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## D5.1 Social Innovation and Ethical Guidelines

Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
CO	Confidential, only for members of the Consortium (including the Commission Services)	

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## 1 Introduction

This report explores the rising development of new forms of social, economic and cultural interaction and organization, by analysing the creative use of new technologies in a mutual exchange between technological possibilities and organizational or socio-economic interactions. In the first chapter the vision of Social Innovation applied by CHEST is outlined, the architecture of the Collective Enhanced Environment for Social Innovation is introduced and the specific measures to implement it within CHEST are described. Chapter two analyses the possibilities offered by participatory platforms, and how those platforms can effectively support cooperation among different actors, with different goals, perspectives, and knowledge, but sharing the same vision. To do so, different modalities of participation are described and exemplified by projects funded by CHEST. Furthermore, technological enablers, the range of societal challenges addressed, the most relevant actor groups in this specific domain and the dynamics of the CHEST online crowd are assessed. In chapter three, we are taking a closer look at the corresponding legislative frameworks related to privacy issues and data protection in order to properly face ethical issues with respect to the risks of sharing personal information. In the final chapter, we derive and summarize recommendations both for social innovators and for policy makers in the respective area based on the lessons learned so far in the course of the project.

### 1.1 Social Innovation vision

Recent decades have seen societal challenges grow in number and complexity. Today, there is a growing consensus that economic growth does not automatically lead to social welfare. Societal challenges remain exigent even in countries with significant economic growth and a growing social division between different population classes and countries. Nonetheless, societal challenges are also opportunities. Social innovators aim to address them and provide new answers to old problems. There are business opportunities and synergies to be exploited in better integrating societal challenges at the core of innovation activities. Societal challenges have a strong mobilizing effect, which would allow gathering of competences and resources, beyond sectors and disciplines boundaries [HAR11].

There are many definitions of social innovation in literature and they cover a broad array of meanings. In its simplest form the concept describes 'new ideas that work in meeting social goals'. This definition opens a vast scope of what can be called a social innovation – from new lifestyles to innovative products or services. The Stanford Social Innovation Review slightly narrows the scope by defining it as: "A novel solution to a social problem that is more effective, efficient, sustainable, or just than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals" [PHI08]. This differentiates social innovation from business innovations, which are generally motivated by and diffused through organisations that are primarily motivated by profit maximization. Slightly more specific is the understanding of the term by the European Commission (as published in its Guide to Social Innovation): "Social innovation can be defined as the development and implementation of new ideas (products, services and models) to meet social needs and create new social relationships or collaborations. It represents new responses to pressing social demands, which affect the process of social interactions. It is aimed at improving human well-being" [EUC13]. It distinguishes social innovation from technical innovation as it does not occur in form of a new technology but at the level of social practice: it is a behavioural change in certain social contexts prompted by certain actors in an intentional targeted manner. This doesn't mean that social innovations can't have a technical side to them or that they can't be based on innovative technologies. In fact the border between the two is not clearly delimited. Many social innovations today are based on modern ICT and make extensive use of innovative technologies such as Social Networks or Web 2.0 (for example platforms like Avaaz<sup>1</sup> or Open Street Map<sup>2</sup>). Yet their primary goal

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<sup>1</sup> Connecting citizens to drive sustainable political decisions via online petitions.

is to satisfy social problems and only as a side effect may they result in a new technology.

Consequently, TEPSIE<sup>3</sup> includes in its definition social innovations, which use digital tools alongside traditional tools and approaches. As a result, it is not assumed that “final users and communities” necessarily themselves use digital tools, but that such tools are used in significant ways by one or more actors, or in one or more parts of the value chain, to support or enable social innovation. Thus, TEPSIE defines digital social innovation as the use of digital technology to enable or support social innovation. With the rapid growth of cheap, ubiquitous and powerful tools like the internet, the world-wide-web, social media and smart phone apps, new ways of carrying out social innovation have become possible whilst many existing ways have been strengthened. Often this means the barriers to social innovation in terms of communication, outreach and scaling have been reduced and thresholds lowered. For example, the so-called ‘sharing economy’ is blossoming in which people can share cars, tools, accommodation, and even their time and skills. This is now possible more than ever before using the internet or mobile apps to link, almost instantaneously and regardless of distance, people with a social need to others who can meet that need. Digital tools can also be transformational and open new perspectives on social innovation, such as the use of so-called ‘big data’<sup>2</sup> to collect and analyse data of what social needs are being experienced by which people in different places at different times. Using new digital technologies can also open new perspectives for locally manufactured and very cheap products for people who otherwise have no chance of being helped. For example, using the internet to send algorithms for 3-D printed prosthetic limbs designed for war victims in developing countries for local production and use.

Complementary to TEPSIE’s understanding and with technology playing a key role is the definition developed by the research project on Digital Social Innovation: “Digital Social Innovation (DSI) is a type of social and collaborative innovation in which innovators, users and communities collaborate using digital technologies to co-create knowledge and solutions for a wide range of social needs and at a scale that was unimaginable before the rise of the Internet” [BRI15].

All definitions of (Digital) Social Innovations share some core elements and common features as shown in Figure 1.

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<sup>2</sup> Collaborative project creating a free editable map of the world.

<sup>3</sup> “The theoretical, empirical and policy foundations for building social innovation in Europe” (TEPSIE), European Commission – 7th Framework Programme, Brussels: European Commission, DG Research: <http://www.tepsie.eu>

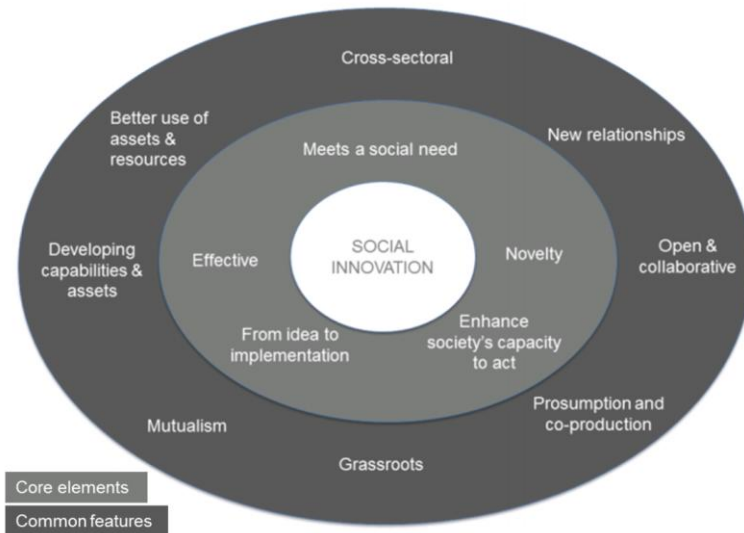


Figure 1: Core elements and common features of social innovation. Source: [YOU12]

One key aspect of social innovation as envisioned by CHEST is that of a conjoint development, a process of collective learning. Social innovation does not happen with the lone genius coming up with an out-of-the-box solution in a moment of 'Eureka!' Instead, ideas start as possibilities that are only incompletely understood by their inventors. They evolve by becoming more explicit and more formalized, as best practice is worked out and tested against social needs (together with the target users), and as organisations develop experience about how to make them work. Consequently, Social innovation in a more encompassing way can be understood to comprise also the entire process by which new responses to social needs are developed in order to deliver better social outcomes. This process can be described as consisting of four main stages:

1. Identification of new/unmet/inadequately met social needs;
2. Development of new solutions in response to these social needs;
3. Evaluation of the effectiveness of new solutions in meeting social needs;
4. Uptake and scaling of the most effective developed solutions and practices.

Apart from knowledge sharing in order to achieve changes in lifestyle, production or consumption patterns, CHEST emphasizes more participatory democratic processes leveraging the emerging network effect. This means that the involved participants are both, the users and the co-producers to the initiative. They are no longer seen as mere consumers but rather as active users and co-creators resulting in their deeper motivations to participate in the innovation process. Consequently, DSI aim to change the way involved participants behave and interact collaboratively leveraging the power of collective intelligence through open digital technologies in order to achieve a better social, economic and environmental sustainability.

## 1.2 CHEST - Enhanced Environment for Social Innovation

A central goal of CHEST is to explore new ways of fostering Digital Social Innovations in Europe implementing different means and modules supporting that goal. Consequently, CHEST is more than only a platform running an idea competition providing seed funding to social innovators. It is a decentralized connected platform for Digital Social Innovations integrating a mix of technical (online) modules, on-site measures and best practice guidelines supporting grassroots initiatives through seed funding, collaborative knowledge and through the extended community of experts and other

stakeholders (multipliers, social innovators and target groups). The architecture reflects the holistic approach of the CHEST Environment (Figure 2) implementing the Social Innovation vision of CHEST (described in section 1.1).

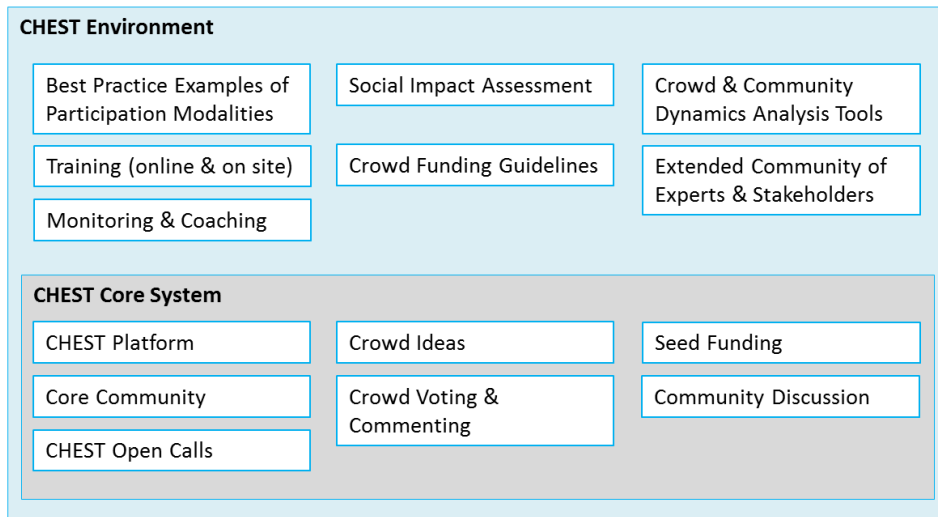


Figure 2: Architecture of the CHEST Enhanced Environment for Social Innovation

In the following section as well as in chapter 2 key modules of the CHEST architecture are described in more detail.

### 1.2.1 CHEST platform

For the Call for Ideas, the **CHEST platform** (described in detail in deliverable D3.1) provided an Idea Management system dedicated to the organisation and assessment of large amounts of input from various parties in form of **crowd ideas**. All ideas can be explored and visualized grouped by category of societal challenges. The evaluation of the ideas and of their expected social impact depends on the given perspectives of the involved stakeholders and takes place in social discourse. The CHEST platform provided a framework for the **community discussion**, the **crowd voting & commenting** and the disseminating (sharing) of the ideas submitted – which in turn forms the first step in the processes of social change or societal modernization (the social change sought after by the ideas). Users could discuss the ideas submitted and rate them according to the perceived relevancy of the problem, the quality of the idea and the feasibility and viability of the proposed project. The platform also provides access to various kinds of information (e. g. online video trainings, links to other CAPS initiatives, information on alternative funding schemes, etc.) and it will provide a collaborative space for the winning projects and the CHEST community. To further enrich the CHEST platform, we integrated Edgesense, a **tool for crowd and community dynamics analysis** (see section 2.6). Similarly, we are currently assessing the possibility to integrate other external modules like DebateHub, an innovative tool with enhanced community analytics functionalities supporting online debates in order to collectively organise and progress good ideas forward.

### 1.2.2 CHEST open call design

A central goal of CHEST was to support a large variety of initiatives at different stages of the project life cycle we decided to split the competition into three different strands. Consequently, there were three **open calls** implemented with different amounts of **seed funding**:

1. In Call 1 – the Call for Ideas – 30 ideas for a pre-seed-funding of up to € 6.000 each.

2. In Call 2 – the Call for Partners – 5 projects with up to € 150.000
3. In Call 3 – the Call for Prototypes – 24 projects with up to € 60.000 each.

Each call had its own target group:

1. Call 1 aimed to support Ideators like students and creative individuals, basically anyone with a good idea. The funding should be spent to explore the technical feasibility, social impact potential or commercial viability of this idea.
2. Call 2 aimed to support the development of ‘market ready’ products or services. We will fund projects that take an initial idea or basic research to a stage that could be classified as ready for deployment/initial application within its target ‘market’.
3. The target group of Call 3 was two-fold: On the one hand, we seek to offer prolonged support to the best projects that were derived from Call 1. On the other hand, the call also invited submissions from new applicants – or from applicants that applied for Call 1 but didn’t make it into the top 30 ideas. Activities should aim to advance an idea through to the development of a prototype or demonstrator of a product or service. Winners should include prototype development, trials, testing, and the development of a business plan indicating routes for future exploitation.

With regard to the large diversity of social innovation definitions (outlined in section 1.1), we aimed to explore different types of Social Innovation existing in society. Key questions to be assessed were: Which ideas or initiatives are emerging beyond that collaborative approach? What can we learn from them by expanding our understanding of what current forms of Social Innovations are and how they can be supported? Therefore, CHEST followed a two-fold approach:

1. To foster Social Innovation ideas based on collective approaches in Calls 2 and 3
2. While at the same time remain as open as possible to different approaches in Call 1 because Social Innovation by definition is a grassroots phenomenon

Once selected, we have requested all CHEST winners to think of ways to improve their projects by integrating also collaborative approaches.

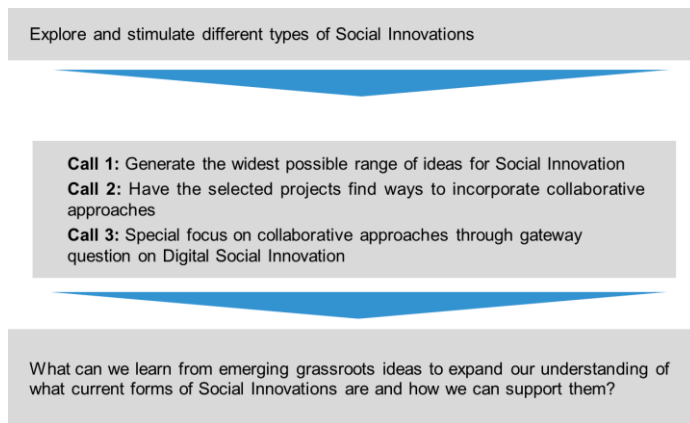


Figure 3: Exploring the full potential of Social Innovations

### 1.2.3 CHEST monitoring and social impact assessment

CHEST beneficiaries will not only receive substantial seed funding to implement their projects. A central element of our work is also to provide ongoing non-monetary support to create awareness and to facilitate future exploitation/adoption. Two aspects are central in this support:

1. to provide guidelines for successful and effective community engagement for processes of user-centered co-design and
2. to foster their social impact – from the project start.

To do so we organised a dedicated one-day workshop with the winners of Call 2 in Berlin, March 27<sup>th</sup> 2015. For the 24 winners of Call 3 a physical meeting does not seem feasible, so we will provide the same kind of support through a webinar. The central topics of this support are described in the following.

Acknowledging the fact that social innovation is that of a conjoint development, a process of collective learning, the initiatives funded by CHEST will implement measures of co-design and co-creation. We supported also those beneficiaries that had not elaborated these measures in their application to strengthen and extend their work in this regard by incorporating collaborative methods into the project monitoring procedures.

The CHEST Call 1 beneficiaries are provided with a specifically developed report template aiming to summarize the results of each beneficiaries investigation, detailing the viability of their idea and serving as a basis for an application for Call 3. The structure of this report is oriented at the format suggested by the Social Reporting Standard SRS standardizing the regular work documentation of organisations run by social entrepreneurs, non-profit organisations, and other organisations with a social purpose (such as social businesses) – for funders, investors, partner organisations, and the public. One CHEST-specific part of the report was to outline in which ways beneficiaries plan to integrate their target group(s) into the innovation process (e.g. through participatory processes like Co-Design, Crowdsourcing, new social practices etc.)

For CHEST Call 2 and Call 3 beneficiaries, being far more extensively funded than Call 1 winners, the reporting is also more elaborate. Especially with regard to the stipulation of collaborative measures during the funding period. Their monitoring takes place in a two-stage process. Each applicant will be required to submit two reports within the project duration – an interim report and a final report. These reports specifically developed for the CHEST beneficiaries are incorporating the Social Reporting Standard SRS<sup>4</sup> and the IA4SI methodology framework<sup>5</sup>. In addition, a special focus will be set on the involvement of the respective end-user target groups right from the start of the projects fostering the co-design of the solutions developed and thereby supporting the creation of high-impact Digital Social Innovations. The interim reports and the final reports will build on each other providing a consistent base for internal controlling and external reporting as the selected projects advance and a special focus will be set on community involvement in the development process right from the start (co-designing digital social innovations). The structure of the report templates is outlined in Table 1 (for a complete overview see the current draft of the interim report template in Annex I).

Table 1: Structure of CHEST report template

#	Section	Description
1	Implementation of organizational structure	Brief description of the organizational structure of project, (organisations, individuals, and cooperation partners involved in carrying out your project)
2	Implementation of solution approach	<ul style="list-style-type: none"> <li>Detailed description of the societal problem addressed and how the solution proposed is aiming to solve it.</li> <li>Description of the solution approach and of the work performed during the reporting period</li> </ul>

<sup>4</sup> The Social Reporting Standard SRS (<http://www.social-reporting-standard.de/en>) is a monitoring framework common in the non-profit sector enabling projects to make comparable judgements about their social impact.

<sup>5</sup> The IA4SI project (Impact Assessment for Social Innovation – <http://www.ia4si.eu>) is a FP7 CAPS project providing tools with which initiatives can assess their socio-economic, environmental and political impacts. The IA4SI methodological framework is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.



		<ul style="list-style-type: none"> <li>Exploitation plan / go-to-market strategy (with strong focus on target group reach)</li> </ul>
<b>3</b>	Measuring Social Impact	<ul style="list-style-type: none"> <li>Definition of project specific set of Social Impact KPIs (Key Performance Indicators) consisting of indicators common for all CHEST projects (online community building, access to information, knowledge sharing) and additional individual indicators depending on the projects' main areas of impact</li> <li>Definition of target value for each indicator</li> <li>User-centered concept test (Call 3) / system evaluation (Call 2) assessing a sub-set of KPIs identified</li> </ul>

In section 3, beneficiaries are requested to describe the social impact they anticipate for their individual target groups as a result of the project's activity. Based on this description each project should derive a set of useful indicators (Key Performance Indicators, KPIs) which help to measure their social impact. CHEST beneficiaries are requested to select their primary and secondary impact area from the following list and to identify at least 3 different indicators for each impact area that are most suitable for their project:

1. Social impact areas (including ecological impacts)
  - 1.1 Impact on community building and empowerment
  - 1.2 Impact on information
  - 1.3 Impact on ways of thinking, values and behaviours
  - 1.4 Impact on education and human capital
  - 1.5 Impact on employment
  - 1.6 Impact on environment
  - 1.7 Impact on civic and political participation
  - 1.8 Impact on policies and institutions
2. Economic impact areas
  - 2.1 Users' economic empowerment
  - 2.2 The economic value generated by the project

In order to facilitate the KPI selection process we have pre-defined a list of common indicators which each CHEST beneficiary should report. These predefined KPIs put a strong focus on user engagement and community building and are shown in Table 2 in normal font. Examples of project specific indicators are written in italic letters in Table 2, the full catalogue of indicators for each impact area can be found in Annex I.

*Table 2: Dimensions and indicators for CHEST reporting*

Dimensions	Example Indicators	Variables	Target value	Measured value
ONLINE COMMUNITY BUILDING	User involvement in prototype evaluation / test usage	Number of target groups involved in co-design process		
		Number of users involved in co-design process		
		Ratio between men and women involved		
		Ratio between young, adult and old people involved		

ACCESS TO INFORMATION	Project self-evaluation of its capability to influence information asymmetries	Project self-evaluation of its capability to influence information asymmetries (e.g. access to sources of information that represent a range of political and social viewpoints, access to media outlets or websites that express independent, balanced views, etc.)		
	Number of tools/activities developed by the project for influencing information asymmetries	Number of tools/activities developed by the project for influencing information asymmetries		
KNOWLEDGE SHARING	Sharing through CHEST website	Number of entries in project blog on CHEST website		
		Number of comments / replies on project blog entries on CHEST website		
	Sharing through social media channels	Quantified measure of followers on selected social media channels (e. g. twitter followers, facebook friends, etc.)		
		Quantified measure of communications on selected social media channels (e. g. number of project tweets and re-tweets, etc.)		
<i>e.g. IMPACT ON CITIZENS/USERS POLITICAL PARTICIPATION</i>	<i>e.g. Instruments developed by the project offering new channels/way of political participation</i>	<i>e.g. Number of instruments developed by the project offering new channels/way of political participation</i>		
<i>e.g. IMPACT ON ACCESS TO FINANCE</i>	<i>e.g. Impact through crowdfunding</i>	<i>e.g. Money attracted by the project through crowdfunding</i>		
...	...	...		

While some of these indicators will be only quantifiable once the project has gone live, others can be assessed already during the development phase. One way to allocate their values is an early concept or prototype test / evaluation. One key prerequisite to achieve a high impact in developing Digital Social Innovations is the user-centred design involving target users right from the project start (co-design). Following an iterative development cycle, we ask every project to carry out such a concept test / prototype evaluation involving your target users already during the first half of their funding period. At least provide following information have to be reported by the project (Dimension: Online Community Building, Indicator: User involvement in prototype evaluation / test usage):

- Number of target groups involved in co-design process
- Number of users involved in co-design process
- Ratio between men and women involved
- Ratio between young, adult and old people involved

Beneficiaries are also requested to provide a brief summary of the evaluation results and describe the strengths and weaknesses identified in the course of the evaluation. The goal here is not to show that the idea is already perfect. On the contrary: As the projects are new and innovative, it is very likely that in interacting with their target groups by testing the core idea with them, the initiatives will encounter unforeseen critical issues. These should be described and ideas provided to address them. In order to facilitate the finding of adequate solutions, we will involve the experts of our CHEST community providing you with feedback and ideas. The results and any issues encountered in the course of the concept test / system evaluation are to be published in the project journal on the CHEST website for open discussion with the community in order to develop measures for project improvement. All project teams will be granted access to the CHEST website and provided with a dedicated blog-like project journal to publish progress and to gather feedback from the community. Each project is requested to publish project updates, achievements or problems encountered regularly and the community will be invited to give their feedback.

#### 1.2.4 CHEST community building and expansion

The CHEST community is not only a major pillar of the participatory approaches of the CHEST Open Calls, plays an important role by supporting the exchange of knowledge and experiences. Successful online community building, however, does not happen by itself. It is a central effort for any Social Innovation project aiming to connect a group of people online and making them feel a part of something special. One way to get this common interest is by identifying something people believe in and inviting them to talk to each other.

For CHEST the common interest is the promotion of and support for Digital Social Innovations as well as the subsequently derived characteristics of our target groups and stakeholders. However, the common interest is the first level of the group bonding. It is evident that a top-down approach for setting up the CHEST Community is not appropriate. Rather we are following a decentralised and bottom-up approach in which members can create their own groups and where these groups are precisely and dynamically tailored to the member’s interest. Members will also be more motivated in and loyal to groups they created on their own. To reach our target groups and to foster a bottom-up community building process with a wide audience of stakeholders, we are implementing a two-stage process (described in more detail in D4.3). The first part is starting engagement with our **CHEST Core Community** as shown in Figure 4.

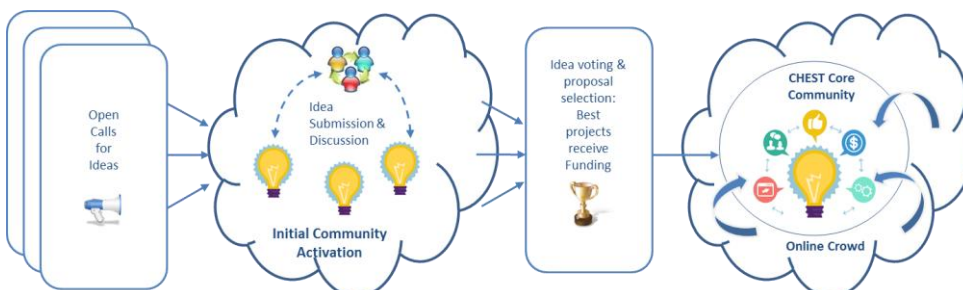


Figure 4: CHEST Community building

The second stage is the community expansion resulting in the **CHEST Extended Community of Experts & Stakeholders**, in which the “CHEST beneficiaries” and their networks play a key role as “community seeds”. The approach provides an opportunity to support this goal helping to advance not only the projects supported under the three call strands but also to facilitate collaborative activity; connecting entrepreneurs with funders, sharing learning and best practice, and seeking funding and sustainable new business models. CHEST supports this through ongoing dissemination and communication activities (Figure 5).

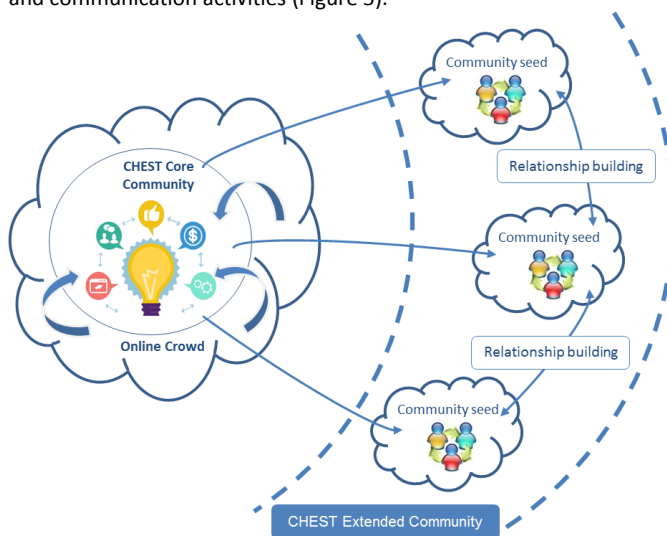


Figure 5: CHEST Community expansion

**Recommendation:** Creating a vibrant community is a key factor of success for most social innovation activities. The following steps could serve as a guideline in achieving this goal:

1. Start by identifying what you want to achieve and when you want to achieve it by. Define the resources available, whom you want to reach and find a metric to measure success by.
2. Then focus on the people you want to reach. What do they value? Who are the first members? What are the topical issues here? Who are the big influencers? What technology do members use? What are their personalities and motivations for participating online?
3. Try to define the type of online community it will be: What’s the big appeal? What do members need from the interface? How soon can it be launched? Who is going to build the interface, and when?
4. Launch the community: Drop personal e-mails to your early members before the launch. Build relationships with the influencers needed later. Introduce members to each other. Seed content some early content, and give new members clear actions to take. Develop tactics to keep growing internally.
5. Foster the development a sense of community. Encourage members to invest time in the community, create bounds. Shine the spotlight on high-achieving members. Ensure everyone can influence the group, in at least small way. If possible, integrate existing communities of key members (community seeds). Offering rewards can be a good way to motivate members. Introduce members to each other, set tasks and celebrate milestones. Treat top members much better. Get press coverage. Continue reaching out to members to join. Recruit and train volunteers to take on the workload.
6. Use intelligent tools to better understand and grow your community. Tools like Edgesense,

Assembl or DebateHub<sup>6</sup> facilitate community managers to ensure efficient debates among citizens, i.e. to ensure collective ideation, decision and action.

## 2 Key aspects of Digital Social Innovations in CHEST

### 2.1 Participation modalities for Social Innovation

Digital Social Innovation is a relatively young area of research, with little existing knowledge on who the digital social innovators are, what types of activities they are involved in and how they are using digital tools to achieve a social impact. Yet, there are a number of recent studies on Digital Social Innovation trying to create typologies of this socio-economical phenomenon. Bria et al. for example, group 1000 DSI organisations and 630 collaborative projects within six broad domains that capture the way DSI is growing and developing [BRI15]. The following Table 3 maps the CHEST beneficiaries into these six domains.

Table 3: Domains of Digital Social Innovations [BRI15] and mapping of CHEST proposals to DSI-report domains

#	Domain	Description	No. of CHEST beneficiaries
1.	New ways of making	An ecosystem of makers is revolutionising open design and manufacturing. 3D manufacturing tools, free CAD/CAM software and open source designs are now giving innovators better access to tools, products, skills and capabilities they need to enhance collaborative making.	5
2.	Open democracy	Open democracy is transforming the traditional models of representative democracy. Digital technology can enable collective participation at a scale that was impossible before enabling citizens to be engaged in decision-making processes, collective deliberation, and mass mobilisation.	5
3.	The collaborative economy	New collaborative socio-economic models that present novel characteristics, and enable people to share skills, knowledge, food, clothes, housing and so on. It includes crypto digital currencies, new forms of crowdfunding and financing, new platforms for exchanges and sharing resources based on reputation and trust.	18
4.	Awareness networks enabling sustainable behaviours and lifestyles	Individuals and communities are now able to aggregate data coming from people and the environment in order to create a new generation of products and services, fostering behavioural change. Platforms for collaboration are used to solve environmental issues and promote sustainable behavioural changes, or to mobilise collective action and respond to community	32

<sup>6</sup> The tools named are developed by the CATALYST project and available on its website <http://catalyst-fp7.eu/>. CATALYST is an FP7 and fellow CAPS project that will develop and test collective intelligence tools and make them available, as open source solutions, to any interested communities.

		emergencies.	
5.	Open Access	The Open Access Ecosystem approach (including open access to content, open standards, open licensing, knowledge commons and digital rights) has the potential to empower citizens and increase participation, while preserving the openness and accessibility of the Internet infrastructure. It includes projects that are using bottom up privacy-preserving and decentralised infrastructures, and the diffusion of knowledge systems in the Public Domain.	2
6.	Funding, acceleration and incubation	A range of incubators, accelerators, impact investment schemes have been set up by public and private funders to support digital innovation projects. They do this through a combination of seed funding as well as nonfinancial support such as access to co-working spaces and business support and mentors.	1

Analysing the distribution of CHEST beneficiaries over the DSI domains revealed that projects funded by CHEST cover all DSI domains (see Table 3). Not surprisingly, the initiatives funded by CHEST show a significant focus in the areas of awareness networks and collaborative economy since the overall programme CAPS (Collective Awareness Platforms for Sustainability and Social Innovation) emphasizes approaches in this area and there is a focal point in CHEST on participatory models and all different forms of bottom-up engagement through our beneficiaries. Analysing the diversity of projects funded by CHEST it became clear that a closer look at the different possibilities of participation and engagement was necessary. Consequently, we developed an additional scheme of categories assessing the different participatory processes applied by our beneficiaries. The scheme we developed incorporates the abovementioned domains of Digital Social innovations but looks at them from a different angle. The central question assessed by the participation modalities described in Table 4 are the ways in which users are involved in the projects. Naturally, one project can incorporate more than only one of these modalities. In fact, almost all projects funded by CHEST seek to involve users in several different ways.

Table 4: Participation modalities

#	Participation modality	Description
1.	Co-design and co-creation	Does/did the project involve its target group in the design and development of its solution (implementing an iterative development cycle incorporating user feedback)?
2.	Open Source	Does the project develop an Open Source solution and/or provide an open API for others to contribute to the further development of the solution?
3.	Knowledge sharing	Does the project actively involve contributions and sharing of specific knowledge of its users in order to raise awareness or to gain new insights into one or more of its core topics?
4.	Social deliberation	Does the project offer tools to support processes of weighing options in order to achieve better group decisions?
5.	eActivism	Does the project seek to facilitate change through a range of players engaged in interrelated and complementary efforts, i. e. raise awareness of and demand for a particular development objective through face-to-face dialogue?

6.	Collaborative consumption	Does the project actively empower its users with information that enables distribution, sharing and reuse of excess capacity in goods and services?
7.	Crowdsourcing	Does the project obtain needed content, ideas or services by soliciting contributions from a large group of people, and especially from an online community rather than from traditional employees or suppliers?
8.	Open Innovation	Does the project stipulate the generation of new ideas and solutions among its users (e. g. through idea competitions, open calls etc.)?

Apart from the modalities of participation, we also assessed the different target groups that are involved through the participatory processes:

*Table 5: Involvement of user groups*

#	Involvement of	Description
1.	Main target group	The beneficiaries of the expected social impact are directly involved as end-users through one of the abovementioned participatory processes
2.	Indirect users	Apart from the main beneficiaries, groups supporting the social impact of the project are also involved through of the abovementioned participatory processes (e. g. if a project aims to improve literacy among teenagers it may or may not involve also their parents)
3.	Multipliers	Are multipliers involved in one of the participatory processes (beyond acting as mere multipliers in communicating and disseminating the project)?
4.	Expert communities	Are external experts or advisory boards involved in one of the participatory processes?

In the following sub-sections, we will take a closer look at each of these different modalities of participation and showcase examples of how they have been applied by the CHEST beneficiaries. An overview over the application of these modalities by the winning CHEST projects is given in Table 6 (Call 1 beneficiaries), Table 7 (Call 2 beneficiaries) and Table 8 (Call 3 beneficiaries).

Table 6: Participation modalities of CHEST Call 1 beneficiaries

Project title	URL	Co-design and co-creation (during project development)	Open Source	Knowledge sharing	Social deliberation	eActivism	Collaborative consumption	Crowdsourcing	Open Innovation	Involvement of main target group	Involvement of indirect users	Involvement of multipliers communities / external advisory
RiverWatch/Tevere	<a href="http://ideas.chest-project.eu/?q=node/118">http://ideas.chest-project.eu/?q=node/118</a>	✓		✓	✓	✓		✓		✓	✓	✓
Connecting Citizens and Parliaments	<a href="http://ideas.chest-project.eu/?q=node/129">http://ideas.chest-project.eu/?q=node/129</a>		✓	✓	✓			✓		✓	✓	✓
Mind the Bank	<a href="http://ideas.chest-project.eu/?q=node/134">http://ideas.chest-project.eu/?q=node/134</a>		✓	✓				✓		✓		✓
Beep up. The talking city	<a href="http://ideas.chest-project.eu/?q=node/174">http://ideas.chest-project.eu/?q=node/174</a>	✓		✓				✓		✓		
LEaRN - Live Education and Rethink kNowledge	<a href="http://ideas.chest-project.eu/?q=node/176">http://ideas.chest-project.eu/?q=node/176</a>	✓		✓				✓		✓	✓	✓
Direct Health	<a href="http://ideas.chest-project.eu/?q=node/186">http://ideas.chest-project.eu/?q=node/186</a>		✓	✓				✓		✓		
Pharmawizzard - The Digital Pharma Awareness	<a href="http://ideas.chest-project.eu/?q=node/188">http://ideas.chest-project.eu/?q=node/188</a>		✓					✓				✓
Rollin' Art	<a href="http://ideas.chest-project.eu/?q=node/196">http://ideas.chest-project.eu/?q=node/196</a>	✓								✓		✓
My Event. Shrink your time, stretch your network!	<a href="http://ideas.chest-project.eu/?q=node/200">http://ideas.chest-project.eu/?q=node/200</a>	✓	✓					✓		✓	✓	✓
RiseApp	<a href="http://ideas.chest-project.eu/?q=node/251">http://ideas.chest-project.eu/?q=node/251</a>	✓	✓			✓		✓		✓		✓
Ecomummy	<a href="http://ideas.chest-project.eu/?q=node/1179">http://ideas.chest-project.eu/?q=node/1179</a>	✓					✓	✓		✓	✓	
Beaky - Learning to read through Augmented Reality	<a href="http://ideas.chest-project.eu/?q=node/3310">http://ideas.chest-project.eu/?q=node/3310</a>							✓			✓	✓
WillChair	<a href="http://ideas.chest-project.eu/?q=node/3317">http://ideas.chest-project.eu/?q=node/3317</a>	✓	✓	✓				✓		✓	✓	✓
MyFoody - Be the One to Save	<a href="http://ideas.chest-project.eu/?q=node/3321">http://ideas.chest-project.eu/?q=node/3321</a>	✓				✓	✓	✓		✓		✓
CITYPLAY - Board games for shared planning	<a href="http://ideas.chest-project.eu/?q=node/3344">http://ideas.chest-project.eu/?q=node/3344</a>	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Languages in my city	<a href="http://ideas.chest-project.eu/?q=node/3356">http://ideas.chest-project.eu/?q=node/3356</a>	✓	✓	✓				✓		✓		✓
Emotional Journey	<a href="http://ideas.chest-project.eu/?q=node/3362">http://ideas.chest-project.eu/?q=node/3362</a>	✓	✓	✓				✓		✓	✓	
MyDoctor.com	<a href="http://ideas.chest-project.eu/?q=node/3363">http://ideas.chest-project.eu/?q=node/3363</a>	✓	✓	✓				✓		✓		✓



Project title	URL	Co-design and co-creation (during project development)	Open Source	Knowledge sharing	Social deliberation	eActivism	Collaborative consumption	Crowdsourcing	Open Innovation	Involvement of main target group	Involvement of indirect users	Involvement of multipliers communities / external advisory
Fiorato - Mindfulness in Happiness	<a href="http://ideas.chest-project.eu/?q=node/3367">http://ideas.chest-project.eu/?q=node/3367</a>	✓									✓	✓
UniSmartAll	<a href="http://ideas.chest-project.eu/?q=node/3370">http://ideas.chest-project.eu/?q=node/3370</a>	✓								✓		
Home...works!	<a href="http://ideas.chest-project.eu/?q=node/3371">http://ideas.chest-project.eu/?q=node/3371</a>	✓	✓					✓		✓		✓
E-VOTING	<a href="http://ideas.chest-project.eu/?q=node/3373">http://ideas.chest-project.eu/?q=node/3373</a>									✓		
ErBin	<a href="http://ideas.chest-project.eu/?q=node/3374">http://ideas.chest-project.eu/?q=node/3374</a>											
LSV - Lista della Spesa Virtuale	<a href="http://ideas.chest-project.eu/?q=node/3376">http://ideas.chest-project.eu/?q=node/3376</a>											
PlayBasketNow - Do you want to play?	<a href="http://ideas.chest-project.eu/?q=node/3451">http://ideas.chest-project.eu/?q=node/3451</a>							✓		✓		
Celiac Worl. Eat, drink and... have fun!	<a href="http://ideas.chest-project.eu/?q=node/3380">http://ideas.chest-project.eu/?q=node/3380</a>	✓	✓	✓				✓		✓	✓	✓
DECISO Virtual Desktop Infrastructure	<a href="http://ideas.chest-project.eu/?q=node/3382">http://ideas.chest-project.eu/?q=node/3382</a>	✓	✓	✓				✓		✓	✓	
Soccer and Rescue Robot	<a href="http://ideas.chest-project.eu/?q=node/3383">http://ideas.chest-project.eu/?q=node/3383</a>		✓									
MyFriendlySchool. The discovery of knowledge!	<a href="http://ideas.chest-project.eu/?q=node/3384">http://ideas.chest-project.eu/?q=node/3384</a>		✓	✓				✓		✓		
FoodAlly	<a href="http://ideas.chest-project.eu/?q=node/3386">http://ideas.chest-project.eu/?q=node/3386</a>		✓	✓		✓	✓	✓		✓	✓	
Communication App for the Deaf and Hard of Hearing	<a href="http://ideas.chest-project.eu/?q=node/3413">http://ideas.chest-project.eu/?q=node/3413</a>	✓								✓	✓	✓
M.in.A. museum inclusive access	<a href="http://ideas.chest-project.eu/?q=node/3418">http://ideas.chest-project.eu/?q=node/3418</a>	✓		✓				✓		✓		✓
Crowd innovation for sustainable packaging	<a href="http://ideas.chest-project.eu/?q=node/3432">http://ideas.chest-project.eu/?q=node/3432</a>		✓					✓	✓	✓		
Social Sands	<a href="http://ideas.chest-project.eu/?q=node/3443">http://ideas.chest-project.eu/?q=node/3443</a>							✓		✓		
TherApp	<a href="http://ideas.chest-project.eu/?q=node/3456">http://ideas.chest-project.eu/?q=node/3456</a>	✓		✓				✓		✓	✓	✓

Table 7: Participation modalities of CHEST Call 2 beneficiaries

Project title	URL	Co-design and co-creation (during project development)	Open Source	Knowledge sharing	Social deliberation	eActivism	Collaborative consumption	Crowdsourcing	Open Innovation	Involvement of main target group	Involvement of indirect users	Involvement of multipliers communities / external advisory
eReuse	<a href="http://www.erueuse.org">http://www.erueuse.org</a>	✓	✓	✓			✓	✓		✓		✓
Magenta Traffic Flow	<a href="http://www.magentalab.it">http://www.magentalab.it</a>	✓		✓				✓		✓	✓	✓
GreenApes	<a href="https://www.greenapes.com/en">https://www.greenapes.com/en</a>	✓		✓				✓		✓	✓	✓
Project99	<a href="http://www.wegot99.com/">http://www.wegot99.com/</a>	✓	✓	✓				✓		✓	✓	✓
Onodo	<a href="http://onodo.org/en/">http://onodo.org/en/</a>	✓	✓	✓	✓	✓		✓		✓		✓

Table 8: Participation modalities of CHEST Call 3 beneficiaries

Project title	URL	Co-design and co-creation (during project development)	Open Source	Knowledge sharing	Social deliberation	eActivism	Collaborative consumption	Crowdsourcing	Open Innovation	Involvement of main target group	Involvement of indirect users	Involvement of multipliers communities / external advisory
3D-Immersion Platform with Low-literacy course	<a href="http://organiq.nl">http://organiq.nl</a>	✓								✓		
Active Citizen	<a href="http://www.citizens.is">http://www.citizens.is</a>		✓	✓	✓	✓		✓	✓	✓	✓	✓
AdviSex	<a href="http://www.chest-project.eu/call-3-winning-projects">http://www.chest-project.eu/call-3-winning-projects</a>	✓		✓				✓		✓	✓	✓

Project title	URL	Co-design and co-creation (during project development)	Open Source	Knowledge sharing	Social deliberation	eActivism	Collaborative consumption	Crowdsourcing	Open Innovation	Involvement of main target group	Involvement of indirect users	Involvement of multipliers communities / external advisory
Citizens for monitoring/sharing air pollution data	<a href="http://www.chest-project.eu/call-3-winning-projects">http://www.chest-project.eu/call-3-winning-projects</a>	✓	✓	✓	✓	✓		✓		✓		✓
Communication App for the Deaf and Hard of Hearing	<a href="http://mh-hannover.de/">http://mh-hannover.de/</a>	✓		✓				✓		✓	✓	✓
Hybrid Letterbox. Bridging the analog/digital gap	<a href="http://www.design-research-lab.org/projects/hybrid-letter-box/">http://www.design-research-lab.org/projects/hybrid-letter-box/</a>	✓	✓	✓	✓	✓		✓	✓	✓		✓
Jourvie - an app for the eating disorder therapy	<a href="http://www.jourvie.com/">http://www.jourvie.com/</a>	✓		✓				✓		✓	✓	✓
Kidslox: setting boundaries in the age of the iPad	<a href="https://kidslox.com/">https://kidslox.com/</a>	✓						✓		✓	✓	✓
Medhance	<a href="http://www.chest-project.eu/call-3-winning-projects">http://www.chest-project.eu/call-3-winning-projects</a>	✓						✓		✓		✓
MoreLife Online - Tackling Global Obesity	<a href="http://more-life.co.uk/">http://more-life.co.uk/</a>	✓		✓				✓		✓	✓	✓
MountainWatch	<a href="http://www.chest-project.eu/call-3-winning-projects">http://www.chest-project.eu/call-3-winning-projects</a>	✓		✓				✓		✓		✓
Open language learning plattform on Serlo	<a href="https://de.serlo.org/">https://de.serlo.org/</a>	✓	✓	✓				✓	✓	✓		✓
PAYEZE - MOBILE PAYMENT SOLUTION	<a href="http://www.payeze.co.uk/">http://www.payeze.co.uk/</a>	✓	✓	✓			✓	✓	✓	✓	✓	✓
Personal health record for self-management elderly	<a href="http://www.chest-project.eu/call-3-winning-projects">http://www.chest-project.eu/call-3-winning-projects</a>	✓								✓		✓
Provenance Coin: Open supply chains on Blockchains	<a href="https://www.provenance.org/">https://www.provenance.org/</a>	✓	✓	✓				✓		✓	✓	✓
ReadRunner. A Playful Reading Platform for Dyslexics	<a href="http://www.thereadrunner.com/">http://www.thereadrunner.com/</a>	✓								✓	✓	✓
SchulePLUS Mobile Application	<a href="https://www.schule-plus.de/">https://www.schule-plus.de/</a>	✓		✓				✓		✓	✓	✓
BeInvolved. Serious Gaming for Study and Career Orientation	<a href="http://www.beinvolved.nl/">http://www.beinvolved.nl/</a>	✓		✓				✓		✓	✓	✓
SHOP&DROP - love to shop, care to drop	<a href="http://www.shopendrop.nl/">http://www.shopendrop.nl/</a>	✓		✓		✓	✓	✓		✓	✓	✓
SourceIT-Mapping Resources to Increase Recycling	<a href="http://www.smileexchange.ie/">http://www.smileexchange.ie/</a>	✓		✓				✓		✓		✓

**Project title**

Tender-IT

Transformap - mapping social innovation

User Centric Energy Management for Social Housing

W4P - Crowdsourcing local social innovation

**URL**<http://tender-it.com/><http://transformap.co/><http://www.chest-project.eu/call-3-winning-projects><http://www.chest-project.eu/call-3-winning-projects>Co-design and co-creation  
(during project development)

✓

✓

✓

✓

Open Source

✓

✓

✓

✓

Knowledge sharing

✓

✓

✓

✓

Social deliberation

eActivism

Collaborative consumption

Crowdsourcing

✓

✓

✓

✓

Open Innovation

✓

✓

✓

✓

Involvement of main target  
group

✓

✓

✓

✓

Involvement of indirect users

✓

✓

✓

✓

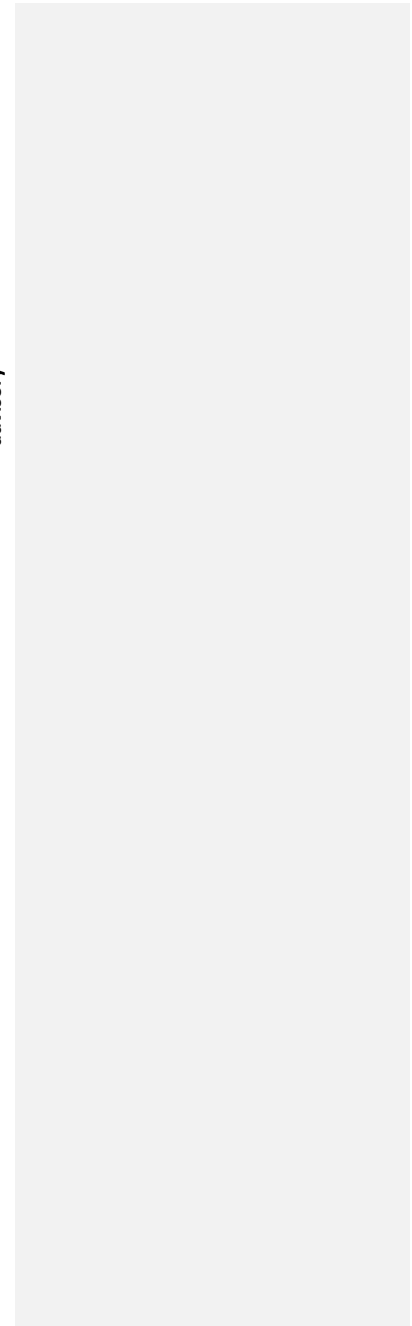
Involvement of multipliers  
communities / external  
advisory

✓

✓

✓


✓



### 2.1.1 Co-design and co-creation

Co-design is a product, service, or organization development process where design professionals empower, encourage, and guide users to develop solutions for themselves. Co-design encourages the blurring of the role between user and designer, focusing on the process by which the design objective is created. This process believes that by encouraging the trained designer and the user to create solutions together, the final result will be more appropriate and acceptable to the user. It is generally recognized that the quality of design increases if the stakeholders' interests are considered in the design process. Co-design is a development of systems thinking, which according to C. West Churchman "begins when first you view the world through the eyes of another" [CHU68]. As it is, co-design in the different research fields is tightly connected to the conception or creation of artifacts in communities context through a shared vision, social learning and mutual understanding among all key stakeholders, taking in consideration different perspectives and expectations that should be hold in consideration during the co-design process.

Co-creation is what happens when different parties together attempt to implement the co-designed solution, when the raw materials needed to do something are brought together and combined to generate something new. Working out what to do is design work; doing it is creation.

	<p><b>Call 2 winning idea: Project99</b></p>
	<p><b><a href="http://www.wegot99.com/">http://www.wegot99.com/</a></b></p>
	<p>There is a growing evidence that top-down programmes have only limited utility in connecting with young people, in part because of the rapidly changing nature of the way in which youth communicate and interact with their peers, with information resources and with the adult and professional worlds. Instead models that work together with the 'target group' and draw on their experiences, energy and ideas have much more prospect of success - e.g. see NESTA's People Powered Health Programme. It is also vital to make more positive use of the power of peer connection - Project99's preparatory work strongly confirms that with more support, young people can paly a powerful role in supporting the mental wellbeing of their peers and in guiding them to more professional supports when required.</p>
	<p>Project99 is taking a radical approach to youth participation and involvement as co-design partners. They have already successfully demonstrated that this element can yield highly sophisticated insights and prototype ideas, and they can now build on this to turn the best of these ideas into working support tools and engagement resources for and with young people. Core target audience and participant group will be all young people in the Greater Glasgow and Clyde area aged between 13 and 21, though the nature of web and digital resources means that they will inevitably reach and connect with young people outside this age range and beyond our geographical area. Project99 will employ a range of tracking, analytic and survey approaches to understand the reach and impact of the resources developed, with a view to continually refining their functionality. They will also place significant emphasis on connecting with and addressing the needs of more marginal and at risk groups of young people, again, drawing on our local service networks - such as looked after and accommodated young people, LGBT young people, users of CAMHS services and young people in disadvantaged neighbourhoods.</p>
	<p>Through the active youth involvement - adopting a coproduction and codesign approach - there will be a significant spin-off benefit of the generation of enhanced skills and confidence for</p>

participating young people. This will in broad terms be at two levels - a smaller core group of young people who are intimately involved in the codesign work (8-10 young people) and a much wider network of young people who participate through interaction with the Portal, its associated social media channels and communication outreach, for example by creating their own user-generated content, by interacting and using the support tools, by engaging in campaigns, competitions and events and through sharing awareness via their own social networks. For the core development group, Project99 will explore the potential of accrediting these skills through use of innovative methods such as Mozilla Foundation's Open Badges system.



**Call 2 winning idea: Magenta Traffic Flow**  
<http://www.magentalab.it/>

Magenta's project for participatory traffic monitoring and management implements a

LivingLab approach to co-design its solution starting right from day one with a small group of initial users (up to 20) in order to gather feedback, assess and setup the technology that will be used throughout the project. The following communities will be actively involved in the co-design processes:

1. **ImpactHub** is a co-working space part of the worldwide network of social innovation incubators. ImpactHub Firenze is hosted by Magenta's partner, Lama Agency, who is responsible of the community engagement activities of Magenta Traffic Flow.
2. **Ninux** is a wireless network community, part of a movement of the organisations that attempt to take a grassroots approach to providing a viable alternative to municipal wireless networks for consumers.
3. **Fablab** is an active community of makers based in Florence. They will help to design the data acquisition station based on open hardware that we plan to use during the campaign. They will also be part of our group of power users.

Several workshops with potential users are planned to develop the project's concept and the requirements of the target audience in a participatory way (see Figure 6). In order to open up the discussion on the project concept to a wider audience of interested stakeholders, a dedicated website and project blog has been setup to communicate project progress and to stipulate an open discussion on issues encountered during the project (<http://chest-trafficflow.magentalab.it/>). The website will also be used to engage with other organisations (both local and across Europe), to replicate the activity of the Florence pilot action.



Figure 6: Magenta TrafficFlow user workshop at the ImpactHub Firenze

### 2.1.2 Open Source

Open source technologies and social innovation have emerged at a time when it is critical to adopt inclusive, creative, multi-disciplinary approaches to solving complex social and environmental problems. Generically, open source refers to a program in which the source code is available to the general public for use and/or modification from its original design free of charge, i.e., open. Open source code is typically created as a collaborative effort in which programmers improve upon the code and share the changes within the community. Open source sprouted in the technological community as a response to proprietary software owned by corporations.

For the purposes of CHEST, we go beyond source code and define open source as non-proprietary design and decision-making and management processes that accept ongoing improvements reflecting different perspectives, capacities, approaches and priorities. By enabling horizontal (peer-to-peer), vertical (up-down and down-up) and reciprocal engagement, open source principles and methods enable large numbers of people from different disciplines to work together to solve the myriad unexpected problems that surface in large scale projects.



**Call 2 winning idea: Onodo – Network Analysis for everyone**  
<http://onodo.org/en/>

The objective is to create an open platform to enable citizens' access to verified information in an innovative visual way. Though Quien Manda is currently focused on power relations in Spain, the final platform will be replicable in other languages and contexts, allowing other stakeholders to use the technology in diverse areas like social or historical studies. Being an open source platform with a strong focus on community engagement, we expect the platform to be enlarged and enriched by a broader community of developers, journalists and social organizations.

This will include

- a) improving access and re-use of the data, by extending its API to allow integration with other open source tools like Open Refine or Gephi;
- b) combining the available data with semantic technologies to augment the quality and depth of news;
- c) advanced network analysis at the global level so that i.e the most important nodes and relations can be highlighted, distance between any two members calculated, and clusters of tightly connected members visualized;
- d) improvement of existing visualizations, allowing the creation of custom graphs which can be embedded in other websites, showing the differences between ranks of relations and entities and creating time lines to better understand information.

## Design Research Lab

**Call 3 winning idea: Hybrid Letterbox. Bridging the analog/digital gap**  
<http://www.design-research-lab.org/projects/hybrid-letter-box/>

The Hybrid Letterbox is an augmented, connected mailbox. You write a postcard, throw it into the letterbox where it is automatically digitized, visually “drops” onto the integrated touchscreen, and is uploaded to an internet platform to be spread and discussed. All digital contributions are being made available again on the letterbox through browsing on the touchscreen and the integrated printer. More and more social and political processes of our societies happen digital. Those who are not online are left out. The Hybrid Letterbox provides “digital strangers”, those who do not have access and those who do not have the skills to participate in the digital world, with the means to engage easily on internet discussion forums and the like. The Letterbox will be released open source under a Creative Commons License, which allows any urban or rural community or any individual to use and adapt it and to create new ways to participate online. Hence, this project seeks to address the challenge of developing novel forms of interaction, that bridge the gap between the digital and the analog. It aims at including those who are excluded as well as at developing innovative concepts of how to think technologically supported forms of collaboration and discourse. The Hybrid Letterbox makes it easy for users to playfully apply new technology, thus empowering a wide range of people to engage both socially and politically.

The networked Letterbox as access point to established digital platforms offers a low---threshold use, provides access to digital technologies and thereby empowers ‘digital strangers’, and reshapes the technologies through their use. By releasing the letterbox open source we encourage a diverse range of initiatives to explore possibilities, help to improve and adapt this new technology and approach the scalability for future applications.

In order to generate a significant amount of appropriations of the prototype, we plan to release it open source and to collaborate with others in implementing the Letterbox in various contexts. Already initiated contacts include a refugee initiative (having a tool for broadcasting living realities out of the camps), a NGO (enabling senior citizens to tweet) and a political party (provide novel forms of voter inclusion).

### 2.1.3 Knowledge sharing

Knowledge sharing is an activity through which knowledge (information, skills, or expertise) is exchanged among people, friends, families, communities or organizations. With the development




of new technologies, and particularly e-collaboration and communication technology, groups have evolved to encompass new forms of interaction and collaboration. Since the invention of the web, sharing of knowledge has dramatically increased. Clearly, there is an increasing willingness to share one's practices. If some of this sharing is done for commercial purpose, most of it comes purely from a will to share one's knowledge/passion, help others and be part of a community of practice. This is particularly true for the domain of Social Innovations where individuals and groups are sharing best practices for sustainable living and appropriate use of technology.

Knowledge Management Systems are abundant, yet their main focus lies on explicit knowledge which can be readily articulated, codified, accessed and verbalized. Yet, a lot of our knowledge is implicit or tacit, which means that it is difficult to transfer to another person by means of writing it down or verbalizing it. When it comes to Social Innovation aiming to change social practices, knowledge sharing needs to integrate both, explicit and tacit knowledge. Although tacit knowledge is difficult to identify and codify, relevant factors that influence tacit knowledge sharing include:


- Informal networks such as daily interactions between people within a defined environment (work, school, home, etc.). These networks span hierarchies and functions.
- The provision of space where people can engage in unstructured or unmonitored discussions, thereby fostering informal networks.
- Unstructured, less-structured or experimental work practices that encourage creative problem solving, and the development of social networks.

The successful sharing of explicit and tacit knowledge will result in collective intelligence. Moreover, collective intelligence, defined as "a self-sustaining, self-directed integrated and distributed cognitive system that involves both other humans and technology to successfully solve problems beyond the cognitive capacities of any individual outside of the larger system" [BRIA15], is a central element of social innovations. It is required because some problems require collective coordinated action that individuals cannot accomplish by themselves.



**JOURVIE** Call 3 winning idea: **Jourvie - an app for the eating disorder therapy**  
<http://www.jourvie.com/>

Patients and therapists cooperate in a way which was impossible without the use of digital technology. They can exchange important information on the rehab-status and challenges during the treatment in real time and by this increase the efficiency of the therapy. Jourvie will set up an engaged community consisting not only of those affected but also their relatives. We aim to create knowledge on a bigger scale – Jourvie can contribute to a much bigger and deeper knowledge base on eating disorders, successful therapy methods, etc. The availability of anonymous data will give an overview of which therapy approaches have led to the improvement of patient's condition. Comparing these findings can be of great value for the development of new methods for the efficient recovery process.



**GREENAPES** Call 2 winning idea: **GreenApes**  
<https://www.greenapes.com/en>

Citizens engage and take action in at least three ways: purchasing decisions (i.e. buying eco-friendly or fair-trade products), daily habits (i.e. walking, biking and using public transportation; privileging vegetarian, organic and local food; using energy efficient appliances at home) and volunteering/inspiring others. Therefore, only if we find ways to lower the barriers and increase tangible and intangible private benefits for citizens to make more sustainable choices, we can expect the majority to change. Therefore, the specific

societal challenge this project addresses is: How to engage citizens in sustainable lifestyles?

By developing a 'citizen engagement platform' (CEP), a mobile application for Apple's iOS system, a desktop application and a web page GreenApes have done the first step towards increasing the engagement of citizens into more sustainable lifestyles. GreenApes allows users to share their sustainable actions and get 'intangible' private benefits for their positive impact.

By using the citizen engagement platform (CEP) citizens will be able to make sustainability lifestyle and voluntary contributions more interesting, fun and convenient. They will be able to share and inspire friends with sustainable actions also on other social media platforms, learn from others and from the app itself, play find sustainable businesses around. Users will be able to socialize via private messaging, launch collective actions and challenges, rate sustainable products and access offers and discounts from sustainable business. Together, these every day actions will increase the level of engagement of citizens in sustainable lifestyles. NGO's will also benefit from the existence and use of the CEP to promote their mission, be known in the local community and eventually increase their volunteer base.

#### 2.1.4 Social deliberation

One step beyond sharing knowledge, social deliberation is a process of thoughtfully weighing different options leading to a group decision. Fearon defines deliberation "as the critical examination of an issue involving the weighing of reasons for and against a course of action" [FEA98]. Deliberation can involve a single individual, but the deliberative processes under discussion here involve group deliberation. Thus, social deliberation is a process allowing a group of actors to receive and exchange information, to critically examine an issue, and to come to an agreement, which will inform decision-making. It means to negotiate situations involving differing opinions where a resolution of ideas is sought, e.g., in dispute resolution, collaborative problem solving, bargaining, and civic deliberation processes. The need for this deliberative capacity is seen in all realms of human activity from international politics, to collaborative work, to mundane everyday life. Conflict and difference too often result in unsatisfactory outcomes that can be attributed to insufficient skill, or an inability to bring existing skills to bear in difficult situations. Throughout the various contexts mentioned above many of the same underlying skills and capacities are called for. Deliberation emphasizes the use of logic and reason as opposed to power-struggle, creativity, or dialog.

Two deliberative trends are most relevant to social innovation. Within the first trend, deliberative processes are viewed as tools of democratic governance. Emphasis is generally placed on the participation of civil society in government decision making (e.g. to define a problem, identify priorities, allocate resources or evaluate the implications of various policy options). Deliberation thus promotes not only conciliation between the various actors affected by a policy, the emergence of an informed and engaged public, and the taking into account of the public's perspective, but also transparency, legitimacy and accountability in decision making [LOM05]. Within the second trend, deliberative processes are viewed as tools for promoting the use of research-based knowledge to guide decision-making. Interest in this trend has grown alongside the movement to promote evidence-informed policymaking. Such deliberative processes focus on the participation of experts and decision makers and aim at building bridges between the worlds of research and policymaking. Thus, deliberation allows for the co-production and co-interpretation of research, while taking into account the decisional context [ABE03]. Despite the noteworthy differences between these trends, it is interesting to note their points of convergence. Indeed, both trends affirm the ability of deliberation to promote consensus among various actors, to build knowledge based on the cross-fertilization of knowledge and to inform decision-making.

People are increasingly engaged in online dialogue, deliberation, and collaboration. Here Digital Social Innovations provide various opportunities for increased exchange of ideas, particularly with others who we may not have a chance to engage face-to-face and to directly support participants in having higher quality and more skillful engagements. Several projects funded by CHEST aim to support higher quality online deliberation, especially by supporting social deliberative skills through software tools and features, some of which directly support participants and others, which support facilitators or mediator as they engage with participants.



#### Call 3 winning idea: Active Citizen

Active Citizen connects citizens to open big data through advanced machine learning algorithms similar to those used by companies like Facebook and Google. Citizens are in full control of their Active Citizen algorithms and their purpose is solely to help the citizens make informed decisions. The project gives citizens access to powerful artificial intelligence algorithms that look after their democratic interests online, notifies about opportunities to participate and researches the issues at stake. Active Citizen AI will reduce participation friction by giving citizens notifications and relevant information when they need it. It will also help people with similar ideas and priorities to connect with each other.

Through Active Citizen, individuals are given the possibility not only to have their say on the decisions affecting them but also to define the political agenda of their municipality or the top priorities in their organisation. They will be better informed by the power of machine learning and have more opportunities to participate. Using collective intelligence (crowd-sourcing in this case) is the best bet to be made to upgrade democracy and ensure sustainable decision-making processes. The whole community will benefit not only from making it's own decisions but also from the fact that individuals are more content if consulted on local issues. By ensuring the expression of better informed opinions and decisions, Active Citizen reinforces the feeling of being part of a community. It also helps citizens to have a real impact on decision-making which is in our view a key to fight political apathy. In addition it gives every individual the possibility to have their say on the issues affecting them. By using collective intelligence to ensure improved debate through better informed opinions and decisions, Active Citizen replies to the needs of current generations whilst enabling sustainable democratic practices which will benefit future generations.

### 2.1.5 eActivism

In its most general definition, activism consists of efforts to promote, impede, or direct social, political, economic, or environmental change, or stasis. Various forms of activism range from writing letters to newspapers or politicians, political campaigning, economic activism such as boycotts or preferentially patronizing businesses, rallies, street marches, strikes, sit-ins, and hunger strikes. Obar et al. identify two central processes underlying the phenomenon of activism: civic engagement and collective action [OBA12].

Civic engagement involves moving an individual away from disinterest, distraction, ignorance, and apathy and towards education, understanding, motivation, and action. For Ehrlich, "civic engagement means working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes" [EHR00].

Collective action then refers to the pursuit of a single goal or multiple goals by more than one individual. Collective action can take many forms, brief or sustained, institutionalized or disruptive,

humdrum or dramatic, and includes a range of activities, from voting and interest group affiliation to bingo tournaments and football matches. But these are not the forms of action most characteristic of social movements. Movements characteristically mount contentious challenges through disruptive direct action against elites, authorities, other groups or cultural codes. Central to the concept of collective action is political mobilization, a process that can involve a variety of strategies and tactics for bringing people together to effect political, social, and ideological change. The focus is often the development and maintenance of a form of social relationship between actors, individuals, and parties, with the goal of participating together in mobilization activities within the political realm, such as interest formation, community building, and forms of action [OBA12].

Recent events have heightened an already thriving interest in social media's ability to facilitate civic engagement and collective action empowering and connecting individuals as well as groups. For example, the political uprisings in Tunisia, Libya, and Egypt in 2011 saw rebels posting on Facebook and Twitter. And activist groups throughout the world increasingly rely on social media channels as effective tools for facilitating civic engagement and collective action through their potential to strengthen outreach efforts, enable engaging feedback loops, and increase the speed of communication [ibid.].



**Call 1 winning idea: RiseApp**

**<http://ideas.chest-project.eu/?q=node/251>**

RiseApp is a mobile app to share and publish media in risky situations (protests, manifestations) when Internet connection is filtered/blocked. It is privacy-aware and based on ad-hoc networks and TOR. It has two features: the first is the ability to anonymously exchange media between phones via direct wireless communications. You take pictures, keep the phone in your pocket, when anybody with the app walks close to you, you share media with him. This lowers the chance that media is lost/destroyed before being published. The second is the use of TOR (the onion routing, [www.torproject.org](http://www.torproject.org)): the first phone that reaches Internet access will safely upload all the gathered media avoiding filters, censorship and preserving his anonymity.

RiseApp is critical for all the people that are fighting for their rights. We have seen how powerful is the Internet to let the world know that there is a protest, but also to let the activists themselves organize their movement and reach their goals. That's why authoritarian regimes try to filter the access to the internet and track on-line activities to find and hit the activists. We have seen this happening in the Arab Spring, in Ukraine, and recently in Turkey, just to name a few. RiseApp will help in those critical situations where people can get arrested, do not have immediate access to the internet, and risk their life publishing contents online. RiseApp can do this using TOR, ad-hoc networks that are localized and private networks.

### 2.1.6 Collaborative consumption

A sharing economy takes a variety of forms, often leveraging information technology to empower individuals, corporations, non-profits and government with information that enables distribution, sharing and reuse of excess capacity in goods and services. Hamari et al. define collaborative consumption as a phenomenon is a class of economic arrangements in which participants share access to products or services, rather than having individual ownership. It is a "peer-to-peer-based activity of obtaining, giving, or sharing the access to goods and services, often coordinated through community-based online services" [HAM15].

A common premise for the collaborative consumption is that when information about goods is shared (typically via an online marketplace), the value of those goods may increase, for the business, for individuals, and for the community. Consequently, the sharing economy is an emerging economic-technological phenomenon that is fueled by developments in ICT, growing consumer awareness, proliferation of collaborative web communities as well as social commerce/sharing.

The collaborative consumption model is used in online marketplaces such as eBay as well as emerging sectors such as social lending, peer-to-peer accommodation, peer-to-peer travel experiences, peer-to-peer task assignments or travel advising, car sharing or commute-bus sharing. While the sharing economy appears in very different instances (open source, online collaboration, file sharing, peer-to-peer financing, etc.) and with different modes of exchange (sharing, new purchase, second hand purchase, renting, donating, bartering, swapping and lending/borrowing), they all share a number of common aspects. They have origins and growth stemming from a tech-driven culture and share the characteristics of online collaboration, online sharing, social commerce, and some form of underlying ideology, such as collective purpose or a common good [HAM15].

Collaborative Consumption is disrupting outdated modes of business and reinventing not just what we consume but how we consume. New marketplaces such as TaskRabbit, ParkatmyHouse, Zimride, Swap.com, Zilok, Bartercard and thredUP are enabling “peer-to-peer” to become the default way people exchange — whether it’s unused space, goods, skills, money, or services. Sites like these are appearing every day, all over the world and in many different areas of business. Yet, collaborative consumption has been regarded as a mode of consumption that engages especially environmentally and ecologically conscious consumers and Hamari et al. [HAM15] suggest that viewing it as a sustainable activity can lead to an increase in participation. Yet, collaborative consumption is not a niche trend, and it’s not a reactionary blip to the recession. A socioeconomic groundswell will transform the way companies think about their value propositions and the way people fulfill their needs [BOT10].



**Call 1 winning idea: ecomummy**  
**<http://ideas.chest-project.eu/?q=node/1179>**

ecomummy is an environmentally conscious and money saving mobile app which allows parents from the local area to interact and identify other parents whose children attend the same or adjacent schools.

They are then able to build a reliable and secure social community centered on helping each other with the daily school run. By creating a flexible weekly timetable (“WeeklyRun”) that is easy to interact with, parents can share the task of dropping and picking up their children from school, thereby making the school run more efficient and eco-friendly. They all share a pool of resources and take advantage of the mutual benefits.

### 2.1.7 Crowdsourcing

Crowdsourcing is often understood as the general process of obtaining needed services, ideas, or content by soliciting contributions from a large group of people, and especially from an online community, rather than from traditional employees or suppliers. This broad view leads to the blurring of the limits of crowdsourcing that may be identified virtually with any type of Internet-based collaborative activity, such as co-creation or open innovation.

Estellés-Arolas and González-Ladrón-de-Guevara argue for a more precise definition of crowdsourcing. According to them, it is a type of participative online activity in which an individual, an institution, a non-profit organization, or company proposes via a flexible open call the voluntary undertaking of a task to a group of individuals (of varying knowledge, heterogeneity, and number).

The undertaking of the task, of variable complexity and modularity, and in which the crowd should participate and bring in their work, money, knowledge and/or experience, always entails mutual benefit. The user will receive the satisfaction of a given type of need, be it economic, social recognition, self-esteem, or the development of individual skills, while the crowdsourcer will obtain and utilize to their advantage that what the user has brought to the venture, whose form will depend on the type of activity undertaken [EST12].

Crowdsourcing can involve division of labor for tedious tasks split to use crowd-based outsourcing, but it can also apply to specific requests, such as crowdfunding, a broad-based competition, and a general search for answers, solutions, or a missing person. Patients share medical experiences and problems among themselves ([www.patientslikeme.com](http://www.patientslikeme.com)) or customers provide knowledge about repairing products ([www.ifixit.com](http://www.ifixit.com)). Crowdsourcing is also linked to the open source software development ([www.joinindiaspora.com](http://www.joinindiaspora.com), [www.crisiscommons.org](http://www.crisiscommons.org)). Users contribute spatial data to create electronic maps ([www.openstreetmap.org](http://www.openstreetmap.org), [www.crowdmap.com](http://www.crowdmap.com)), or they upload pictures or report about accidents ([www.safer-streets.appspot.com](http://www.safer-streets.appspot.com)). Furthermore, ICT offers new, simple and cheap channels to attract funds, via online fundraising organizations reach young people in a cost effective way: the next generation of donors lives with the web, expecting possibilities for social engagement within the virtual world. Large NGOs are fostering this potential: Online Giving Markets ([www.betterplace.org](http://www.betterplace.org), [www.donorschoose.org](http://www.donorschoose.org)) spread around the globe and bring together donors and beneficiaries as closely as never before – sometimes even without the traditional charity organizations. Users can grant micro credits to people or organizations in need of funding (<http://uk.zopa.com>, [www.fundingcircle.com](http://www.fundingcircle.com)), artists and innovators can get their projects funded by the crowd ([www.kickstarter.com](http://www.kickstarter.com), [www.startnext.de](http://www.startnext.de)) or scientists can collect money for research projects ([www.opengenius.org](http://www.opengenius.org)). Online crowd funding is simple; it reduces administration efforts and increases transparency, potentially cost-effective way of fundraising, which addresses a young target group.

**Call 3 winning idea: MountainWatch**

<http://www.chest-project.eu/call-3-winning-projects/>

MountainWatch will develop an active crowdsourcing interface for massive environmental data collection. In fact, we propose a solution that aims at the creation of a collective intelligence solutions for monitoring the evolution of the mountain health status and for predicting important ecological and environmental phenomena, by a social collaboration (aggregation of user generated photos). Mountain image datasets were already collected in a few case studies at a very reduced scale for testing different content analysis algorithms; we propose instead to harness the love of people for mountains to gather a mass scale dataset, suitable for real life application scenarios.



**Call 3 winning idea: W4P - Crowdsourcing local social innovation**

<http://www.chest-project.eu/call-3-winning-projects/>

W4P is designed to stimulate local social innovation projects in Belgium by providing an Open Source crowdsourcing web platform to extend and enhance today's crowdfunding models. Many citizens, local organisations and community groups have great ideas and passions they want to build upon, but not the resources, knowledge or network to develop and extend these ideas. Currently there are a few local crowdfunding platforms available, but they are solely focused on gathering financial funding, while the needs of social innovation projects are far more complex. With W4P we want to tackle this problem by providing a platform

that enables citizens and organisations to ask for funding, coaching, materials, volunteers and other resources for their projects.

W4P is a one-project-per-month type platform to ensure the necessary support and coaching before, during and after each campaign while preventing overgrowth and neglecting projects. Because we want to stimulate local social innovation on a scalable level we propose to build this platform under an Open Source license, so governments, foundations and organisations can setup their own W4P platform to support their respective communities that have innovative projects. We provide the platform with which partners can integrate and we offer extra services such as technical support and coaching on how they can work with their community in making local innovation possible.

### 2.1.8 Open innovation

In the field of collaborative, distributed and participatory innovation, there are two main streams that shape what we know and use today. Von Hippel's research has established the importance of user innovation emphasizing the users' creative potentials that are used companies to design new products or services [VHI78]. On the other end of the spectrum, Chesbrough's open innovation approach relates to companies co-operating across firm boundaries in order to create and commercialize innovations [CHE03]. Lately, additional approaches have further diversified this field of research by focusing on some other aspects of innovation:

- cumulative innovation, where sharing/shared conditions are emphasized by attending to the legal and social contexts [WES08a]
- open community innovation, where the focus is on a type of organized and independent association of actors (i.e., agents) [WES08b]
- or social production and co-creation, with social aspects as the main focus [BEN06] (overlapping with other participation modalities)

The major question for both research and business is how to find and influence the enormous potential of the 'collective brain' to broaden the scope of 'open R&D'. Initially focused on the world of businesses open innovation as a way of fostering both internal and external ideas the concept is nowadays widely dispersed throughout all sectors. One of the mechanism of participation may be the competition, trying to expand internal capacity of innovation by reaching external creative people and researchers, creating a more collaborative and original approach to problem solving, using monetary prizes as lever. InnoCentive is one of the first web community trying to solve R&D problems of a wide range of industries, another solution is the competitive BootB 'Brands out of the box' (works with some of the biggest brands in the world such as Disney, UNICEF, Lego, Mondadori, Auchan, etc.). Nowadays many different and specialized platforms have emerged: 99designs run competitions for marketing and design, Quirky aims to harvest ideas for new products. In the realm of Social Innovations, Ashoka's Changemaker is hosting idea competitions. In the public sector, administrations also engage with their citizens to find the best solutions for urgent challenges (www.challenge.gov, www.peertopatent.org).



**Call 1 winning idea: CITYPLAY - Board Games For Shared Planning**

<http://ideas.chest-project.eu/?q=node/3344>

CITYPLAY is a relational art project that promotes creativity and shared planning through a board game based on

historical memory and identity. Citizens have to play for planning their reality by creating and interconnecting places and knowledge.

First of all, CITYPLAY is a virtual FabLab, in which it needs a registration to access. The website associated consists of series of section: 1) digital library, 2) virtual makerspace we want to connect to a shared 3D printer, 3) a city-blog; in which insert, implement or modify the information pertinent to the living-area we are playing (historic memory, material culture, architectural places, symbolic spaces, criticality, development, services, productions, etc.) Recording, the user will have to choose a range in which sign up based on own competence or interests; in this range a team/group of work will correspond with which he will play to CITYPLAY. People registered will not only contribute to the retrieval of archived materials that will serve to the creation of the game. Moreover, they will be involved in the elaboration and creative realization, for example choosing the places to put into play (ex: abandoned, landscape, industrial, historical interest areas, etc.), or by assembling the contents of card decks (ex: deck of problems, deck of the rising phenomenal). Once conceptually developed, the game will be finally released, calling all the teams to play it. The aim of the game will be plant a project or an innovative practice (connected to the area of interest of the group) in one of the places of the board and try to connect it in an inclusive way with that of the other teams. The originated super-project will become the winner of the contest, receiving from riverrun and from the partners of CITYPLAY a batch of services of entourage to the concrete implement of the winner idea.





**Call 1 winning idea: Open innovation platform for sustainable packaging**

<http://ideas.chest-project.eu/?q=node/3432>

We will initiate a European platform that compiles best practice cases for sustainable packaging design, hosts sustainable design competitions and thereby builds up a directory of best practice cases for sustainable packaging design.

With our crowdsourcing platform we initiate an innovation process. Companies are able to express their needs and wishes, while designers can create and upload their solutions. By enabling this exchange, we bring together innovative designers and manufacturers, thus putting the entire creative potential to use.

Through this standardized approach we enable cooperation along the value chain and create a new source for companies to get a faster access to fresh and new sustainable packaging ideas. This will lead to a project based collaboration platform as a flexible answer for skills shortage. We want to establish a marketplace for project based workforce for sustainable design. Our best-practice design directory works as a kind of reputation system. It will be a useful tool to filter ideas and designers, which is a necessary tool for working market mechanism.

We want to cover the whole value chain of packaging to enable a real solution with impact and not an isolated solution where back and forward effects are not included. Co-designed with potential customers we created three types of crowdsourcing challenges:

1. **Material challenge:** Material suppliers provide basic starter kits of material. Those are sent to designers who are asked to develop ideas of packaging solution that can be developed out of this material. Through this challenge sustainable suppliers get access to designers and new ideas.
2. **Makeover challenge:** Brands challenge the crowd to redesign their packaging in a more sustainable way. We provide a faster and cheaper tool for brands to get inspirations for more sustainable solutions.
3. **Retail challenge:** Retailers have special needs for bulk breaking and special convenience. End consumers can be integrated in the creation of ideas and this way lower the failure rate of new products.

Each type of crowdsourcing challenges focuses on a step in the packaging value chain and is charged with a fee between 4,000 and 8,000 Euros each.

### 2.1.9 Comparison of participation modalities in CHEST and other DSI platforms

As the previous sections have shown, the projects funded by CHEST cover a very wide range of different forms and processes of user involvement and engagement. Almost all projects implement at least one participation modality and a vast majority implements more than one. Throughout all three open calls some modalities are more prominent than others. Not surprisingly, crowdsourcing and knowledge sharing are the ones most widely applied by most beneficiaries. With regard to co-design and co-creation we see an increase from 60 % in Call 1 to 96 % in Call 3 and 100 % in Call 2. This shows that the measures fostering co-creation as explicitly implemented by CHEST for Call 2 and Call 3 have been effective. The same holds true not only for co-design and co-creation: collaborative and participatory approaches in general are more widespread among Call 2 and Call 3 winners. This indicates that the overall design of the CHEST open calls (as described in section 1.2.1) has been successful: while CHEST has deliberately been open to all kinds of IT-based social innovations in Call 1, the scope of Call 2 and Call 3 has been more focussed to foster collaborative approaches. Just as

most initiatives apply more than one participation modality, most of them also involve more than only one stakeholder group. Not surprisingly, almost all projects involve their main target groups in some way, and many of them also actively involve other groups as well. Here, too, we see an increase from Call 1 beneficiaries to those of Call 2 and Call 3, again indicating the success of the induced measures stipulating more participatory applications.

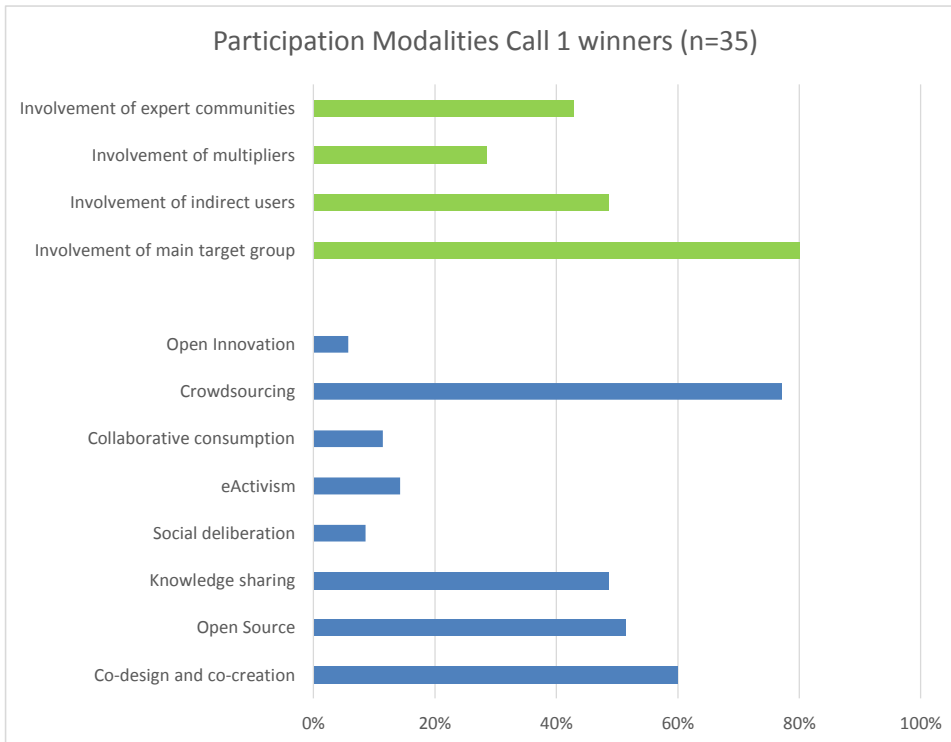


Figure 7: Participation modalities of CHEST Call 1 beneficiaries

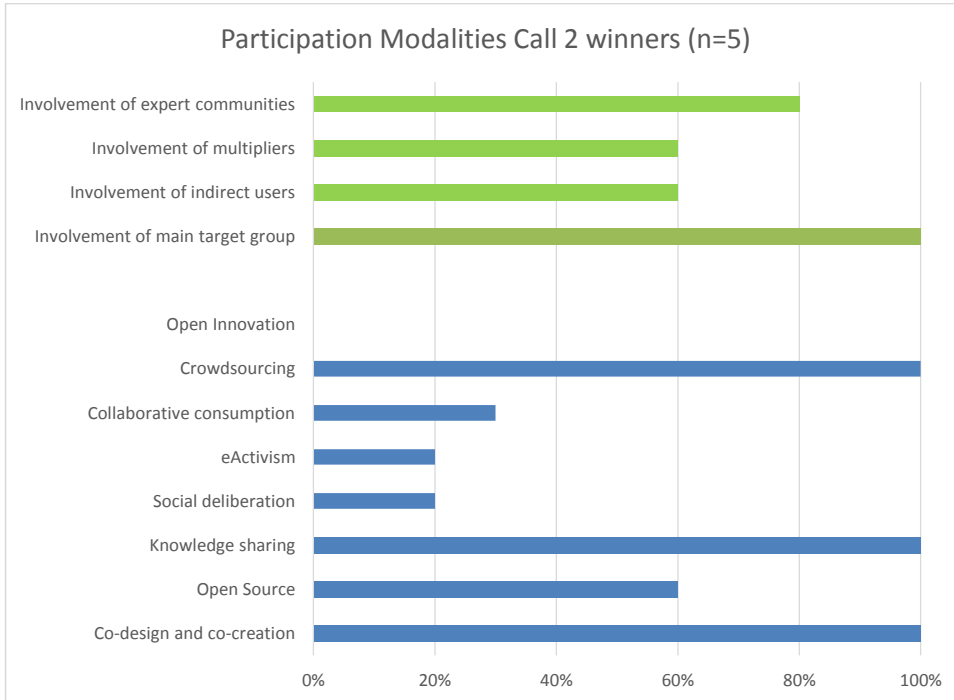


Figure 8: Participation modalities of CHEST Call 2 Beneficiaries

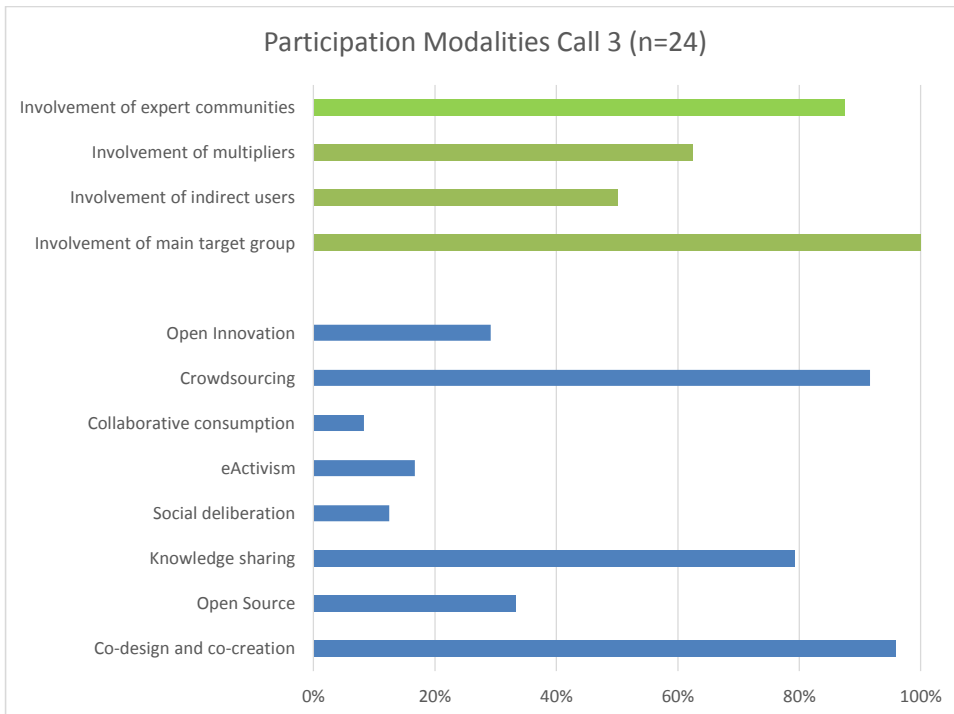


Figure 9: Participation modalities of CHEST Call 3 beneficiaries

Comparing the CHEST beneficiaries to other, well-established DSI initiatives we see already a number of similarities regarding the user involvement (see Table 9). Just like most CHEST beneficiaries, the DSI platforms in focus also involve more than only one stakeholder group. Contrary to the CHEST projects, fewer of these platforms also involve indirect user groups, which might be related to their more “superordinate” orientation in the field of Social Innovations. This is an interesting aspect of CHEST, which has managed to stimulate its beneficiaries to also include additional stakeholders that can play various important roles in supporting the primary target groups as well as in communication and dissemination of the project. The DSI platforms assessed here show a focus on processes of knowledge sharing and also on crowdsourcing (see Figure 10). Another important trend we have seen also among the CHEST beneficiaries, however, is also resembled among those platforms: they also apply more than only one participation modality. The comparison shows that a vast majority of all CHEST beneficiaries of all three calls implement processes of co-design and co-creation while only one third of the DSI platforms show an emphasis on this aspect. This fact shows that the various measures to stimulate implemented by CHEST (see section 1.2) have been successful. A similar difference is the high number of crowdsourcing modalities implemented by the CHEST beneficiaries, which is less widespread among the other DSI platforms.

Table 9: Participation modalities of selected DSI initiatives

Platform	Co-design and co-creation		Knowledge sharing	Social deliberation	eActivism	Collaborative consumption	Crowdsourcing	Open Innovation	Involvement of main target group	Involvement of indirect users	Involvement of multipliers	Involvement of expert communities
	Open Source											
<a href="http://www.changemakers.com">http://www.changemakers.com</a>			✓		✓		✓	✓	✓	✓	✓	✓
<a href="http://darwinator.com">http://darwinator.com</a>								✓				
<a href="http://www.everyaware.eu/">http://www.everyaware.eu/</a>	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓
<a href="http://www.sustainable-lifestyles.eu/">http://www.sustainable-lifestyles.eu/</a>	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓
<a href="http://spread2050.ning.com/">http://spread2050.ning.com/</a>												
<a href="http://www.purpose.com/">http://www.purpose.com/</a>	✓		✓	✓	✓				✓	✓	✓	✓
<a href="http://euclidnetwork.eu/">http://euclidnetwork.eu/</a>			✓	✓			✓		✓	✓	✓	✓
<a href="http://imaginationforpeople.org">http://imaginationforpeople.org</a>	✓		✓				✓	✓	✓	✓	✓	✓
<a href="http://www.nesta.org.uk">http://www.nesta.org.uk</a>			✓					✓	✓	✓	✓	✓
<a href="http://betterplace.org">http://betterplace.org</a>			✓	✓				✓	✓	✓	✓	✓
<a href="http://digitalsocial.eu/">http://digitalsocial.eu/</a>			✓						✓	✓	✓	✓
<a href="http://dcentproject.eu/">http://dcentproject.eu/</a>	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓
<a href="http://wikirate.org/">http://wikirate.org/</a>			✓	✓	✓		✓		✓	✓	✓	✓
<a href="http://catalyst-fp7.eu/">http://catalyst-fp7.eu/</a>	✓	✓	✓	✓			✓		✓	✓	✓	✓
<a href="http://www.decarbonet.eu/">http://www.decarbonet.eu/</a>	✓		✓	✓	✓		✓		✓	✓	✓	✓
<a href="http://www.webcosi.eu/">http://www.webcosi.eu/</a>			✓	✓	✓		✓		✓	✓	✓	✓
<a href="http://ia4si.eu/">http://ia4si.eu/</a>	✓		✓						✓	✓	✓	✓

<a href="http://www.european-observatory-for-crowdsourcing.eu/">http://www.european-observatory-for-crowdsourcing.eu/</a>	✓	✓		✓		✓		✓
<a href="http://www.usemp-project.eu/">http://www.usemp-project.eu/</a>				✓		✓		✓
<a href="http://www.p2pvalue.eu/project">http://www.p2pvalue.eu/project</a>	✓					✓		✓
<a href="https://www.campact.de/">https://www.campact.de/</a>	✓	✓	✓	✓		✓	✓	✓
<a href="http://www.avaaz.org/">http://www.avaaz.org/</a>	✓	✓	✓	✓		✓	✓	✓
<a href="https://www.change.org/">https://www.change.org/</a>	✓	✓	✓	✓		✓	✓	✓

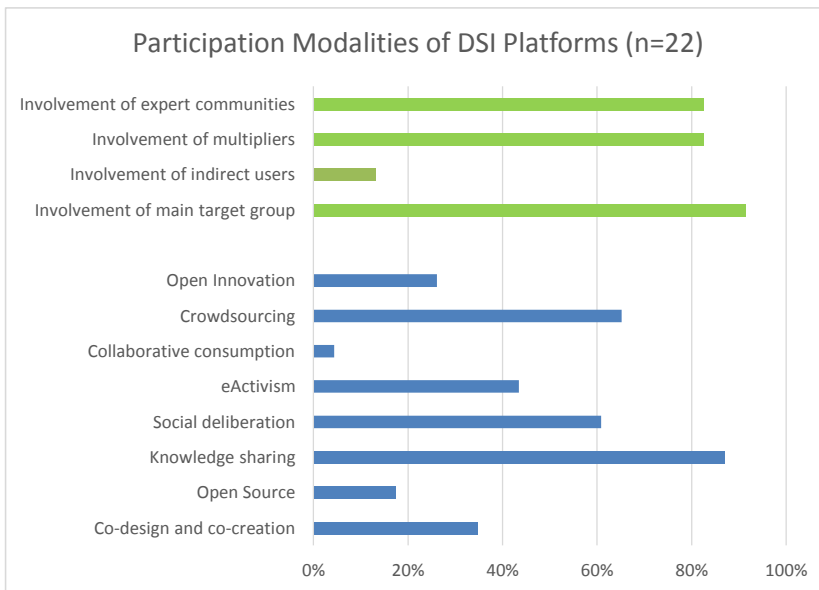


Figure 10: Participation modalities of selected DSI initiatives

## 2.2 Community building among CHEST beneficiaries

For the above-mentioned participation modalities to be effective, a vibrant community of active users is indispensable for Digital Social Innovations. The stage of the community building process of the CHEST beneficiaries largely depends on their state of maturity which is reflected in the distribution of the three calls. While all winners of the most advanced Call 2 (Call for Partners) already have a well-established community, only 20 % of Call 1 (Call for Ideas) winners do. This is not surprising as Call 1 fostered early stage ideas while beneficiaries from Calls 2 and 3 are already more advanced in their project lifecycle and consequently much more likely to having put some effort already in their community building activities. Still, even the most advanced CHEST beneficiaries are still at an early stage and consequently the existing communities of most of the projects did not have more than 1.000 members at the time of submitting their proposal to CHEST. Community building may be vital for social innovators, but it usually happens only after a solution is introduced and it also takes time to evolve. Consequently, in the course of the funding period, CHEST will put a strong focus on empowering and supporting the beneficiaries in their community building activities (see 1.2.4). The starting point for community building of the CHEST beneficiaries at the time of their proposal submission is shown in Figure 11.

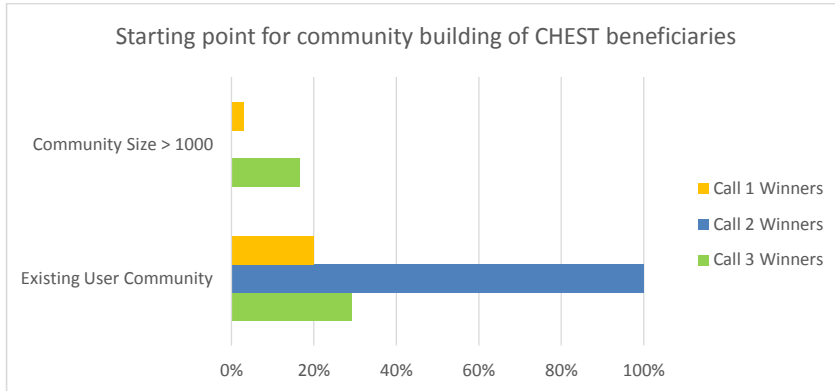


Figure 11: Starting point for community building of CHEST beneficiaries

In the course of the CHEST funding period we will support the community growth of the beneficiaries networks (taking of from their starting points) through different measures for which we are following a decentralised and bottom-up approach in which members can create their own groups and where these groups are precisely and dynamically tailored to the member’s interest. This approach provides an opportunity to advance not only the projects supported under the three call strands but also to facilitate collaborative activity, to connect entrepreneurs with funders, to share best practices, and to seek funding and sustainable new business models.

CHEST beneficiaries do not only receive substantial seed funding to implement their projects. Also we provide ongoing non-fiscal support to create awareness and to facilitate future exploitation/adoption. Two aspects are central in this support: 1. to provide guidelines for successful and effective community engagement and 2. To foster their social impact – from the project start. To do so we organised a dedicated one-day workshop with the winners of Call 2 in Berlin, March 27<sup>th</sup> 2015. For the 24 winners of Call 3 a physical meeting does not seem feasible, so we will provide the same kind of support through a webinar.

All projects will benefit from the CHEST extended community consisting of organisations and individual social innovators like incubators, social venture capitalists, NGOs, Universities, social entrepreneurs, citizens all over Europe. All project teams will be granted access to the CHEST website and provided with a dedicated blog-like project journal to publish progress and to gather feedback from the CHEST community. Each project is requested to publish project updates, achievements or problems encountered regularly and the community will be invited to give their feedback. These online debates will support the projects in order to collectively organise and progress good ideas forward.

As outlined in section 1.2.3, each beneficiary will be required to submit two reports within the project duration – an interim report and a final report. These reports set a special focus on the involvement of the respective end-user target groups right from the start of the projects fostering the co-design of the solutions developed and thereby supporting the creation of high-impact Digital Social Innovations. One measure to ensure this is the request to report on the following Key Performance Indicators related to dissemination and community engagement

Another measure to ensure community engagement is the prescribed implementation of two user-centred evaluations/concept in the course of the project. The first one in the first half of the CHEST funding period (to be reported by the beneficiaries in their interim report) and the second one at the end of the funding period (to be reported in the final report). One central goal of both evaluations (as

part of an iterative development cycle) is to identify weak spots in the actual concept/prototype design that are still challenging and provide potential for further improvements. We ask each project to provide a short summary of both evaluations (Answering central questions like: What works already? What challenging issues did you encounter? What ideas do you have to address them?). We will publish the summaries of all evaluations on a dedicated section of the CHEST website and will invite the CHEST community to discuss them in order to foster additional ideas to overcome the challenges the projects are facing.

Moreover, one of the objectives of the CHEST project is to act as a meeting place for the activation of social innovation synergies. In this perspective, CHEST will support the funded projects in disseminating their results and possible developments, putting them in contact with other similar initiatives. Just as a first example, one of the Call 2 winning projects (greenApes) was introduced by CHEST into the “International Conference on Mobile Applications for Empowerment and Social Inclusion of Immigrants”<sup>7</sup>, which took place at the Open University in London on March 16-17, 2015, organised by the European research project Maseltov. Another example of the benefit of CHEST is the close connection and collaboration between the beneficiaries. For instance, following a suggestion from the CHEST consortium, the two winning projects of Call two, Magenta Traffic Flow and GreenApes have joined forces and are working on a concept to integrate both solutions in another pilot project. Such synergies will be further facilitated by connecting the CHEST beneficiaries also to members of the CHEST community of experts and stakeholders.

As we have seen in section 2.1, many CHEST beneficiaries are implementing crowdsourcing as part of their participatory approaches. One key achievement of CHEST has been the setting up of an online crowd consisting of 4,983 users. Consequently, the CHEST online crowd will serve as a base crowd for which each project can recruit the participants for their own crowd. This module of the CHEST architecture is particularly valuable for Call 1 and Call 3 winners, of which only 20 respectively 30 % already had an own crowd at the time of proposal submission.

Following on from the successful CHEST Workshop “Co- Designing and Funding Digital Social Innovations” held on the 8<sup>th</sup> July 2014 (described in Deliverable D4.2), a further dedicated workshop will be held, this time with a focus on raising finance and supporting social innovations. The event will include presentations from investors including how to raise funds for DSI projects, details of innovation grants as well as successful case studies. Presentations from the CHEST winners will also feature. As in Berlin, attendees will also have the possibility to pitch ideas of projects for discussion and feedback. Members of the CHEST Community will be invited. This event will be held towards the end of the reporting period, location and date to be agreed. The CHEST partners also plan to stream 1-2 webinars (by M24), covering similar topics with presentations from the consortium, and the Community. The webinars will be advertised through the CHEST Community, networks of other relevant CAPS projects, social media, the project website, relevant forums. Efforts will also be made to participate at relevant events where CHEST could be promoted including small side workshops covering similar topics.

### **2.3 Technological enablers of Digital Social Innovations in CHEST**

Technology enablers comprise significant challenges as well as opportunities for social innovations. Used appropriately, cutting-edge ICT tools can increase scale and impact, and multiply positive results. Although there is a huge variety in the different types of DSI and the technologies these innovations use, Bria et al. [BRI15] identify four main technology trends: Open Data, Open Networks, Open Hardware and Open Knowledge. The tendency towards openness in any technology used for DSI is clearly visible. Yet, not all social innovators do implement open standards for their IT-based solutions. Based on an analysis of different similar idea contests and platforms specialized on Digital

<sup>7</sup> <http://www.maseltov.eu/2015/02/01/conference-on-mobile-application-for-immigrants-maseltov-2015/>

Social Innovations, in CHEST, we have developed a broader typology for fields of technology enablers used. Applicants could select up to three different fields of technology for their proposal and we see many different combinations applied by the projects. What we see in Figure 12 is that the CHEST beneficiaries cover a wide range of technologies. This reflects the broad scope pursued by CHEST: our central goal has been to support many different approaches to addressing societal challenges. And different approaches require different technological enablers. Not surprisingly, mobile and web technologies and social software solutions also play an important role among the projects as the overall CAPS programme fosters such initiatives. Interestingly, geolocation is a field that is relatively widespread among CHEST beneficiaries. Physical computing and audiovisual solutions, on the other hand, are implemented only by a few projects. This could be explained by the fact that realising such solutions might require increased resources – both monetary but also with regard to knowledge. Furthermore, what we see is that around 10 % of CHEST funded projects stated that they are going to implement a purely open source solution. Discussing this issue with the CHEST beneficiaries we have seen that many of them plan to incorporate different licensing models, partly Creative Commons licenses, partly in combination with other IPR licenses and therefore they had not stated their proposal as being open source when submitting it to the CHEST calls. As a measure for further improvement, CHEST encourages all winning projects to implement open licensing models, e.g. by incorporating Creative Commons models.

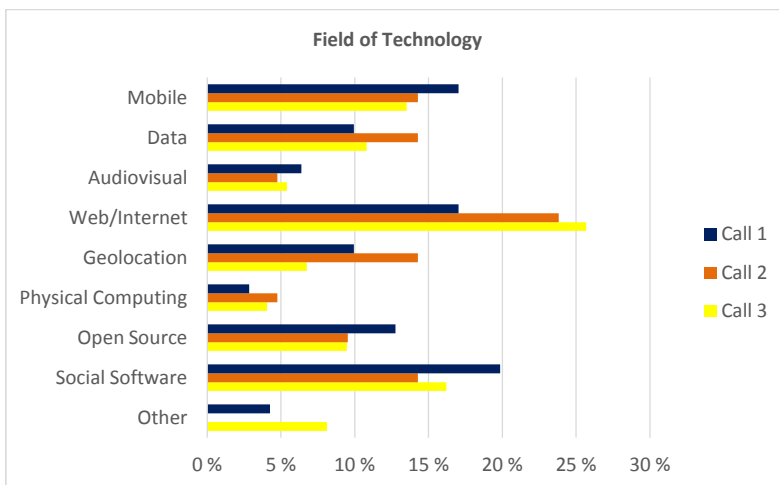


Figure 12: CHEST fields of Technology (winning proposals)

## 2.4 Societal challenges addressed by CHEST beneficiaries

Social innovations are by nature multidimensional insofar as a variety of issues is addressed as societal challenges, which entails a significant degree of diversity in terms of knowledge basis in science and technology. The complexity derives from the wide scope covered by social innovations, as societal challenges are related to demographic changes, climate change, poverty, employment, health care, education, etc. Nonetheless, the multidimensional package of existing societal challenges can be categorized along the areas of society where their main focus lies. Based on an analysis of other idea contests, expert knowledge bases and digital social platforms in the field of Social Innovations, we developed a typology consisting of seven of such categories. The results of applying this typology to classify the fields of societal challenges addressed by the CHEST beneficiaries are depicted in Figure 13. We see is a broad range of societal challenges covered indicating the successful implementation of the CHEST Social Innovation vision, which explicitly aimed to foster this heterogeneity of applications. We also see that there is no single challenge in



focus, rather there are three focal points among the beneficiaries: There is an emphasis in the area of “Civic Empowerment and Community Engagement”, which at its very core aims to increase user participation in the project at hand. The other two key fields addressed by the CHEST beneficiaries are “Environment and Sustainability” and “Knowledge Society and Education”. The other three fields, “Economic empowerment and Prosperity”, “Health and Demographic Change” and “Social Inclusion, Human Rights and Equality” are also relatively evenly represented among the beneficiaries. This balanced distribution of challenges addressed reflects the overall ambitions of the CAPS programme and shows that the CHEST strategy of exploring the full potential of Social Innovations has been successfully applied. Differences between the three Calls like the peak in “Civic Empowerment and Community Engagement” in Call 2 or in “Health and Demographic Change” in Call 3 are relatively small (with a maximum of 8-10 %) and cannot be attributed to fundamental differences between the three Calls.

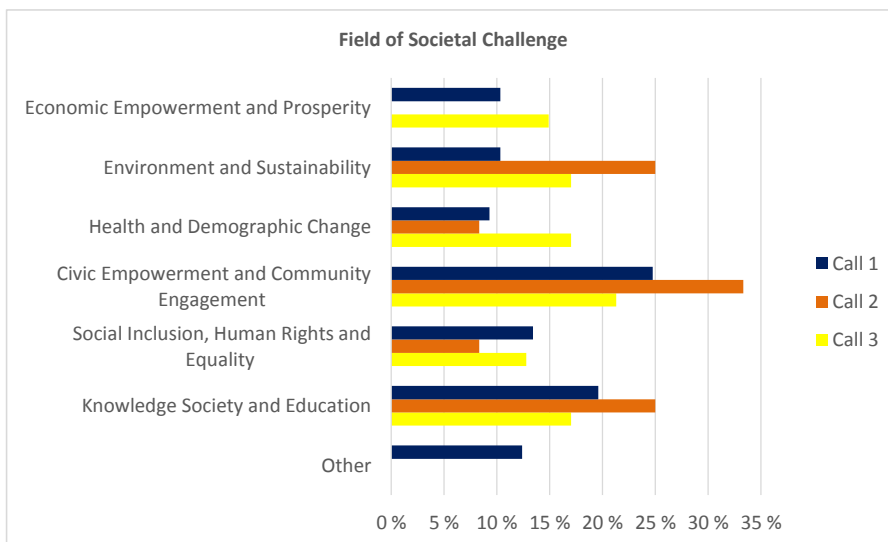


Figure 13: CHEST Fields of Societal Challenges (winning proposals)

## 2.5 Actors in Digital Social Innovations

Just as social innovations are by nature multidimensional (see section 2.4) they also involve many different stakeholders (universities, research institutes, private companies, government, civil society organisations, citizens, etc.). This calls for more research activities on multidisciplinary and promoting stakeholders’ involvement, in particular by favouring the implementation process of research priorities (while avoiding lobbyism). To do so, the development of a new governance system, in particular participative tools aiming at facilitating partnerships, is still to be strengthened in order to be effective [HAR11].

Over the last decades, new actors have emerged and challenge the current established innovation support institutions and instruments. These actors range from social entrepreneurs and enterprises to amateur scientists, International Organisations, NGOs and private foundations, and new ways to establish proper and fruitful cooperation between them have to be found. Their respective role in society has to be reshaped so that they become more effective in driving technical and social progresses. In particular, as a new actor, social entrepreneurship proves to be more and more

essential to promote this trend but still have to be fully recognized and supported by governments [HAR11].

Taking a closer look at social innovations in general and at the ones funded by CHEST, we see a large majority of these “new actors” as described by Harayama [HAR11]. Bria et al. [BRIA15] define five different types of organisations involved in supporting or delivering Digital Social Innovations. As can be seen in Table 10, 34 % of the CHEST beneficiaries fall under category three (grassroots organisations or community networks), 28 % under category one (social enterprises, charities, foundations) and 19 % under category two (business).

Table 10: Types of organizations [BRIA15] and mapping of CHEST proposals to DSI-report typology

#	Type of organisation	Form of support	No. of CHEST beneficiaries
1.	Social enterprise, charity or foundation	<ul style="list-style-type: none"> <li>Stimulate multi-disciplinary research and innovation</li> <li>Connecting top-down and bottom up movements</li> <li>Amplifying weak signals</li> <li>Supporting grass-roots movements</li> </ul>	18
2.	Business	<ul style="list-style-type: none"> <li>Delivering services</li> <li>Providing funding for experiments / R&amp;D (particular the case for large Telco organisations)</li> </ul>	12
3.	Grassroots organisation or community network	<ul style="list-style-type: none"> <li>Engaging, facilitating and expanding communities</li> <li>Democratizing access to emerging technologies</li> </ul>	22
4.	Academia and research	<ul style="list-style-type: none"> <li>Analysing trends and movements</li> <li>Providing new (fundamental) technologies and methodologies</li> </ul>	7
5.	Government and public sector	<ul style="list-style-type: none"> <li>Providing funding for experiments / R&amp;D</li> <li>Providing non-financial resources (i.e. opening up public data sets)</li> <li>Delivering or partnering with DSI services</li> </ul>	5

In order to better understand the actors involved as CHEST beneficiaries – especially among the first three types of actors – the typology above needed to be extended. The category “Business” has been split in two: “SME” and “Large” (big corporations) as well “academia and research” into “RO” (Research Organisation) and “Uni”. As Figure 14 shows, all CHEST beneficiaries that in the abovementioned typology fall under “Business” are in fact SMEs while none of them can be classified as a large corporation. This finding corresponds with a central goal of the CHEST project, namely to attract new actors to the realm of EU-funded social innovations. This goal has clearly been reached. A majority of the ideators applying for funding with CHEST are not from the “usual suspects” that normally apply for EU funding. In fact, most of them are among the “new actors”: small or medium (social) enterprises, non-profit organisations and – especially under Call 1 – even individual applicants. For example, in CHEST Call 1 we received a number of applications coming from pupils from one school in Rome, which encouraged their students to submit ideas to CHEST. Yet, throughout all three calls, we received applications from small and grassroots initiatives. Interesting is the large ratio of applicants categorizing their type of organisation as “other”, especially in Call 3.

Taking a closer look at these beneficiaries it became evident that many of them are actually emerging initiatives with the proposal submitted by individuals that at the time of applying did not have an organisational structure. Most of them, however, were considering to found either a social enterprise (SME) or a non-profit organisation for carrying out the CHEST-funded project, but at the time of applying this decision had not yet been made. Overall the analysis shows a broad spectrum of CHEST beneficiaries with all types represented apart from large corporations (which has been an explicit goal of CHEST). Apart from SMEs and non-profit organisations, which represent the majority of the winning projects, individuals, public bodies and both universities as well as non-university research organisations are among the CHEST beneficiaries.

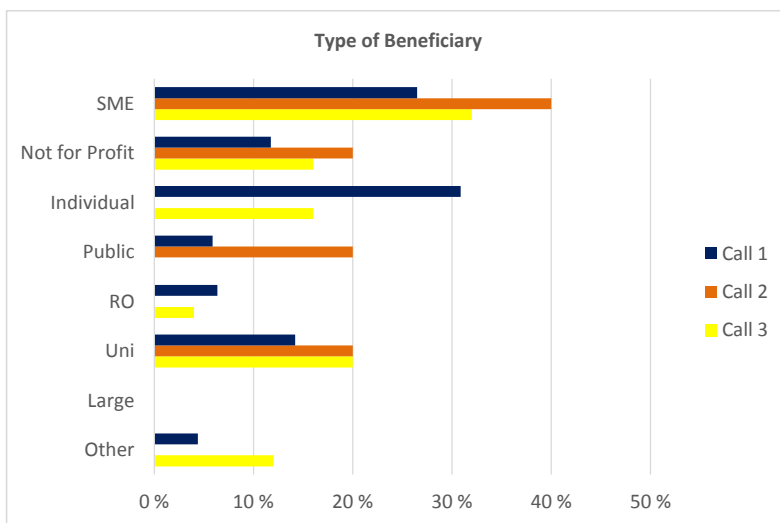


Figure 14: CHEST Type of Beneficiary

## 2.6 Crowd and community dynamics analysis

Online communities have been playing an increasingly important role in supporting grassroots initiatives in the area of social innovation and sustainability. As outlined in section 1, it is crucial for almost all Digital Social Innovations to build a vibrant community. As we have seen in section 2.2, many of the CHEST beneficiaries did not have an existing user community of substantial size at the time of applying to the CHEST open calls. Consequently, one important goal of CHEST was to set up a user crowd and community that the projects could use and activate in order to grow their own community and to increase their outreach. This is especially important as many of the projects apply crowdsourcing methodologies (see section 2.1).

In order to carry out the CHEST Call 1 with the online idea submission, commenting and voting, we have managed to set up the CHEST online crowd with 4,983 users active in the CHEST Call for Ideas: 956 different users gave 1,141 comments and 4,886 users submitted 28,718 votes. And with CHEST following an experimental approach, one important goal was to gain deeper insights into the question how online crowds and communities can be engaged and involved in innovative funding schemes. As described in section 1.2.2, the CHEST online crowd has largely been involved in the evaluation of ideas submitted to Call 1. To enable a closer look at the role of our crowd and their dynamics, we collaborate closely with CATALYST<sup>8</sup> by integrating one of their open tools in CHEST, namely Edgesense.

<sup>8</sup> CATALYST (<http://catalyst-fp7.eu/>) is an FP7 and fellow CAPS project that will develop and test collective intelligence tools and make them available, as open source solutions, to any interested communities.

Applying Edgesense within CHEST is of mutual benefit for both CAPS-projects as it also provides valuable test results for CATALYST and the further improvement of the tool. Edgesense is a social network analytics tool augmenting online conversations (such as the commenting on and the voting of ideas on the CHEST platform) with network analytics aiming to foster collective intelligence processes. It allows network managers to take a step back from their networks and assess the overall structure of the interactions going on between the users of the community as well as the evolution of these interactions over time.

Through Edgesense we were able to assess the underlying structure of the CHEST online crowd and the relations between single members or groups as well as their communications (in form of comments and voting). What we see in Figure 15 are the interactions taking place between CHEST users in form of comments on ideas and replies to other comments. Not surprisingly for a network like CHEST, the structure of the interactions largely mirrors the ideas posted with some of them receiving a high number of comments and these comments then attracting an also high number of replies. What we see is a network with different focuses resulting from 1030 comments given by 956 different users. This high share of 19% of the users actively commenting shows that the CHEST crowd is very engaged in the topics because in similar settings their share is more likely to range between 1 and 10% only. The flower-like artefacts seen in Figure 15 reflect ideas of users that attracted a huge amount of activity in form of many comments by other users. What we also see are connections between different dots showing that these users commented on several ideas. This shows that users did not only give feedback on those ideas for which they had been mobilized in the first place, but rather that initial community building with real interaction has taken place as users commented on different ideas and also on different comments given by other users. Furthermore, the fact that 171 of the 1030 comments were given by users who had also submitted an idea shows that the crowd-based process of idea generation and improvement applied by CHEST has worked: A large share of ideators reacted on the feedback they received from the crowd. The network shows that some users were able to mobilize more activity than others, and these users are also potential multipliers for the further expansion of the CHEST community. Overall, the online crowd begins to transform into a community, which can be built by the beneficiaries for the development of their projects.

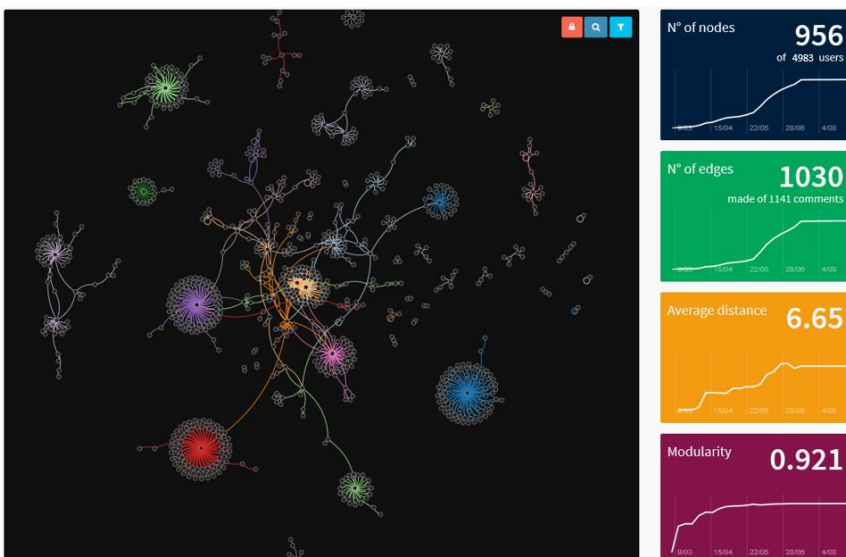


Figure 15: Edgesense view of the commenting activity of users within the CHEST online crowd

While Figure 15 shows the structure of the network based on the users' comments, Figure 16 visualizes the voting activity of CHEST Call 1. 4.886 out of 4983 users voted on different ideas, giving a total of 28.851 votes. The picture shows a very dense network with many linkages between different dots resembling the high voting activity reached in CHEST. Each dot resembles a user that has posted one or more ideas himself (the more "central" dots of the network) or voted on an idea by a certain user (the more "peripheral" dots surrounding the central dots). Similar as in the network of comments (Figure 15) the lines between the dots show the activity that links two different users through a voting. Taking a closer look at some key users of the community we see that many users that have voted on many different ideas rather than supporting only one project for which they might have been mobilized by the submitter. Figure 17 shows one example of such a key user of the CHEST online crowd who has not submitted an idea himself but has voted on many different ideas.

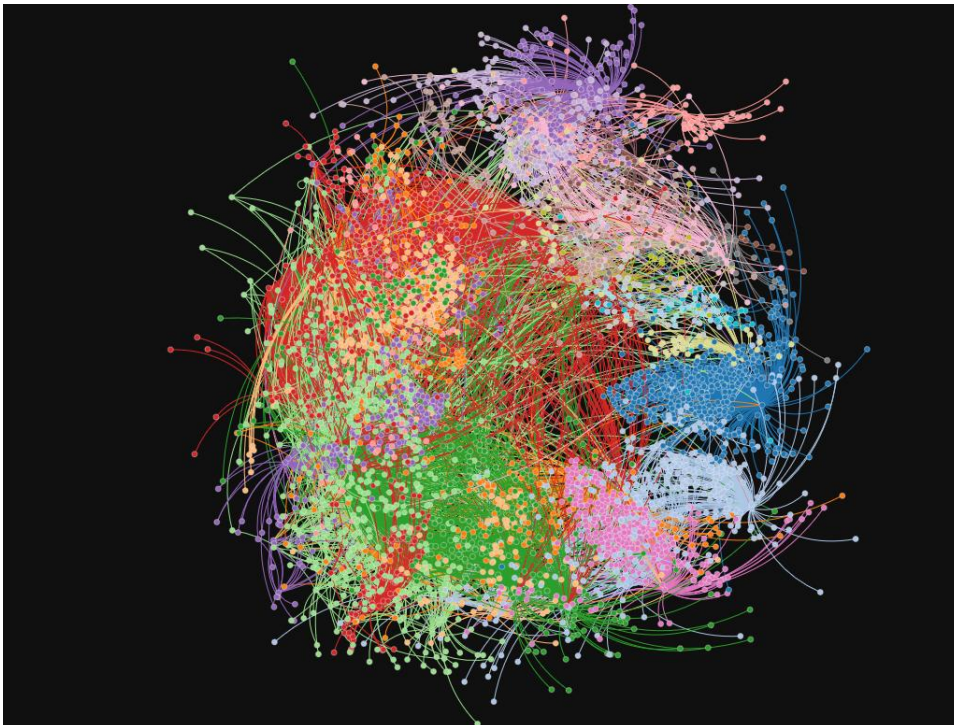
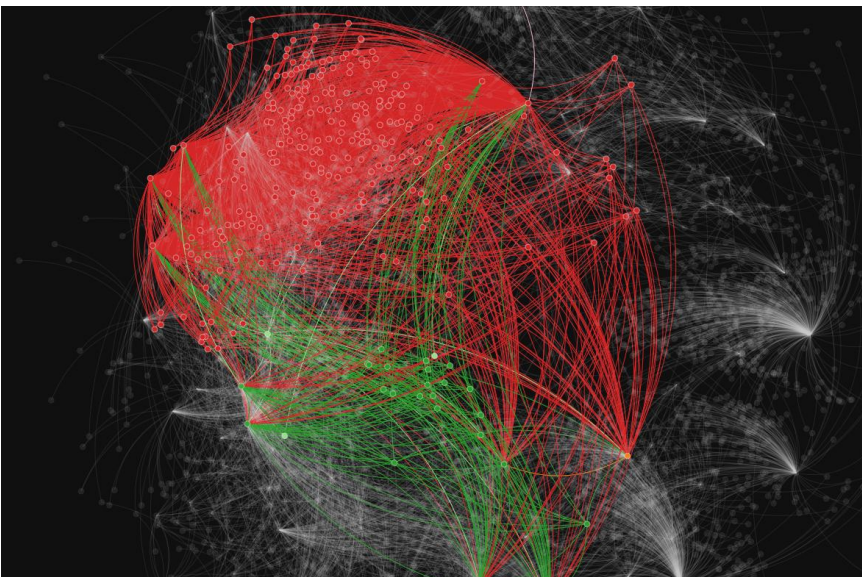


Figure 16: Visualization of the CHEST voting activity



*Figure 17: High voting activity by one key user of the CHEST online crowd*

Not surprisingly, many submissions (especially the winning ideas) gathered a strong community of supporters around their ideas. However, the example of such an idea with a strong supporting community visualized in Figure 18 shows also many connections reaching out and connecting different users, that have many links to other users, i. e. they voted on many different ideas. This means that the winners did not win because only of their supporters which they mobilized through their personal networks. In order to win they also needed to collect positive votes from other members of the CHEST online crowd.



*Figure 18: View of an idea submitted, which received extensive support from all over the CHEST online crowd*

Beyond the commenting and voting activity described above, Figure 19 visualizes the evolution of the interactions over time. On the left side we see a very high peak of activity towards the end of the idea submission phase, caused by a large number of last-minute submissions just before the deadline (which in the case of CHEST Call 1 has been May 31<sup>st</sup> 2014). On the right side we see two peaks of comments, the first one corresponding with the peak near the idea submission deadline (May 31<sup>st</sup> 2014) and a second peak at the end of the voting phase (which has been July 7<sup>th</sup> 2014).

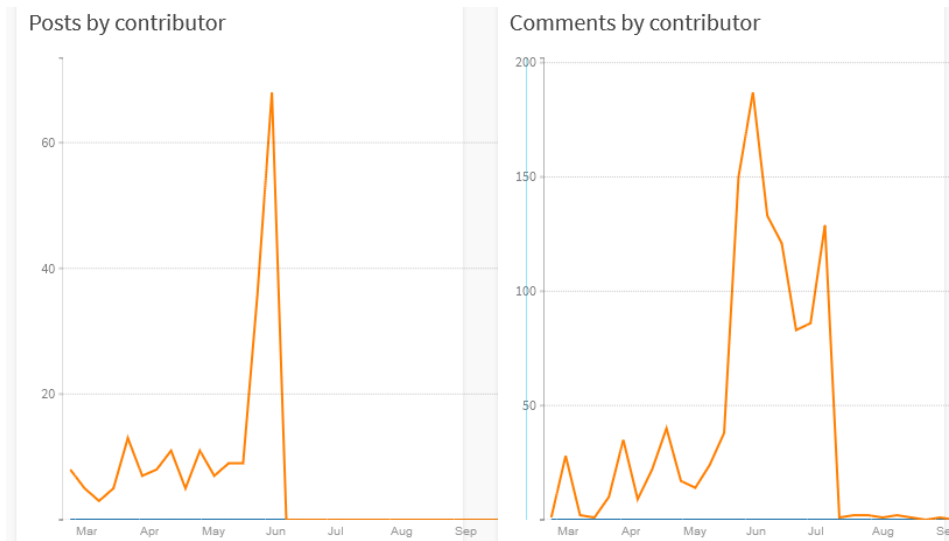


Figure 19: Activity per user over time

### 3 Privacy, ethical issues and IPR

#### 3.1 Legislative frameworks and ethical considerations on data protection and privacy

Contemporary information and communication technologies have created new modes of interaction. People now can easily communicate with each other and express themselves with a wide range of people including family, friends, acquaintances or even unknown audiences through different mediums e.g. social media. However once the content goes viral, there can be no guaranty that only the intended recipient(s) will receive it. Any IT-platform following a participatory approach must therefore ensure data protection and privacy of its users. Data privacy is the aspect of information technology that deals with the ability an organization or individual has to determine what data in a computer system can be shared with third parties. Data protection is the process of safeguarding important information from corruption and/or loss. In the context of CHEST both issues are important because applicants to the open calls had to submit not only their ideas but also a minimum amount of personal data. Going beyond the scope of the open calls, data privacy and data protection also is of crucial relevance for the CHEST beneficiaries as they implement different modalities of user participation (see chapter 2).

Projects similar to CHEST implement regulations on data privacy and data protection with different levels of strictness. AGPrize, for example, followed a rather weak approach by simply stating in its guidelines that “Any submitted materials must be the original work of a declared team member or held under a disclosed license” and that “Teams are encouraged to pursue appropriate intellectual property protection (including but not limited to patents, copyright, trademark, trade secret, etc.) to protect their entry prior to disclosure in the competition.”<sup>9</sup> A similar basic approach had been used by the Stockholm challenge for which the only paragraph on data protection in the entry rules states: “Information entered in the Basic Information and Media sections of the entry form will be made publicly available on the Stockholm Challenge Web Site as well any other communication channels used by Stockholm Challenge.”<sup>10</sup>

Such vague rules, however, do not seem suitable anymore for up-to-date participatory platforms. Especially in Europe, where the right to privacy is a highly developed area of law. All the member states of the European Union (EU) are also signatories of the European Convention on Human Rights (ECHR). Article 8 of the ECHR provides a right to respect for one's "private and family life, his home and his correspondence", subject to certain restrictions. The European Court of Human Rights has given this article a very broad interpretation in its jurisprudence.

Participatory projects which are aware of this aim to implement strict regulations on user data protection and privacy. For example, the European Social Innovation Contest ([http://ec.europa.eu/enterprise/policies/innovation/policy/social-innovation/competition/index\\_en.htm](http://ec.europa.eu/enterprise/policies/innovation/policy/social-innovation/competition/index_en.htm)) refers in its terms and conditions to regulation (EC) No 45/2001 on the protection of individuals with regard to the processing of personal data by the institutions and bodies of the Community and on the free movement of such data. This Regulation contains provisions to protect personal data processed by European Union (EU) institutions and bodies. For organisations other than EU institutions, the corresponding regulation is the European Parliament and Council Directive 95/46/EC of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data. This directive aims to ensure a high level of protection for personal data processed by automated means. In particular, such data have to be:

<sup>9</sup> <http://www.agprize.com/information-about-the-competition/rules/>

<sup>10</sup> <http://www.stockholmchallenge.org/entry-rules>



- processed fairly and lawfully;
- collected for specified, explicit and legitimate purposes and not further processed in a way incompatible with those purposes;
- adequate, relevant and not excessive in relation to the purposes for which they are collected and/or further processed;
- accurate and, where necessary, kept up to date (all reasonable steps should be taken to ensure that data which are inaccurate or incomplete in relation to the purposes for which they are collected or for which they are further processed, are erased or rectified);
- kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data are collected or for which they are further processed.

CHEST adopted the EU Data Protection Directive 95/46/EC in its guidelines declaring that all personal data (such as names, addresses and other details) will be processed pursuant to this directive. Even though it is the most up-to-date legal framework in currently in place in Europe, it does not solve all data management issues of cutting-edge Digital Social Innovations. For instance, directive 95/46/EC does not consider important aspects like globalization and technological developments like social networks and cloud computing sufficiently and the Commission determined that new guidelines for data protection and privacy were required. Therefore, the European Commission plans to unify data protection within the European Union (EU) with a single law, the General Data Protection Regulation (GDPR).

When considering the stronger data protection regime of the future GDPR, there is still much work to do in making participatory platforms like social networks fully compatible with European fundamental rights. The FP7-project USEMP<sup>11</sup> in its research therefore suggests that any such platform should not only implement the DPD 95/46/EC but to exceed its strength by following a development approach that creates legal protection by design. Privacy by Design (PbD) is an approach to systems engineering which considers privacy throughout the whole engineering process. The essence of PbD is proactiveness: To make privacy proactive, it should be embedded into software applications as the default setting. Most current privacy options are overly complicated, which means many consumers do not use them. Regulatory compliance alone is therefore unsustainable. But privacy can be built in from the beginning, which would allow users to relax about the safety of their data. And even though not explicitly mentioned in the current DPD 95/46, the terms “Data Protection by Design” (DPbDesign) and “Data Protection by Default” (DPbDefault) have a prominent place in the GDPR (Art. 23). When the proposed GDPR comes into force, DPbDesign will become an enforceable legal requirement. As suggested by the USEMP-project, CHEST therefore followed the principles of PbD throughout the project and recommends similar initiatives to follow the same approach.

**Recommendation:** For any participatory platform, in addition to relying on existing legal frameworks like the EU Data Protection Directive 95/46/EC, the principles of Privacy by Design should be considered in order to ensure data protection and privacy (source: [CAV15]):

1. **Proactive not Reactive; Preventative not Remedial**

The Privacy by Design (PbD) approach is characterized by proactive rather than reactive measures. It anticipates and prevents privacy invasive events before they happen. PbD does not wait for privacy risks to materialize, nor does it offer remedies for resolving privacy infractions once they have occurred — it aims to prevent them from occurring. In short, Privacy by Design comes before-the-fact, not after.

2. **Privacy as the Default Setting**

We can all be certain of one thing — the default rules! Privacy by Design seeks to

<sup>11</sup> User Empowerment for Enhanced Online Presence Management USEMP: <http://www.usemp-project.eu/>

deliver the maximum degree of privacy by ensuring that personal data are automatically protected in any given IT system or business practice. If an individual does nothing, their privacy still remains intact. No action is required on the part of the individual to protect their privacy — it is built into the system, by default.

**3. Privacy Embedded into Design**

Privacy by Design is embedded into the design and architecture of IT systems and business practices. It is not bolted on as an add-on, after the fact. The result is that privacy becomes an essential component of the core functionality being delivered. Privacy is integral to the system, without diminishing functionality.

**4. Full Functionality — Positive-Sum, not Zero-Sum**

Privacy by Design seeks to accommodate all legitimate interests and objectives in a positive-sum “win-win” manner, not through a dated, zero-sum approach, where unnecessary trade-offs are made. Privacy by Design avoids the pretense of false dichotomies, such as privacy vs. security, demonstrating that it is possible to have both.

**5. End-to-End Security — Full Lifecycle Protection**

Privacy by Design, having been embedded into the system prior to the first element of information being collected, extends securely throughout the entire lifecycle of the data involved — strong security measures are essential to privacy, from start to finish. This ensures that all data are securely retained, and then securely destroyed at the end of the process, in a timely fashion. Thus, Privacy by Design ensures cradle to grave, secure lifecycle management of information, end-to-end.

**6. Visibility and Transparency — Keep it Open**

Privacy by Design seeks to assure all stakeholders that whatever the business practice or technology involved, it is in fact, operating according to the stated promises and objectives, subject to independent verification. Its component parts and operations remain visible and transparent, to users and providers alike. Remember, trust but verify.

**7. Respect for User Privacy — Keep it User-Centric**

Above all, Privacy by Design requires architects and operators to keep the interests of the individual uppermost by offering such measures as strong privacy defaults, appropriate notice, and empowering user-friendly options. Keep it user-centric.

Apart from applying existing legal frameworks like the EU Data Protection Directive 95/46/EC and following the principles of Privacy by Design, there is no one-size-fits-all recommendation for the CHEST beneficiaries. Rather, as they all implement different combinations of the participation modalities assessed in chapter 2 with different goals, they all require a project-specific plan on how to implement and ensure data privacy and data protection for their respective goals and unique settings and they will be requested to define their own privacy policy in the course of the CHEST funding period.

### 3.2 Intellectual property rights (IPR)

Social Innovation along with the adaptation to participatory modes of innovation, to open models of intellectual property (IP) creates a system that allows for the exponential rise of the direct creation of value and social impact. Yet, each business and social model (commons, sharing, crowdsourcing) has different dynamics and different interests between the self-aggregating peer production community, the for-benefit institution in charge of the infrastructure of cooperation, and the ecology of businesses practicing (or not practicing) benefit sharing. Tension and problematic power relations can arise between the different spheres, and also within them. This will also be the case for the emerging open design communities — between the community of designers contributing to the design commons and the entities producing the designs physically, even though those producers can

be ‘social enterprises’ or cooperatives. The key here is the development of community-interest literacy and a literacy of participation that supports user-producer community rights, and leads to a further expansion of the sphere of Digital Social Innovations [BAU09].

Open licensing (being itself a social innovation) has redrawn the traditional battle lines between the interests of society and the interests of individual creators: it enables broader access to information while providing incentives to creators by enabling them to retain some rights over their works. Licensing models like the Creative Commons, Free Documentation and Open Publication Licenses create a freely accessible ‘commons’ of information with some rights for authors and creators.

One avenue to greater impact that has not been followed as often as it could be is requiring, or at least encouraging, beneficiaries to make any grant-funded works freely available for broad uses by others, so that those works can not only be distributed for education and research, but readily improved and built upon to create new works in a potentially unlimited trajectory. Even assuring public access just to read the works is important. To take one example, foundations often fund research that is relevant to the welfare of the world’s poorest people – who often live in countries where their own researchers can’t afford to subscribe to the journals in which the work is published. Making articles on advances in medicine available through the internet can speed the transfer of knowledge to places where it is urgently needed – often by years. Licenses that give people the right to download, print and distribute those articles, and to translate or otherwise adapt them to local needs, multiply the already-great value of simple access.

Increasingly, government agencies and intergovernmental organizations are adopting open policies for copyrightable works and data they create or commission. For example, all grants under the U.S. Department of Labor’s Trade Adjustment Assistance Community College and Career Training Program require that copyrightable materials produced be licensed under a Creative Commons Attribution license, so that those materials may be freely used by all, eliminating the need for costly replication of effort as community colleges put together courses to train workers for new jobs. Foundations have typically made the same requirement for works produced under grants to develop open educational resources, but only a few have extended the requirement to grants for other purposes. Across the EU and other international organisations (like the United Nations), open access models become more and more popular. They provide unrestricted online access to peer-reviewed scholarly research (journals, theses, book chapters, and monographs). Open access can be provided through gratis open access (online access free of charge) and libre open access (online access free of charge and with some additional usage rights). The additional usage rights of the latter are often granted through the use of various specific Creative Commons licenses.

The symbiotic relationship between open source methodologies and (Digital) Social Innovation is contributing to a renewal of civic engagement. Open source licenses allow software to be freely used, modified, and shared. They apply to IT-based solutions mainly and are therefore very relevant for Digital Social Innovations. The following

Table 11 gives an overview of selected open source licenses are popular, widely used, or have strong communities<sup>12</sup>.

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<sup>12</sup> For an extensive comparison of free and open-source software licenses, see for example [https://en.wikipedia.org/wiki/Comparison\\_of\\_free\\_and\\_open-source\\_software\\_licenses](https://en.wikipedia.org/wiki/Comparison_of_free_and_open-source_software_licenses)

Table 11: Comparison of popular open source licenses



License	Linking	Distribution	Modification	Patent grant	Private use	Sublicensing	Grants TM
Apache License	Permissive	Permissive	Permissive	Yes	Yes	Permissive	No
BSD License	Permissive	Permissive	Permissive	Manually	Yes	Permissive	Manually
Cryptix General License	Permissive	Permissive	Permissive	Manually	Yes	?	Manually
Eclipse Public License	Limited	Limited	Limited	Yes	Yes	Limited	Manually
GNU General Public License	GPLv3 compatible only	Copylefted	Copylefted	Yes	Yes	Copylefted	Yes
GNU Lesser General Public License	With restrictions	Copylefted	Copylefted	Yes	Yes	Copylefted	Yes
MIT license / X11 license	Permissive	Permissive	Permissive	Manually	Yes	Permissive	Manually
Mozilla Public License	Permissive	Copylefted	Copylefted	Yes	Yes	Copylefted	No

**Recommendation:**



In a digital world where users will increasingly engage with a culture of collaboration and instant Internet access, open content licensing will provide a vitally important facility for sharing and reshaping knowledge in the name of culture, education and innovation. While respecting the basic principle of copyright, open content licensing allows a broader understanding of information management in a way, which builds on the existing system. There can be little doubt that open content licensing has already become and will continue to be, an important option in the copyright management, distribution and utilisation of Digital Social Innovations [FIT15].

When designing an idea contest, you should leave the intellectual property rights to submitters while require or at least encourage the usage of open licensing models: We believe that in almost all cases, Digital Social Innovations will have more impact on the societal challenges they aim to address if they are published under an open license.

One model of open licensing which is popular, widely used, and has a strong community, are the creative commons (CC). The CC licenses all grant the "baseline rights", such as the right to distribute the copyrighted work worldwide for non-commercial purposes, and without modification. The details of each of these licenses depends on the version, and comprises a selection out of four conditions<sup>13</sup>:

	Attribution (BY)	Licenseses may copy, distribute, display and perform the work and make derivative works based on it only if they give the author or licensor the credits in the manner specified by these.
	Share-alike (SA)	Licenseses may distribute derivative works only under a license identical to the license that governs the original work.

<sup>13</sup> For details, please refer to <https://creativecommons.org/>

	Non-commercial (NC)	Licensees may copy, distribute, display, and perform the work and make derivative works based on it only for noncommercial purposes.
	No Derivative Works (ND)	Licensees may copy, distribute, display and perform only verbatim copies of the work, not derivative works based on it.

Just as with data privacy and data protection, the exact ways of handling of intellectual property rights among the CHEST beneficiaries depends on the project-specific requirements and goals. In the course of the CHEST open calls, we did not explicitly require applicants to submit their ideas implementing an open licensing model, yet many of our applicants did so. Still, in order to increase the application of open licensing models among, in the course of the projects monitoring (see 1.2.3) we will require each beneficiary to define their respective license model applying creative commons licenses.

## 4 Recommendations

### 4.1 Recommendations for social innovators

Analysing the large number of applications to the CHEST open calls we derived the key lessons for social innovators listed in Table 12. These lessons learned contain experiences from many different ideas coming from very different actors. As we have seen in section 2, they address a large variety of societal challenges, use different technological enablers and participation models to engage with their users. Furthermore, we analysed the results from face-to-face meetings and workshops with expert communities and stakeholders, in events held with our applicants and beneficiaries and also by assessing the lessons learned different similar projects like TEPSIE or digitalsocial.eu. Table 12 contains the CHEST key recommendations at the time of writing; the list of recommendations will continue to grow as the beneficiaries' projects evolve during the funding period.

Table 12: Recommendations for Social Innovators

Issue Description	Recommendation
<p><b>Definition of the Societal Challenge</b> Problems need to be recognised. Innovators need to fully understand the societal challenge addressed and the causal chain that is at its core. Too often, the actual problems are hidden, marginalised or they consist of many different problems and it is not clear which of these should be addressed first to maximise outcomes and impacts. Or there is a belief that nothing can be done about them. Much research is about bringing problems to light. Many politics is about getting problems a hearing. Many innovations are triggered by new data and research.</p>	<p>In recent years, there has been a rise in the use of mapping techniques to reveal hidden needs and unused assets. Mapping needs to estimate the existence, nature and distribution of the actual and potential need for goods and services, specifically where the need is a social need. There are multiple approaches, including:</p> <ul style="list-style-type: none"> <li>• crowd-based problem identification,</li> <li>• co-design,</li> <li>• stakeholder workshops</li> <li>• surveys,</li> <li>• the use of social indicators,</li> <li>• sociodemographic datasets,</li> <li>• open data solutions</li> <li>• community sensing and crowdsourcing approaches</li> <li>• 'Voices of the Poor' projects.</li> </ul> <p>The Young Foundation's Mapping Needs Project<sup>14</sup> has developed a comprehensive set of quantitative and qualitative methods. These aim to understand underlying causes – for example looking at the importance of 'adaptive resilience' in explaining why some individuals, families and communities cope well with shocks while others do not. Ideally, innovators should use a mix of methods combining classical top-down approaches with user-centered and bottom-up methods (e. g. crowd-based problem identification, community sensing, etc.) as many CHEST beneficiaries do.</p>
<p><b>Community Building</b> Social Innovations need a vibrant community in order to be successful.</p>	<p>Develop a clear strategy to build your community:</p> <ul style="list-style-type: none"> <li>• Describe your target groups and your envisioned community. What are your</li> </ul>

<sup>14</sup> <http://www.youngfoundation.org/our-work/research/themes/social-needs/mapping-needs/mapping-emerging-and-unmet-needs>

<p>Building such a community from the beginning on is a major challenge.</p>	<p>project's main goals and which role does the community play in reaching them?</p> <ul style="list-style-type: none"> <li>• If possible, don't start from scratch. Rather consider ways to build on existing communities and grassroots networks. Identify and engage relevant multipliers that help you to grow your community. Connect with communities from initiatives like CHEST or digitalsocial.eu to maximise your outreach.</li> <li>• If possible, create a combined online and offline community that fits your project goals.</li> <li>• Think of ways to engage with your community and encourage them to invest time in your network. The modalities of participation provided in chapter 2.1 contain ideas to increase user engagement.</li> </ul>
<p><b>Ethical issues and data privacy</b> Especially for Digital Social Innovations ethical issues and data privacy are crucial. Projects striving for a social good while not acknowledging the risks related to sharing personal information are jeopardizing their credibility.</p>	<p>Implement existing regulations on data protection and privacy (like DPD 95/46/EC), but exceed its strength by following a development approach that creates legal protection by design. Privacy by Design (PbD) considers privacy and defines it as the default setting throughout the whole engineering process.</p>
<p><b>User involvement for co-design</b> Social Innovations can tackle societal challenge successfully only if the causes of the problem and the needs of the target groups are completely understood by the social innovator.</p>	<p>Users are often best placed to identify their own needs and come up with ideas about how best to meet them. Following an iterative development cycle right from the project start (co-design) and implementing a user centred and participatory design approach is an important methodology that puts users at the heart of the design process. Find out as much as possible about the needs of your target groups. Constantly test your idea with them and implement their feedback in constant improvement loops of your solution. Empower your target groups to create ideas of solving the problem at hand themselves. There are many different and easy to use techniques available to carry out such early-stage evaluations taking place even before a running system is available (using click-demos, mockups or paper) – for example<sup>15</sup>:</p> <ul style="list-style-type: none"> <li>• Scenario-based testing</li> <li>• Wizard-of-Oz prototyping</li> <li>• Paper prototyping</li> <li>• Video or Experience Prototyping</li> <li>• Roleplaying / Acting-out scenarios</li> <li>• Simulations</li> <li>• Game techniques</li> </ul>

<sup>15</sup> An extensive list of suitable techniques and their descriptions can be obtained from <http://www.ucc.ie/hfrg/projects/respect/urmethods/methods.htm>

<p><b>Facilitating participation</b></p> <p>There is a range of techniques for engaging participants in effective and meaningful ways. It is challenging to turn physical meetings and workshops into productive and creative places where new ideas first come into people’s heads.</p>	<p>Face to face meetings and other forms of working together in shared physical environments remain one of the most important forms in generating commitment to innovations, they are decisive in shaping ideas and building support. Increasingly technologies of all kinds are helping to transform meetings combining online and offline participation, enabling people to interact verbally, visually, and through simulations:</p> <ul style="list-style-type: none"> <li>• Crowd-based idea generations and assessment</li> <li>• User innovation toolkits</li> <li>• On-site events and conferences for networking and learning</li> <li>• Virtual meetings and conferences as well as Webinars are a fairly simple device for organising seminars over the web</li> <li>• Web-discussion forums are a classical way of engaging online participation, increasingly sophisticated tools like DebateHub<sup>16</sup> support collaborative approaches to project development</li> </ul> <p>Different participation modalities require different amounts of effort and take place on different levels. It is advisable to begin with lighter, low-barrier, less-effort modalities (mainly online approaches crowd voting and commenting, web discussion forums, etc.) and then move to more complex and direct forms of participation demanding more effort and commitment (like physical workshops for idea generation or solution evaluation). Select and design a mix of different approaches tailored to different requirements of your target groups.</p>
<p><b>Social Impact Monitoring</b></p> <p>All social innovators aim for social impact, i. e. changes in the lives of their target groups or in society at large achieved by the products or services they offer. Measuring these impacts, however, remains a central challenge.</p>	<p>There are two different approaches to social impact monitoring and steering recommended by CHEST:</p> <ul style="list-style-type: none"> <li>• Especially for small teams and young initiatives, we recommend the Social Reporting Standard SRS<sup>17</sup>, which focuses on the logic chain from Input to Impacts. SRS is very helpful in completely understanding the societal challenge addressed and in designing high-impact solutions. SRS with its modular, adoptable structure reduces reporting complexity while ensuring effective impact documentation.</li> <li>• For the selection and definition of project-</li> </ul>

<sup>16</sup> <https://debatehub.net/> is developed by the CAPS-project CATALYST to give online communities a place to raise issues, share ideas, debate the pros and cons and vote contributions in order to collectively organize and progress good ideas forward.

<sup>17</sup> The Social Reporting Standard SRS (<http://www.social-reporting-standard.de/en>) is a monitoring framework common in the non-profit sector enabling projects to make comparable judgements about their social impact.



	<p>specific Key Performance Indicators (KPIs), the methodological framework of the IA4SI project<sup>18</sup> provides a valuable source of information. It is a very detailed tool supporting the in-depth analysis of different aspects of Social Innovation projects.</p> <p>As we have seen in CHEST, both approaches should be integrated in the project development process as early as possible as they not only serve as ex-post tools but rather help to design as well as to periodically evaluate and improve any solution right from the beginning thus maximising its social impact.</p>
<p><b>Innovative business models</b> Turning a good idea into something sustainable outside of the public sector depends on a business model – a clear idea of how it will generate a sufficient income stream that covers more than costs. Effective supply and effective demand need to be brought together. Effective supply means that whatever is being provided has been shown to work and to be cost-effective. Effective demand refers to the willingness of someone to pay for what's on offer, which may be a public agency or the public themselves but includes also other forms of financing like sponsorships, combined models, etc.</p>	<p>The business concepts of the social economy require as much care and creativity in their generation as the social ideas. The two are best developed together to sustain and reinforce each other. For social enterprises, the business model represents a strategy for sustainability. It needs to be simple, persuasive and striking, since along with the social idea, it is a key part of a venture's attraction. Business models that work are themselves a prime area for social innovation. They are as diverse as business models in commercial markets, ranging from direct service provision to commissioners, through models that create value for customers to models similar to those around the web that share knowledge and intellectual property. There are many ways and tools to develop a business model, among them the Business Model Canvas is one that is recommendable also for Social Enterprises as it facilitates the identification of a value proposition which can differentiate between different forms of value (social value, business value, etc.)</p>

## 4.2 Recommendations for policy makers

Among the CAPS projects driven by the European Commission, CHEST is an experimental project aiming to explore new ways of fostering the widest possible range of social innovations coming from the widest possible range of ideators rather than from the usual suspects, which usually apply to EU funding schemes (e. g. universities, large research organisations, big corporations, etc.) As outlined in section 2, CHEST succeeded in attracting a large number of applications from very different actors with a majority coming from small grassroots organisations, social entrepreneurs and individual applicants and covering a wide spectrum of project maturity from initial idea to prototype development to applications ready for deployment. Compared to most other EU funding schemes, the amount of funding for each beneficiary has been rather small ranging from € 6.000 up to € 150.000 in the range of pre-seed and seed funding (see chapters 1.2.2 and 2.5 as well as deliverable

<sup>18</sup> IA4Si (Impact assessment for Social Innovation - <http://ia4si.eu/>) is a CAPS project aiming to adapt well experimented socio-economic impact assessment methodologies to the specific field of digital social innovation and to offer online tools for impact self-assessment, enabling projects to understand and improve their impacts. The IA4SI methodological framework is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.

D1.4). Being very novel in many aspects, not surprisingly CHEST has been facing many challenges in the course of the project, which were unforeseeable at its beginning. Appropriate solutions to tackle these challenges had to be found when they occurred. Our experiences in solving the occurring issues can provide valuable insights for implementing similar initiatives in the future and are listed in Table 13.

Table 13: Recommendations for Policy Makers

Issue Description	Recommendation
<p><b>Seed funding for Social Entrepreneurs</b> Most grassroots initiatives and social start-ups succeed in raising small amounts of pre-seed funding ranging between € 5.000 to € 15.000 (through friends and family, crowdfunding campaigns, etc.) When introducing viable solutions to the market and the need for financing reaching larger amounts of € 250.000 or more, funding from venture philanthropists becomes more readily available. There is a large gap and the strong need of seed-funding opportunities in between € 50.000 and € 250.000 as both experts and social innovators from the CHEST community confirm the.</p>	<p>As members of our expert panel (social innovators, business angels, venture philanthropists, funding agencies) confirmed, CHEST with Call 2 (€ 60.000) and Call 3 (€ 150.000) addressed exactly this huge gap in funding opportunities while there is a strong need for this range of seed-funding. The landscape of funding schemes for social innovators should be enriched with more instruments filling the gap between € 50.000 and € 250.000 funding.</p>
<p><b>Inclusion of the widest possible range of applications</b> The goal of any open call should be to attract the widest possible range of applications from as many different applicants or applicant groups (and not from the usual suspects only) and with a high diversity in project size, maturity, novelty and geographic reach.</p>	<ul style="list-style-type: none"> <li>• Open Call design should aim to address projects of different sizes at different stages of the project life-cycle and with different funding volume requirements. An example of how this can be achieved are the funding levels of CHEST Call 1 (funding initial ideas with up to € 6.000), Call 2 (prototypes with up to € 60.000) and Call 3 ('market-ready' solutions with up to € 150.000) have been appropriate for the initiatives targeted.</li> <li>• Ensure broad dissemination beyond the already established communication channels by developing a systematic communication strategy, e. g. like the one successfully applied by CHEST: <ul style="list-style-type: none"> <li>○ Identify target countries / regions</li> <li>○ Communicate and disseminate the open call to direct target groups (potential applicants)</li> <li>○ In order to maximise outreach in an efficient and effective way, research key stakeholders and relevant institutions (multipliers)</li> <li>○ Communicate through them to act as multipliers into their region leveraging network effects</li> </ul> </li> </ul>
<p><b>Application process design</b> Grassroots initiatives and social start-ups usually don't have the knowledge and resources to apply</p>	<p>Funding schemes aimed at grassroots initiatives and social entrepreneurs should provide a clear and straightforward application process. It should</p>

<p>for funding schemes which require a lot of effort and place high bureaucratic hurdles when chances of success are unknown or small.</p>	<p>be as simple as possible requesting only the minimum information necessary and should support applicants in structuring and filling in their proposal. The CHEST guidelines for application and the design of the application forms<sup>19</sup> have received very positive feedback from the applicants and can serve as an example for similar funding schemes. For example, the CHEST application forms were perceived as very clearly structured and as simple as possible. Applicants also quoted that the explanation of the information required has been very helpful and that the gateway question (as incorporated in the Call 3 guidelines) is an effective way to determine whether or not the proposal meets the scope of the Call.</p>
<p><b>Leveraging applicants' enquiries</b> Irrespective of the quality of open call guidelines and application formats there will always be a large number of enquiries and questions received from applicants, which need to be handled timely and appropriately.</p>	<p>When running an open call, online tools will facilitate the support for applicants while reducing the administrative effort for the call organizers. Above all, a Frequently Asked Question section is advisable, from where all applicants can benefit from answers already given to others. Additionally, a standardised inquiry form could help to pre-structure the questions asked. As we have seen in CHEST, any communication with applicants and beneficiaries requires personal addressing and handling. The personal resources necessary to meet this requirement have to be planned when designing similar calls. In the case of CHEST the operational resources for this important task have been very limited and not sufficient, a gap which has been closed by bringing in own additional resources from the consortium. Consequently, more effort and budget should be foreseen for similar future initiatives.</p>
<p><b>Application quality</b> Apart from a large number of submissions, the success of any open call initiative in the end depends on the quality of the proposals it receives. The challenge is how to ensure the highest possible quality of submissions.</p>	<p>The higher the average quality of submissions the better the chances of any funding scheme to select the best of the best proposals with less effort necessary. Providing as much support to potential submitters as possible is recommended. In CHEST we have seen that especially hands-on methodology workshops with potential applicants lead to high-quality submissions. Webinars and online training videos (like the ones provided by CHEST) could serve the same purpose while increasing the outreach of the measure.</p>
<p><b>Financial Management of Beneficiaries</b> Delegating project funding involves the</p>	<p>Possible ways to address this issue could include:</p> <ul style="list-style-type: none"> <li>• The EC proposes a schema (self-declaration</li> </ul>

<sup>19</sup> Available at <http://www.chest-project.eu/calls-for-proposals/>

<p>transferring of financial risks. The current EC mechanism according to which the project coordinator acts on behalf of the Consortium doesn't properly fit all cases, such as sub-contracting many new beneficiaries, which are unknown to the project consortium.</p>	<p>or similar) with constraints and requirements to be fulfilled by applicants.</p> <ul style="list-style-type: none"> <li>• The EC, provided that the above requirements are fulfilled, relieves the project coordinator of financial risks with respect to new beneficiaries.</li> <li>• Otherwise, the EC sets up a special procedure, lighter and faster than usual inclusion of new project partners, to take on the financial responsibility of new beneficiaries.</li> </ul>
<p><b>Beneficiaries monitoring and support</b> Existing funding schemes provide limited to no support beyond the financial resources. Successful applicants, however, also often need access to knowledge and networks for their initiatives to scale and outreach. CHEST monitors and steers projects by providing knowledge and support to community building and Social Impact assessment as well as with regard to administrative issues and European outreach, but has only a very limited budget for this important task.</p>	<p>For the overall success of any funding scheme, it is advisable to provide extensive support for their beneficiaries beyond the mere provision of budget. Project monitoring and steering is essential to align each project to the scope of the call. Especially for DSI initiatives, through Social Impact monitoring and reporting as well as community building activities are crucial to be steered and supported by the call organizer as well as the access to existing knowledge and networks. Policy makers should foresee substantial budget for such supporting activities, which highly increase the impact of any open call.</p>
<p><b>Ensuring the selection of the best proposals</b> An effective, timely and cost-efficient evaluation of a large number of submissions to open calls is a challenge in itself.</p>	<p>The CHEST proposal evaluation and selection process (described in detail in deliverable D1.4) has been effective and efficient resulting in a broad portfolio of high-quality beneficiaries (as acknowledged also during the first CHEST review meeting). The following lessons can help to design similar open calls accordingly:</p> <ul style="list-style-type: none"> <li>• The results of the crowd and community dynamics analysis (section 2.6) show that an online voting and crowd- evaluation process as for CHEST Call 1 ideas can be a cost-efficient and highly engaging alternative / addition to expert evaluations. Yet, voting biases are not completely avoidable. Therefore, crowd voting should be applied only for calls with small pre-seed funding budgets where manipulation incentives are rather low.</li> <li>• The expert evaluation process for Calls 2 and 3 worked well due to a good spread of assessors in terms of location, gender and core competencies. In order to cope with possible discrepancies between single evaluators in a cost-efficient and timely way, CHEST applied a simplified version of the Delphi-methodology:             <ul style="list-style-type: none"> <li>○ Each proposal has been assessed</li> </ul> </li> </ul>

	<p>independently by 3 evaluators</p> <ul style="list-style-type: none"> <li>○ In case of major discrepancies in their verdicts, each of them were provided all 3 evaluations and asked to re-assess their own judgement based on the judgement of the other 2 evaluators.</li> <li>• For small scale funding schemes with limited administrative resources providing mainly seed finance (as in CHEST) the need to follow typical FP7 format involving a consensus meeting should be assessed thoughtfully.</li> </ul>
<p><b>Last minute submissions</b>          In CHEST, like the majority of national and EU funding programmes, around 50% of all applications were received just before the deadline – irrespective of the strong recommendation for applicants to not wait with submission to the very last minute.</p>	<p>To cope with this hardly avoidable issue, it is important to plan the technological and the human resources accordingly. In CHEST we ensured the smooth operation by providing extra human resources at the hours before the submission deadline. Depending on the submission format and technology, the system for the application process should be designed scalable and with the according capacity to handle peak times of proposal submissions.</p>

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EUC13	European Commission: <i>Guide to Social Innovation</i> . Available at: <a href="http://ec.europa.eu/regional_policy/sources/docgener/presenta/social_innovation/social_innovation_2013.pdf">http://ec.europa.eu/regional_policy/sources/docgener/presenta/social_innovation/social_innovation_2013.pdf</a>
MIL14	Millard, J., Carpenter, G. (2014): <i>Case study analysis report of online collaboration and networking tools for social innovation. A deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe" (TEPSIE)</i> , European Commission – 7th Framework Programme, Brussels: European Commission, DG Research.
OBA12	Obar, J. et al. (2012): <i>Advocacy 2.0: An Analysis of How Advocacy Groups in the United States Perceive and Use Social Media as Tools for Facilitating Civic Engagement and Collective Action</i> . <i>Journal of Information Policy</i> 2 (2012): 1-25.
PHI08	Phills Jr., J. A.; Deiglmeier, K.; Miller, D. T. (2008): <i>Rediscovering Social Innovation</i> . Available at: <a href="http://www.ssireview.org/articles/entry/rediscovering_social_innovation/">http://www.ssireview.org/articles/entry/rediscovering_social_innovation/</a>
WES08a	West, J., & O'mahony, S. (2008): <i>The Role of Participation Architecture in Growing Sponsored</i>

	Open Source Communities. <i>Industry and Innovation</i> , 15(2), 145–168.
WES08b	West, J., & Lakhani, K. R. (2008): Getting clear about communities in open innovation. <i>Industry and Innovation</i> , 15(2), 223–231.
VHI78	Von Hippel, E. (1978). Successful Industrial Products from Customer Ideas. <i>Journal of Marketing</i> , 42(1), 39–49
YOU21	The Young Foundation (2012): Social Innovation Overview. A deliverable of the project: “The theoretical, empirical and policy foundations for building social innovation in Europe” (TEPSIE), European Commission – 7 <sup>th</sup> Framework Programme, Brussels: European Commission, DG Research.

## 6 Annexes

### Annex I: Current draft of interim report template for social impact monitoring

#### 0. Purpose of this report

The structure of this report is partly based on the format suggested by the Social Reporting Standard SRS (<http://www.social-reporting-standard.de/en>) standardizing the regular work documentation of organisations run by social entrepreneurs, non-profit organisations, and other organisations with a social purpose (such as social businesses) – for funders, investors, partner organisations, and the public. The catalogue of Key Performance Indicators assessing the social impact is based on the methodological framework of the IA4SI project<sup>20</sup>. Throughout the report we ask you to be brief and to stick to the recommended lengths indicated for each section.

<b>Ch. 1</b>	<b>Implementation of organizational structure</b>	In the first section you should describe a brief description of the organisational structure of your project, namely the organisations, individuals, and cooperation partners involved in carrying out your project.
<b>Ch. 2</b>	<b>Implementation of your solution approach</b>	<p>Section 2 will take a closer look at your “market” by researching in depth the societal problem you’re addressing and outlining explicitly how your solution is aiming to solve it.</p> <p>The reader should be able to</p> <ul style="list-style-type: none"> <li>• understand the problems you have identified,</li> <li>• what you assume to be their causes and</li> <li>• how you intend to address these causes.</li> </ul> <p>The identification of the actual or imminent problem which is to be remedied represents a key aspect of impact-oriented reporting. For this purpose, it is important to describe the social problem at hand. In this part you should also describe your specific activities during the first 5 months of the funding period and develop an initial plan to scale your prototype.</p>
<b>Ch. 3</b>	<b>Measuring your Social Impact</b>	<p>Section 3 focuses on the social impact you aim to achieve. You should describe the social changes for the individual target groups which can be observed as a consequence of your activity.</p> <p>As measuring social impact can be challenging, this section of the report will guide you to define a set of key performance indicators (KPIs) for your project. First, you’ll find a pre-defined list of indicators which apply for all CHEST beneficiaries. These indicators cover 3 different dimensions:</p> <ul style="list-style-type: none"> <li>• Online community building</li> <li>• Access to information</li> <li>• Knowledge sharing</li> </ul> <p>Second, you will be guided in the process of defining your project’s specific set of additional indicators that meet your individual needs. These KPIs should be selected to cover your main impact area(s):</p> <ol style="list-style-type: none"> <li>3. Social impact areas (including ecological impacts) <ul style="list-style-type: none"> <li>1.1 Impact on community building and empowerment</li> <li>1.2 Impact on information</li> <li>1.3 Impact on ways of thinking, values and behaviours</li> </ul> </li> </ol>

<sup>20</sup> IA4SI – Impact Assessment for Social Impact ([www.ia4si.eu](http://www.ia4si.eu)) is a research project supported by the Seventh Framework programme of the European Commission. The IA4SI methodological framework is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.



		<ul style="list-style-type: none"> <li>1.4 Impact on education and human capital</li> <li>1.5 Impact on employment</li> <li>1.6 Impact on environment</li> <li>1.7 Impact on civic and political participation</li> <li>1.8 Impact on policies and institutions</li> <li>4. Economic impact areas             <ul style="list-style-type: none"> <li>2.1 Users' economic empowerment</li> <li>2.2 The economic value generated by the project</li> </ul> </li> </ul> <p>For each indicator you should then set realistic target values. In order to facilitate the involvement of your target users in co-designing your prototype and to assess a sub-set of your KPIs, we finally ask you to carry out an early stage test of your envisioned prototype / concept with your target group(s).</p>
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## 1. Implementation of organizational structure

*This section aims to provide a brief description of how you implement your project. You should describe the maturity of your project, its organizational structure as well as the individuals, and cooperation partners involved in implementing your prototype.*

### 1.1 Maturity of your project

*It is helpful for the reader to understand the current state of your application development, e.g. by referring to the following phases.*

- *Idea/seed phase: No solution has been implemented yet.*
- *Pilot phase: Phase in which various proposed solutions are tested.*
- *Growth phase: The proposed solution has been implemented by the organisation, usually first on a local or regional basis. The focus is on spreading the proposed solution, either by way of own growth or via cooperation with partner organisations.*
- *Mature/establishment phase: The organisation is known for its proposed solution and has reached financial sustainability. The target groups are reached on a regular basis.*
- *Expansion and renewal phase: The organisation turns to additional or different objectives. Reasons may be that its approach is not (or is no longer) sufficient for solving the social problem or because the approach is losing relevance (e.g. because certain services are now included in regular government services or because the context of the problem has changed).*

*Recommendation: Stay between 100 and 200 characters.*

[...]

### 1.2 Organizational structure

*In this section, please describe the structure of how you implement your project, which tasks are fulfilled by which unit as part of the overall activity. Please specify how many individuals are involved in the activity and indicate whether they are permanent employees, freelancers, or volunteers.*

*Recommendation: Stay between 500 and 1000 characters.*

[...]

### 1.3 Key personnel

*The purpose of this section is to provide the reader with an overview of the key individuals involved. Please decide freely which and how many individuals are relevant. In addition to providing biographical details, please consider the following aspects:*

- *Motivation*
- *Relevant experience and skills, for instance in relation to initiating activities or establishing companies/organisations*
- *Leadership experience*
- *Expert knowledge of the particular subject area, experience with regard to the target groups*
- *Specific qualifications relevant to the approach*

*Recommendation: Stay between 1000 and 3000 characters for each person.*

[...]

#### **1.4 Partnerships, cooperations, and networks**

*The partnerships and cooperations in which your project is involved are key parts of your positioning and effectiveness. Please provide details on the following aspects:*

- *Partners (individuals, organisations, other CHEST projects / other Digital Social Innovation initiatives, public authorities, memberships in networks, government and EU workgroups, and professional associations, etc.)*
- *Subject and goal of the partnership*
- *Contractual basis of the partnership (e.g. contractual agreement, memorandum of understanding, verbal agreement)*
- *Strategic significance of the partnership*

*Please also report details concerning relevant changes which have taken place during the reporting period.*

*Recommendation: Stay between 500 and 2000 characters for each partnership.*

[...]

## 2. Implementation of your solution approach

Please describe the context of the problem you intended to solve and your specific approach to solving the problem. The reader should be able to **understand the problems you have identified, what you assume to be their causes and how you intend to address these causes**. The identification of the actual or imminent problem which is to be remedied represents a key aspect of impact-oriented reporting. For this purpose, it is important to describe the societal problem at hand (“children in Germany do not exercise sufficiently”), rather than stating a social concern or demand (“children in Germany should exercise more”).

We define a “societal problem” as any social need that you intend to address and for which you have created an activity, programme, project or product. Social problems include ecological and environmental problems.

In any of the following sections a dedicated focus lies on **the new insights you have gained during the reporting period**. Please describe in which ways your understanding of the problem has changed during this project. Wherever possible, please highlight your lessons learned over time.

### 2.1 The societal problem

#### 2.1.1 Description of the problem

In order to be able to understand the specific solution proposed, the reader must be aware of your understanding of the social problem, its context, and the underlying causes. Please elaborate on the following points:

1. Which specific problem did you intend to solve? The social problem should be described as specifically as possible. If several problems can be identified, they should be prioritized based on importance.
2. Who is affected by the problem? Please describe in detail who is affected by the problem and how so.
3. How has your perception / understanding of the problem changed during the reporting period (lessons learned)?
4. How has the social problem itself evolved over time? What is the current situation (your **baseline scenario**)? How will the problem develop in the future if no action is taken?
5. What are the underlying causes of the problem? Please describe interdependencies of different causes.

Describing interdependencies between different causes is crucial. Only with this knowledge will readers understand your specific approach to solving the problem.

*Recommendation: Stay between 2000 and 5000 characters.*

[...]

### 2.1.2 Scale of the problem

*Readers can more easily assess the relevance of the problem and the effectiveness of your proposed solution if you provide information regarding the problem's scale:*

1. *How many people are affected by the problem? Please describe the European dimension of the problem. Depending on the type of problem you are dealing with, it may be useful to provide additional information concerning the scale of the problem (e.g. size of the area, percentage or number of people affected in the case of environmental protection activities).*
2. *Has the scale of the problem changed during the reporting period? If possible, please also provide estimates for the likely future development.*
3. *What social consequences have already occurred, and what costs have been incurred by society as a result? What do you expect to be the consequences and costs if the problem remains unsolved?*

*Any information should be as specific as possible and quantified where possible. Please list any sources used.*

*Recommendation: Stay between 2000 and 5000 characters.*

[...]

### 2.1.3 Previous approaches to solving the problem

*It is likely that other attempts have already been made to solve the social problem. Please describe how and with what success others have previously attempted to solve the problem. This helps the reader to understand and assess your proposed solution. You can also explain why and in what respect these previous approaches have not been sufficient for solving the problem. If there have not been any previous attempts to solve the problem, it can be useful to explain why this might be the case.*

*Recommendation: Stay between 500 and 2000 characters.*

[...]

## 2.2 Your approach to solving the problem

### 2.2.1 Solution approach – what do you intend to achieve and where do you start?

*Please describe the ideal state of the situation that you aim to achieve: What is your long-term objective which provides the central motivation for your activity? Has this objective changed during the reporting period?*

*Please also provide a brief description of your fundamental approach. In section 2.1.1 you have explained the causes of the problem. This section asks you to detail which point in the causal chain leading to the problem your project addresses – and what in general you intend to achieve. What is the added value you offer to the respective target groups and in which form (products, services, tools, etc.)? This brief description of your impact chain enables the reader to understand how your project contributes to solving the problem.*

*Recommendation: Stay between 2000 and 5000 characters.*

[...]

### 2.2.2 Target groups

*Here you describe who you intended to reach with your activity. Your direct target group comprises those individuals your proposed solution addresses directly such as the participants of a workshop. In addition, there may be individuals who benefit indirectly from your activity such as the children of parents who take part in a parenting programme. Your target group may also include influencers and intermediaries such as journalists or teachers you approach in order to ensure that your idea is spread and your objectives are met.*

*There may be several different groups of individuals or institutions on all three levels. Please focus on those groups of individuals that are particularly important.*

*Please provide the following information for your target groups:*

- 1. Who belongs to the respective target group?*
- 2. How large is the respective target group?*
- 3. What are the concerns and goals of the members of the respective target group? Which of these concerns or goals can be realized or attained by way of your activity?*
- 4. If possible, please highlight new insights you gained with regard to your target groups during the report period: Did you identify new target groups in the past 6 months? Did your target groups change in some ways?*

*Recommendation: Stay between 500 and 1000 characters for each target group.*

[...]

## 2.2.4 Activities and work performed

*In appendix 1 of this document you'll find a set of templates to describe your specific activities during the first 6 months of the funding period (comprising the resources employed and the work performed by your team and partners). Please use these templates to provide the following information:*

- *A concise description of the work performed for each work package*
- *Describe any management concerns and activities to recover the situation*
- *Detail any publications, publicity or other dissemination activity.*
- *Summarise the project progress against deliverables, noting any discrepancies against the Project Plan and action to recover situation if necessary*

*Recommendation: The length of this section largely depends on the structure of your work so a specific recommendation is not suitable. You should stick to brief, but concise descriptions mentioning all important aspects of your work.*

[...]

## 2.3 Implementing your route to market

*As the goal of CHEST Call 2 is to support the development of applications that are market-ready / ready for deployment, a central part of your project is the implementation of your route to market. Please describe how you intend to spread your proposed solution. The central questions you should answer here are:*

- *How you intend to take your prototype to the next level of maturity after the CHEST funding period?*
- *Which other sources of financing are you going to use?*
- *How are you planning to reach your target groups?*

*Please focus on the mechanisms used to spread your approach. In many cases, however, you will not be able to implement your solution in other locations yourself. Instead, you may collaborate with local or regional partners or approach local providers and ask them to implement your approach independently. Some projects spread certain activities or services. Others enable, educate or empower third parties to use a method themselves. Or they spread an attitude or an idea. Please describe as detailed as possible, what exactly you spread. There is a wide range of possibilities for spreading and scaling solutions – from the publication of knowledge and experience to licensing or expansion of your own activity by growing your organisation. You can use the following examples for your description:*

- *Open distribution: You provide experience and knowhow to third parties either for a fee or free-of-charge but do not influence the local implementation (except through advice and/or assistance). The following are three strategies which are frequently used for open distribution:*
  - *Publication of results via brochures, manuals, web sites, or public presentations*
  - *Training and consulting*
  - *Definition of standards, possibly also accreditation*

- *Open source / creative commons licensing models for your prototype / final solution*
- *License and/or social franchise models: You collaborate with independent partners who are responsible for implementing the activity locally, but are bound by a (contractual) agreement. For instance, partners are permitted to use your knowhow, brand, and other intellectual property. At the same time, they may be required to take part in trainings or even undergo regular certification, to meet quality standards or pay fees or charges for services that you provide.*
- *Networks and cooperation approach: Your own activity can also be spread by forming or joining a network or by entering into cooperation with other organisations in the market.*

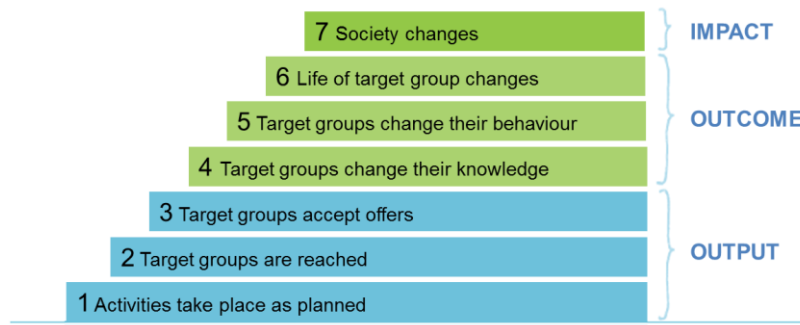
*Recommendation: Stay between 2000 and 5000 characters.*

[...]



### 3. Measuring your Social Impact

In chapter 2 you have described the societal problem you are addressing. In this section we ask you to report on the social impact you anticipate for the individual target groups as a result of your solution – and the extent to which you succeed in realizing your objectives. To understand the concept of social impact, the distinction between resources used, work performed, and impact has proven useful:



Adopted from Kursbuch Wirkung, Phineo gAG

#### 3.1 Your expected social impact

Impacts are defined as the social changes which can be observed as a consequence of the output of your activity. Ecological impacts are also considered as social impacts in this context. Impact can affect the individuals directly addressed. For instance, changes in the behaviour of parents attending parental training. Changes (impacts) may also affect some groups indirectly such as the children of parents who have participated in parental training. In certain cases, it is also possible to specify results on the level of society. For instance, it may be possible to quantify a re-socialisation programme's cost savings for the whole economy due to a particularly low relapse rate or the carbon dioxide savings that result from an energy-saving campaign.

Please describe the social impact you anticipate for the individual target groups as a result of your activity!

Recommendation: Stay between 2000 and 5000 characters.

[...]

Based on this description you should derive a set of useful indicators (Key Performance Indicators, KPIs) which help you to measure your social impact – and to set your specific goals for these indicators. In many cases, it will be difficult to directly measure the impact of your activity. However, appropriate indicators that are known to be closely connected with your intended effects will allow you to make statements about the effectiveness of your activities – even if you are not able to ultimately prove causality, it will be helpful to explain why you derive the effectiveness of your activity from certain indicators. In order to facilitate this process we have pre-defined a list of common indicators which each CHEST beneficiary should report:

**Commento [MB1]:** Aus Kap 2 Indikatoren  
Tatsächlich erreichte Indikatoren-Werte

Table 14: Common indicators for all CHEST projects (see also appendix 2)

Dimensions	Example Indicators	Variables	Target value	Measured value
ONLINE COMMUNITY BUILDING	User involvement in prototype evaluation / test usage	Number of target groups involved in co-design process		
		Number of users involved in co-design process		
		Ratio between men and women involved		
		Ratio between young, adult and old people involved		
ACCESS TO INFORMATION	Project self-evaluation of its capability to influence information asymmetries	Project self-evaluation of its capability to influence information asymmetries (e.g. access to sources of information that represent a range of political and social viewpoints, access to media outlets or websites that express independent, balanced views, etc.)		
	Number of tools/activities developed by the project for influencing information asymmetries	Number of tools/activities developed by the project for influencing information asymmetries		
KNOWLEDGE SHARING	Sharing through CHEST website	Number of entries in project blog on CHEST website		
		Number of comments / replies on project blog entries on CHEST website		
	Sharing through social media channels	Quantified measure of followers on selected social media channels (e. g. twitter followers, facebook friends, etc.)		
		Quantified measure of communications on selected social media channels (e. g. number of project tweets and re-tweets, etc.)		
<i>e.g. IMPACT ON CITIZENS/USERS POLITICAL PARTICIPATION</i>	<i>e.g. Instruments developed by the project offering new channels/way of political participation</i>	<i>e.g. Number of instruments developed by the project offering new channels/way of political participation</i>		
<i>e.g. IMPACT ON ACCESS TO</i>	<i>e.g. Impact through crowdfunding</i>	<i>e.g. Money attracted by the project through crowdfunding</i>		

FINANCE				
...	...	...		

In addition to this list of indicators common for all CHEST beneficiaries we ask you to define those indicators that best suit your project (from the catalogue of additional indicators, appendix 3). In order to do so, you should first choose your primary and your secondary social impact area and then identify at least 3 different indicators for each impact area that are most suitable for your project. If suitable, you can in addition also choose an economic impact area and similarly identify at least 3 different indicators for that area. The social and economic impact areas are listed below:

1. Social impact areas (including ecological impacts)
  - 1.1 Impact on community building and empowerment
  - 1.2 Impact on information
  - 1.3 Impact on ways of thinking, values and behaviours
  - 1.4 Impact on education and human capital
  - 1.5 Impact on employment
  - 1.6 Impact on environment
  - 1.7 Impact on civic and political participation
  - 1.8 Impact on policies and institutions
2. Economic impact areas
  - 2.1 Users' economic empowerment
  - 2.2 The economic value generated by the project

In appendix 3, you will find an extensive catalogue of potential indicators for each impact area. If non or not enough of the indicators listed in appendix 3, you can also define your own indicator(s) according to your needs.

For each indicator, please define a target value you aim to achieve at the end of the funding period and fill the following table with your set of indicators for each impact area!

Social Impacts				
Dimensions	Indicators (Examples)	Variables	Target value	Measured value
<i>Impact on community building and empowerment, for example:</i>				
LOCAL COMMUNITY BUILDING	Project self-assessment of its capacity to foster the creations and the enlargement of local communities/groups	Project self-assessment of its capacity to foster the creations and the enlargement of local communities/groups	[...]	[...]
[...]	[...]	[...]	[...]	[...]
<i>Impact on information, for example:</i>				
QUALITY OF INFORMATION	Instruments provided by the project allowing	Number of instruments provided allowing users to verify the quality of the information he/she access to	[...]	[...]

	users to verify the quality of the information he/she access			
[...]	[...]	[...]	[...]	[...]
<i>Impact on ways of thinking, values and behaviours, for example:</i>				
CHANGE IN BEHAVIOURS	Topics where changes in behaviours are expected to happen	Topics where changes in behaviours are expected to happen	[...]	[...]
[...]	[...]	[...]	[...]	[...]
<i>Impact on education and human capital, for example:</i>				
TRAINING PROVIDED BY THE PROJECT	Training efficiency	Hours of training provided by the project	[...]	[...]
[...]	[...]	[...]	[...]	[...]
<i>Impact on employment, for example:</i>				
IMPACT ON JOB CREATION (DIRECTLY DEVELOPED BY THE PROJECT)	New job places generated	Number of persons recruited specifically for the project	[...]	[...]
[...]	[...]	[...]	[...]	[...]
<i>Impact on environment, for example:</i>				
PROJECT IMPACT ON ENVIRONMENTAL BEHAVIOURS RELATED TO THE GREENHOUSE GASES ISSUE	Project self-assessment of its capability to provide easier access to innovative solutions for low carbon technologies	Project self-assessment of its capability to provide easier access to innovative solutions for low carbon technologies	[...]	[...]
[...]	[...]	[...]	[...]	[...]
<i>Impact on civic and political participation, for example:</i>				
IMPACT ON CITIZENS/USERS POLITICAL AWARENESS	Project self evaluation of changes in the time spent by users in getting informed about local, national	Project self evaluation of changes in the time spent by users in getting informed about local, national and international political issues	[...]	[...]

	and international political issues			
[...]	[...]	[...]	[...]	[...]
<i>Impact on policies and institutions, for example:</i>				
PROJECT CAPABILITY TO INFLUENCE POLICIES AND INSTITUTIONS	Number of policy recommendations produced by the project	Number of policy recommendations produced by the project	[...]	[...]
[...]	[...]	[...]	[...]	[...]

*Economic impacts*

<b>Dimensions:</b>	<b>Indicators (Examples)</b>	<b>Variables</b>	<b>Target value</b>	<b>Measured value</b>
<i>Users' economic empowerment, for example:</i>				
IMPACT ON ENTREPRENEURSHIP AND INCOME GENERATION FOR THE USERS	Project self-evaluation of its capability to support the creation of entrepreneurial initiatives by users	Project self-evaluation of its capability to support the creation of entrepreneurial initiatives of its users	[...]	[...]
[...]	[...]	[...]	[...]	[...]
<i>The economic value generated by the project, for example:</i>				
ECONOMIC RESULTS	Project self-evaluation of increasing the resource pooling of the users	Project self-evaluation of increasing the resource pooling of the users	[...]	[...]
[...]	[...]	[...]	[...]	[...]

While some indicators will be only quantifiable once your prototype is finished, others can be assessed already during the development phase. One way to allocate their values is an early concept or prototype test / evaluation. One key prerequisite to achieve a high impact in developing Digital Social Innovations is the user-centred design involving your target users right from the project start (co-design). Following an iterative development cycle, we ask you to carry out such a concept test / prototype evaluation involving your target users already within the first 5 months of your funding period. There are many different and easy to use techniques available to carry out such early-stage evaluations (user analysis, concept test, etc.) taking place even before a running system is available (using click-demos, mockups or paper) – for example:

- Scenario-based testing (<http://www.cs.pomona.edu/classes/cs181f/supp/scenariotest.html>)
- Wizard-of-Oz prototyping (<http://www.ucc.ie/hfrg/projects/respect/urmethods/wizard.htm>)
- Paper prototyping (<http://www.paperprototyping.com/what.html>)

- Video Prototyping  
(<http://www.ucc.ie/hfrq/projects/respect/urmethods/video.htm>)

Choose an applicable methodology (for possible methods other than the few stated above please take a look at <http://www.ucc.ie/hfrq/projects/respect/urmethods/methods.htm>) and carry out an evaluation/test of your envisioned prototype/concept testing a suitable sub-set of your indicators (selecting some but not all indicators identified for your project under section 3.2) – you should at least provide following information (Dimension: Online Community Building, Indicator: User involvement in prototype evaluation / test usage):

- Number of target groups involved in co-design process
- Number of users involved in co-design process
- Ratio between men and women involved
- Ratio between young, adult and old people involved

Please provide a brief summary of the evaluation results and describe those areas (indicators) for which the prototype will be well suited – and the weak spots you found where further improvements in the requirements or early design will be necessary. The goal here is not to show that your idea is already perfect. On the contrary: As your project is new and innovative, it is very likely that in interacting with your target groups by testing your idea with them you will encounter unforeseen critical issues. Please describe these issues and provide your ideas to address them. In order to help you solve these problems we will involve the experts of our CHEST community providing you with feedback and ideas so please be brief but clear in your description.

*Recommendation: In addition to assessing the values of the KPIs you measured, please stay between 3000 and 5000 characters in the description of your evaluation.*

[...]

## List of KPIs to choose from

Below you'll find a catalogue of possible indicators to assess different areas of social impacts. Not all of them are suitable for your prototype. Please choose your primary and your secondary social impact area and then identify at least 3 different indicators for each impact area that are most suitable for your project. If applicable, you can in addition also choose an economic impact area and similarly identify at least 3 different indicators for that area.

### 1. Social impact areas (including ecological and political impacts)

#### 1.1 Impact on community building and empowerment (additional indicators)

Dimensions	Indicators	Variables
ONLINE COMMUNITY BUILDING	Change in time spent on the platform by users	Time spent by the users, on average
		Change in time spent on the platform by users
ONLINE COMMUNITY EMPOWERMENT	Number of groups spontaneously created by the users	Number of groups spontaneously created by the users
		Self-assessment on project capability to influence trust among users
		Sharing of personal data among users
LOCAL COMMUNITY BUILDING	Project self-assessment of its capacity to foster the creations and the enlargement of local communities/groups	Project self-assessment of its capacity to foster the creations and the enlargement of local communities/groups
	Project capacity to provide to local communities/groups instruments for better organise themselves	Project self-assessment of its capacity to provide to local communities/groups instruments for better organise themselves
LOCAL COMMUNITY EMPOWERMENT	Number of events organised by the the project addressing local communities	Number of participants to events organised by the project addressing local communities
	Project capability to influence local communities in terms of social inclusion and non-discrimination	Project self-evaluation of its capability to make local communities more inclusive
		Number of project activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities

### 1.2 Impact on information (additional indicators)

Dimensions	Indicators	Variables
ACCESS TO INFORMATION	Typology of information- data available on the platform	Typology of information- data available on the platform - selection from a list including: <ul style="list-style-type: none"> <li>• Articles/long post/structured content</li> <li>• Short post/status updated</li> <li>• Forum discussions</li> <li>• Forum entries</li> <li>• Images</li> <li>• Videos</li> <li>• Other contents</li> </ul>
	Quantity of information available	Number of information for each typology selected in the previous question at the time of the assessment
QUALITY OF INFORMATION	Instruments provided by the project allowing users to verify the quality of the information he/she access	Number of instruments provided allowing users to verify the quality of the information he/she access to



### 1.3 Impact on ways of thinking, values and behaviours (additional indicators)

Dimensions	Indicators	Variables
CHANGES IN OPINIONS / WAYS OF THINKING	Topics where opinion change is expected to happen	Topics where opinion change is expected to happen  Detailed description of topic and subtopics
	Activities performed by the project in order to achieve the expected change in users opinions, values and behaviours	Activities performed by the project in order to achieve the expected changes in users opinions, values and behaviours
	Number of people participating in the activities	Number of people participating in the activities
CHANGE IN BEHAVIOURS	Topics where changes in behaviours are expected to happen	Topics where changes in behaviours are expected to happen

### 1.4 Impact on education and human capital (additional indicators)

Dimensions	Indicators	Variables
TRAINING PROVIDED BY THE PROJECT	Training efficiency	Hours of training provided by the project
		Number of persons trained
		Topics covered by training activities
		Budget allocated to training
	Tools for education/training developed by the project	Number of tools for education/training developed by the project
Description of tools for education/training developed by the project		
IMPACT ON HUMAN CAPITAL	Impact on users eSkills	Number of activities supporting the acquisition of digital competences, digital literacies competences, eSkills and the reduction of digital divide
		Number of participants to activities supporting the acquisition of digital competences, digital literacies competences, eSkills and the reduction of digital divide

	Project self-evaluation of its capability to support the personal development of its users	Project self-evaluation of its capability to support the personal development of its users
		Description of project's support to the personal development of its users
CHANGE IN TRAINING CURRICULA, EDUCATIONAL POLICIES AND PERSONAL INVESTMENTS IN EDUCATION	Project self-evaluation of its capability to influence changes in training curriculum of secondary and higher education	Project self-evaluation of its capability to influence changes in training curricula of secondary and higher education
	Project self-evaluation of its capability to influence changes in educational policies	Project self-evaluation of its capability to influence changes in educational policies
		Description of project influence on educational policies
	Project self-evaluation of its capability to influence its users investment in education	Project self-evaluation of its capability to influence its users investment in education
		Description of project influence on users investments in education

### 1.5 Impact on employment (additional indicators)

Dimensions	Indicators	Variables
IMPACT ON JOB CREATION (DIRECTLY DEVELOPED BY THE PROJECT)	New job places generated	Number of persons recruited specifically for the project
	Number of persons recruited specifically for the project that will continue to work after the end of the project	Number of persons recruited specifically for the project that will continue to work after the end of the project
	Impact on woman employment	Rate of woman in the project
	Number of new job places generated (or expected to be generated) by the project outputs	Number of new job places generated (or expected to be generated) by the project outputs

	Number of spin-off/start-ups developed as a result of the project	Number of spin-off/start-ups developed as a result of the project
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### 1.6 Impact on environment (additional indicators)

Dimensions	Indicators	Variables
PROJECT IMPACT ON ENVIRONMENTAL BEHAVIOURS RELATED TO THE GREENHOUSE GASES ISSUE	Project self-assessment of its capability to provide easier access to innovative solutions for low carbon technologies	Project self-assessment of its capability to provide easier access to innovative solutions for low carbon technologies
	N. of compensation activities performed by the users since their engagement with the project (perception of the project vs. users questionnaire)	N. of compensation activities performed by the users since their engagement with the project according to the project
PROJECT IMPACT ON BEHAVIOURS RELATED TO AIR POLLUTION RELATED TO TRANSPORT ISSUE	Project self evaluation of contribution to the increase in users' sensitivity towards the issue of air pollution related to local, everyday transport	Project self evaluation of contribution to the increase in users' sensitivity towards the issue of air pollution related to local, everyday transport
	Project self-assessment of its capability to provide easier access to innovative solutions for a sustainable transport choices	Project self-assessment of its capability to provide easier access to innovative solutions for a sustainable transport choices
PROJECT IMPACT ON ENVIRONMENTAL BEHAVIOURS RELATED TO THE WASTE ISSUE	Project self assessment of its capability to provide easier access to waste management technologies	Project self assessment of its capability to provide easier access to waste management technologies
	N. of waste reduction activities performed by the users since their engagement with the project	N. of waste reduction activities performed by the users since their engagement with the project according to the project
	Project self evaluation of the increase in users' sensitivity towards the waste issue (e.g. participation to community-based reusing/recycling initiatives, etc.)	Project self evaluation of the increase in users' sensitivity towards the waste issue (e.g. participation to community-based reusing/recycling initiatives, etc.)
PROJECT IMPACT ON	Increase of green / local /	Increase of green / local / ethical products

ENVIRONMENTAL BEHAVIOURS RELATED TO THE SUSTAINABLE CONSUMPTION ISSUE	ethical products purchased by users in relation to start of the project- in percentage	purchased by users in relation to start of the project- in percentage
	N. of promotion of sustainable consumption activities performed by the users since their engagement with the project (perception of the project vs. users questionnaire)	N. of promotion of sustainable consumption activities performed by the users since their engagement with the project according to the project
	N. of green labels or certifications for products or services promoted by the initiative	N. of green labels or certifications for products or services promoted by the initiative
PROJECT IMPACT ON ENVIRONMENTAL BEHAVIOURS RELATED TO THE BIODIVERSITY ISSUE	N. of biodiversity conservation initiatives supported by the users	N. of biodiversity conservation initiatives supported by the users
	Project self-assessment of its capability to provide easier access to biodiversity conservation technologies / methodologies	Project self-assessment of its capability to provide easier access to biodiversity conservation technologies / methodologies

### 1.7 Impact on civic and political participation (additional indicators)

Dimensions	Indicators	Variables
IMPACT ON CITIZENS/USERS POLITICAL AWARENESS	Project self evaluation of changes in the time spent by users in getting informed about local, national and international political issues	Project self evaluation of changes in the time spent by users in getting informed about local, national and international political issues
	Project self assessment of changes in the time spent by users in persuading friends, relatives or fellow workers about social/political issues	Project self assessment of changes in the time spent by users in persuading friends, relatives or fellow workers about social/political issues
	Changes in the social/political topics addressed by users	Changes in the social/political topics addressed by users

IMPACT ON CITIZENS/USERS CIVIC PARTICIPATION	Instruments developed by the project offering new channels/way for civic participation	Number of instruments developed by the project offering new channels/way for civic participation
	Project self evaluation of its capability to increase the number of citizens participating to civic-society organisation	Project self evaluation of its capability to increase the number of citizens participating to civic-society organisation
	Project self evaluation of its capability to increase the time spent by citizens in participating to civic-society organisation	Project self evaluation of its capability to increase the time spent by citizens in participating to civic-society organisation
	Project self evaluation of its capability to increase the number of bottom-up/grassroots actions	Project self evaluation of its capability to increase the number of bottom-up/grassroots actions
IMPACT ON CITIZENS/USERS POLITICAL PARTICIPATION	Instruments developed by the project offering new channels/way of political participation	Number of instruments developed by the project offering new channels/way of political participation
	Project self-evaluation of its capacity to increase citizens/users participation to national and local election	Project self-evaluation of its capacity to increase citizens/users participation to national and local election
	Project self-evaluation of its capacity to increase citizens/users participation in: signature campaigns, boycotts and manifestations	Project self-evaluation of its capacity to increase citizens/users participation in signature campaigns, boycotts and manifestations
	Project capability to improve political participation of citizens belonging to group at risk of discrimination	Project self evaluation of its capability to improve political participation of citizens belonging to group at risk of discrimination

### 1.8 Impact on policies and institutions (additional indicators)

Dimensions	Indicators	Variables
PROJECT CAPABILITY TO INFLUENCE POLICIES AND INSTITUTIONS	Number of policy recommendations produced by the project	Number of policy recommendations produced by the project
	Number of policy makers and institutions representatives aware of the policy recommendations	Number of policy makers and institutions representatives aware of the policy recommendations
	Meetings/conferences organised/attended for influencing policy-makers	Number of meetings/conferences organised/attended for influencing policy-makers
		Number of policy makers/institutions represented in the meeting
	Project self-evaluation of its capability to influence institutions/governments transparency	Project self-evaluation of its capability to influence institutions/governments transparency
	Project capability to influence parties/democratic processes transparency	Project capability to influence parties/democratic processes transparency
	Policies/regulations/laws changed or updated by the project	Number of policies/regulations/laws changed or updated by the project
Number of institutions created or changed by the project	Number of institutions created or changed by the project	
USERS IMPACT ON POLICIES AND INSTITUTIONS	Project self-evaluation of its capability to influence the capability of citizens/users and civic society organisations of influencing policies	Project self-evaluation of its capability to influence the capability of citizens/users and civic society organisations of influencing policies
	Number of policy recommendations/documents /petitions produced by users	Number of policy recommendations/documents/petitions produced by users thanks to the use of the project outputs
	Project evaluation of users capability to influence institutions/governments transparency	Project evaluation of users capability to influence institutions/governments transparency
	Project evaluation of users capability to influence parties/democratic processes transparency	Project evaluation of users capability to influence parties/democratic processes transparency
	Number of policies/regulations/laws changed or updated by project users	Number of policies/regulations/laws changed or updated by project users
	Number of institutions created or changed by project users	Number of institutions created or changed by project users

## 2. Economic impact areas

### 2.1 Users' economic empowerment (additional indicators)

DIMENSION	INDICATOR	VARIABLE
IMPACT ON ACCESS TO FINANCE	Project self-evaluation of its capability to increase the access to finance of its users	Project self-evaluation of its capability to increase the access to finance of its users
		Total Funding distributed
		Type and description of instruments for increasing access to finance
	Impact through crowdfunding	Money attracted by the project through crowdfunding
Project self-evaluation of improving investment risk diversification opportunities for the users of the project through crowdfunding		
IMPACT ON ENTREPRENEURS HIP AND INCOME GENERATION FOR THE USERS	Project self-evaluation of its capability to support the creation of entrepreneurial initiatives by users	Project self-evaluation of its capability to support the creation of entrepreneurial initiatives of its users
	Number of enterprises or business ideas developed by the project users	Number of enterprises or business ideas developed by the project users
		Instruments stimulating entrepreneurial activities
	Number of test beds provided by the project supporting the users for testing business ideas	Number of test beds provided by the project supporting the users for testing business ideas
	Project self-evaluation of its capability of improving the support to users for diversifying income resources	Project self-evaluation of its capability to improve user support in diversifying income resources
	Project self-evaluation of its capability of increasing the incomes of the users	Project self-evaluation of its capability of increasing the incomes of the users
	Project self-evaluation of its capability of increasing the resilience of its users to cope with crises	Project self-evaluation of its capability of increasing the resilience of its users to cope with crises

## 2.2 The economic value generated by the project (additional indicators)

DIMENSION	INDICATOR	VARIABLE
ECONOMIC RESULTS	Project self-evaluation of increasing the resource pooling of the users	Project self-evaluation of increasing the resource pooling of the users
	Cost saving related to resource pooling	Cost-saving related to resource pooling
	Percentage of use of shared resources	Percentage of use of shared resources
	Monetary value of shared resources	Monetary value of shared resources
BUSINESS MODELS	Business Models	Business Models
	Project self-evaluation of being able to generate a new business model	Project self-evaluation of being able to generate a new business model
	New market opportunities for partners	New market opportunities for partners
	Number of business collaborations	Number of business collaborations
COMPETITIVENESS AND EXPLOITATION	Project competitors	Project competitors
	Project self-evaluation of its impact on the capability of the project team to keep pace with competitors	Project self-evaluation of its impact on the capability of the project team to keep pace with competitors
	Number of persons able to be dedicated to exploitation and innovation transfer	Number of persons able to be dedicated to exploitation and innovation transfer
	Number of activities for the transfer of each project output	Number of activities for the transfer of each project output