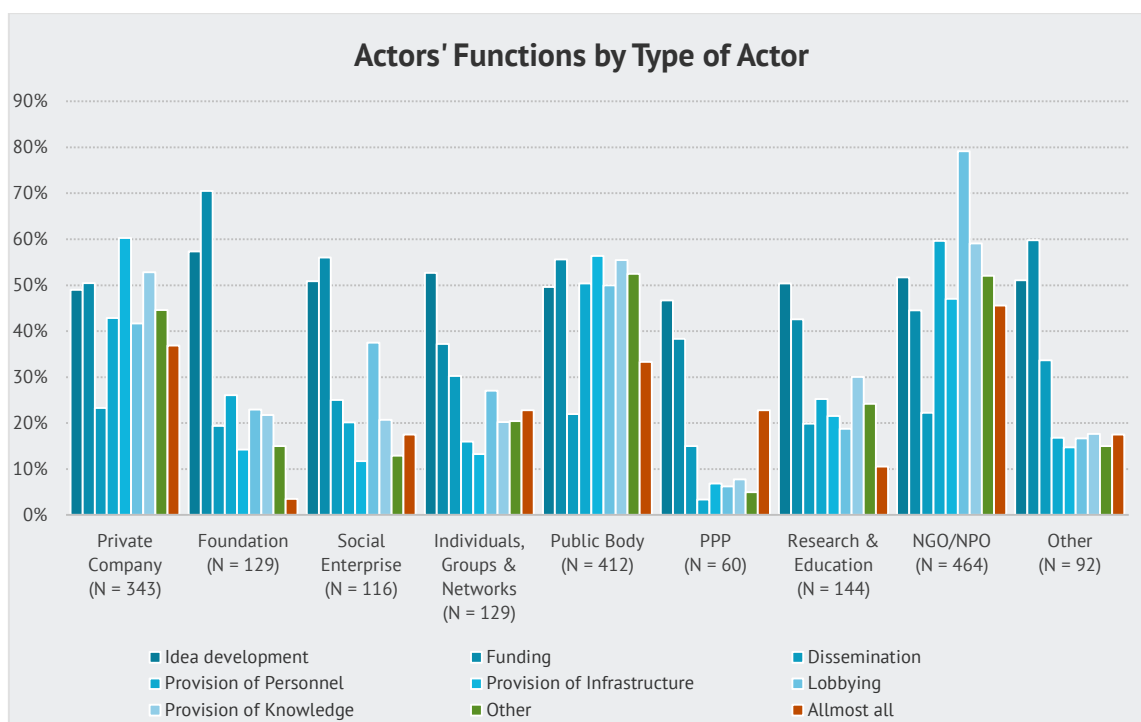


Figure 49: Actors' Functions in Social Innovation by Type of Actor (multiple responses, % of cases within single types)

Next to actors' functions, their *role* in social innovation is analysed. In this respect it is distinguished between central developers, promoters, supporters and knowledge providers (cf. chapter 4.4.1). As depicted in Figure 50 below, the role as *central developer* is foremost assigned to NGOs/NPOs (60%). At some distance public bodies (45%) and private companies (38%) rank second and third. All other actors' can be ascribed a less central role as initiators and operators of the initiatives, which is particularly marked for PPPs with a proportion of only 6%. In contrast, public bodies take the lead as promoter of social innovation (57%), followed by NGOs/NPOs (53%) and private companies (47%). Again research organisations, foundations, individuals, groups and networks as well as social enterprises and PPPs are lagging considerably behind the former three actors.

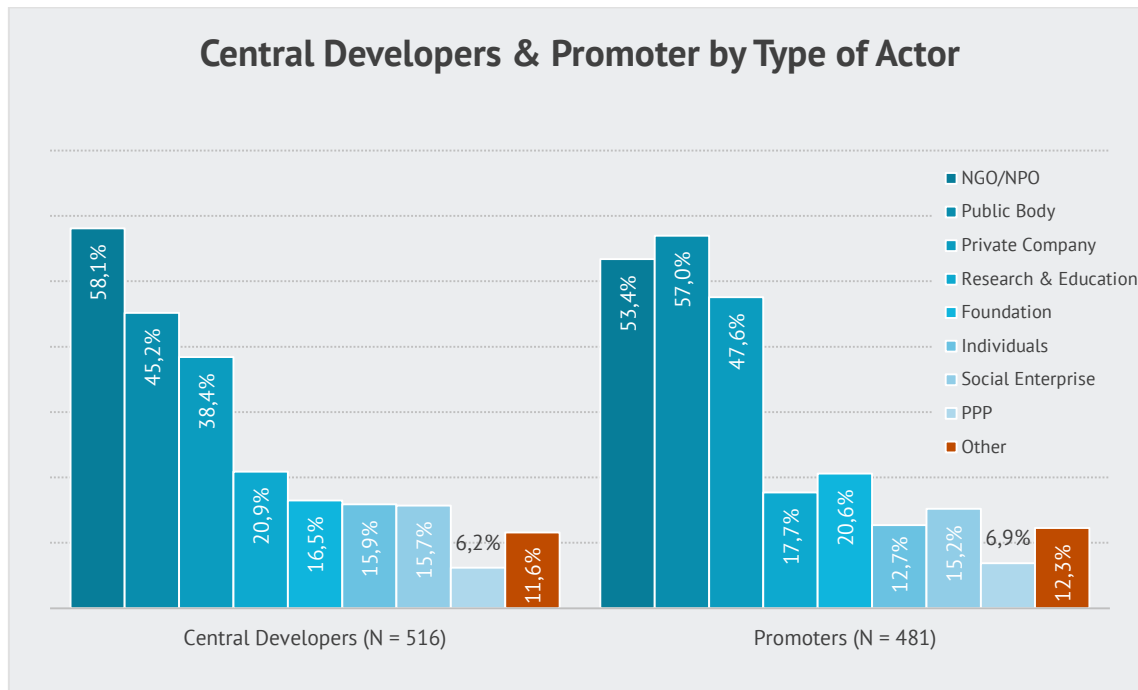


Figure 50: Central Developers and Promoters by Type of Actor

As will be shown in the following the above results are well reflected in the distribution of main implementing bodies.

4.4.2.5 Actors as Implementers

Before going into further details it has to be acknowledged that, in contrast to the previous chapters, the results of the subsequent analyses refer solely to actors that have been classified by the respondents as “main implementing body” and are based on quantitative data which has been complemented by additional qualitative information. In the sense used here the term “main implementing body” refers to those actors who take the lead in implementing the solution, which are not necessarily the inventors, initiators or developers of the social innovation. In total for 955 mapped initiatives 1.072 main implementing bodies were named, while for the vast majority of cases (89%) only one main implementing body was identified, two in additional 10% of cases and more than three in less than 1% of the mapped initiatives.

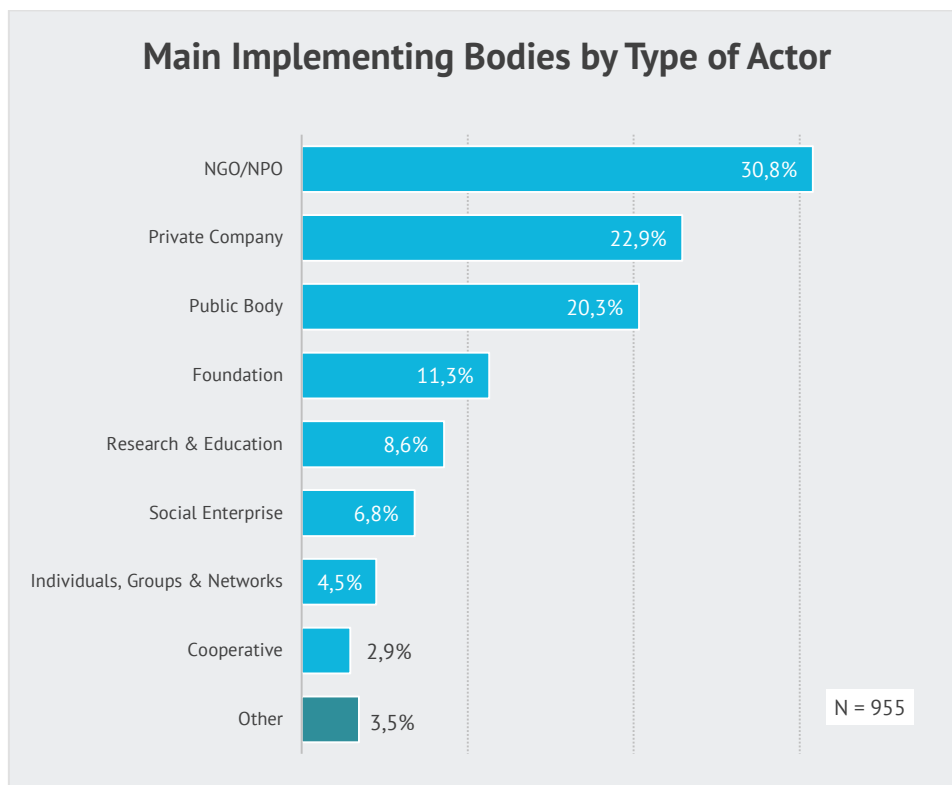


Figure 51: Main Implementing Bodies (multiple responses)

As depicted in Figure 51, with regard to the type of actor it becomes evident that almost one-third (31%) of the initiatives are led by NGOs/NPOs, followed at some distance by private companies (23%) and public bodies (20%). In contrast, cooperatives as well as individuals, groups and networks are only ascribed a minor role in the implementation of the mapped initiatives. Although social innovation initiatives are implemented more often by research organisations (9%) and social enterprises (7%) compared to the former two, their importance remains limited.

With regard to the above results it has to be acknowledged that rather than being a homogeneous group within the category «private company» we find a variety of legal forms of organisations and distinct arrangements of ownership which are not always clear cut and might be subject of change in the course of time. For example, next to “classical” private companies we find non-profit organisations owned and financed by private companies.

According to the mapped data

Private companies as main implementing body are characterised by hybrid forms of organisation and distinct arrangements of ownership.



4.4.2.6 Levels of Governance

As was stressed in chapter 4.4.1, social innovation and governance are mutually influencing each other. Also levels (e.g. initiative, cross-sector, region, EU, society etc.) and structures of governance vary to a large degree. In this respect we distinguish between two dimensions: First, *governance as framework*, i.e. social innovations emerge in given governance schemes which are foremost shaped by the European, national and regional governance system, but also by the policy field. Second dimension *governance as process* refers to the social innovation initiative itself where (self-)governance is practiced.

Governance as framework

Analysing governance as framework four distinct types of governance frames have been identified, namely policy programmes, networks, umbrella organisations and social movements. As Figure 52 illustrates, 42% of the initiatives is related to a policy programme, 37% to a network 34% to an umbrella organisation and 27% to a social movement.

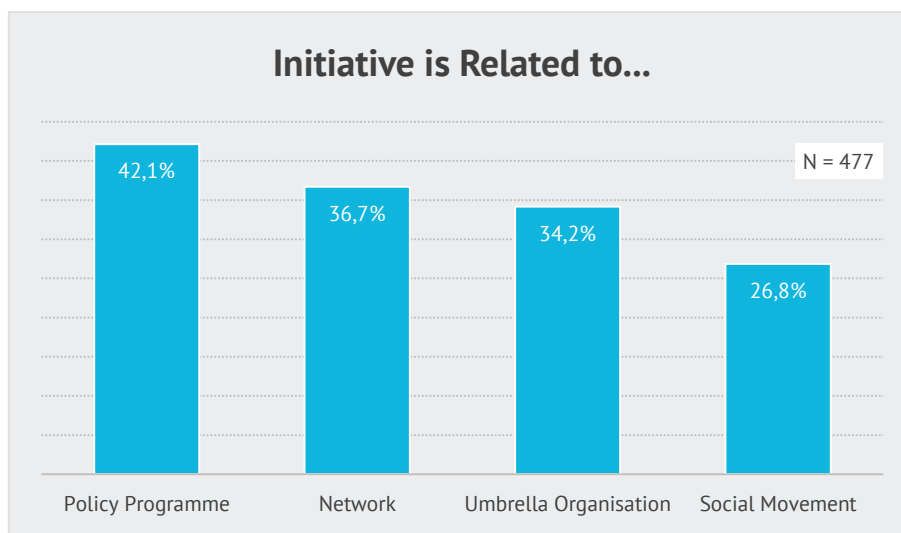


Figure 52: Social Innovation Initiatives Relatedness to Governance Frameworks (multiple responses)

Taking a closer look at the governance frameworks in relation to the size of the partnership/alliance (cf. Figure 53) reveals that initiatives with only one partner are more often related to policy programmes (34%) compared to the other governance frames, whereas small alliances are slightly more often related to networks (19%). The proportion of partnerships of three or more actors embedded in networks and umbrella organisations are equally high (61%), while their relation to social movements (55%) and policy programmes (50%) lag lightly behind.

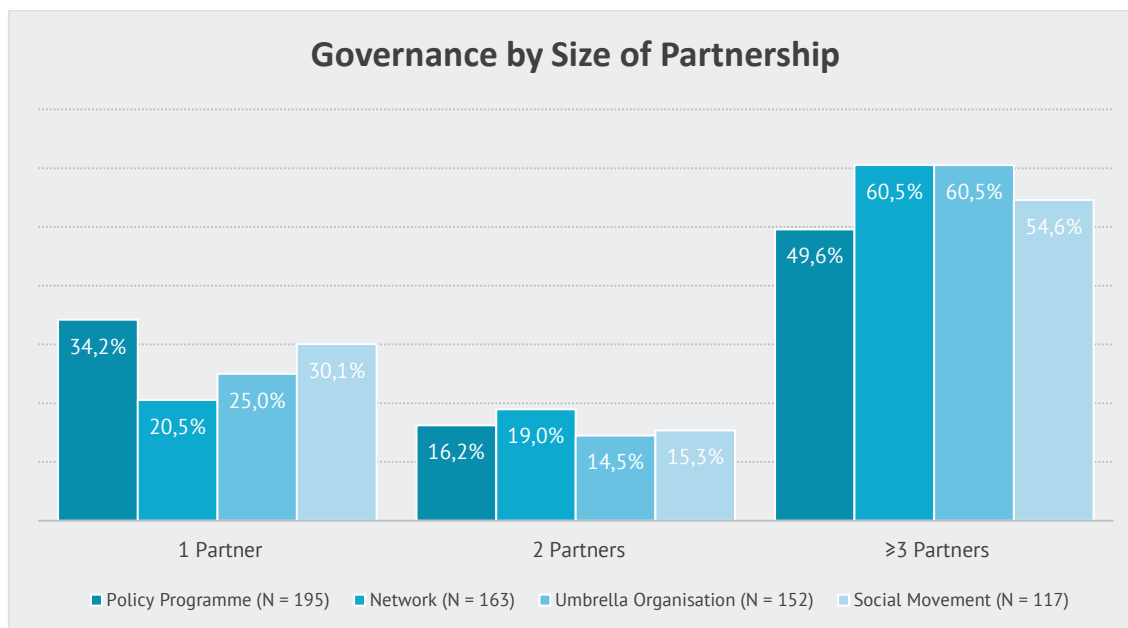


Figure 53: Initiatives' Relatedness to Governance Framework by Size of Partnership (multiple responses)

From a policy fields' perspective, it appears that across all policy fields the policy programmes are the most pronounced governance framework, except for Environment and Climate Change. Therewith, the empirical results underpin the conclusion from the Compilation Policy Fields Reports that (a) the dominance of centralised and often hierarchically organised governance systems and (b) the importance of governmental actors are common characteristics across policy fields (cf. Scopetta 2015).

Next to policy programmes, social movements show to play an important role in Education as well as Environment and Climate Change accounting for proportions of 38% and 39%. Umbrella organisations and networks can be ascribed a high relevance in Health and Social Care, just as social movements. The latter sustains the conclusion of the Policy Field Report which informs that in the civil society social innovation is attracting increasing intention. With a share of 57%, umbrella organisations appear as major governance framework in Poverty Reduction and Sustainable Development clearly exceeding the other frameworks.

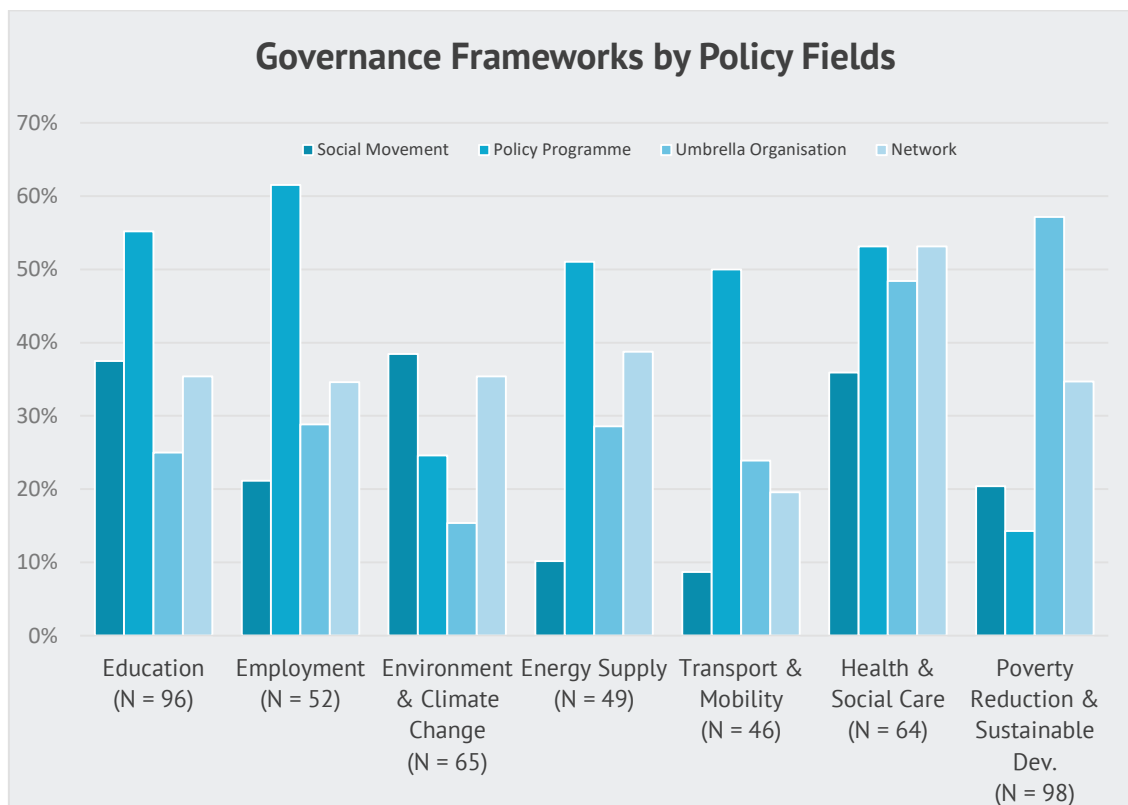


Figure 54: Governance Frameworks by Policy Fields (% of cases within the policy field)

According to the mapped data

Policy programmes are the dominate governance framework in which the mapped social innovation initiatives are embedded in, except for the policy field Poverty Reduction and Sustainable Development where umbrella organisation show to be most relevant.

Governance as Process

To advance understanding how social innovation initiatives are governed, qualitative answers on the structure and methods of coordination and management have been coded, categorised and quantified. The identified levels of governance comprise the strategic and operational management, the implementation structure as well as the organisational background (cf. Figure 55 below).

Concerning the *strategic management* as first governance level executive boards emerge as most frequent mode of governance (24%) within the mapped initiatives, followed by governance by executive directors (20%). On the other hand, it becomes evident that role of participatory modes of governance - expressed through general assemblies - are of minor relevance.

In *operational management* governance foremost reflect the project character of the mapped social innovation initiatives: Project and task management show to be the most frequent modes of governance, while coordination lags considerably behind.



With regard to the implementation structure network and democratic structures appear as dominant forms of governance, applying to 11% and 10% of the mapped in initiatives. Although many social innovations emerge as grassroots initiatives, surprisingly data suggests that informal structures as mode of governance are negligible with a share of only 3%. In contrast, due to the low number of partners of many initiatives (cf. chapter 4.4.2.3) it was to be expected that governance by a clear division of labour is an exception rather than common practice.

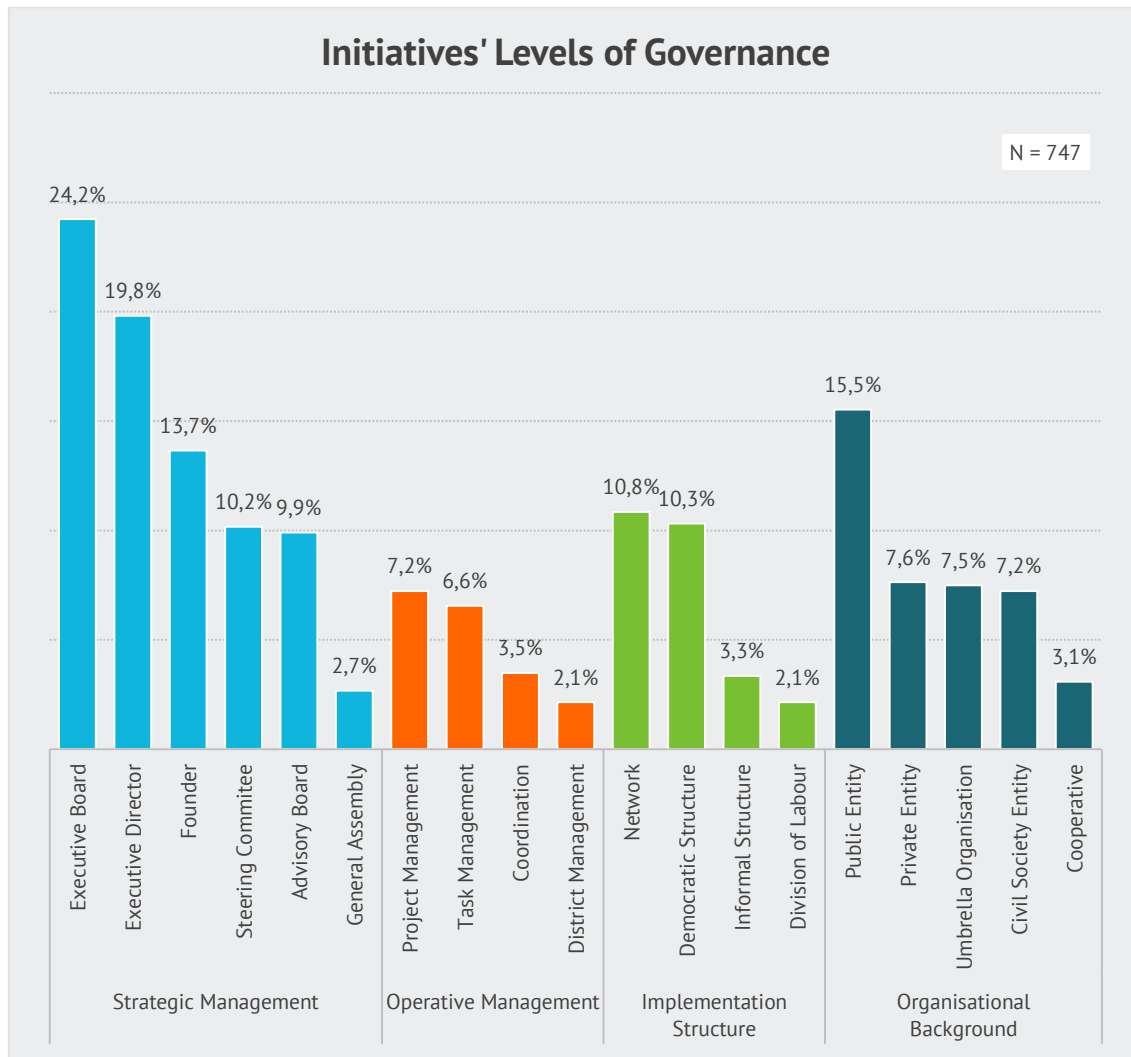


Figure 55: Social Innovation Initiatives' Levels of Governance

In relation to the *organisational background*, the proportion of public entities (16%) in charge of governance is approximately twice as high as that of private entities, umbrella organisations and civil society entities. With a share of 3% cooperatives seem to play only a marginal role.



According to the mapped data

Social innovation initiatives' governance is characterised by rather formalised structures of strategic management, networks as implementing structures prevail with public entities taking the lead.

From a spatial perspective some difference between EU and Non-EU become visible (cf. Figure 56): Compared to EU countries in *strategic management* executive boards in Non-EU countries are considerably more common (+17%). Likewise, this applies to executive directors. The results suggest more formalised modes of governance in Non-EU countries, which is further underpinned by the marginal role assigned to general assemblies in these countries (< 1%). As regards the operative management differences in the modes of governance are less pronounced, except for task management which in Non-EU countries exceeds the proportion of EU countries by 4%. This equally applies to the level of implementation structures. With regard to the organisational background considerable differences become evident as concerns umbrella organisation and civil society organisations whose proportions in Non-EU are substantially lower than in EU countries.

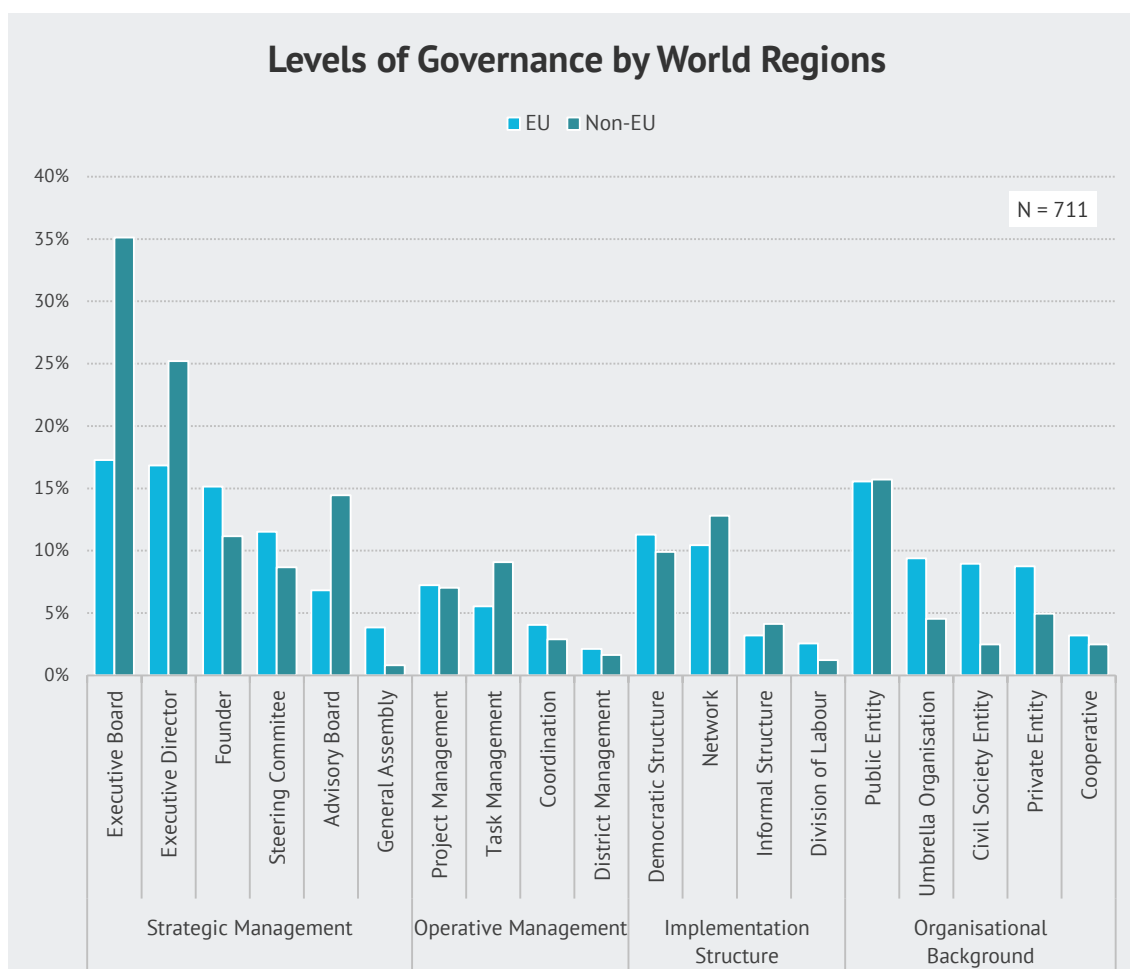


Figure 56: Initiatives' Levels of Governance by World Regions



According to the mapped data

Differences in social innovation initiatives' governance between EU and Non-EU countries are rather small, except for the more pronounced formalisation of strategic management in Non-EU and a higher degree of institutionalisation of the organisational background in EU countries.

4.4.3 Conclusions and Open Questions

This chapter discussed *actors*, *networks* and *governance* of social innovation as fourth dimension of SI-DRIVE's pentagon. To advance understanding of actors' functions and roles it was distinguished between central developers, promoter, support and the transversal category of knowledge providers.

4.4.3.1 Actors and Networks

In relation to actors' engagement, their functions, roles and interactions the main findings of the empirical analysis can be summarised as follows:

- Civil society organisations (e.g. NGOs/NPOs), public bodies and private companies are the key actors in the mapped social innovation initiatives.
- *Users as knowledge provider* are essential actors in social innovation initiatives across all policy fields, while their relevance in Health & Social Care is most pronounced.
- *Users as solution providers* have an outstanding position in Transport & Mobility. In general involving users as solution providers is more common in Non-EU countries compared to EU countries.
- Involvement of *users as adapters* appears to be of higher relevance in regions which to a large extent adopt solutions from other (e.g. Southern European countries).
- The development of social innovation in small-scale initiatives with 1-2 partners emerges as a common pattern, whereas larger alliances of three partners and more are scarce.
- The vast majority of initiatives is developed by domestic partners, while cross-country collaboration is an exception.
- NGOs/NPOs, private companies and public bodies appear as the main implementing bodies, while research organisations' and social enterprises' importance remains limited.
- Alliances of public bodies, NGOs/NPOs and other partners except for private companies emerge more often than networks of other actor constellations.
- Although actors' functions in social innovation initiatives vary considerably, a certain degree of complementarity becomes evident. For example, private companies function as providers of infrastructures, while foundations core function is funding.
- Also actors' support activities are well reflected in their roles as central developers and promoter as well as their responsibility as main implement body.



- Private companies as main implementing body are characterised by hybrid forms of organisations and distinct arrangements of ownership.

With regard to the outlined background on actors and networks (cf. chapter 4.4.1) the key results underpin the diversity of actors, their roles and function in social innovation, whereas the potentials of alliances and networks remain underexplored. Notwithstanding this deficit, cross-sector collaborations emerge as a common pattern in initiatives that are developed in alliances, while actors fulfil specialised functions that allow for taking advantage of complementarities and synergies. In this respect, it is important to note that borders between the functions can be blurred: NPOs/NGOs represent the civil society and provide problem identification/solutions based on societally relevant knowledge; public bodies are able to set up programmes and projects and have the resources to coordinate social innovation processes; private companies provide infrastructures. All of these specialisations are equally relevant for a successful social innovation initiative, while each actor has the capacities to take over or complement the functions of the others which is reflected in their roles as central developers. Besides their primary function NGOs/NPOs, for example, engage in lobbying and funding etc., whereas private companies also contribute to idea development and funding. In particular, the strong involvement of private companies illustrates that the progress of social innovation is not restricted solely to social enterprises, but is also relevant for the mainstream business community.

In addition, it is, however, shown that only part of the quadruple helix is present in the initiatives due to the as yet limited involvement of research organisations which contradicts their essential role as knowledge providers in classical innovation.

Despite the finding that the role of research organisations in social innovation is still emerging, they have the potential to play an important role in social innovation. In particular, by acting as an anchor in the social innovation ecosystem, research organisations (e.g. universities) have the capacities to fill existing gaps and therewith help social innovators to thrive by, for example, complementing users' knowledge with scientific approaches, methods and tools or consulting to overcome social innovators lack of capacities in certain fields. In this respect Matheson (2008, p. 34) stresses that *"[i]ntegral to this success is an overarching institutional commitment to the value of social innovation so that it pervades the university's activities, ranging from the active encouragement of collaboration across the disciplines to policies regarding intellectual property"*.

Just as the inner core, the role as promoter is taken up by a wide spectrum of actors. Here too, however, it is NPOs/NGOs, public bodies, and private companies that are the key actors. Consequently, the second assumption is to be reformulated:

Albeit the key role of NGOs/NPOs, public bodies and private companies, the spectrum of actors acting as promoters is divers. Being involved they provide specialised competences and resources to address challenges and or problems arising in due course of the innovation process.



Next, the hybridity of organisations shows to be a common pattern in social innovation. Organisational hybridity, as it appears in the mapped cases, is associated to private companies and NGOs/NPOs that combine distinct structural and/or mission-related elements (e.g. economic vs. social value). These findings underpin earlier studies indicating that the traditional clear-cut separation of market-based (private), state-based (public) and civil society based (third sector) have become increasingly insufficient.

In order to advance understanding actors' distinct roles and to gain deeper insights in actors' interactions, and therewith, establish an actor-centric view in the social innovation ecosystem the following *open issues* should be addressed by the case studies:

- The role of users as equal partner in social innovation could only be approximated; to substantiate the empirical results users' role as innovators should be further investigated.
- Furthermore, users' strong involvement as knowledge providers coincident with the marginal engagement of research organisations raises the question whether users' emerge as the "new" knowledge provider replacing, for example, universities. And what is the role of research organisation?

4.4.3.2 Governance

In order to approach the distinct levels of governance in social innovation the analysis covered two dimensions, namely "governance as framework" and "governance as process". The former refers to given governance schemes shaped by the European, national and regional governance system in which the social innovation emerges, but also by the policy field. The four governance frames social movements, policy programmes, umbrella organisations and networks have been analysed. The main results can be summarised as follows:

- It is shown that policy programmes are the dominant governance frame work in which social innovation initiatives are embedded.
- From a policy-perspective it is evident that policy programmes are the central governance frame *across* all policy fields, except for the policy field Poverty Reduction & Sustainable Development where umbrella organisations emerge as most relevant.

Governance as a process refers to the social innovation initiative itself where (self-)governance is practiced. The levels analysed comprise the strategic and operational management, the implementation structure as well as the organisational background. Main findings are:

- Social innovation initiatives' governance is characterised by rather formal structures in form of executive boards and directors.
- Operative management of initiatives follows a "project logic" with project and task management, but little coordination.
- Initiatives implementation is characterised by network-like, democratic structures.
- The majority of initiatives bases on a public entity as organisational background.



- Differences in social innovation initiatives governance between EU and Non-EU countries are marginal, except for the more pronounced formalisation of the strategic management in Non-EU and a higher degree of institutionalisation of the organisational background in EU countries.



4.5 PROCESS DYNAMICS

As was outlined in the Critical Literature Review, process dynamics as the fourth dimension of SI-DRIVE's pentagon are apparent in social innovation initiatives and influence their growth. Forasmuch, social innovation concepts should explain the process dynamics of social innovations in relation to shifting power relations and levels of governance/government (Scopetta et al. 2014).

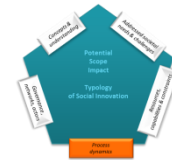
4.5.1 Background of the Analysis

Focusing on the relationship between social innovation and social change, mechanisms to bridge individual social innovation initiatives (micro level) and social change (macro level) aims at the core theoretical challenge of SI-DRIVE.

Against this background the Critical Literature Review (Butzin et al. 2014b, p.153) concludes that *"[c]onsidering the complexity of innovation we need to understand the process dynamics of social innovation on the one hand and its relationship to social change on the other hand. The process dimension of social innovations concerns the creation and structuring of institutions as well as behavioural change (Hoffmann-Riem 2008, p. 591ff.), as well as the empowerment of actors (Crozier/Friedberg 1993, p. 19). The decisive criterion in a social invention becoming a social innovation is its institutionalization or its transformation into a social fact (Durkheim 1984), in most cases through planned and coordinated social action. [...] The successful implementation and/or active dissemination of a new social fact usually follows targeted intervention, but can occur also through unplanned diffusion (Greenhalgh et al. 2004) – how much this is the case will be subject to research."*

While chapter 4.4 focused on actor constellations and governance structures in social innovation and therewith, addressed the structural and organisational level, in the following the process level is analysed or put differently the dynamics of social innovation processes. In order to understand such processes in the context of SI-DRIVE we distinguish between three analytical levels.

The *first level* concerns the role of the *individual and collective actors (hereinafter: actors), their motivations and strategies*. The initiating actors – the social entrepreneur, the project manager, the activist, the group, network and so on – have a motivation, intention or a strategy to disseminate their solution for a social problem. Scaling in terms of different modes of organizational growth is a typical way. Encouraging further actors to engage in the same practice or policy field is a further example. The difference between scaling and the creation of mission networks is that in the first case the actor controls the way the activities works and in the second case influence becomes weaker because further actors with own intentions join the agenda. There are further activities an actor can initiate in order to overcome the limits of organizational growth: It is possible to distribute the ideas in a broad way (for instance by one source), social movement can be initiated or lobbying or political pressure aims at changing the political or institutional environment. The table below shows the different modes of scaling or dissemination strategies that had been discussed in the Critical Literature Review of SI-DRIVE.



Approach	Strategy	Overview
Replication	'Scaling out'	Organisation attempt to replicate their social innovation in other geographical areas
	'Scaling up'	Organisations attempt to affect a wider system change by tackling the institutional causes of a problem
	Mission networks	A social entrepreneur rids of traditional aspects of organisational control (brand, intellectual property, etc.) to influence and create other 'change makers' within the system
Non-replication	Open Source	The core intellectual property of the innovation or organisation is turned into an open source tool for others to take up
	Other (less explored potential strategies)	Including: <ul style="list-style-type: none"> • Affiliation with new partners • Direct/indirect dissemination of ideas • Working to change policy environments • Social movement building

Table 15: Summary of Main Scaling Strategies (CLR, Davies 2014, p. 71)

The *second level* is related to the *interplay of different actors* involved in a social innovation or in the related practice or policy field. In this case we have different actors with different (supporting or opponent) interest and strategies that interact in different modes (cooperation, competition, conflict) of governance. From the perspective of process analysis, it is important to be aware that any actor has a motivation, intention and a strategy. Thus, the result of the process is neither predictable and nor is it the result of a rational (political) discourse. Rather the process is often driven by not intended and self-enforcing dynamics. Appadurai (2013, p. 258) for instance remembers that when explaining social change, we have to be aware of the "accounts of sociality all the things that make human society so fascinating in the first place. These occluded elements include ethical anguish, irrational exuberance, self-fulfilling prophecies (or failed ones), hypocrisy, sour grapes, rising expectations, bottomless wants, and selective receptivity to propaganda".

The *third level* is about *politics*. Politics try to intervene in the process of social innovation in order to give it a direction that fits with the political or societal values. This can mean both: to support social innovation that promises better solutions for societal challenges and/or to avoid social innovations that challenge the given institutional setting.

4.5.2 Results of the Global Mapping

Analysing process dynamics is performed at the level of social innovation projects or initiatives (first-level of analysis), i.e. actor's motivations, intentions and objectives. Strategy covers the dynamic or the scaling of the activity itself as well as attempts of the actor to design the related process of social innovation by dissemination, lobbying, campaigning and so on.



4.5.2.1 Acceleration of Social Innovation

The analysis reveals that approx. 42% of the mapped social innovations started between 2011 and 2015, another 30% between 2006 and 2010, nearly 14% between 2001 and 2005, and additional aggregated 14% percent between 1965 and 2000. In total, social innovation initiatives launched during the past ten years' account for more than 70% of the mapped cases.

At a first glance, these findings indicate a rising dynamic of social innovation or the emergence of a new innovation paradigm (4.2.1). However, the results have to be interpreted carefully as our sample covers only 'visible' and ongoing social innovations (cf. chapter 3.2). We have to keep in mind that earlier social innovations that have come to an "end" are less visible as they have been transformed in an economic business or became common policy practice.

Taking a closer look at the projects' start times within the different policy fields only minor differences appear. On average, 44% of the mapped cases were initiated in the period 2011 to 2015 across all policy fields compared to 60% of cases in Energy Supply. Roughly 80% of social innovations in Environment and Transport & Mobility were launched during the past ten years (cf. figure below, orange numbers). These findings, however, provide only weak evidence, as most recent cases are more likely to have been identified (see above).

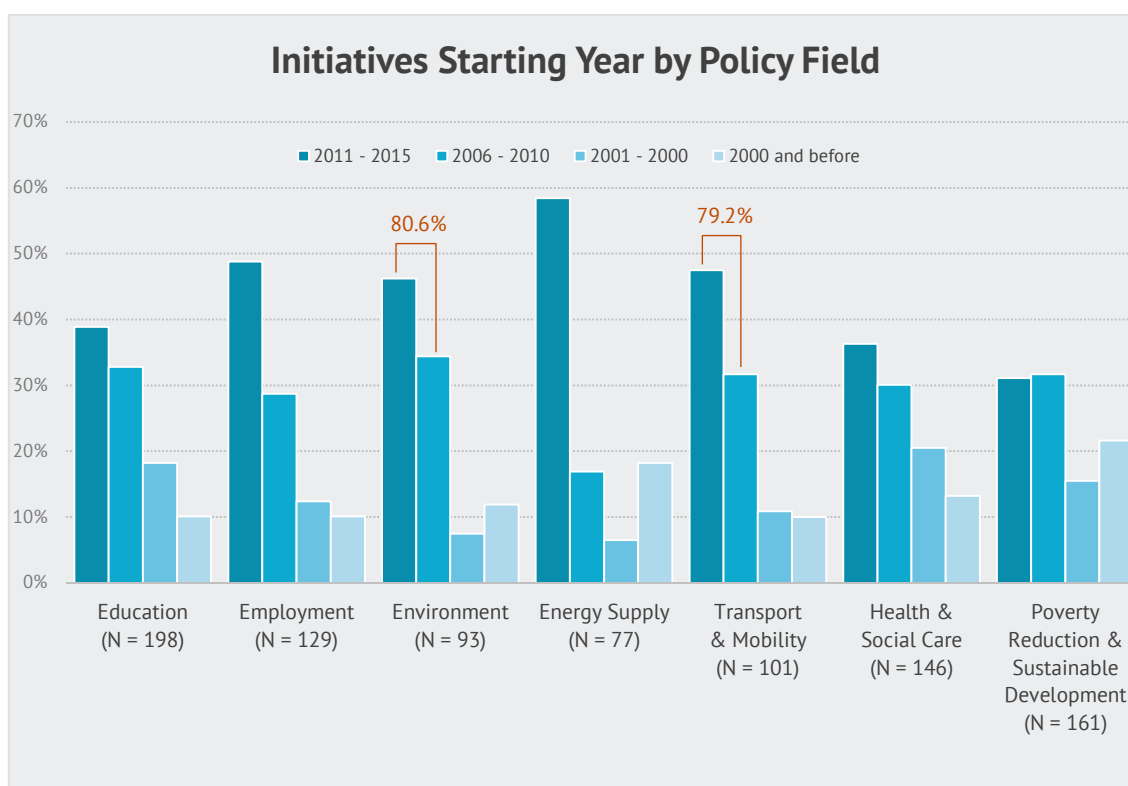


Figure 57: Initiatives' Starting Date by Policy Field (% of cases within policy field)



4.5.2.2 Social Innovators' Motivations, Intentions and Strategies

Being a key aspect of social innovation, process dynamics are also reflected in changes of social innovators' motives. Since available data is scarce for early social innovations we limit our comparison to four five-year periods between 1991 and 2015. Again differences are rather small. With approximately 60%, 'social demand' and 'societal challenges' motives outperform all other motives within the single five-year periods, while only minor deviations for the two motives appear between the five-year periods (cf. figure below). Despite the fact of being considerably more seldom, it appears that the share of social innovators motivated through 'social movements' and 'policy incentives' were slightly higher in earlier years. More precisely, accounting for 23% in the five-year period 1991 to 1995 'social movement' motivation is more pronounced (+8 percent points) compared to its share across all years (15%), whereas this margin decreased to 0.5% for the period 2011 to 2015. In the same period 'policy incentive' motivation deviation from the marginal distribution (19%) declined from +4% (1991-1995) to approx. -2%. To classify these changes as a trend would, however, require further information. In particular, with regard to the question whether social innovation projects have become more problem-oriented and pragmatic in the last years and less motivated by political issues.

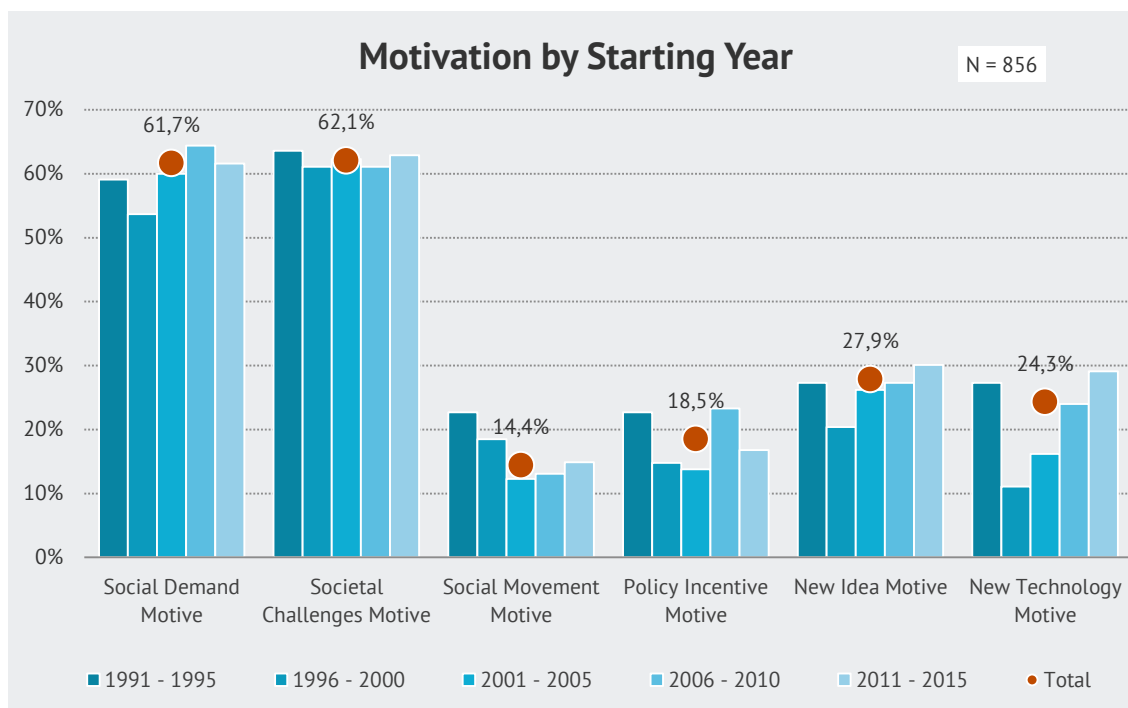


Figure 58: Social Innovators' Motivation by Starting Year (multiple responses)

Furthermore, the empirical findings indicate that 'new technology' motive gained in importance which is not at least attributable to the spread of digital technologies. Indeed, a clear increase in social innovators motivated by new technology becomes evident when comparing the share of 29% of all motives for the time period 2011 to 2015 with 11% for 1996 to 2000. This result corresponds with the finding that technology as enabler of social innovation is gaining importance (cf. chapter 4.3.2.2). Moreover, Schweitzer et al. (2015) show that technology-reflected individuals, i.e. individuals that think about the impact of



technological products on its users and society in general, contribute to technology-enabled social innovation.

As the figure below illustrates, differences in actors' motivations within the single policy fields are rather small (deviations of about 5 percent points), nevertheless, some interesting findings become apparent:

- Accounting for only 11%, in *Education* social movement motivation falls below the share in all policy fields by approx. 5%, while new technology motivation surpassed that by 5%.
- In *Employment* solutions motivated by societal challenges and new technologies are below the share in all policy fields (-4%).
- With a share of 25% below all policy fields, in *Environment* social innovations triggered by social demand are markedly and new technologies are slightly less important, whereas societal challenges motivation surpasses the share of all policy fields by 6%.
- In *Energy Supply* social demand motive is below and societal challenges motive above the share of all policy fields; contrary, policy incentives motive remarkably exceeds the share of all policy fields remarkably (+10%) and new technology motive slightly (4%).
- *Transport and Mobility* reveals a quite different picture: social demand and societal challenges motives are less important compared to all policy fields. With a share of 9% less than all policy fields, social movement motivation seems marginal accounting for only 6% of all motives, whereas policy intervention motive shows to be more important. New ideas motivation is much lower than in all policy fields (-12%), new technology motive is slight about that.
- The differences in *Health & Social Care* are small: social demand motive surpasses the share of all policy fields by 5%, whereas societal challenges motive and new tech motive fall below that (-4% and -5%).
- With a share of 14% above the share of all policy fields, in *Poverty Reduction & Sustainable Development* social demand shows to be the core motivation, followed by new ideas (+8%) and social movement (+6%).

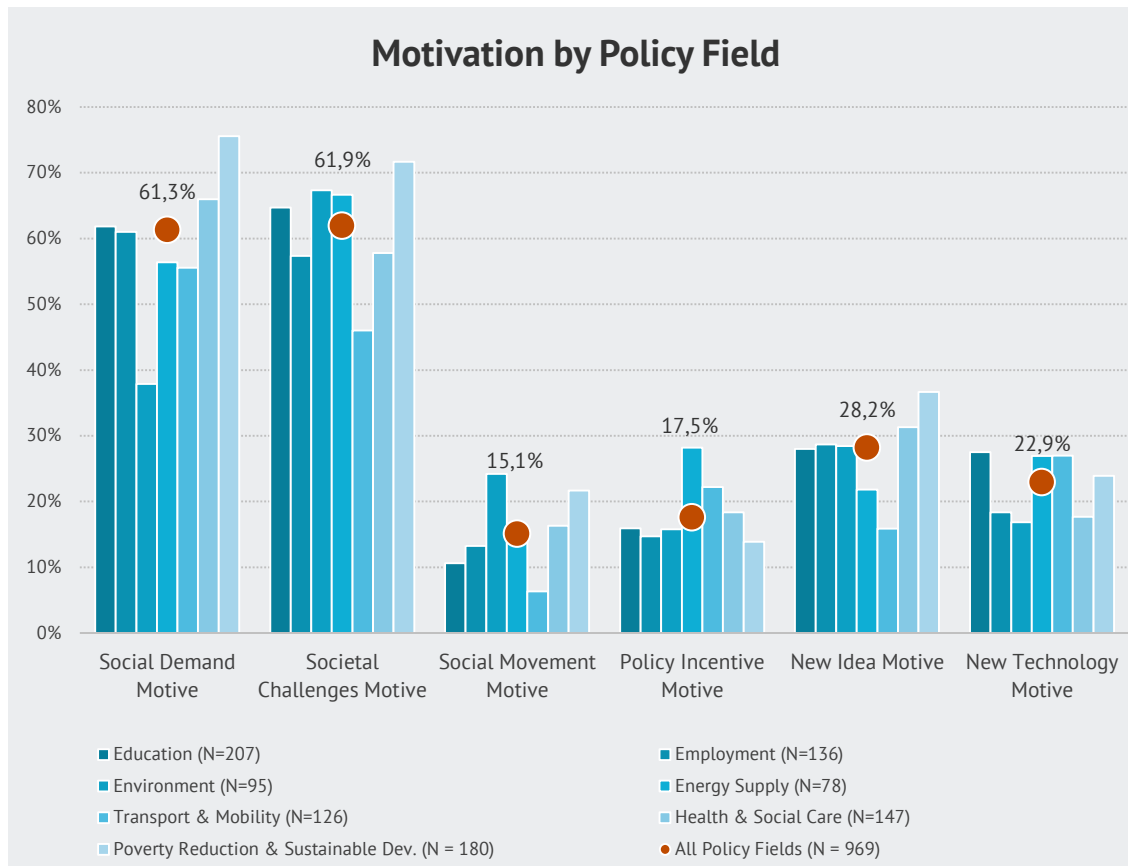


Figure 59: Actors' Motivations by Policy Field

From a broader perspective the differences basically reflect the characteristics of the policy fields. With respect to the innovation process four aspects can be identified:

- Social innovations motivated by a *social demand* or *societal challenge* prevail in Poverty Reduction & Sustainable (76%), but are also of high importance in the other policy fields.
- Albeit to a lesser extent than social demand and societal challenges, particularly in Environment and Poverty Reduction and Sustainable Development *social movements* translate into innovative solutions (each approx. 24% compared to 15% across all policy fields).
- *Policy motivation* in Energy Supply (28%) and Transport & Mobility (22%) is more pronounced than across all policy fields (17.5%)
- Accounting for approx. 28%, *new technologies* are a central motive in Education, Energy Supply and Transport & Mobility.

Analysing the social innovators' motives from a *spatial perspective* focuses on the three indicators policy incentive, social movement and new technology, because the first two directly refer to the innovation process, whereas the new technology motive is indirectly related to the process dimension through the (new) possibilities modern ICT offer, e.g. with regard to the design and spread of innovative solutions.

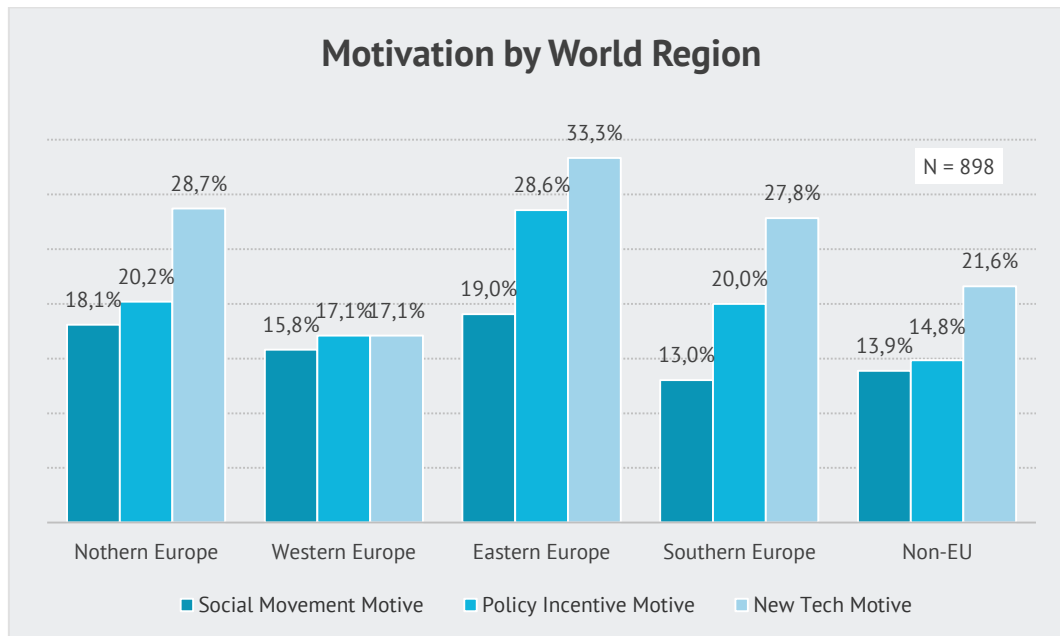


Figure 60: Social Innovators' Motivation by World Regions

Among the three motives, *new technologies* appear as most widely spread motive for innovators to engage in social innovation across all world regions and considerably surpass the other two motives. This can be attributed to the new possibilities information and communication technologies (ICTs) offer. However, compared to the other world regions, the share of initiatives motivated by new technologies (17%) is considerably lower in Western Europe compared to the share across all world regions (27%). On the one hand this can be explained by the already extensive use of ICTs in Western Europe, on the other by a limited perception of the possibilities new technologies offer.

In Europe the share of social innovation initiatives motivated by *policy incentives* (17%) is slightly higher than in Non-EU countries (15%). Differences in the awareness of policy makers as well as distinct policy instruments are possible explanations, to be further analysed in the second mapping face. With a share of 29% initiatives in Eastern Europe, the policy incentive motive is considerably higher than in the other European regions. In contrast, the share of social innovations motivated by policy incentives in Western Europe (17%) is clearly below the share of all European countries (22%). The difference is all the greater (-12%) in comparison to Eastern European initiatives (29%). As is the case with the new technologies motive, the reasons for the deviations need to be further investigated in the case studies.

Moreover, the findings suggest that in Southern Europe the social movement motivation is of minor importance for social innovations. In several aspects, this is surprising a result: On the one hand Southern European countries were particularly affected by the financial crises (e.g. significant increase of youth unemployment, austerity policies). On the other hand we find a growing number of social movements in these countries (cf. Flesher Fominaya/Cox 2013). Hence, this issue is to be further analysed by the in-depth case studies.



4.5.2.3 From Invention to Impact

Assessing the project stage, data illustrates that 53% of the mapped projects state to already have reached the impact stage and another 36% are in the implementation phase, 6% are in the testing phase, 3% in the phase of invention, and 2% in the phase of ideation/inspiration. Insofar, we can suppose that consequences for the dynamic of the social innovation process (imitation/adaption, institutional change, policy response, conflict) should be visible in the further interpretation of the sample (see figure below).

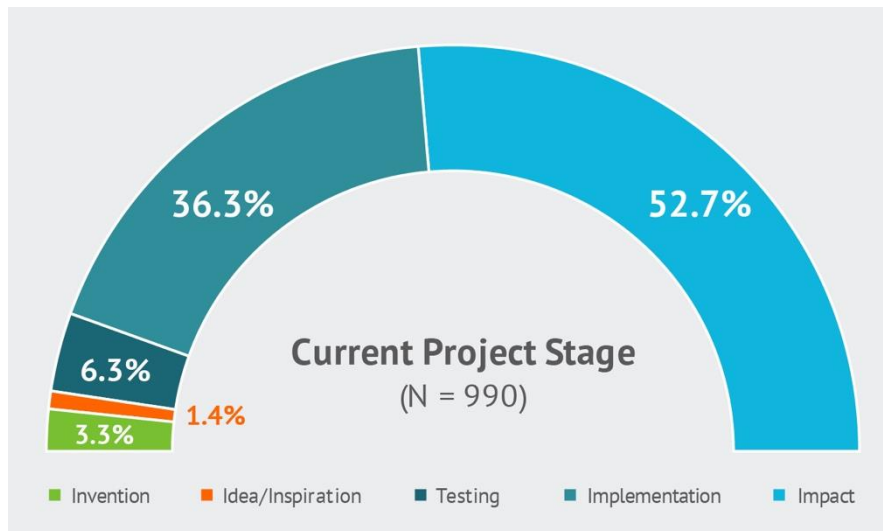


Figure 61: Current Project Share

Comparing the projects' development stages within the policy fields reveals some specific differences (cf. Figure 62).

- While initiatives having reached the implementation stage across all policy fields account for a share of 36%, their share in *Education* is considerably higher totalling 44%.
- Compared to the share of initiatives in the idea/inspiration/invention across policy fields (4.8%), shares in *Employment* (8.8%), *Energy Supply* (7.5%) and *Environment* (7.4%) are considerably more pronounced.
- In *Transport & Mobility* as well as *Health & Social Care* a similar distribution of initiatives in the different development stages coincides with shares of the initiatives across all policy fields.
- In *Poverty Reduction & Sustainable Development* the difference to the share of initiatives in the impact stage of all policy fields (53%) is particularly marked (over 70%).

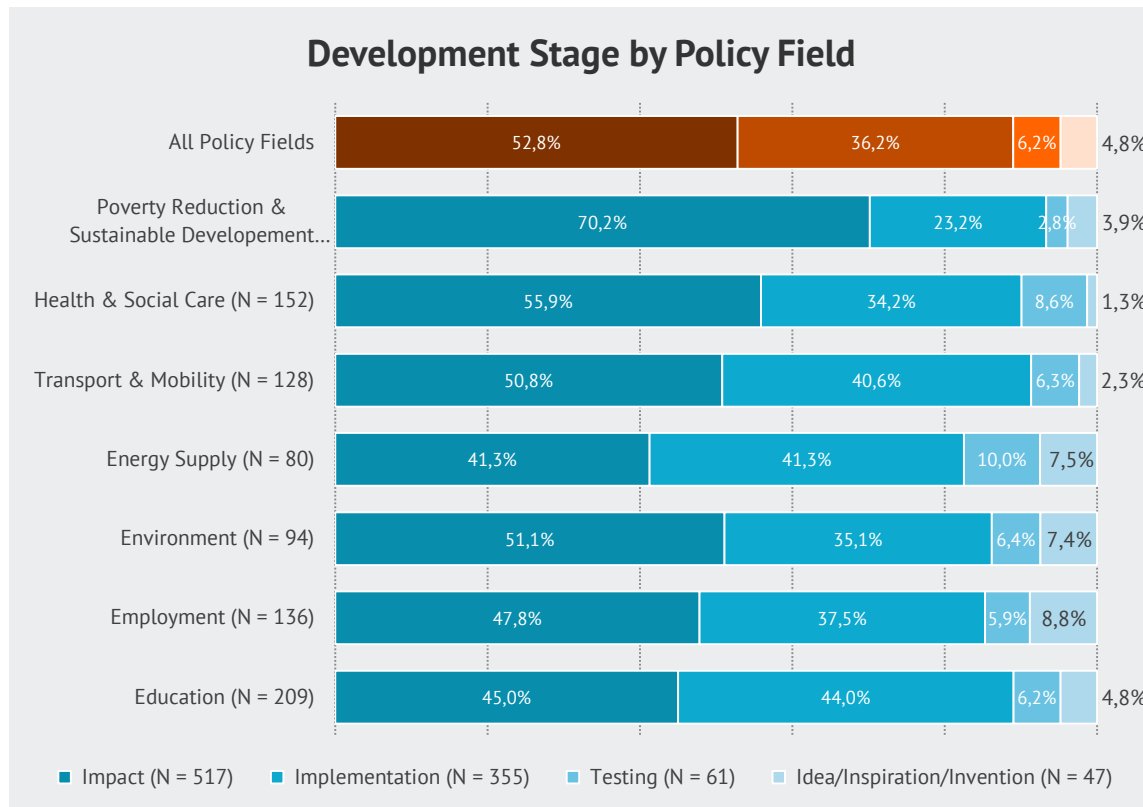
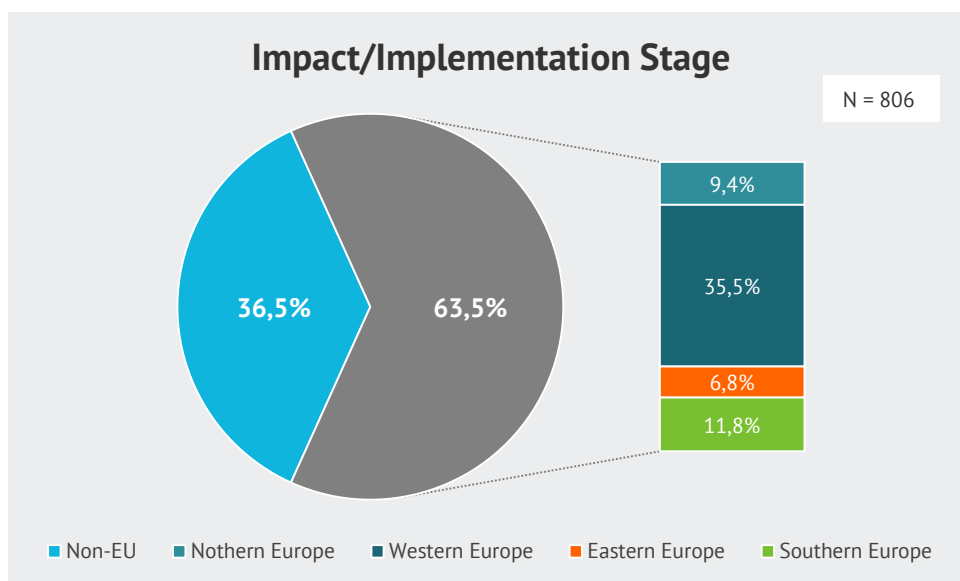


Figure 62: Initiatives' Development Stage by Policy Field (% of cases per policy field)

Analysing the data from a spatial perspective reveals further differences (cf. figure below): Of the 806 cases which are currently in the stage of implementation or impact generation (= basic population) about 64% are located in Europe, whereof Western Europe accounts for the largest part (approx. 36%), while shares of projects in Northern, Southern and Eastern Europe are considerably lower.



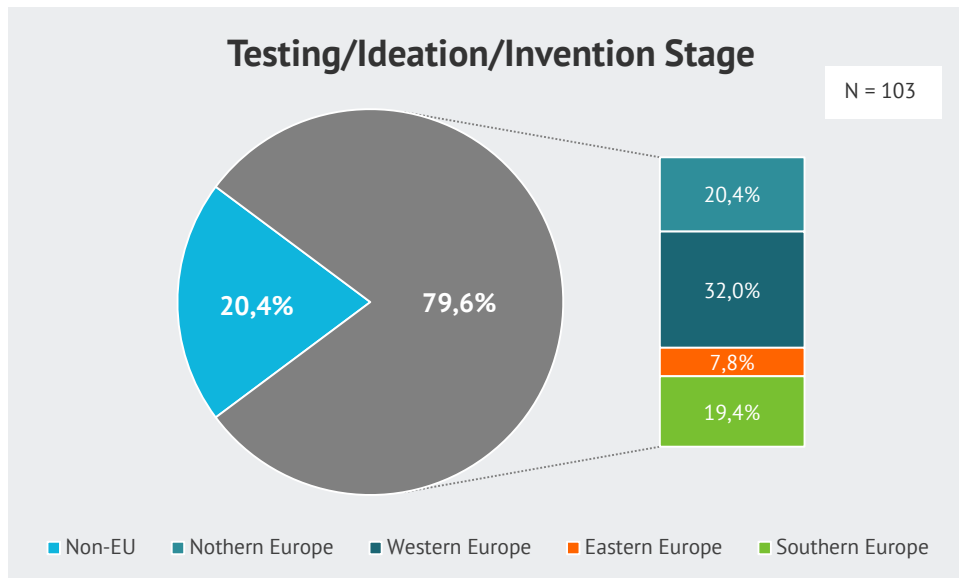


Figure 63: Project Development Stage by World Regions (% of cases in impact/implementation resp. testing/ideation/invention stage)

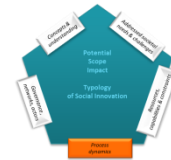
With regard to the 103 projects in the testing/ideation/invention stage (= basic population) again Western Europe ranks first with a share of 32%, while projects located in Northern and Southern Europe account for roughly equal shares of 20% and 19%. In contrast, projects in Eastern Europe sum up to only 8%.

The share of projects in the impact/implementation stage located outside of Europe is well above the levels of European regions (53%). This is especially true for Latin America and South East Asia.

4.5.2.4 Diffusion by Imitation

Referring to Tarde's theory of imitation Howaldt et al. (2014b, p. 15f.) emphasise that through diverse forms of imitation inventions are integrated into social practice. The authors further claim that "[i]nventions open up new opportunities, expose problems and shortcomings in established practices, initiate processes of learning and reflection, and ultimately enable new social practices. To this extent, one should enquire it's the potential of any invention to trigger such imitation and learning processes and hence generate new social practices" (ibid, p. 19).

With regard to the novelty of social innovations it was shown that nearly 50% of the solutions have originally been developed by the project partners, while the remaining 50% have been adopted from other projects (cf. Chapter 4.1.2.3). Hence, a certain dynamic driven by imitation, learning and adaption can be analysed. Following the above reasoning, the role of learning is assumed to be reflected in the magnitude of social innovations adopted from other projects that have been moderately or significantly modified/improved, i.e. adaption to the context. It is to be expected that such diffusion is «a process centred on changing patterns of behaviour that sets social learning processes in motion that are triggered by new inventions» (ibid, p. 19).



The regional comparison of initiatives' innovative character suggests that in Eastern Europe social learning triggered by the adaption of solutions from other projects (53%) plays a crucial role. Contrary, in Northern and Southern Europe as well as in Non-EU countries completely new solutions outweigh modified/improved projects.

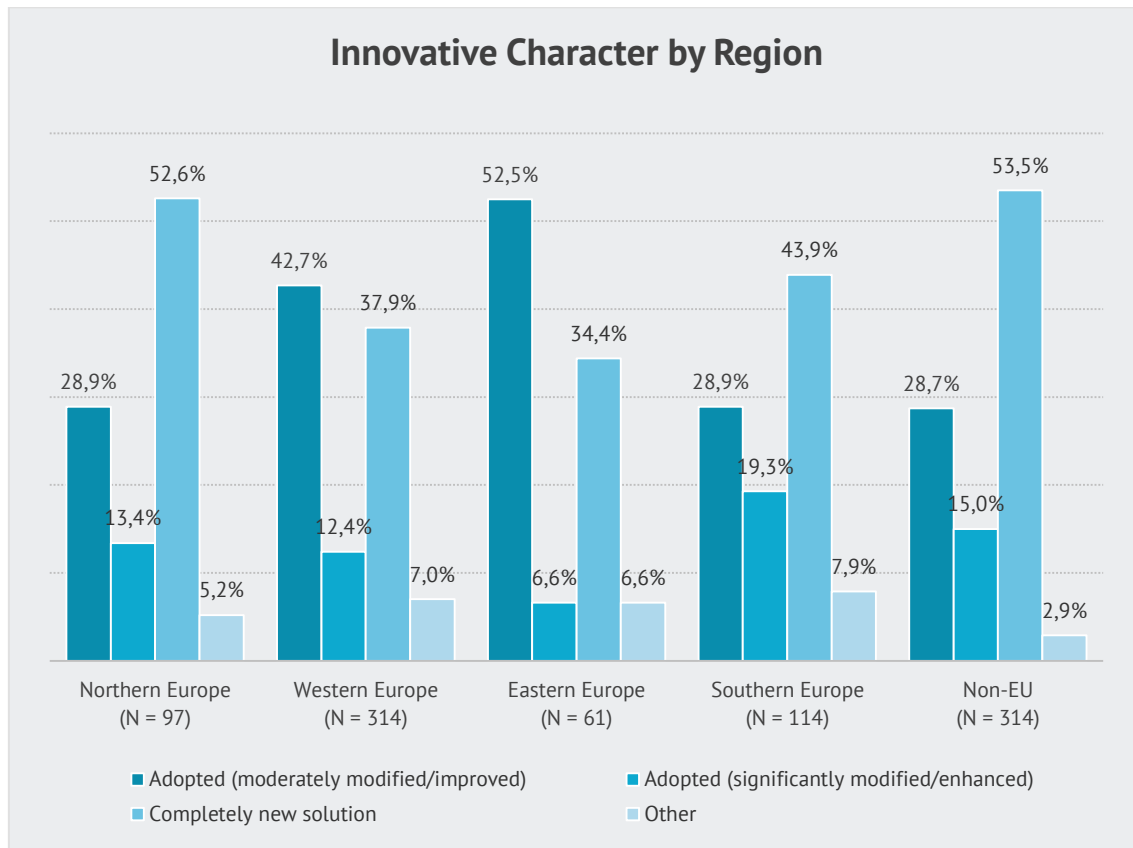


Figure 64: Innovative Character by World Region (% of cases in world region)

4.5.2.5 Processes of Scaling

In total, 90% of the initiatives are scaling in one or the other way, whereby *increasing the target group* is with a share of 70% by far the most applied scaling mechanism. At some distance network extension ranks second with a share of 49%. This result confirms that *“upscaling of social innovations should follow the connection with the other helices”* (Dhondt/Oeij 2014, p.140)²⁹ Organisational growth as scaling mechanism ranks third (40%).

²⁹ From a New Public Management perspective the authors draw on Carayannis and Campbell's (2011) «Quadruple helix approach» that differentiates between four helices: academia (first helix), industry (second helix), state (third helix) and civil society (fourth helix).

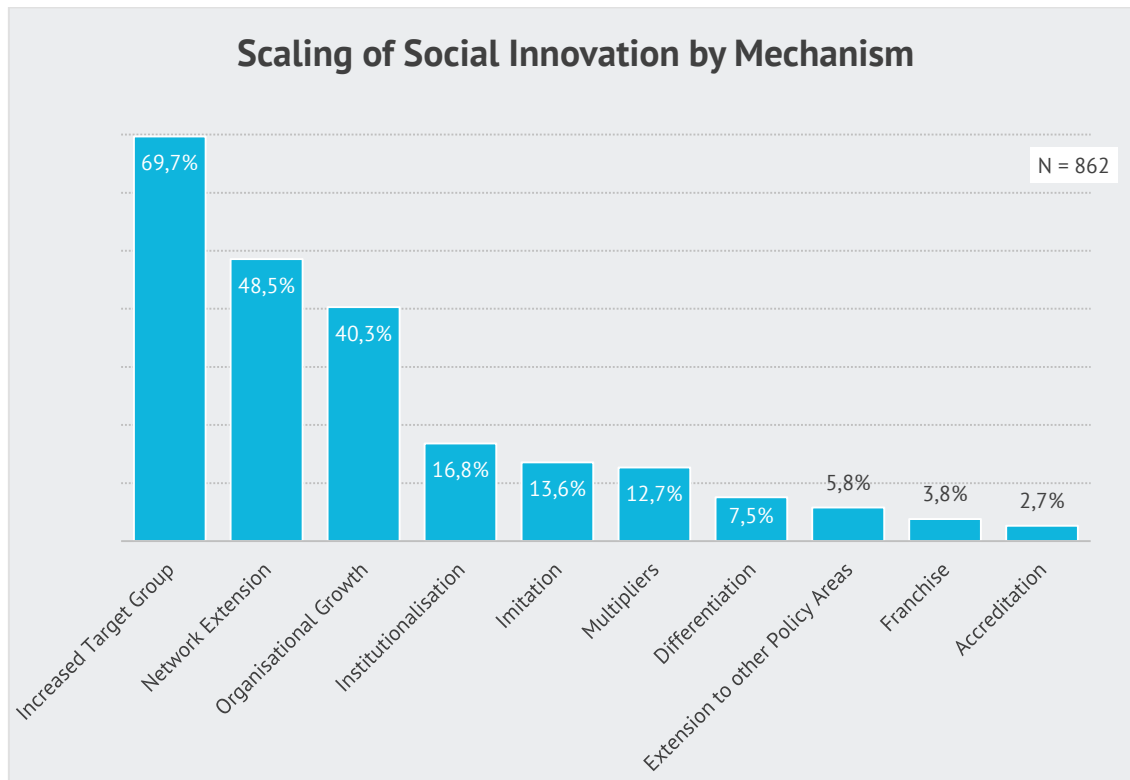
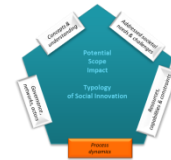


Figure 65: Scaling of Social Innovation by Mechanism

Furthermore, our findings substantiate that “[s]ocial innovation from a micro perspective is linked with bottom up initiatives of citizens, civil servants and local stakeholders. Upscaling and dissemination seldom occurs, because this demands ‘imitation’ and ‘social contagion’ on a larger scale. At macro level we observe the take up of social innovation by public bodies like national and European governments” (ibid, p. 140). Hitherto, scaling activities that overcome the limits of the single activity seem to be of less importance: Institutionalisation was named in 17% of the case, imitation and multipliers approx. 13% each and spread to further policy areas ranks last with a share as low as 5%.

Taking a closer look at the relation between the ways of scaling and the initiatives’ development stage reveals further differences: Increased target group, organisational growth and network extension have been stated more frequently for projects in earlier development stages (testing, idea/inspiration, invention). All other ways of scaling occur mainly in more mature project stages (impact/implementation).

Analysing the application of scaling mechanisms within the policy fields, the following findings are of particular (cf. Figure 66 below) interest:

- Within the policy field *Transport and Mobility* increasing the target group as a way of scaling appears to be approx. 20% below the share of all policy fields (70%), which might be attributed to the already broad application of solutions such as car-sharing.



- Moreover, the results suggest that *organisational growth* is of less importance in Environment, Energy Supply, as well as Transport and Mobility (- 10% compared to all policy fields).
- In Education the scaling mechanism of *network extension* is above and in Employment below the share of all policy fields (approx. 10%).
- Diffusion to other *policy areas* is below 10% in all policy fields, it is ranked highest in Energy Supply (9.9%), which implies that systemic change is an exception rather than a rule.
- With regard to *imitation* only minor differences emerge between the policy fields, except for Education and Employment where imitation is seldom used as mechanism (10% and 9% compared to 14% across all policy fields). Notwithstanding the role of imitation and social learning (cf. Chapter 4.5.2.5), this raises the question whether imitation is actually of less importance in Education and Employment or attributable systemic features in the policy fields.
- Although on a low level, accounting for approx. 16% *multipliers* as scaling mechanism in Health & Social Care as well as in Poverty Reduction & Sustainable Development are slightly above the value of all policy fields (13%).
- In Environment *differentiation* (12%) exceeds the share across all policy fields (8%) by +4%.
- Albeit *institutionalisation* as scaling mechanism is clearly lagging behind (17% across all policy fields), the results suggest that the mechanism is of remarkably more pronounced in Transport & Mobility (29%) compared to all other policy fields. As was outlined earlier, this might be a result of the many solutions that have already become common practice (e.g. car-sharing).
- Finally, the minor importance of *franchise* and *accreditation* does not allow for interpretation of differences.

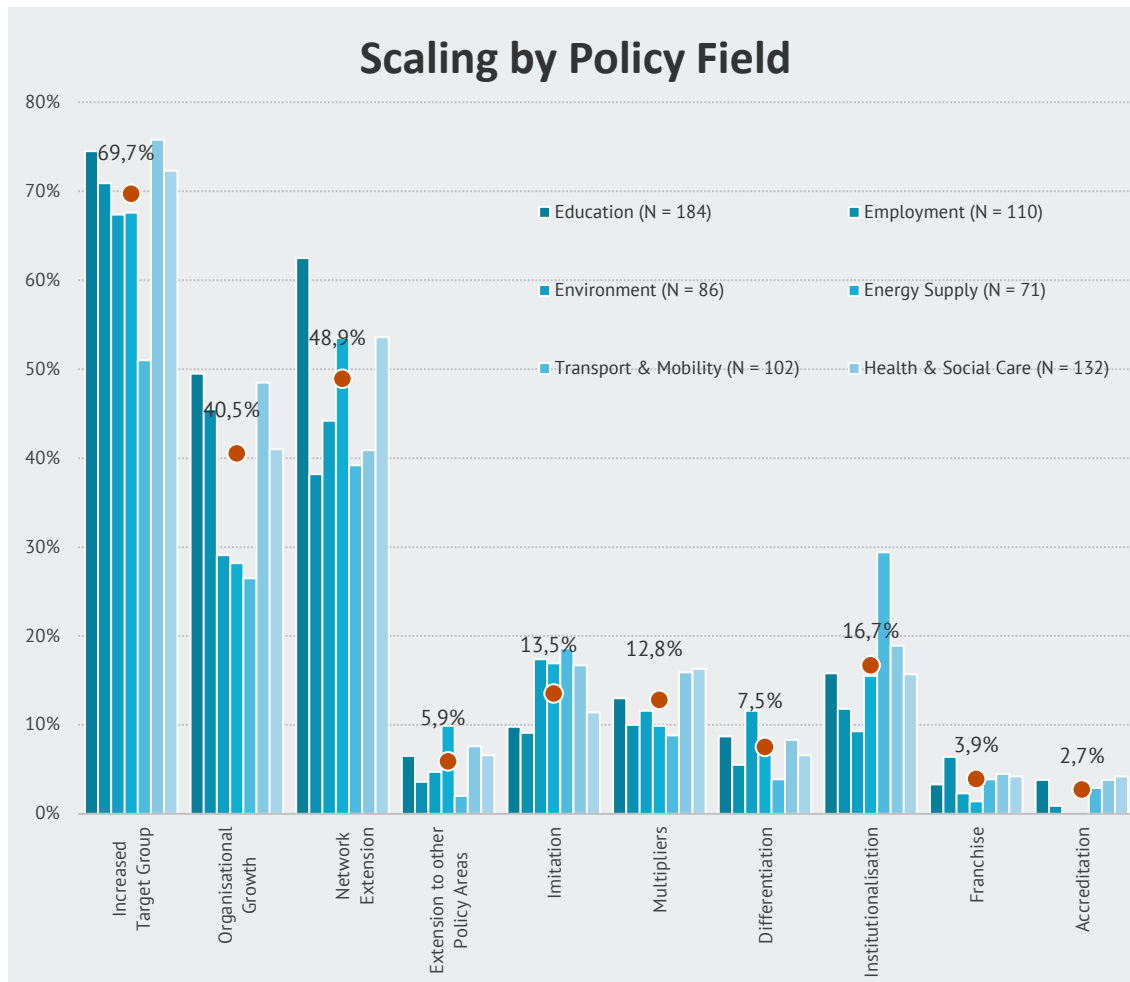


Figure 66: Scaling Mechanisms by Policy Field (% of cases within policy field)

Studying *regional differences*, it appears that

- In *Northern Europe*, there are no remarkable differences in the usage of scaling mechanisms compared to all other countries.
- In *Western Europe*, network expansion is below the share of all countries.
- In *Eastern Europe*, the scaling mechanisms of increased target groups, policy areas, multipliers, and institutionalization are above the share of all countries.
- In *Southern Europe*, imitation and multipliers exceed the shares of all countries corresponding to the higher adoption rates (cf. table below).



Scaling Mechanism	Northern Europe	Western Europe	Eastern Europe	Southern Europe	Non-EU	All Countries
Increased Target Group	67.0%	70.7%	80.7%	73.5%	67.3%	70.1%
Organisational Growth	35.2%	34.8%	26.3%	42.2%	46.1%	39.3%
Network Extension	52.3%	38.3%	56.1%	63.7%	49.6%	48.5%
Extension to other Policy Areas	3.4%	2.7%	14.0%	8.8%	6.3%	5.7%
Imitation	11.4%	13.3%	14.0%	24.5%	9.2%	13.1%
Multipliers	3.4%	9.4%	17.5%	17.6%	14.4%	12.2%
Differentiation	6.8%	7.0%	5.3%	6.9%	7.0%	6.9%
Institutionalisation	18.2%	14.5%	31.6%	20.6%	14.8%	17.0%
Franchise	2.3%	4.7%	1.8%	4.9%	3.2%	3.7%
Accreditation	0.0%	1.6%	3.5%	6.9%	1.8%	2.3%

Table 16: Scaling Activities by World Region (% of cases)

4.5.2.6 Transfer of Social Innovation

Closely related to scaling is the transfer of solutions, which next to the outline aspects reflects the dynamics of social innovation processes. The analysis reveals that 66% of initiatives for which data was available (N = 997) transferred their solution in one or the other way. Accordingly, it can be assumed that transfer is a common practice of the mapped cases. From a spatial perspective (cf. figure below, left), however, it becomes evident that the majority of social innovation initiatives remains local (41%), 33% cases transfer their solutions at the regional scale. Accordingly, the subnational level can be considered the main scale. With a share of 37% transfer at national level ranks second, while the international level ranks fourth.

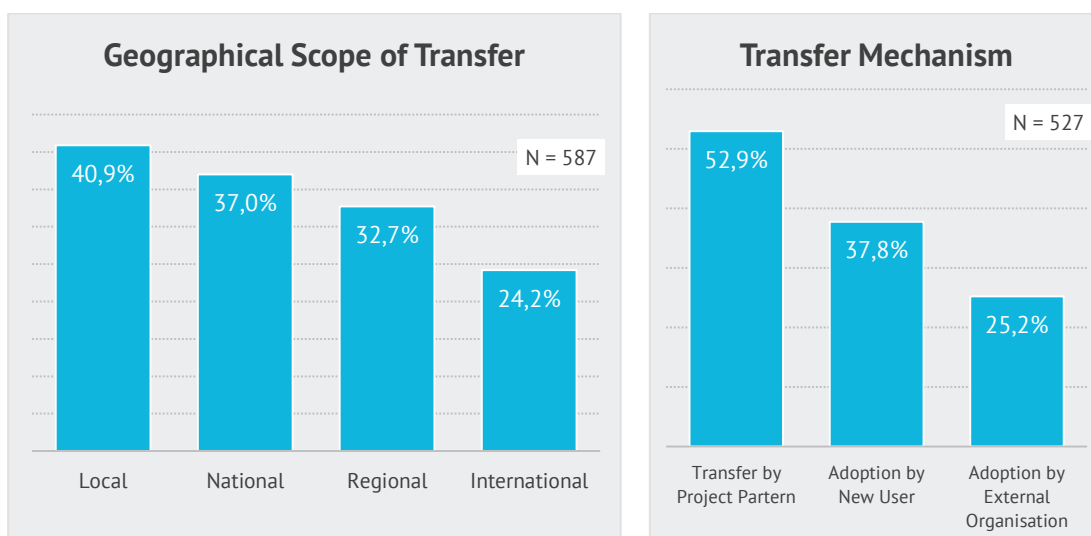


Figure 67: Geographic Scope and Mechanisms of Transfer (multiple responses)

With regard to the mechanism through which the solutions are transferred, with a share of 53% transfer by project partners prevails, followed by transfer by the adoption of the



solution by new users (38%) and by external organisations (25%). When we ask who drives the transfer the picture suggests that nearly in half of the cases the transfer is done by project partners, and another half by external partners.

4.5.2.7 Social Innovation Outcomes

Accounting for the diversity of possible outcomes, an open question was used to capture the related data. The received answers concern different levels:

- Some replies focus on the *performance of the project* itself and name outcomes such as company or project growth, efficiency of the services or cost reduction.
- Other responses centre on customers, beneficiaries or users of the solution claiming the number of beneficiaries/user/consumers, integration and inclusion, empowerment or increasing employability as outcomes, while the latter two are closely interwoven.
- A third block of answers groups around *societal outcomes* such as quality of life, social cohesion, social welfare, economic welfare, environmental improvements.
- The fourth group emphasises cultural or institutional modes of change (e.g. legitimization/recognition and attitude change).

Because of the multiple levels addressed, data can only be interpreted with caution, in particular with regard to far reaching statements. Nevertheless, one key impression is that a large number of social innovation initiatives have the beneficiaries/users and society on the agenda when asked for outcomes of their solutions (cf. figure below).

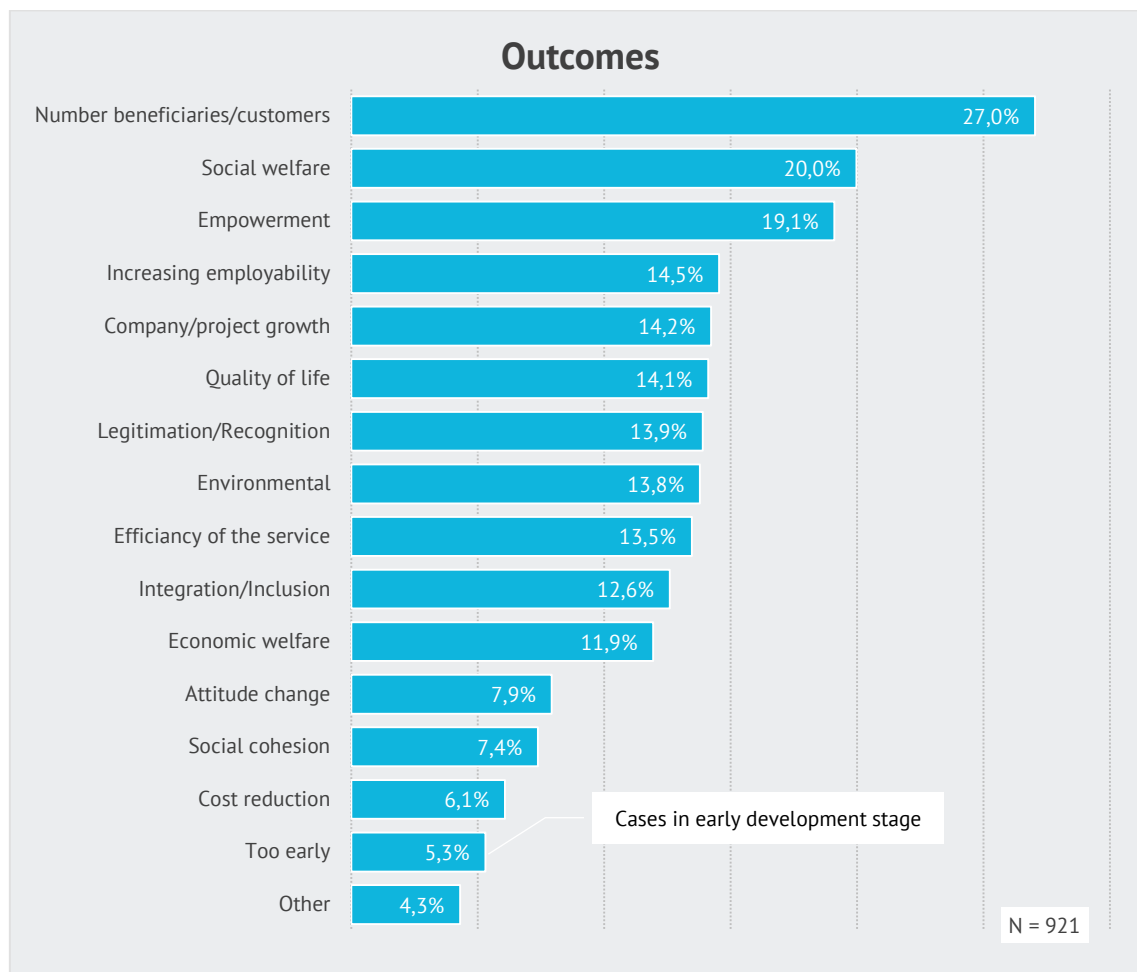


Figure 68: Social Innovation Outcomes (multiple responses)

Analysing the outcomes by the four levels outlined above reveals that the mapped initiatives mainly generate outcomes related to the target group (37%) and the society (34%). The generation of outcomes at the level of the initiative accounts only for 17% of the cases, while additional 11% emphasise cultural and institutional change as outcome.

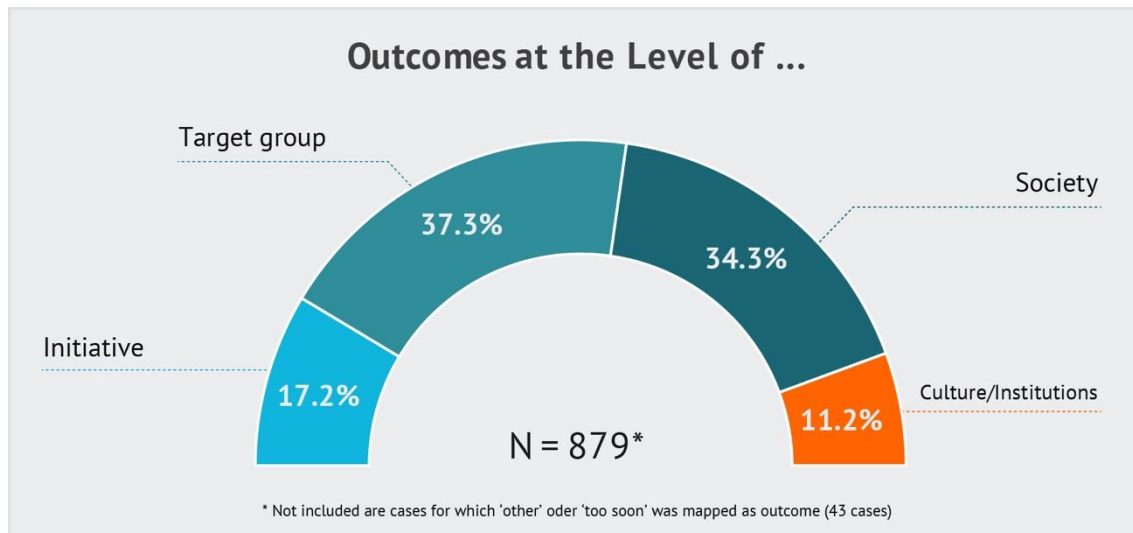
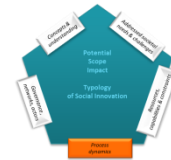


Figure 69: Social Innovation Outcomes by Level Addressed

When linking the outcome and the spatial level of transfer, the differences are small, except for international transfer activities. The empirical findings suggest that in these cases cost reduction is of higher importance, while societal aspects such as empowerment, social cohesion and economic welfare are of less importance.

In search of relations between outcomes and policy fields, the empirical analysis suggests that the outcomes reflect the specific needs and targets of the major policy field concerned (cf. figure below).

- In Education *efficiency of the service* and *empowerment* exceed the share of all policy fields by 10% respectively 7%.
- In Employment *integration/inclusion* (24%) and *increasing employability* (53%) clearly outperform the related shares of all policy fields (13% resp. 15%).
- In Environment *company growth* surpasses the share of all policy fields by +7%, likewise, *legitimation* (+13%) and *environmental outcomes* (+18%) are well above marginal distribution.
- In Energy Supply the findings suggest that *company growth* (4%) and the *number of beneficiaries* (19%) are of low importance compared to all policy fields (14% and 27%), whereas *efficiency of the service* (+7%), *cost reduction* (+12%) and *environmental outcomes* (+46%) can be attribute a high relevance.
- In Transport and Mobility *company growth* and *number of beneficiaries/customers* are well above the shares of all policy fields (+10% and +12%), while data indicates that social aspects such social cohesion (-12%), empowerment (-18%), or integration (5%) are of less importance.
- In Health and Social Care outcomes related to *quality of life* exceed the share of all policy fields substantially (+12%), whereas *economic welfare* remains considerably below (-8%). Drawing on the findings from the Policy Field Report where it is stated that countries with no explicit social innovation policy, "but an environment well suited for promotion and implementation of social innovations [...] report evidence



of social innovation at more micro, and grassroots levels” (Scopetta 2014, p. 7), suggests that quality of life is core issue bottom-up initiatives .

- In Poverty Reduction and Sustainable Development, we find a clear focus on social issues: Quality of life (+8%), empowerment (+14%), social cohesion (+6%), social welfare (+10%), and economic welfare (+15%) considerably surpass the share of all policy fields.

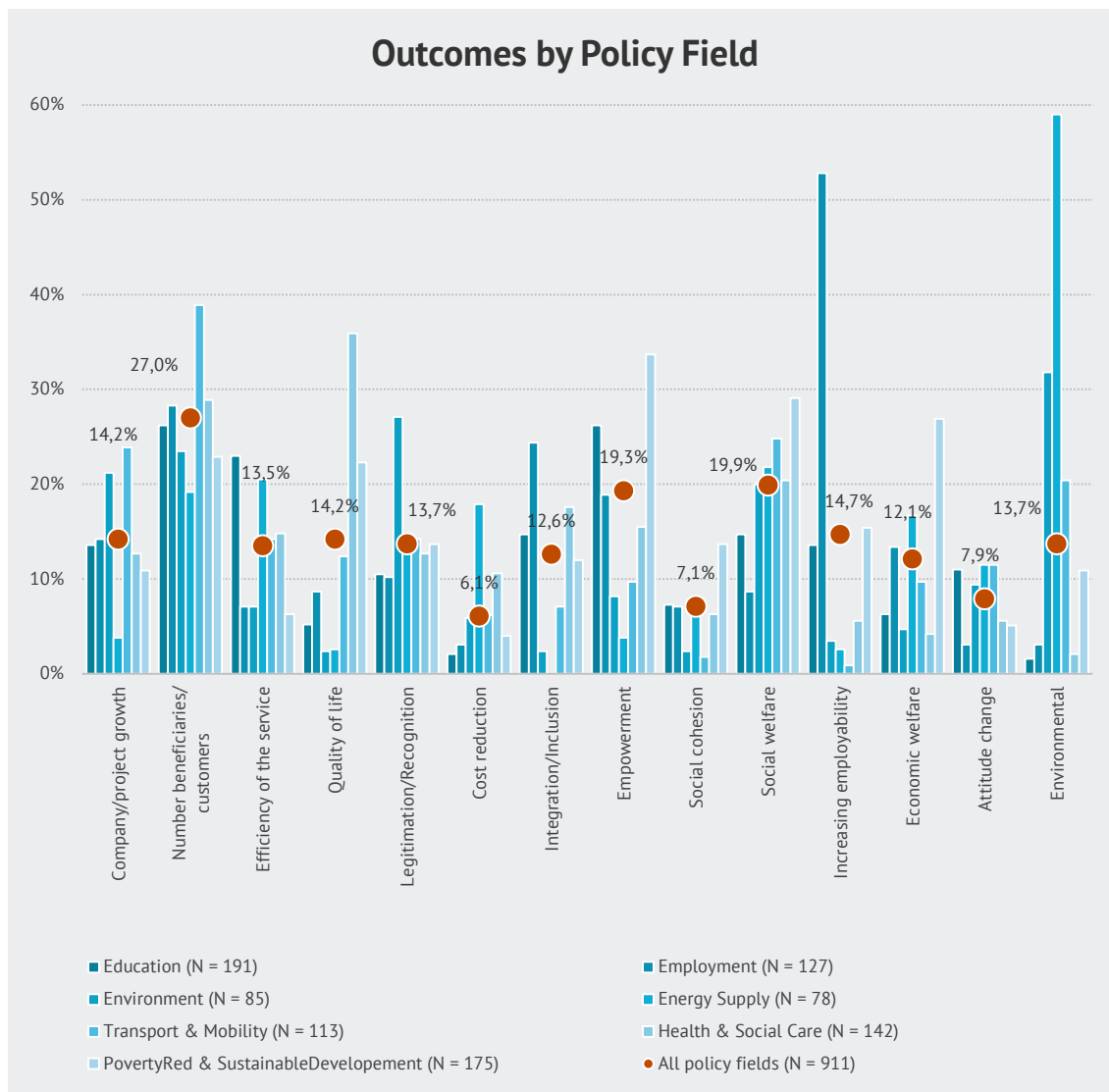


Figure 70: Outcomes by Policy Fields

Taken together, the outcomes vary largely, while basically reflecting the specifics of the distinct policy fields. For example, in the policy field Environment the environmental outcomes are at the core with a share of approx. 60% of the cases in the field. Likewise, increasing employability appears as the major outcome in the field of Employment (53%), while it is empowerment in Poverty Reduction & Sustainable Development (34%), followed by Education with 27%. Numbers of customers/beneficiaries is most pronounced in Transport & Mobility (39%), while Health & Social Care (29%) and Employment (27%) rank at some distance second and third. Quality of life is the major outcome in Health &



Social Care. Not surprisingly, integration/inclusion results mainly from cases in the policy field Employment. Moreover, it becomes apparent that across all policy fields cost reduction and social cohesion with average shares of 6% and 7% are rather an exception.

These results have far reaching implications: Although, from a research perspective, social innovations commonly concern more than one policy field, our findings suggest that social innovation initiatives are preliminarily shaped by the core policy field (rank 1) they are associated to. Accordingly, taking a social demand or societal challenge as starting point, from a social innovators' perspective the policy field can be considered the reference frame which shapes the solution and is in course of time is subject to change. Vice versa, social innovations as practice fields are likely to affect different policy fields.

4.5.2.8 Barriers in the Innovation Process

In chapter 4.2.3 it was shown that most important barriers of social innovation are associated with the initiative itself: lack of funding, lack of personal, knowledge gaps. In contrast, legal restrictions and lack of policy support appeared to be hindering factors in only 15% of the cases. These findings indicate that process dynamics are most likely shaped at the level of the initiative, rather than by the policy or practice field.

Nevertheless, it is worth to take a closer look at barriers in order to understand the process of social innovation. One key assumption of SI-DRIVE is that social innovation results in social change. Following this, it is assumed that social innovation projects that are characterised far reaching aims such as systemic change have to cope with legal, institutional and political barriers.

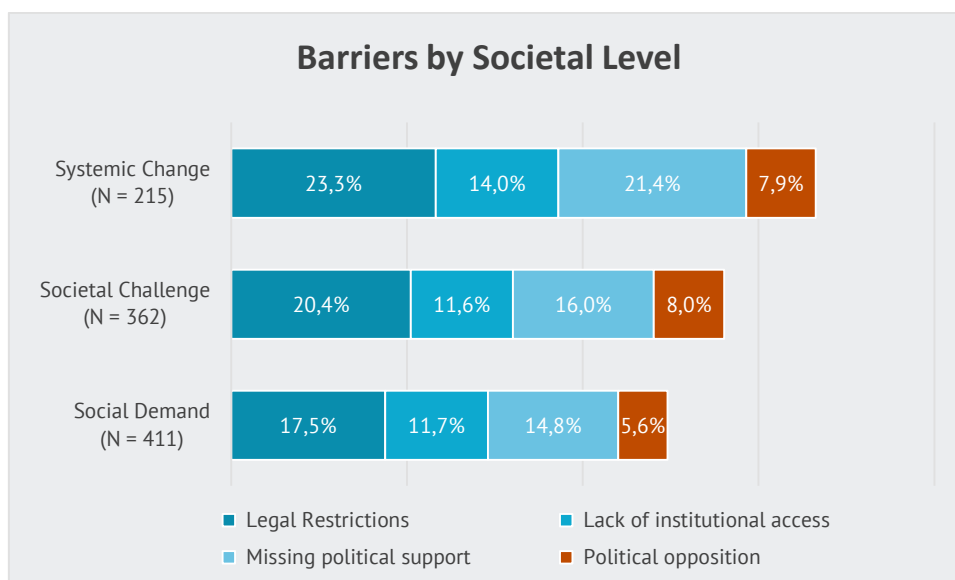


Figure 71: Barriers by Societal Level

The above figure illustrates that, with the exception of political opposition, barriers external to the social innovation process gain in importance the more ambitious the initiatives objective is. Moreover, the findings suggest that policy fields with a strong and



dense regulation entail more barriers than those with weak regulation (cf. figure 43, chapter 4.3.2.2).

Analysing barriers of Social Innovation and the spatial level of transfer, only minor difference become evident. Surprisingly, this is the same when comparing the regions within Europe and between European and Non-European countries. In consequence, this leads to the hypothesis that the difference between the institutional, political and legal barriers depend more on the characteristic of the policy field than on regional or national frameworks.

4.5.3 Conclusions and Open Questions

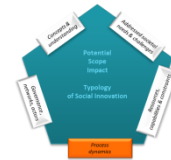
Although a broad range of social innovations exist at European and global scale, so far self-enforcing dynamics are outstanding in most regions and policy fields. Social innovation policy is a very young policy field, social innovation projects are in most cases small-scale projects and often embedded in the national policy context, and the links between the broad ranges of activities are weak in most regions and policy fields. Forasmuch, in the following those aspects are emphasised that are important in search of growing momentum in the field of social innovation.

To advance understanding the process dynamic of social innovation the balance between of bottom-up and top-down driven dynamic has to be studied in more detail. Basically two extreme poles exist: a primarily policy-driven top-down approach strongly linked to the national welfare politics on one end and second, a bottom-up approach, basing on a more or less established social innovation ecosystem at the other end.

In between these extremes there are two additional modes of social innovation. Firstly, top-down-driven social innovations complemented by bottom-up activities, particularly in the context of implementation. In this context, grass root activities are at risk of being fully embedded in the overall policy frame and through streamlining resulting in the necessity to adopt strategies to the policy priorities. Second, a policy strategy gives leeway to bottom-up activities and contributes to improve the social innovation ecosystem.

Important indications to understand the key factors of such a social innovation ecosystem can be summarised as follows: The need/demand of an established civil society provide the starting point, while civil society's contribution to social innovation is determined by the level of trust in social innovation actors' including social entrepreneurs' activities. Furthermore, the availability of funding is crucially important as is a flexible governance system. In addition, spaces open for innovation and experimentation as well as the readiness of politics to support and adapt new ideas in social innovation are central.

Politics social innovation readiness is, however, often bound to proof of concept. That is, the single social innovation projects have to demonstrate that their solutions contribute to societal challenges in a better way than established practices. The empirical findings illustrate that this is a key bottleneck for several reasons: First, social innovation initiatives often act local (cf. Chapter 4.5.2.8), while their functioning at broader scale (national) remains an open issue. Second, due to the complexity of many policy fields social



innovation activities often contribute to only one building block in complex system. In this sense, several policy studies and the already conducted first SI-DRIVE Policy and Foresight Workshops conclude that the missing compatibility with the given institutional system is a high barrier. Third, only few links between the single activities exist leaving the aggregated or synergic potential of social innovation underexplored.

This leads to a further aspect crucial for dynamic processes, namely the necessity to improve/strengthen the linkages between social innovation initiatives and extend connecting activities to speed up the innovation process. In some regions networks fulfilling this function exist. Next to networks, platforms as tools to experience exchange as well as intermediaries such as specialised research institutes, change agents, consulting companies, help advance links and ensure a fluid knowledge transfer. Following the discussion on actors' roles and functions in social innovation (cf. chapter 4.4), universities have the potential to substantially contribute to support networking and knowledge transfer.

With regard to the context of process dynamics an open question concerns the relationship between regional or better national frames on the one hand and the overall policy frame on the other hand. Whereas the analysis of the projects indicates a strong influence of the context of the policy fields as frame of reference, Regional and Policy Field Reports indicate a strong influence on the national context.

5 SUMMARY AND CONCLUSIONS

5.1 BACKGROUND

The purpose of the *Comparative Analysis (CA)* is to operationalise and check the theoretical framework developed earlier in SI-DRIVE³⁰ against a *unique empirical dataset*. We analysed the data of the first global mapping of 1.005 social innovation cases all over the world against the background of the five key dimensions of social innovation, which include the potential of social innovation, its scope, and its impact in one analytical frame.

In addition, this cross-cutting thematic analysis enables us to identify key policy issues of citizen empowerment, access to finance, scaling-up models, skills and training, social entrepreneurship and collective creation and diffusion. On the basis of a better understanding of the features and characteristics of social innovation, its capacities and constraints for changing society become visible.

The analysis is based on five elements of the first empirical phase (mapping 1: global and baseline mapping), each having a different focus: (1) seven Policy Field Reports and a Compiling Report, (2) a Regional Report, (3) a global survey for mapping social innovation cases around the world (database of 1.005 cases), (4) a screening of existing social innovation databases, and (5) explorative Policy and Foresight Workshops in the seven policy fields and one overarching International Round Table (see chapter 3.2 and figure 3).

The results of the first empirical phase (with a special focus on the global mapping), reflected in this report, provide an overview of the variety of social innovation initiatives and concepts in the seven policy areas and deliver new intelligence on the diversity of social innovation approaches in different parts of the world used by practitioners, researchers and policy makers.

SI-DRIVE is aiming at a *comprehensive and systematic analysis*, focusing on the main societal challenges reflected in seven policy fields. The systemic approach allows us to analyse social innovation in a comprehensive societal background incorporating the predominant cultural and historical background and framework as well as the determining governance models. Thereby SI-DRIVE is able to map the whole world of social innovation, both in a geographical and policy field perspective covering the diversity and plurality of concepts and understanding, objectives and actors and their diverse roles within a social innovation process.

In particular, a comparative analysis was conducted on all cases of the seven policy fields to analyse the differences and commonalities between social innovations in these areas to understand how social innovations develop, spread and scale under different conditions and in relation to the cross cutting themes indicated above.

³⁰ See the Critical Literature Review Howaldt et al. 2014a

The purpose of the first mapping was to deliver a general overview of social innovations in different regions of the world as well as in different policy areas, to explore key issues that are pertinent to the support/success or detriment/failure of the cases; and to start exploring possible trends and drivers that will shape the future of social innovation in the respective areas.

5.2 SUMMARY OF THE RESULTS: THE EMERGENCE OF AN UBIQUITOUS CONCEPT - INCREASING IMPORTANCE OF SOCIAL INNOVATION ON A GLOBAL SCALE

The results of the global mapping reveal the importance of social innovation addressing social, economic, political and environmental challenges of the 21st century on a global scale. Recent years have seen this new type of innovation emerging, both as an object of research and development appearing in a variety of forms and influencing our lives. There is a growing consensus among practitioners, policy makers and the research community that technological innovations alone are not capable of overcoming the social and economic challenges modern societies are facing. This is why we find a vast number of social innovation initiatives in the different world regions, which are providing new levers for solving problems and contributing to social change.

The mapping demonstrates the need for social innovation to overcome the (policy field related) societal challenges and social demands and the broad range of practice fields covered by the initiatives. In every policy field we find an increasing number of social innovation initiatives. Social innovations change the manner in which we live together (shared housing), work (telework), consume (car-sharing), distribute wealth (unconditional basic income) or deal with economic crises (short time work instead of termination). Social innovations provide new forms of collaboration between people (co-working spaces), organizations (private-public-partnerships) and states (agreement on the free movement of labour). Social innovations can emerge within different sectors: in civil society (urban farming), politics (parental leave), and economy (micro credits). In short: social innovations in a sense of new practices are omnipresent and contribute to social change. The establishment of new social practices does play a prominent role in making mobility more environmentally friendly, diseases less scary or the energy turn around more successful. The high diversity of social needs and societal challenges addressed by the initiatives are not limited to one but often work across several policy fields. *Social innovation has become a ubiquitous concept.*

1. Focus: Social Needs and Societal Challenges

Social innovative projects and initiatives aim to address social needs and societal challenges rather than focusing primarily on economic success and profit. Referring to a distinction introduced by BEPA who suggest that “the output dimension refers to the kind of value or output that social innovation is expected to deliver: a value that is less concerned with mere profit, and including multiple dimensions of output measurement” (2010, p. 26) there are three societal levels on which output may take place. In this understanding, social innovations

- “respond to *social demands* that are traditionally not addressed by the market or existing institutions and are directed towards vulnerable groups in society [...],
- tackle ‘societal challenges’ through new forms of relations between social actors, [...] respond to those societal challenges in which the boundary between social and economic blurs, and are directed towards society as a whole [...],
- or contribute to the reform of society in the direction of a more participative arena where empowerment and learning are both sources and outcomes of well-being” (ibid, p. 29).

With regard to the SI-DRIVE definition, a high diversity of addressed social needs and societal challenges in the different practice fields and world regions appear. Still, as shown in the regional reports and in the quantitative mapping of SI-DRIVE, there is a common set of major social needs, challenges and opportunities which are driving social innovation in almost all countries. These include demographic change and ageing societies, social inclusion and cohesion, tackling poverty, and environmental issues including new ways in the fields of energy and transport.

Mapping 1 comprises a wide range of approaches and successful initiatives presenting the strength and potential of social innovations for inclusion through education and poverty reduction, as well as for the establishment of sustainable consumption patterns or for tackling demographic change.

Out of all initiatives mapped for SI-DRIVE, a clear majority seeks to satisfy a concrete social demand and/or tackle a societal challenge, whereas a minority wants to achieve systemic change. So almost one third of the social innovation initiatives mapped is “going for the max” and seeking to achieve this most comprehensive output in the process of the innovation journey.

The mapping also reveals that there is no shared understanding of the outcome of the initiatives. Some initiatives focus on the performance of the project itself (company or project growth, efficiency of the services, cost reduction) others on the customers or beneficiaries (number of beneficiaries/customers, integration/inclusion, empowerment, increasing employability). A third group of answers focused on societal outcomes (quality of life, social cohesion, social welfare, economic welfare, and environmental outcomes) and a forth group on cultural or institutional modes of change (legitimation/recognition and attitude change). Nevertheless, one key impression is that a large number of projects have the beneficiaries and societal impact on the agenda when we ask for outcomes. But that at the same time there is no clear understanding how the outcome can be measured.

2. Variety of Forms and Concepts and High Dynamics

The mapping reveals the variety and diversity of social innovation worldwide, the different social innovation initiatives and practices, concepts and approaches, innovation processes and actor constellations, the variety of processes and networking through which social innovation occurs.

Social innovations in a sense of new practices are omnipresent and appear in a variety of forms and change the manner in which we live together. We find a vast number of social

innovation initiatives in the different world regions involving variety of actors. Within the last years we are witnessing a growing number of new initiatives emerging and growing variety of practice fields and related initiatives in which the concept of social innovation is gaining importance.

At the same time, there is a high number of persons engaged (employees, volunteers, experts and advisers) – including a high user involvement – and a high number and diverse types of participating partners and surprisingly high budgets of some initiatives. Social innovation has become a “hot topic” with a high dynamic.

3. Manifold Actors and Cross Sector Collaborations

The mapping results reaffirm the assumption that the concept of social innovation cannot be limited to one focus, be it social entrepreneurship or social economy, and demonstrates that widening the perspective is crucial for understanding the concept in its entirety. A broad range of actors is involved in the mapped social innovation initiatives. While private companies, public bodies and NGO's/NPO's are involved in the majority of initiatives, surprisingly, social enterprises are engaged only in minor parts of the initiatives.

Additionally, academia as a fourth sector is a partner in some of the social innovation initiatives. The marginal engagement of research and education facilities is in strong contrast to their essential role as knowledge providers in classical innovation processes (source) and as one actor of the triple helix model.

Nevertheless, the global mapping clearly shows the participation of partners from all sectors. The public, private, and the civil society sector are represented to a high degree in all policy fields and world regions. The majority of mapped initiatives has been developed and implemented in a social network in which more than one sector is involved. We can say that cross-sectoral collaboration of the public sector, civil society and the private sector is playing a key role, and becomes even more important on the level of practice fields.

To overcome the given social demands and societal challenges cross-sector collaboration is crucial, actively involving public, economic and civil society partners - including active user or beneficiary involvement in almost half of the social innovation initiatives. This shows that most of the initiatives developing new alliances and guaranteeing cross-sector fertilization and mobilizing civil society (also proved by the high number of volunteers supporting the initiatives).

In this context a constructive partnership between the sectors is a very important factor in order to reap the full potential of social innovation. Social innovations are first and foremost ensemble performances, requiring interaction between many actors. These findings indicate that cross-sectoral collaborations are of great importance, and a general dominance of the civil society cannot be detected.

4. Empowerment and User Involvement as Indispensable Component of Social Innovation

The great importance of empowerment of beneficiaries and citizens in the social innovation concept corresponds with the fact that in almost half of the initiatives mapped

by SI-DRIVE there is a direct user or beneficiary involvement stated whereby the rates of involvement differ in the policy fields and world regions. Social innovations aim at activating, fostering, and utilising the innovation potential of the whole society. Empowering the beneficiaries, increasing their capacities to meet social needs and giving them 'agency' is an indispensable component of social innovation. Thereby we find various forms of user involvement from the development or improvement of the solution over providing feedback, suggestions and knowledge to the adaptation of the social innovation idea for personalized solution

At the same time the concept of social innovation has to be integrated in and fostering societal engagement. Therefore, social initiatives are often related to networks, social movements, umbrella organisations, and policy programmes.

Empowerment and human resources and knowledge development show one of the core challenges of social innovation initiatives all over Europe and also in other world regions. A central concern of the initiatives is about the people involved, be it promoters or users, and increasing their competences and capacities to act.

While user involvement often occurs in a more indirect way, e.g. through intermediaries such as NGOs, it is notable that almost half of the mapped initiatives *directly* involve user/beneficiaries. At the same time, it seems questionable if the described traditional modes of user involvement really lead to the expected empowerment of beneficiaries and citizens.

5. Complexity of the Innovation Processes and Modes of Governance

Alongside with growing importance of social innovation and the growing variety of actors within the innovation process we perceive a growing *awareness of the complexity* of innovation processes, along with *increasing demands as far as the management and governance* of innovation are concerned. In this regard, the question arises "which governance structures support the growth of social innovations that are set as combined actions" (Scoppetta et al. 2014, p. 92).

Many Policy Field Reports confirm that the societal and governance systems, in which the social innovations are embedded, are complex and the problems addressed are deeply rooted in established practices and institutions. At the same time we have to admit that many initiatives are small in scale. Therefore - as we emphasized in the Critical Literature Review (Butzin et al. 2014b, p. 154) - to better understand this relationship between social innovation and social change we have to analyse the social embeddedness of any innovation in a dense network of existing practices, routines, institutions and context conditions on the one hand and innovation streams on the other. That's why SI Drive is relating practice to policies and social change: analysing the policy environment, answering questions such as how innovation policies are barriers to innovations? What drives SI and who? And which stakeholders are doing what?

To unfold the potential of social innovation it is important to develop a comprehensive understanding of social innovation. Considering the complexity of innovation processes we need to focus on the cross-sector dynamics of social innovation and the diversity of actors

and their roles and functions within the innovation process (including their interaction in networks etc.) on the one hand and the framework conditions including governance models, addressed societal needs and challenges, resources, capabilities and constraints, on the other hand.

Thus, a systemic approach to social innovation focuses on the interfaces of the so far differentiated and largely separate self-referential societal sectors of state, business, civil society and academia, of their corresponding rationalities of action and regulation mechanisms and at the associated problems and problem-solving capacities. With regards to the question how these interfaces can be reconfigured in the sense of sustainability-oriented governance, established steering and coordination patterns are complemented, extended and shaped by aspects like self-organization, cross-sector co-operation, networks, and new forms of knowledge production

6. Emerging Ecosystems

Such collaborations are picked up by at least two different heuristic models, the quadruple helix (cf. Wallin 2010) on the one hand, where government, industry, academia and civil society work together to co-create the future and drive specific structural changes, and the social innovation ecosystem (cf. Sgaragli 2014) on the other hand, which also asks for interactions between the helix actors, adds the notion of systemic complexity and looks at both the serendipity and absorptive capacity of a system as a whole. Academic knowledge on social innovation ecosystems is very scarce and the concept is still fuzzy.

A comprehensive understanding of social innovation brings the different societal sectors and the surrounding ecosystem for social innovation on the scene. The ecosystem of social innovation “is in very different stages of development across Europe, however. In all countries, though, the ecosystem is under development and there are a number of important factors enabling the development of social innovation, including important support and impetus from the EU” (Boelman/Heales 2015, p. 7).

It is one of the key tasks of social innovation research to work on the theoretical foundations of the concept and to investigate how social innovations are created, introduced into society, diffused and sustained. Once again, a key question is about the roles and functions of different societal sectors as well as relations and interactions among them.

7. Levels of Intervention

In order to understand this process of social innovation and how social innovations lead to (transformative) social change we have to distinguish between three analytical levels: The first level concerns the role of the actors, their intention and their strategies within the Initiatives and projects. The second level is the interplay between the different actors involved in the related practice. In this case we have different actors with different (supporting or opponent) interest and strategies that interact in different modes (cooperation, competition, conflict) of governance. The third level is about politics in the policy field and beyond.

Politics tries to intervene in the process of social innovation in order to give it a direction that fits with the political or societal values. This can mean both: to support social innovation that promises better solutions for societal challenges and/or to avoid social innovations that challenge the given institutional setting. Taking the policy field perspective as empirical core activity of SI-DRIVE it is not surprising that public authorities play an important role in the mapped initiatives. The starting point for the policy field analysis is a social problem for which citizens and organisations develop social innovations. To understand what the social innovations are in fact doing, we started with analysing the current situation e.g. how the 'market' and 'public policy' for the policy are functioning and interact and what are the main future challenges. The question is which issues are not solved by this dominant (policy, delivery and innovation) model. It is also important to understand how technological and economic/business (and other) innovations are developed to tackle the new issues in a policy field and which solutions are generated by citizens, social entrepreneurs, civil society organisations, localities etc., for the most urgent problems. These solutions might be niche innovations and there might be strong impediments from policy makers or from private partners limiting the capabilities of actors to develop and implement social innovation on a higher scale. So the question of how to scale up social innovations to become part of a transformative change is a very important topic.

Every level is based on different forms of governance and needs different forms of actors and actor collaboration and different strategies and actions. A better understanding of these processes is precondition to better understand the relationship between social innovation and social change as a complex interaction process. While a lot of studies and tools and infrastructure have been developed to help social innovations to scale up their ideas, products etc. only little has been done on the level 2 or 3.

8. Practice Fields

In the SI-DRIVE project we developed the concept of the practice field defined as a general type of different initiatives within one thematic area as meso level (level two) for analysing the complex process of interaction of different innovation activities..

While an initiative is a *single* and concrete implementation of a solution to respond to social demands, societal challenges or systemic change (e.g. Muhammed Yunus's Grameen Bank which lends micro-credits to poor farmers for improving their economic condition). A practice field expresses general characteristics common to different projects (e.g. micro-credit systems). Only by taking the broader perspective of a practice field we will be able to get deeper insights into upcoming trends and emerging areas for social innovation and their impact on social change.

The practice field approach allows analysing the processes of diffusion beyond the micro-level of single small scale social innovation case studies and a data collection at a more societal level, where there are wider user groups and a certain societal impact has been reached and where the moments of societal change are observable. At the same time the approach allows to study the interplay between micro or small scale developments and their merger at the macro-level.

Based on the SI-DRIVE definition a highly diversified list of practice fields and social initiatives is emerging – with increasing importance but often not appearing as “Social Innovation”. Whereas traditional social innovation and diffusion research offers ex-post explanations of how individual innovations have ended up in social practice, the goal here is to develop approaches to understanding the genesis of innovations from the *broad range of social practice*. Special attention should be paid not so much to the transfer and modification of isolated singular innovation offers, but rather to multiple innovation streams, fed by an evolutionary interplay of invention and imitation. So there is a strong interactivity in the process of innovation in which imitation and adoption of solutions from other projects and initiatives plays an important role and creates new streams of innovation that mutually reinforce each other. This is underlined by the mapping results: As almost half of the initiatives are creating brand new solutions, almost the same number of initiatives moderately or significantly modifying existing ones.

9. Resources and Barriers

The potential and development of social innovations is based on the resources, capabilities, drivers and constraints they have. The mapping 1 reveals a wide range of different financial and personnel resources (including volunteers, employees, external advisor etc.) which form the basis for social innovation initiatives. There are big differences in the budget the initiatives can deal with and a surprisingly high average as well as a variety of funding sources. The growing importance and expansion of social innovations is not only indicated by the 1.005 cases and its worldwide distribution but also by emergence of infrastructures and institutions that promote social innovations and provide a variety of funding and support structures.

The mapping demonstrates that a variety of barriers continue to exist. The most frequently mentioned barriers *focus on the initiative* itself (level 1): lack of funding, lack of personal, knowledge gaps. Legal restrictions and lack of policy support are not in the main focus which indicates that the process dynamic is on the level of the initiative and only in a minority of cases a dynamic that challenges policy or practice fields can be assumed (level 2 and 3). At the same time the policy and regional reports reveal a broader problem setting focusing on the (legal)framework conditions and mind-sets that hinder social innovation activities to unfold their potential (contested terrain).

10. Framework Conditions and Enabling Factors – Building Blocks for an Ecosystem of Social Innovation

Against that background the mapping shows a broad range of factors enabling social innovation including (legal) framework conditions and mind-sets/cultural patterns etc.:

- **Active civil society/ inspired and entrepreneurial individuals.** The importance of individuals and groups at the grassroots level is often at the heart of social innovation. As such a country which promotes, encourages and develops an active civil society and proactive individuals creates an enabling environment for social innovation.
- **Funding.** Access to finance is often crucial for developing new social innovations, but also for the other phases in the innovation cycle (sharing information for

example). The increasing availability of EU funds in particular for social innovation has been an important factor across Europe. In some countries there are also financial incentives available from the bilateral donor community which contributes to the piloting of new innovative initiatives.

- **New technologies.** New technologies offer new opportunities for social innovation. The potential of social media and mobile technologies are often mentioned as drivers of social innovations.
- **Networks and platforms for cooperation** between different stakeholders. Many social needs and challenges can be regarded as wicked problems, so connecting and facilitating collaboration between stakeholders is of huge value. Networks also provide routes for sharing experiences and learning from best practice at a local, national and international level.
- **A supportive legislative environment.** Legislation can be used to force to change or to give 'space' to new experiments. In some instances, recent economic crises and constraints on public finances have also led to structural reforms, and the search for new, innovative solutions and mechanisms. In the Western Balkans and some countries in Eastern Europe, political change over the last 20-30 years has also led to positive regulatory reform.
- **A sense of urgency.** Many social innovations respond to social needs and crises which push issues up the public and political agenda. Increased focus and attention on an issue can help to enable new, innovative approaches to gain traction or acceptability in the face of the (apparent) failure of traditional solutions.
- **Political change.** This is particularly evident in the Western Balkans and Eastern Europe where the transition from one system to another, as well as the process of EU integration, have led to significant change in all areas of governance and public policy. It is also evident on a smaller scale elsewhere in Europe as different governments take a more or less supportive approach to things like the role of civil society.

These factors correspond with other factors which constrain social innovation, which are also relatively common across **Europe and beyond**:

- **Poor funding models.** Above and beyond a complete lack of funding, social innovation is often constrained by poor funding models. This particularly includes a lack of second-round financing for projects that would enable proper piloting and roll-out/ scaling of solutions. Short-term funding all too often leads to short-term projects which do not have time to achieve or demonstrate their potential impact. A related aspect is the complexity of obtaining funding, particularly from the EU or other major funders, which can often be beyond the resources and capabilities of smaller innovators. This is compounded when matched financing is required. There is a need for more innovative funding programmes that will better meet the needs of social innovators in terms of their size as well as structures (e.g. support for hybrid organisations);
- **Resistance to change/ risk aversion.** Centralized and hierarchical structures, typically government, are often identified as barriers to change. This can be due to

the slow and bureaucratic nature of decision-making itself or, in some policy fields such as health, due to a high degree of risk aversion;

- **Conflicts of interest.** While collaboration across sectors and with multiple stakeholders can lead to highly successful social innovations, it can also lead to tensions arising from mixed objectives. The complex social problems which innovations are trying to tackle often mean that stakeholders from multiple policy fields are involved and, for example, investments in one area will lead to benefits in others, with few mechanisms in place to recognise this appropriately;
- **Poor knowledge sharing.** The social innovation community often recognises that it has still got more to do in terms of effectively sharing knowledge, examples and best practice. There is also still much to be done in terms of learning from failures so that other innovators do not repeat mistakes.

11. Social Innovation Initiatives - Driven by Problems and depending on Individuals

While the development of technological innovation is a self-driving dynamic process often driven by the new possibilities of technologies, social innovation processes are more problem-driven. So the need to response to a specific societal challenge or a local social demand are by far the main motivation and trigger for starting, initiating and running a social innovation. More than 60% of the initiatives started from this perspective. These objectives are more relevant than having an inspiring new idea (28%), a policy incentive like a policy programme or strategy (18%) or a social movement focusing on specific issues (15%). The possibility of taking advantage of new technologies for tackling social problems is a first motivation or trigger only for 23% of the cases.

Looking at the concrete drivers of the project it becomes evident that by far individual persons, groups and networks are the main and most important force driving social innovations. 75% of the initiatives rank this driver among their top 3.

That means the other way round that the initiatives and their sustainability are *highly dependent on these actors*, the more so, because social innovations are not embedded in public innovation programmes yet. Additionally, it had to be stressed that - different from technological innovation - science and research are not having a relevant role as a trigger or driver (this is underlined by the low number of involved universities and research institutions as partners of initiatives).

5.3 CONCLUSIONS

- INCREASING IMPORTANCE AND UNDEVELOPED POTENTIAL

The results of the global mapping reveal that the importance of social innovation addressing social, economic, political and environmental challenges of the 21st century on a global scale. Social innovation has become a ubiquitous concept with high dynamics.

At the same time there is an increased awareness of the size of the challenges modern societies are facing and the complexity of innovation processes. Like technological innovations successful social innovations are based on a lot of presuppositions and require appropriate infrastructures and resources. Moreover, *social innovations* are requiring

specific conditions because they aim at activating, fostering, and utilizing the *innovation potential of the whole society*. Therefore, new ways of developing and diffusing social innovations are necessary (e.g. design thinking, innovation labs etc.) as well as additional far reaching resources, to unlock the potential of social innovation in society and to enable participation of the relevant actors and civil society.

This is not only a matter of *appropriate funding* but also of *new participation and collaboration structures, co-creation and user involvement, empowerment and human resources development*. Attention has to be paid to the invention and its development as well as its diffusion and imitation. From this innovation process and development perspective resources, capabilities and constraints, drivers and barriers are not only relevant for the invention and implementation but also for scaling and diffusion of successful innovations.

The mapping demonstrates that social innovation processes and the underlying resources, capabilities and constraints are also very much related to the actors of the different sectors of the social innovation eco-system. This includes a new role of public policy and government for creating suitable framework and support structures, the integration of resources of the economy and civil society as well as supporting measures by science and universities (e.g. education for social innovation performance, know-how transfer).

While civil society as an innovation actor is a widely untapped area, we have to put a strong focus on the role of civil society (citizens, non-governmental and not for profit organisations (NGOs, NPOs) social movements, communities) in the innovation process. The main question evolving from the theoretical review is: How can we enhance the 'innovation capacity of society' and 'how can we empower citizens'? Which resources and capabilities are necessary for the development of brand new innovations? How can these resources and capabilities be used for diffusion, adaptation and imitation of innovations?

The mapping 1 reveals that already a wide range of different financial and personnel resources (including volunteers, employees, external advisor etc.) exist. They build the ground for many successful social innovation initiatives. Yet, there are big differences in the budget the initiatives can deal with (surprisingly high average) and a variety of funding sources. The growing importance and expansion of social innovations is not only indicated by the 1.005 cases and its worldwide distribution but also by *emergence of infrastructures and institutions that promote social innovations and provide a variety of funding and support structures*.

At the same time the mapping reveals an underdeveloped status of *conceptualisation and institutionalisation*. There is no shared understanding of SI (including a clear differentiation from other concepts such as social entrepreneurship or technology innovation) and no uptake/integration in a comprehensive (social) innovation policy. Policy field related documents of public authorities such as the European Commission, the United Nations, the OECD, the World Bank, etc. often even do not refer to social innovations (exceptions are Horizon 2020 documents as well as publications of other DGs). Only in a few countries as e.g. Columbia, Germany, Italy, Sweden, the United Kingdom and the USA social innovation has been taken up by politics. In most of the countries there are no policy institutions with direct responsibility for Social Innovation. The initiatives and their sustainability are *highly*

dependent on these actors, because social innovations are not embedded in public innovation programmes yet.

Even though a *broad spectrum of social innovations* is present in the policy fields all Policy Field Reports, in addition, notify an *unclear understanding of the concept of social innovation*, report on social innovations in their policy fields even if they are not called social innovations and call for further social innovations to respond to the societal challenges the world is facing.

So one of the most important insights of the mapping 1 is that given the strong need for social innovation highlighted by the various policy field experts, and, bearing in mind the drivers but in particular also the barriers for social innovation *a social innovation friendly policy environment still has to be developed in Europe as well as globally*. A European (and global) social innovation policy that enables social innovations overcoming the societal challenges in a cooperative manner between the actor groups and that drives towards social change thus is regarded as a necessity.

The good news is that there is an increasing awareness and promotion of social innovation: In many countries, the promotion of social innovation itself by the EU has served as a driver and opportunity for various actors to embrace new ways of working, access new funding streams, and promote change at a national level. Even though a lot has been done during the last years, there are still some important steps to take in order to move social innovation from the margin to the mainstream of the political agenda.

The absence of a comprehensive social innovation policy corresponds with the *low maturity status of the SI eco-systems*. While social innovation initiatives and practices have drawn a lot of attention within the last years in the different world regions, being imitated by manifold actors and networks of actors and diffused widely through different societal subareas the ecosystem of social innovation “is in very different stages of development across Europe, however. In all countries, though, the ecosystem is under development and there are a number of important factors enabling the development of social innovation, including important support and impetus from the EU” (Boelman/Heales 2015, p. 7). One of the major challenges will be the development of these eco-systems.

This also raises the question of the role of universities in social innovation processes. The marginal engagement of research and education facilities (in 16% of the initiatives) is in strong contrast to their essential role as knowledge providers in classical innovation processes and as one actor of the triple helix model. That means that at this time we find an uncompleted eco-system of SI (quadruple helix) with one important pillar missing. It will be a major challenge for the development of social innovation to ensure a much higher involvement of research and education facilities. This also includes the question of new modes of knowledge production and scientific co-creation of knowledge aiming at an integration of practitioners and social innovators in the innovation processes.

Another important challenge for social innovation policy and research is the unsatisfactory status of conceptualisation. SI DRIVE is based on a comprehensive concept of social innovation. The critical literature review revealed that social innovation has many different

(and sometimes conflicting) meanings, spanning a variety of areas such as innovation studies, management and organisational research, the field of workplace and quality of working life, as part of the social economy, in sustainable development, or as an aspect of local competitiveness and territorial development (Howaldt et al. 2014a). The international academic debate has seen a significant upswing in recent years in light of increasing political interest in the concept of social innovation (Howaldt/Schwarz 2010; Franz et al. 2012; Moulaert et al. 2013). However, this has not resulted in any clarity.

This lack of consensus mainly has to do with different understandings of the notion of the 'social'. In this regard, we argue that with social innovations, the new does not manifest itself in the medium of technological artefacts, but at the level of social practices. If it is accepted that the invention and diffusion of the steam engine, the computer or the smartphone should be regarded differently from the invention and social spread of a national system of healthcare provision, the concept of corporate social responsibility (CSR) or a system of micro financing, then it stands to reason that there is an intrinsic difference between technological and social innovations.

In this perspective, we describe social innovation as a new combination and/or new configuration of social practices in certain areas of action or social contexts prompted by certain actors or constellations of actors in an intentional targeted manner with the goal of better satisfying or answering needs and problems than is possible on the basis of established practices. An innovation is therefore social to the extent that it, conveyed by the market or "non/without profit", is socially accepted and diffused throughout society or in certain societal sub-areas, transformed depending on circumstances and ultimately institutionalized as new social practice or made routine. As with every other innovation, 'new' does not necessarily mean 'good' or 'socially desirable' in an extensive and normative sense. According to the actors' practical rationale, social attributions for social innovations are generally uncertain (Howaldt/Schwarz 2010, p. 26).

The results of the mapping demonstrated that this approach is helpful to integrate the manifold meanings of social innovation under *a shared umbrella definition* based on and leading to a common concept and framework. At the same time it gives us the opportunity to understand the complexity and embeddedness of social innovation processes in a dense network of existing practices and institutions as a precondition for a better understanding of the relationship between social innovation and social change.

Mapping 1 comprises a wide range of approaches and successful initiatives presenting the strength and potential of social innovations for inclusion through education and poverty reduction, as well as for the establishment of sustainable consumption patterns or for tackling demographic change. Thereby, social innovations do not only gain importance in reference to social inclusion or equal opportunities, but also in respect to the innovation- and future potential of enterprises and society as a whole.

Nevertheless, many projects and initiatives do not reach their desired societal impact, but remain limited to the local, experimental level. In respect to the complexity of the tackled challenges as well as their rootedness in established structures, wider societal transformation processes are needed to realize the full potential of social innovation. This

process depends upon a comprehensive understanding of social innovation which encompasses connecting the innovative solutions of single innovators with political and other public initiatives across a variety of sectors (cf. chapter 4.1.2.). Against this background the relevance of a systemic perspective, in which social innovation contributes to the transition of society in the direction of a more participative arena where empowerment and learning are both sources and outcomes of well-being, becomes the more important.

There is little doubt about the scale of the challenges we face. The world has witnessed unprecedented social and economic development over the past century. These changes, while beneficial in many ways, have also had less positive consequences. Climate change, resource depletion and increasing levels of inequality are creating tensions, divisions and conflicts in societies around the world – in poor *and* in rich nations. We are a long way from fulfilling the MDG envisaged for 2015. There are dangers of unpredictable and potentially uncontrollable events, spreading poverty, hunger and distress, the risk of escalating international tensions and wars, and – in Europe – the disintegration of the EU, the continent's most successful peace project.

Yet at the same time there are the resources available to enable transitions to greater prosperity and social cohesion in a sustainable manner. We can see that people around the world have the skills and capacities to develop solutions to the problems they are facing. Scientific and technological advances provided tools that have massive potential for social change. The global economy has given birth to huge organisations and companies of all types with creative spirit and innovative approaches, as well as enormous reserves of under-used labour. Moreover, there is abundant financial wealth, although much of this is concentrated in the accounts of counter-productive speculators and circulates around the globe with little, and often negative effects, on real services and products.

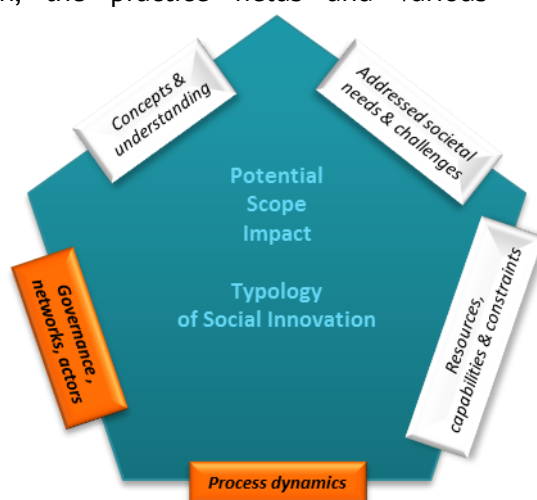
In this context the mapping reveals the emerging capacities and potential of social innovations to modify or even re-direct social change and to empower people – i.e. to address a wide variety of stakeholder groups, as well as the broader public, in order to improve social cohesion and to allow for smart, sustainable and inclusive growth. The mapping shed light on the great many, often nameless but still important, social innovations responding to specific and every-day social demands or *incremental* innovations. The distinction between three different output levels is taken up by the SI-DRIVE project, but also has to be modified to some extent. There is a strong relationship between social demands, unmet social needs societal challenges and transformative social change in different policy fields and approaches. However, the very idea of systemic change implies that multiple institutions, norms and practices will be involved, and that multiple kinds of complementary innovations would have to be introduced in order to copy with the high complexity of problems which require structural changes in society. Only then we will be able to fulfil the excessive expectations of ground-breaking *systemic* social innovations (or *radical* innovations in the common language of innovation theory and research), and transformative change

5.4 IMPLICATIONS FOR SI-DRIVE RESEARCH

While mapping 1 (empirical phase 1), with its global selection and collection of more than 1.000 cases, has led us to a comprehensive picture of world regions and policy fields, mapping 2 (empirical phase 2) will be focused on detailed case studies. The follow-up case studies will take up the questions and remarks pointed out in this comparative analysis report but will mainly focus on aspects and dimension limited by the quantitative mapping.

Therefore, the main focus of the qualitative research done by case studies is on the dynamic interrelation between social innovation, the practice fields and various mechanisms of social change. Related to the five key dimensions of SI-DRIVE the case studies emphasise Governance, Networks and Actors as well as Process Dynamics, mainly asking which changes appear and how they are driven by what/whom. Within these focused key dimensions and mechanisms of change factors of success (and failure) are of high importance as well.

The degree of social change should be also considered: diffusion in society, degree of institutionalisation, and importance of the practice field, the relevance of the initiative for everyday life and the local communities.



Within mapping phase 2 SI-DRIVE will utilise a Qualitative Comparative Analysis (QCA) technique to combine findings from the different cases, based on 'configurations' (i.e. patterns, clusters) of the identified factors that influence social innovation. This will help verifying certain combinations of factors which form a configuration of variables that are 'present' in a specific social innovation case. By comparing these configurations across cases, generalizable conclusions regarding the drivers behind social innovation will be drawn, which configurations' (combinations of variables) dominate over other configurations and so forth.

However, the main objectives are aiming at a better understanding of

- the processes and dynamics of social innovation in relation to social change (institutionalisation, diffusion and imitation of social practices)
- the functions and roles of actors and networks for the development, diffusion, imitation and institutionalisation of social innovations
- including the identification of critical success (and failure) factors, leading to social changes.

Therefore, we will

- (1) Identify and assess success and critical factors for social innovation
 - alongside the social innovation process: which factors are pushing the process further, which factors unlock the potential of the social innovation, ...
 - according to the societal level addressed: which factors are mainly contributing to solve the social need, which factors are pushing the institutions, organisations, ... concerned, ...
- (2) Identify and assess factors in the process dynamics of social innovation that lead to social change.

In accordance with this background it will be crucial to understand the modes of governance of social innovation. A focus should be on networks and their actor constellations, modes of cooperation and communication channels. *To establish* a systemic view upon social innovation, it is suggested to study the specific governance in different types of social innovation processes and assess the particularities as compared to other innovation processes.

Against the background of the objectives of the SI-DRIVE project it will be also crucial to understand why political intervention may or might *not* work in some fields of social innovation, and where or when prevailing trajectories of societal variance and respective policies exhibit impediments to social innovation. Social innovation requires also appropriate *social innovation policies*. The traditional framework for public administration of rules and regulations needs new ideas and methods. Many potential social innovations (ideas) are hindered by traditional approaches in public policies. If Europe wants to tackle the challenges as documented through its Strategy for Smart, Inclusive and Sustainable Growth as well as its specific Flagship Initiatives, policy makers need to understand how to involve and make use of the participation of citizens to serve the public good (Bourgon 2011). Based on accurate integration of conceptual and empirical knowledge, in the end SI-DRIVE will offer a coherent *policy strategy platform* for policy makers.

6 REFERENCES

- Amaratunga, Dilanthi/ Baldry, David/ Sarshar, Marjan/ Newton, Rita (2002): Quantitative and qualitative research in the built environment: application of “mixed” research approach. In: *Work Study*, 51(1), pp. 17 – 31.
- Appadurai, Arjun (2013): *The future as cultural fact*. London;New York: Verso.
- Asheim, B. (2007): Differentiated Knowledge Bases and Varieties of Regional Innovation Systems. *Innovation: The European Journal of Social Science Research*, 20(3), 223-241.
- Austin, James E/ Gutierrez, Roberto/ Ogliastri, Erinque/ Reficco, Ezequiel (2007): Capitalizing on Convergence. In: *Stanford Social Innovation Review*, 5(4), pp. 24-31.
- Austin, James E./ Seitanidi, M.M. (2012): Collaborative Value Creation: A Review of Partnering Between Nonprofits and Business: Part I. Value Creation Spectrum and Collaborative Stages. In: *Nonprofit and Voluntary Sector Quarterly*, 41(5), pp. 726-758.
- Avelino, Flor/ Wittmayer, Julia (2015): Shifting Power Relations in Sustainable Transition: A Multi-Actor Perspective. In: *Journal of Environmental Policy & Planning*,
- Ball, Susan/ Petsimeris, Petros (2010): Mapping Urban Social Divisions. *Forum Qualitative Sozialforschung*, 11(2), Art. 37. Internet: <http://nbn-resolving.de/urn:nbn:de:0114-fqs1002372> [last accessed 06.07.2016]
- BEPA (2010): Empowering people, driving change. Social innovation in the European Union. Bureau of European Policy Advisers (Ed.), European Commission. Internet: <http://www.transitsocialinnovation.eu/resource-hub/empowering-people-driving-change-social-innovation-in-the-european-union> [last accessed 08.04.2016]
- Boelman, Victoria/ Heales, Charlotte (2015): *Social Innovation Strategies – Regional Report (D3.6 internal report)*.
- Boelman, Victoria/ Kwan, Amy/ Schon, Rachel/ Butzin, Anna/ Hilbert, Josef/ Merkel, Sebastian/Bräutigam, Christoph/Dhondt, Steven/Molema, Hanneke/Esmeijer, Jop/van der Klauw, Denise/Schartinger, Doris/ Hultman, Svante/Andersson, Thomas/Como, Elena/Rapisardi, Andrea/Provvedi, Bernardo/Ilin, Vladimir/Shabunova, Aleksandra/Fahradova, Leila/Terebova, Svetlana/Kumin, Ilia/Lin, Ka/ Van Niekerk, Lindi/de Villiers, Katusha/Sopitshi, Athenkosi/Bernal, María Elisa/Rico, Nieves (2015): *State of theArt Report: Social Innovation Health and Social Care (D9.1 internal report)*.
- Boonstra, Beitske/Ooms, Merel/Huygen, Annelies/Rhomberg, Wolfram/Budde, Bjoern/Boelman, Victoria/Schon, Rachel/Kwan, Amy/Pérez de las Heras, Beatriz/Ukar, Olatz/Enciso, Marta/Damianova, Zoya/Dimova, Adriana/Chonkova, Blagovesta/Hickey, Robert/Marmo, Dario/Tognetti, Marco/Provvedi, Bernardo/Ecer, Sencer/ Abouleish-Boes, Maximilian/Hassan, Naglaa Mohamed (2015): *State-of-the-Art Report: Social Innovation in Energy Supply from a European and Global Perspective (D7.1 internal report)*.
- Bourgon, Jocelyne (2011): *A new synthesis of public administration. Serving in the 21st century*. Kingston (Ont.): Queen's School of Policy Studies/McGill/Queen's University Press.
- Brunswick, S./ Vanhaverbeke, W. (2015): Open Innovation in Small and Medium-Sized Enterprises (SMEs): External Knowledge Sourcing Strategies and Internal Organizational Facilitators. In: *Journal of Small Business Management*, 53(4), pp. 1241-1263.
- Budde, Bjoern/ Chonkova, Blagovesta/ Hickey, Robert/ Dimova, Adriana/ Damianova, Zoya/ Schroeder, Antonius/ Andersson, Thomas/ Abbas, Qammar/ Ariton, Viorel/ Dediu, Ciprian/ Hannum, Christopher/ Ecer, Sencer (2015): *Policy Field Report – WP6 – Environment and Climate Change (D6.1 internal report)*.
- Butzin, Anna/Rabadjieva, Maria/van de Lindt, Martin/Banerjee, Swati/Puscaciu, Florin Dan/Emmert, Sophie/Kapoor, Kawal/Santha, Sunil D./ Wagner, Petra/Weerakoddy, Vishanth (2015): *Social Innovation in Transport and Mobility – An explorative Study of Social Innovation Governance, Practice Fields and Projects (D8.1 internal report)*.

References

- Butzin, Anna/Howaldt, Jürgen/ Weber, Matthias/ Schaper-Rinkel, Petra (2014a): Innovation Studies. In: In: Howaldt/Butzin/Domanski/Kaletka (Eds.): Theoretical approaches to social innovation: A critical literature review (D1.1), pp. 105–121. Internet: http://www.si-drive.eu/wp-content/uploads/2014/11/D1_1-Critical-Literature-Review_final.pdf [last accessed 29.03.2016]
- Butzin, Anna/ Howaldt, Jürgen/ Domanski, Dmitri/ Kaletka, Christoph/ Weber, Matthias (2014b): Conclusions. In: Howaldt, Jürgen/ Butzin, Anna/ Domanski, Dmitri/ Kaletka, Christoph (Eds.): Theoretical approaches to social innovation: A critical literature review (D1.1.) Internet: http://www.si-drive.eu/wp-content/uploads/2014/11/D1_1-Critical-Literature-Review_final.pdf [last accessed 29.03.2016], pp. 151-160.
- Carayannis, Elias G./ Campbell, David. F. J. (2011): Open Innovation Diplomacy and a 21st Century Fractal Research, Education and Innovation (FREIE) Ecosystem: Building on the Quadruple and Quintuple Helix Innovation Concepts and the "Mode 3" Knowledge Production System. In: Journal of the Knowledge Economy, 2(3), pp. 327-372.
- Caulier-Grice, J./ Kahn, L./ Mulgan, G./ Pulford, L./ Vasconcelos, D. (2010): Study on Social Innovation. Paper prepared by the Social Innovation Exchange (SIX) and the Young Foundation for the Bureau of European Policy Advisors. Sine Loco: European Union/The Young Foundation. Internet: <http://socialinnovationexchange.org/node/4959> [last accessed 08.04.2016]
- Chalmers, D. (2012). Social Innovation: An exploration of the barriers faced by innovating organisations in the social economy. In: Local Economy 28(1), pp. 17-34.
- Chapman, Jake (2004): System failure: Why governments must learn to think differently. Demos.
- Chesbrough, H. W. (2006): Open Innovation: A New Paradigm for Understanding Industrial Innovation. In: Chesbrough/ Vanhaverbeke/ West (Eds.): Open Innovation. Researching a New Paradigm (Reprinted. ed., pp. 1–12). Oxford: Oxford University Press.
- Crozier, Michel/ Friedberg, Erhard (1993): Die Zwänge kollektiven Handelns – Über Macht und Organisation. Frankfurt a.M.: Hain.
- Davies, Anna (2014): Social innovation process and social entrepreneurship. In: Howaldt/Butzin/Domanski/Kaletka (Eds.): Theoretical approaches to social innovation: A critical literature review, pp. 60–78. Internet: http://www.si-drive.eu/wp-content/uploads/2014/11/D1_1-Critical-Literature-Review_final.pdf [last accessed 29.03.2016]
- D'Este, Pablo/ Iammarino, Simona/ Savona, Maria/ von Tunzelmann, Nick (2012): What hampers innovation? Revealed barriers versus deterring barriers. In: Research Policy, 41(2), pp. 482-488.
- Davalli, Chiara/ De Coninck, Vincent/ Marengo, Claudia (n.d.): Scaling Social Innovation. BENISI – TRANSITION: experiences and first success stories of the two European networks of incubators for social innovation. Internet: http://ebn.eu/sharedResources/users/30/Scaling%20Social%20Innovation_BENISI-TRANSITION%20experiences%20and%20first%20success%20stories.pdf [last accessed 29.03.2015].
- Dhondt, Steven/ Oeij, Peter (2014): Social Innovation related to Innovation in Management Studies. In: Howaldt/Butzin/Domanski/Kaletka (Eds.): Theoretical approaches to social innovation: A critical literature review (D1.1), pp. 122–150. Internet: http://www.si-drive.eu/wp-content/uploads/2014/11/D1_1-Critical-Literature-Review_final.pdf [last accessed 29.03.2016]
- Domanski, Dmitri/ Howaldt, Jürgen/ Kaletka, Christoph (forthcoming): Focus Social Innovation: Theoretical Concepts and International Trends
- Dufour, Sarah/ Lessard, Danielle/ Chamberland, Claire (2014). Facilitators and barriers to implementation of the AIDES initiative, a social innovation for participative assessment of children in need and for coordination of services. In: Evaluation and program planning, 47, pp. 64-70.
- Durkheim, Emil (1984): Die Regeln der soziologischen Methode. Herausgegeben und eingeleitet von René König. Frankfurt a.M.: Suhrkamp.
- Dyer, J.H./ Hatch, N.W. (2006): Relation-specific Capabilities and Barriers to Knowledge Transfer: Creating Advantage through Network Relationships. In: Strategic Management Journal, 27(8), pp. 701–719.

References

- Emerson, Jed (2003): The blended value map. Integrating Social and Financial Returns. In: California Management Review, 45(4), pp. 35-51.
- European Commission (2013): Guide to Social Innovation. Brussels: Regional and Urban Policy Publications, Office of the European Union.
- Fagerberg, Jan/ Mowery, David C./ Nelson, Richard R. (2005): The Oxford Handbook of Innovation. New York: Oxford University Press.
- Flesher Fominaya, Christina/ Cox, Laurence (2013): Understanding European Movements. New Social Movements, Global Justice Struggles, Anti-Austerity Protest. London, New York: Routledge.
- FORA (2010): New Nature of Innovation. Report to the OECD. Copenhagen. Internet: https://www.tem.fi/files/24835/New_Nature_of_Innovation.pdf [last accessed 29.03.2016]
- Franz, Hans-Werner/ Hochgerner, Josef/ Howaldt, Jürgen (2012): Challenge social innovation. Potentials for business, social entrepreneurship, welfare and civil society. Berlin, New York: Springer.
- Gallego, Jorge/ Rubalcaba, Luis/ Suárez, Cristina (2013): Knowledge for innovation in Europe: The role of external knowledge on firms' cooperation strategies. In: Journal of Business Research, 66(10), pp. 2034-2041.
- Greenhalgh, Trisha/ Robert, Glenn/ Macfarlane, Fraser/ Bate, Paul/ Kyriakidou, Olivia (2004): Diffusion of innovations in Service Organizations: Systematic Review and Recommendations. In: The Milbank Quarterly, 82(4), pp. 1-37.
- Hadjimanolis, Athanasios (2003): The barriers approach to innovation. In: The International Handbook on Innovation. Oxford, Elsevier Science.
- Harrison, Denis/ Chaari, Nizar/ Comeau-Vallée, Mariline (2012): Intersectoral alliance and social innovation: When corporations meet civil society. In: Annals of Public and Cooperative Economics, 83(1), pp. 1-24.
- Hoffmann-Riem, Wolfgang (2008). Soziale Innovationen. Eine Herausforderung auch für die Rechtswissenschaft. In: Der Staat, 47 (4), pp. 588-605.
- Howaldt, Jürgen/ Schwarz, Michael (2016): Social Innovation and its Relationship to Social Change. Verifying existing Social Theories in reference to Social Innovation and its Relationship to Social Change (D1.3).
- Howaldt, Jürgen/ Domanski, Dmitri/ Schwarz, Michael (2015a): Rethinking Social Entrepreneurship: The Concept of Social Entrepreneurship under the Perspective of Socio-scientific Innovation Research. In: Journal of Creativity and Business Innovation (D1.1), 1, pp. 88-89. Internet: <http://www.journalcbi.com/social-entrepreneurship.html> [last accessed 24.09.2015]
- Howaldt, Jürgen/ Schwarz, Michael/ Kopp, Ralf (2015b). On the theory of social innovations: Tarde's neglected contribution to the development of a sociological innovation theory. Weinheim und Basel: Beltz Juventa Retrieved from http://www.ssoar.info/ssoar/bitstream/handle/document/41963/ssoar-2015-howaldt_et_al-On_the_theory_of_social.pdf?sequence=1
- Howaldt, Jürgen/ Butzin, Anna/ Domanski, Dmitri/ Kaletka, Christoph (2014a): Theoretical approaches to social innovation: A critical literature review (D1.1). Internet: http://www.si-drive.eu/wp-content/uploads/2014/11/D1_1-Critical-Literature-Review_final.pdf [last accessed 29.03.2016]
- Howaldt, Jürgen/ Kesselring, Alexander/ Kopp, Ralf/ Schwarz, Michael (2014b): Social Theory. In: Howaldt, Jürgen/ Butzin, Anna/ Domanski, Dmitri/ Kaletka, Christoph (Eds.); Theoretical approaches to social innovation: A critical literature review (D1.1). Internet: http://www.si-drive.eu/wp-content/uploads/2014/11/D1_1-Critical-Literature-Review_final.pdf [last accessed 29.03.2016], pp. 9-33.
- Howaldt, Jürgen/ Schwarz, Michael (2010): Social Innovation: Concepts, research fields and international trends. IMO international monitoring. Internet: http://www.sfs.tudortmund.de/odb/Repository/Publication/Doc/1289/IMO_Trendstudie_Howaldt_Schwarz_englische_Version.pdf
- Johnson, R. Burke/ Onwuegbuzie, Anthony J./ Turner, Lisa A. (2007): Toward a definition of mixed methods research. In: Journal of mixed methods research, 1(2), pp. 112-133.

References

- Lavie, D. (2006): The Competitive Advantage of Interconnected Firms: An Extension of the Resource-based View. In: *Academy of Management Journal*, 31(3), 638–658.
- Lawson, Benn/ Samson, Danny (2001): Developing innovation capability in organisations: a dynamic capabilities approach. In: *International journal of innovation management*, 5(3), pp. 377-400.
- Matheson, Kim (2008): How Universities Can Enable Social Innovation. In: *Open Source Business Resource*. Internet: <http://timreview.ca/article/188> [last accessed 07.07.2016]
- Mendes, A./ Batista, A./ Fernandes, L./ Macedo, P./ Pinto, F./ Rebelo, L./ Ribeiro, M./ Ribeiro, R./ Sottomayor, M./ Tavares, M./ Verdelho, V. (2012): Barriers to Social Innovation. A deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe" (TEPSIE), European Commission – 7th Framework Programme, Brussels: European Commission, DG Research.
- Metcalf, S. (1995). The economic foundations of technology policy: equilibrium and evolutionary perspectives. In P. Stoneman, *Handbook of the economics of innovation and technical change* (pp. 409-512). London: Blackwell.
- Millard, Jeremy/ Lin, Ka/Zhejiang/Martín, Nicolás/ Jiménez/Banerjee, Swati/Como, Elena/Bernal, Maria Elisa/Wageih, Mohamed/Erdal, Fuat/Karzen, Mirna (2015): Policy Field Report: Poverty Reduction and Sustainable Development (D10.1 internal report)
- Millard, Jeremy (2014): Development Theory. In: Howaldt/Butzin/Domanski/Kaletka (Eds.): *Theoretical approaches to social innovation: A critical literature review* (D1.1), pp. 34–49. Internet: http://www.si-drive.eu/wp-content/uploads/2014/11/D1_1-Critical-Literature-Review_final.pdf [last accessed 29.03.2016]
- Miller, Kristel/ McAdam, Rodney/ Moffett, Sandra/ Alexander, Allen/Puthussery, Pushyarag (2016): Knowledge Transfer in University Quadruple Helix Ecosystems: An Absorptive Capacity Perspective. In: *R&D Management*, 46(2), pp. 383-399.
- Mingers, John (2001): Combining IS research methods: towards a pluralist methodology. In: *Information systems research*, 12(3), pp. 240-259.
- Moore, Michele-Lee/ Westley, Frances (2011): Surmountable chasms: networks and social innovation for resilient systems. *Ecology and Society* 16(1): 5. Internet: <http://www.ecologyandsociety.org/vol16/iss1/art5/> [last accessed 07.07.2016]
- Moulaert, Frank/ MacCallum, Diana/ Mehmood, Abid/ Hamdouch, Abdelillah (2013): *The International Handbook on Social Innovation. Collective Action, Social Learning and Transdisciplinary Research*. Cheltenham UK, Northampton MA, USA: Edward Elgar
- Moulaert, Frank/ MacCallum, Diana/ Mehmood, Abid/ Hamdouch, Abdelillah (2013a) General introduction: the return of social innovation as a scientific concept and a social practice. In: Moulaert/ MacCallum/ Mehmood/ Hamdouch (Eds.): *The International Handbook on Social Innovation. Collective Action, Social Learning and Transdisciplinary Research*. Cheltenham UK, Northampton MA, USA: Edward Elgar, pp. 1-6.
- Moulaert, Frank/ Martinelli, Flavia/ Swyngedouw, Erik/ González, Sara (2005): Towards Alternative Model(s) of Local Innovation. In: *Urban Studies*, 42(11), pp. 1969–1990.
- Moulaert, Frank/ Ailenei, Oana (2005): Social Economy, Third Sector and Solidarity Relations: A Conceptual Synthesis from History to Present. In: *Urban Studies*, 42(11), pp. 2037–2053.
- Myers, Michael D. (1997): Qualitative Research in Information Systems. In: *Management Information Systems Quarterly*, 21(2), pp. 241-242.
- OECD (1999): *Managing National Innovation Systems*. Paris: Organisation for Economic Cooperation and Development.
- Orcutt, Lawrence H./ AlKadri, Mohamed Y. (2009): Barriers and Enablers of Innovation: A Pilot Survey of Transportation Professionals. TRB manuscript. Internet: http://www.caltrans.ca.gov/research/researchreports/trb_reports/survey-paper-11.pdf [last accessed 07.06.2016].

References

- Osburg, Thomas (2013): Social Innovation to Drive Corporate Sustainability. In: Osburg, Thomas/ Schmidpeter, René (Eds.): Social Innovation – Solutions for a Sustainable Future. Heidelberg: Springer, pp. 13-22.
- Ottaviano, Michael Edward (2004): Assessing and improving the enablers of innovation: *the development of an Innovation Capability Assessment instrument*. PhD Thesis / Swinburne University of Technology.
- Pelka, Bastian / Terstriep, Judith (2016). Mapping Social Innovation Maps. The State of Research Practice across Europe. European Social Innovation Review (forthcoming)
- Phills, James A./ Deiglmeier, Kriss/ Miller, Dale T. (2008): Rediscovering Social Innovation. In: Stanford Social Innovation Review, 6 (4), pp. 34-43.
- Porter, Michael E./ Kramer, Mark R. (2011): The big idea: Creating shared value. In: Harvard Business Review, 89(1), pp. 2-17
- Pradel, Mark/ Carcía, M./ Eizaguirre, S. (2013): Theorizing multi-level governance in social innovation dynamics. In: Moulart, F./ MacCullum, D./ Hamdocuch, A. (Eds.): The International Handbook on Social Innovation. Cheltenham: Edward Elgar, pp. 155-169.
- Saunders, Mark/ Lewis, Philip/ Thornhill, Adrian (2007): Research methods for business students. 4th ed. London: Prentice Hall.
- Schröder, Antonius/ Baumeister, Theresa/ Damianova, Zoya/ Dimova, Blagovesta Chonkova, Adriana/ Hickey, Robert/ Bernal, Maria Elisa/ El-Zoheiry, A. Hamid/ David, Alexandra/ Terebova, Svetlana/ Shabunova, A.A./ Leonidova, G.V./ Golovchin, M.A./ Kuzmin, Ilia/ Andersson, Thomas/ Hultman, Svante/ Tinfavičienė, Ingrida/ Stumbryte, Giedrė/ Haxhijaha, Aferdita Imeri/ Vladislavljovic, Aleksandra/ Karzen, Mirna/ Arifon, Doinita/ Hochgerner, Josef/ Scoppetta, Anette (2015): State of the Art: Social Innovation in Education and Lifelong Learning (D4.1 internal report)
- Schweitzer, Fiona/ Rau, Christiane/ Gassmann, Oliver/ van den Hende, Ellis (2015): Technologically Reflective Individuals as Enablers of Social Innovation. In: Journal of Product Management, 32(6), pp. 847-860.
- Scoppetta, Anette/ Butzin, Anna/ Rehfeld, Dieter (2014): Social Innovation in the Social Economy and Civil Society. In: Howaldt, Jürgen/ Butzin, Anna/ Domanski, Dmitri/ Kaletka, Christoph (Eds.): Theoretical approaches to social innovation: A critical literature review (D1.1). Internet: http://www.si-drive.eu/wp-content/uploads/2014/11/D1_1-Critical-Literature-Review_final.pdf [last accessed 29.03.2016], pp. 79-96.
- Scoppetta, Anette/Ecker, Berenike (2015): Database Screening Report and Manual (D3.1 internal report).
- Scoppetta, Anette (2015): Compilation of the State of the Art Reports on Policy Fields (D3.4). Internet: http://www.si-drive.eu/wp-content/uploads/2015/06/D3.4_Compilation-report_policy-fields_30062015.pdf [last accessed 06.06.2016]
- Sgaragli, Fabio (2014): Enabling Social Innovation Ecosystems for Community-led Territorial Development. Fondazione Giacomo Brodolini, Rome
- Silva, Maria José/ Leitão, João / Raposo, Mário Lino Barata.(2007): Barriers to Innovation faced by Manufacturing Firms in Portugal: How to overcome it? Available at SSRN 1023825.
- Stake, Robert E. (1995): The art of case study research. SAGE, London.
- Stehr, Nico (2007): Theories of the information age. In: Bryson, John R./ Daniels, Peter W. (Eds.): The Handbook of Service Industries. Cheltenham: Edward Elgar, pp. 62-76.
- Tarde, Gabriel (2009): Die Gesetze der Nachahmung 1883. Frankfurt am Main: Suhrkamp.
- Terstriep, Judith/ Kleverbeck, Maria/ Deserti, Alessandro/ Rizzo, Francesca (2015): Comparative Report on Social Innovation across Europe. Deliverable 3.2 of the project «Boosting the Impact of Social Innovation across Europe through Economic Underpinnings» (SIMPACT), European Commission – 7th Framework Programme, Brussels, European Commission, DG Research and Innovation. Internet: http://www.simpact-project.eu/publications/reports/SIMPACT_D32.pdf [last accessed 07.06.2016].

References

- Terstriep, J. and P. Totterdill (2014): Economic Foundation of Social Innovation - New Ways of Policy Production. Paper presented at RIP 2014 – 9th Regional Innovation Policy Conference, University of Stavanger, 16-17 October 2014.
- van der Torre, Wouter/ Oeij, Peter/ Rehfeld, Dieter/ Augustinaitis, Arūnas/ Domanski, Dmitri/ Elmadağ Baş, Banu/ Enciso Santocildes, Marta/ Golovchin, Maksim/ Gómez Urquijo, Laura/ Henry Moreno, Garbiñe/ Kaletka, Christoph/ Kapoor, Kawal/ Kuzmin, Ilia/ Labanauskas, Liutauras/ Lin, K./ Mukhacheva, Svetlana/ López Pérez, Sergio/ Millard, Jeremy/ Nordhause-Janz, Jürgen/ Popov, Andrei/ Shabunova, Alexandra/ Terebova, Svetlana/ Vladislavljjevic, Aleksandra/ Weerakkody, Vishanth (2015): State of the Art: Social Innovation in Employment (D5.1 internal report)
- Wallin, Sirkku (2010, October): The co-evolution in local development – From the triple to the quadruple helix model. Paper presented at Triple Helix VIII, Madrid. Retrieved from http://www.leydesdorff.net/th8/TRIPLE%20HELIX%20-%20VIII%20CONFERENCE/PROCEEDINGS/0110_Wallin_Sirkku_O-104/triple%20helix%20Wallin%20final.pdf [last accessed 30.05.2016]
- Welsch, Johann (2005): Innovationspolitik. Eine problemorientierte Einführung. Wiesbaden: Gabler Verlag.