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Authors: Antonella Passani (T6), Francesca Spagnoli (EK), Alessandra Prampolini (T6), Katja Firus (T6), Shenja van der Graaf (iMinds), Katriina Kilpi (iMinds), Wim Vanobberghen (iMinds)

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IA4SI – Impact assessment for Social Innovation

IA4SI is a support action project developing a socio-economic and environmental impact self-assessment methodology for evaluating projects in the field of social innovation. The project is a collaboration between iMinds (project coordinator), T6 Ecosystems, Eurokleis and ATC and runs from 2013 to 2016.

D2.1 – Methodological Framework – First version

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ACRONYMS

Acronym/Term	Definition
CAPS	Collective Awareness Platforms for Sustainability and Social Innovation
C/B	Cost-Benefit
DSI	Digital Social Innovation
DoW	Description of Work
EU	European Union
FP	Framework Programme
GDP	Gross Domestic Product
GHG	Greenhouse Gases Protocol
Index	A synthetic aggregation of indicators
Indicator	"An indicator quantifies and simplifies phenomena and helps us understand complex realities. Indicators are aggregates of raw and processed data but they can be further aggregated to form complex indices". (Source: International Institute for Sustainable Development quoted by ostings.diplomacy.edu/baldi/malta2001/statint/Statistics_Int_Affairs-27.htm). An indicator is a synthetic description of a phenomenon and its development over the time, it can be composed of one variable (simple indicator) or of two or more variables (complex indicator). "A composite indicator is formed when individual indicators are compiled into a single index, on the basis of an underlying model of the multi-dimensional concept that is being measured" (Source: OECD glossary of statistic terms http://stats.oecd.org/glossary/detail.asp?ID=6278)
ROI	Return of investment
SI	Social Innovation
Variable	"A variable is a characteristic of a unit being observed that may assume more than one of a set of values to which a numerical measure or a category from a classification can be assigned (e.g. income, age, weight, etc., and "occupation", "industry", "disease", etc." "Source: OECD glossary of statistic terms. http://stats.oecd.org/glossary/detail.asp?ID=2857)

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EXECUTIVE SUMMARY

This document presents the first version of the IA4SI methodological framework for the impact assessment of Social Innovation in the context of the Digital Agenda. In particular, the assessment framework is designed for, and in conjunction with, Collective Awareness Platforms for Sustainability and Social Innovation (CAPS) projects. This term associated with the social innovation domain, has been used by the European Commission to mark a research field where projects can investigate how collaborative and networked ICT systems enable and facilitate social innovation-related processes and practices touching upon awareness and solution generation of problems occurring in society, therein highlighting the role and initiatives of individuals.

The IA4SI methodology outlined here describes the first version of the general structure of the methodology, its main indicators and the specific variables. The final version will be made available in month 26 (December 2015), towards the end of the IA4SI project and will include the lessons learned from the CAPS projects validating and improving the variables when using the IA4SI proposed methodology. *This deliverable, therefore, should be seen as a living document, as the indicators and variables here included are going to be modified by the interaction with CAPS projects and the on-going research in this emerging research field, which can be also called Digital Social Innovation.*

In this document, the feedback retrieved from projects is incorporated until the date of submission, and in particular, during the first workshop in Rome (April 2014).

The IA4SI methodology follows a quali-quantitative approach to impact assessment and builds on principles of Cost-Benefit analysis and of Multi-Criteria analysis. These two methods are seen as complementary as they assist to frame both qualitative and quantitative impacts that can be represented in monetised form as well as impacts that are better described in non-monetary terms (such as social or political impacts). Other methodological framework informing the IA4SI methodology are Social Media ROI, Stated preference methods, and Revealed Preference methods. The combination of these methods yields an approach that allows the consideration of both a wide spectrum of impacts as well as the combination of variables that are expressed in different ways.

The IA4SI methodology analyses CAPS projects and the digital social innovation domain at an aggregated level by using eight synthetic indices: four of them are related to key areas of impact (social impact, economic impact, environmental impact and political impact), and are called **vertical indices**. The IA4SI methodology also contains four transversal indices that provide information about the process followed by the CAPS projects in determining their impacts. In other words, the **transversal indices** are related to the attributes of the innovation developed across all the areas of impacts. The IA4SI synthetic indices are the following:

– Social impact – Economic impact – Environmental impact – Political impact	*Vertical indices*
– Efficiency – Effectiveness – Fairness – Sustainability	*Transversal indices*

The vertical indices are composed of 16 (sub)indices. The *social impact index* is articulated in the

following sub-categories: impact on community building and empowerment; impact on information; impact on ways of thinking and behaviours; impact on education and human capital; impact on science and academia; and, impact on employment. The *economic impact index* is articulated in: impact on users economic empowerment; economic value generated by the project; and, impact on ICT driven innovation.

The *environmental impact index* includes CAPS projects and users impacts in terms of: greenhouse gases emissions; air pollution related to transport; waste; sustainable consumption of goods and services; and, biodiversity. Lastly, the *political impact index* contains the sub-categories: impact on civic and political participation and impact on policies and institutions.

Specific variables are linked up to each index and indicator and are described in a dedicated in chapter 3 and in Annex 1. Also, the IA4SI methodology follows an input-output- outcome/impact model so that each variable can be associated with this model.

The IA4SI methodology primarily addresses the *in itinere* (on-going) impact assessment. While it can be used for assessing projects impacts also after their end (ex-post), it stresses that – throughout the IA4SI project – the methodology will mainly be tested with on-going CAPS projects rather than (similar) projects that may have ended already. Moreover, the proposed methodology is meant as a tool for assessing projects and not programmes. In other words, the analysis that IA4SI does about the digital social innovation domain, is likely to yield important insights to the EC about this area of activity, yet cannot serve as programme evaluation which would demand a more extensive time of scrutiny and a different approach.

Lastly, it is important to note that IA4SI will gather data from projects and from their users. In doing so, it is possible to compare the self-assessment made by the projects with the viewpoint of their users. It will be interesting to see if projects that emerge as having a significant impact from the self-assessment are also perceived as such by their users. Moreover, also European citizens not directly in contact with CAPS projects will be engaged through the means of a dedicated tool. In order to do so, ad-hoc tools - that will converge in the IA4SI online toolkit, i.e. Self-assessment Toolkit (SAT), User Data Gathering Interface (UDGI) and Citizens Engagement Platform (CEP) – have been developed. The IA4SI toolkit is not merely constituted by different data gathering instruments, but it also supports the analysis of the data allowing the automatic impact self-assessment of CAPS projects. By using the toolkit, projects will not only be able to enter data, but will also see the results of their assessment in real time. They will be able to save the results and compare them over time based on the benchmarking system that will be designed together with the CAPS projects during the forthcoming period.

The data gathered through the IA4SI toolkit will be used for developing three main research outputs: a deliverable containing an assessment report for each of the collaborating CAPS projects, a report analysing the characteristics and impacts of CAPS domain as a whole and a report dedicated to the identification and further analysis of best practices.

INTRODUCTION

This deliverable describes the first version of the IA4SI methodology for social, economic, environmental and political impact self-assessment for Collective Awareness Platforms for Sustainability and Social Innovation (CAPS) projects and domain. It is the first output of WP2 whose goal is:

"*to define the IA4SI framework by identifying the social, economic political and environmental indicators needed to assess the impact of projects in the area of Social Innovation and the domain as a whole. Projects will be assessed in terms of efficiency, effectiveness and potential in terms of societal up-taking*". The final version of this methodology will be released at the end of the project and will take advantage of the testing and actual usage of on-going CAPS projects.

The IA4SI methodology is a quali-quantitative methodology for impact self-assessment, which builds on previous experiences in impact self-assessment of European projects (SEQUOIA, ERINA+ and MAXICULTUE projects mainly[1]). As it will be explained in the next chapters, it follows the impact value chain approach and finds in the Cost-Benefit Analysis and in the Multi-Criteria Analysis methods its main pillars (other methodological framework informing the IA4SI methodology are Social Media ROI, Stated preference methods, and Revealed Preference methods.). The IA4SI methodology specifically targets on-going impact assessment but can also be used for evaluating project impact after the end of their activities (ex-post) method.

It has been developed using a participative approach: i.e. engaging CAPS projects in the validation and fine-tuning of its indicators and variables. Moreover, the methodology offers a multi-stakeholders approach to impact assessment as it engages projects' coordinators, projects' partners, projects users and - to a certain extent – European citizens. The methodology is accompanied by the IA4SI toolkit, which includes three online tools for data gathering and analysis[2].

The IA4SI methodology incudes eight main synthetic indices: four vertical indices which are social impact, economic impact, environmental impact and political impact and four transversal indices which are: efficiency, effectiveness, sustainability and fairness. The figure below visualise the IA4SI indices. Each vertical index is articulated in different subcategories and for each one specific indicators have been selected.

[1] Information about the previous projects can be fund at: http://www.lse.ac.uk/media@lse/WhosWho/AcademicStaff/PaoloDini.aspx (summary of SEQUOIA project and deliverables); www.erinaplus.eu; www.maxiculture.eu. Main reference for the methodologies are the following: Passani and others, 2013; Passani, Bellini, Spagnoli, Ioannidis, Satolli, Debicki, Crombie, 2014; Passani, Monacciani, Van Der Graaf, Spagnoli, Bellini, Debicki, Dini, 2014

[2] For e detailed description of the IA4SI toolkit and its technical features please refer to D3.1 "Self-Assessment Toolkit, User Data Gathering Interphase and Citizens Engagement Platform"

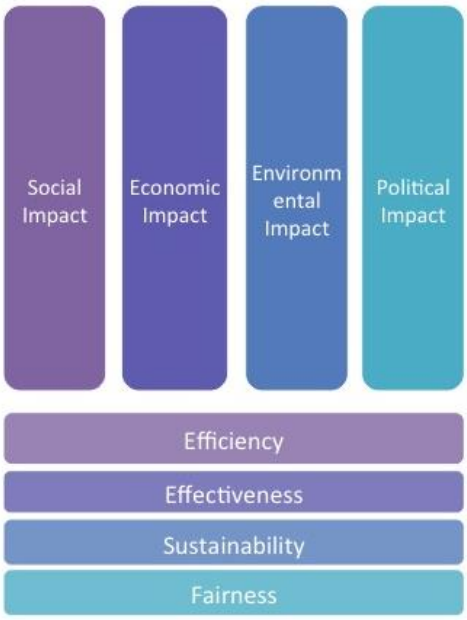

Fig. 1 – IA4SI vertical and transversal indices

Besides the eight indices mentioned, the potential uptake will be also investigated both at project level and considering the CAPS approach.

The proposed methodology is tailored for the CAPS domain: a new research area created within the European Seven Framework Programme (7FP) where projects can investigate how collaborative and networked ICT systems enable and facilitate social innovation-related processes and practices by developing piloting actions which touch upon awareness and solution generation tackling emerging social needs, therein highlighting the role and initiatives of individuals.

The deliverable has to be seen as a working document: while the framework of the methodology has been already presented to CAPS projects and has been validated, the indicators and variables – which are already based on preliminary feedback by CAPS projects – may still change in the next months when the methodology will be actually tested. This is particularly true for the benchmarking system, which is under development. Therefore, new releases of this deliverable can be proposed in the near future.

The deliverable is articulated as follows:

Chapter one defines the domain under assessment by linking the Collective Awareness Platforms for Sustainability and Social Innovation with the debate on Social innovation definition and with the emerging topic of Digital Social Innovation. The chapter ends with a proposal operational description of the CAPS domain, which guide the IA4SI methodology development and its application.

Chapter 2 frames the IA4SI methodology in the context of impact assessment approaches, delineates the main challenges and describes the process followed for developing the IA4SI methodology.

Chapter 3 presents the IA4SI synthetic indices, their subcategories, indicators and variables.

Chapter 4 describes the statistical process through which the synthetic indices are build, the normalisation process and the benchmarking approach.

Chapter 5 explains the data gathering process and introduced, in a synthetic way, the IA4SI toolkit. The expected outputs of the impact assessment are also described by presenting the structure and

the main content of the impact assessment reports that IA4SI team will develop in the second year of the project.

The deliverable concludes with an overview of the next steps in terms of deliverables, data gathering activities and interaction with CAPS projects.

Annex 1 presents all the indicators and variable composing the IA4SI methodology with the related questions for project coordinators and partners. The questions presented in the annex populate the IA4SI self-assessment toolkit.

1. DEFINING THE AREA UNDER INVESTIGATION

1.1 Collective Awareness Platforms for Sustainability and Social Innovation (CAPS)

The acronym CAPS stands for Collective Awareness Platforms for Sustainability and Social Innovation. The European Commission (EC) used this acronym for the first time in 2012, in the context of the Seventh Framework Programme of research. It served for identifying a new group of research projects and, to a certain extent, a new research area.

With the first call (Call10 of FP7 – objective 5.5 of workprogramme 2013), the European Commission invested 19 million of Euros into 12 projects and 500.000 Euros for a Study on "Social Innovation in the Digital Agenda". Other three projects - funded under other programmes – were added to this domain as well, because their research activity is very relevant for CAPS. As a result, the programme can be said to consist of 15 on-going projects in this area.

In this context, IA4SI is developing a methodology for the self-assessment of these projects. These are seven Research Projects for Grass Roots Experiments and Pilots, four support actions (including IA4SI) and one project dedicated to the management of a seed fund for social innovation activities. The CAPS domain will sit in the Horizon 2020 programme with an investment of €37 millions Euro for the periods 2014-2015. As we will see in the next chapters, the expectation is that the IA4SI methodology can be used for future CAPS projects and beyond, for Digital Social Innovation project in general.

The European Commission defines CAPS as follows:

"The Collective Awareness Platforms for Sustainability and Social Innovation (CAPS) are ICT systems leveraging the emerging "network effect" by combining open online social media, distributed knowledge creation and data from real environments ("Internet of Things") in order to create awareness of problems and possible solutions requesting collective efforts, enabling new forms of social innovation.

The Collective Awareness Platforms are expected to support environmentally aware, grassroots processes and practices to share knowledge, to achieve changes in lifestyle, production and consumption patterns, and to set up more participatory democratic processes. Although there is consensus about the global span of the sustainability problems that are affecting our current society, including the economic models and the environment, there is little awareness of the role that each and every one of us can play to ease such problems, in a grassroots manner." (http://ec.europa.eu/digital-agenda/en/collective-awareness-platforms-sustainability-and-social-innovation)

The first paragraph of the quote proposes a definition of CAPS, while the second one lists the expect benefits, or in other term impacts, of CAPS. The upcoming publication “Collective Awareness Platform for Sustainability and Social Innovation: An Introduction” (Arniani, Badii, De Liddo, Georgi, Passani, Schibelski, & Teli, 2014) proposes an analysis of the single terms composing the label ‘CAPS’ that can be used as a point of reference. Synthetizing, Collaborative Awareness Platforms can be seen as ICT-supported collaborations of human and non-human actors which enable and facilitate the production, sharing and sense-making of information gathered through citizen engagement and through sensors and the like. The term platform refers to systems which integrate different ICT tools; socio-technical solutions for promoting reciprocal understanding among social actors, self-organisation, collaboration and orchestration of actions. The information and data at the centre of such platforms are related, and are expected to foster, sustainability and social innovation. The term sustainability can be defined - by using the classical definition of the so-called Brundtland report (WCED, 1987, 15) – as a model of “development, which meets the needs of the present without compromising the ability of future generations to meet their own needs.” This term, originally developed looking at environmental-related issues, is

now also used to promote socio-economic models of innovation and development, and which consider the impact of 'present choices on future generation's critical to a linear, endless conceptualisation of progress. The term will be further described in paragraph 3.4, while in the next paragraphs the concept of Social Innovation is introduced and discussed.

1.2 Social Innovation (SI) and Digital Social Innovation (DSI)

The term social innovation is composed of two words: "Social" and "Innovation". Both terms are largely used in everyday language and are often taken for granted when, in fact, they are difficult to define in a non-tautological way. It is not trivial to question the very nature of society (Latour, 2005) or to define the boundaries between what is social and what is, for example, economical or cultural. Similarly, the literature on innovation's political, economical and technological aspects is broad and many definitions of innovation are available (OECD, 2005). The first step to accurately define social innovation is to recognise the seeming ambiguity of the term: its definition may vary according to the definitions attributed to the concepts "social" and "innovation". It is useful, therefore, to consider the epistemologies behind the two terms in the various definitions of social innovation that are currently available, so as to try to circumscribe the realm of social innovation, and to understand its boundaries. Moreover, social innovation as a field of study, is rather interdisciplinary, hence, definitions and understandings are likely influenced by the various authors' disciplines.

As a starting point for the examination of the term, is the definition proposed by Murray, Caulier-Grice and Mulgan (2010a) in "The open book of social innovation", a text resulting from the collaboration between the British National Endowment for Society, Technology and the Arts (NESTA) and the Young Foundation. These two institutions are seen as currently leading the research and policy-related work on social innovation at a national and European level. The authors define social innovation as "*new products, services or methods that tackle pressing and emerging social issues and, at the same time, transform social interactions promoting new collaboration and relationships"* (2010a: 3). In this definition, the term "social" is used in two ways: it characterises the issues to be solved (such as adaptation to climate change and the effects of aging population on society) and the methods used for solving such issues, and which imply a modification (of some sort) in social relationships. In this definition, social innovation represents both product and process innovation. It is said to generate a new product/service by changing, at the same time, the way in which this product/service is produced. It benefits society 'twice', that is, by proposing a solution to a specific problem and by offering new social links and collaboration opportunities. The authors do not recognise a specific social category as being the protagonist of social innovation; the innovator can be a social entrepreneur, a self-organised local community, an association, a company or a government. Examples of social innovation can include co-housing, the Grameen bank, eco-towns and car sharing. In terms of process innovation, the understanding of social innovation is associated with terms such as participation, engagement, empowerment, co-design, bottom-up, grassroots initiatives and so forth.

This understanding of social innovation is well recognised by policy-makers and institutions. For example, the Bureau of European Political Advisers of the European Commission (BEPA) quotes it in a dedicated publication (2011); the concept of social innovation is a part of the Innovation Union Flagship in EU 2020 strategy (EU, 2010) and an Employment and Social Innovation programme will soon be launched. The United States of America, under the Obama Presidency, opened the Office of Social Innovation and Civic Participation with a dedicated budget. The United Kingdom Prime Minister Cameron renamed the former Office of the Third Sector the Office of the Civil Society and has activated social innovation funds (Bassi, 2011). Government interest in social innovation is also shown by the OECD initiatives which spawned the Forum on Social Innovation, an 11-member organisations that deals with policies and the exchange of best practices supporting social innovation. The forum, created in 2000, focuses on the role governments can play in social

innovation and sets the core of social innovation as the improvement of well-being and quality of life for individuals and communities.

In analysing the meanings attributed to social innovation by these institutions, however, some differences can be detected in understanding the concept. In most cases, the term is used to describe and recommend a new centrality for private-public partnerships as instruments capable of innovating the welfare state, and making it more efficient (BEPA, 2011). So, even if these institutions use the first definition described above, its operationalization may vary considerably depending on the inclusion, or, exclusion of social actors as potential social innovators. More specifically, in what can be defined as a governmental approach to social innovation, social entrepreneurs and companies, cooperative and consultancies are recognised as the main innovators that can support government in the implementation of new initiatives and in changing the welfare state. Bottom-up processes, grass-roots initiatives and social movements may find it difficult to access the support measures offered by governments under social innovation programmes without the mediation of social entrepreneurs and ad hoc consultancies (Illie and During, 2012). In the CAPS domain, this is not so true, as the call that financed the first group of projects, specifically requested the presence of grassroots organisations, social movements and other actors traditionally not engaged in EU projects.

The rapid diffusion of the term, particularly within social and political circles, may, arguably, risk turning it into a buzzword. In order to avoid such a risk, it is important to emphasize that the term “social innovation” is not new. Many of the social services taken now for granted, and seen as “institutional”, were once considered to be great social innovations, such as free national health systems, public kindergartens, cooperatives, and trade unions (Mulgan et al, 2007).

Moreover, the concept can even be traced back further, dating back to the beginning of nineteenth century. In his paper, Godin (2012) explains that the term social innovation emerged after the French revolution and, at that time, had both a positive and a negative connotation. The negative connotation saw social innovation as synonymous with radical socialism represented by thinkers such as Fourier, St-Simon, Proudhon, and called for a drastic and fundamental change of social order. A more positive connotation linked social innovation to social reforms and social justice. Examples of this second connotation are the introduction of a general education system that the famous sociologist August Comte defined with the very term social innovation, the legislation of unions and the recognition of new rights. At the end of nineteenth century, social innovation could be seen to attain a new meaning (in addition to those related to socialism and to reformism) - social innovation as underpinning changes in social habits or behaviours. The term, however, lost its “revolutionary” appeal and became something opposed to the traditional. The word “social” was used to refer to the entire society and there were no particular references to social issues that were important for the earlier definition, and which now are said to play a central role in the current use of the term. Social innovation has become synonymous with an alternative to the norm, non-conformist: ‘anything new in society’.

Over time, the concept of social innovation became to be less frequently used and the term “innovation” was more commonly attributed to technology. Social innovation re-entered theoretical writings in the 1960-70s, and only in the last ten years or so, it has attracted a consistent interest among scholars. Here, social innovation re-emerged as a term that contrasted technological innovation, as a so-called counter-concept (Godin, 2012). In this view, social innovation indicates a call for action, for more attention to be attributed to the social aspects of innovation, which have been perceived as neglected by the hegemonic role of technology. For this reason, it is particularly interesting to see Social Innovation as a key concept in the European Digital Agenda and managed by a research unit once called IST (and later DG Connect).

Given the historical background of the concept, it is worth investigating the ‘value connotation’ that the term seems to carry nowadays; it is evident that it is not a neutral one. The concept of innovation does not seem to be problematized in the context of social innovation. Innovation is

seen in a positive way and tends to be used as synonymous with “improvement” and “progress” when, to the contrary, there are also innovations that have negative effects at economical, social, political or environmental levels. In this sense, social innovations only refer to positive innovation that, as in the definition proposed by Philip, Deiglmeier and Miller (2008:36), is meant to be more “*more effective, efficient, sustainable, or just than existing solutions*.” This definition is central for IA4SI, as it will inform some of its complex indices as it traces a clear pattern in terms of expected impacts.

It is also important to notice that the term “social innovation” can be seen to accentuate distinct aspects in different countries. For example, in the Anglo-Saxon world social innovation tends to be linked to the ‘third way’, as a new path for public-private partnerships and for supporting governments in tackling social issues with the support of entrepreneurs and civil society. Social innovation acts across the boundaries between the state, market and third sector and contributes to the demolition of such boundaries (Phillis, Deiglmeier and Miller, 2008). In other countries such as France, for example, it still tends to recall a concept of being “alternative” to the Government and to political institutions (Godin, 2012). This connotation is also used by social activists and is linked to an alternative Left-wing school of thought for whom social innovation is a process and a strategy to change society through solidarity, cooperation and cultural diversity.

In this perspective, the protagonists of social innovation are mainly social movements and grass roots initiatives. And here, “social” shows another meaning, that is, social as community-based, social as non-institutionalised, social as popular. In this view, with reference to urban development, the term social innovation has been used to describe a process that is driven by, or, at least deeply engages inhabitants in the transformation of neighbourhoods and is, therefore, in opposition to top-down approaches to local development and city renewal (Sharra and Nissens, 2010). According to Busacca (2013), the mainstream definitions of social innovation, the ones that root for the third-way, are synergic with the current economic organisation of western society which he defines as neo-liberal, and search for measures that are able to mitigate the social effects of this model. By linking the term social innovation with its historical background Busacca proposes a different definition of social innovation that includes the likelihood to contrast the neoliberal model of western societies. For this reason, he has defined social innovation as “new ideas that work in a more effective way in meeting social goals with the aim of transgressing social rules accordingly to a vision of a different social system” (Busacca, 2013: 49).

From this overview, social innovation can be said to lack a univocal definition and, when used by different social actors (e.g., governments, researchers, activists, third-sector representatives), may be linked to different value propositions. Social innovation is emerging as a field of scrutiny, and one of the first items on its agenda will likely be to creating a more precise definition or classification of social innovation and to make its epistemology more explicit. However, the capability of this term to attract attention from different stakeholders, to open new spaces of collaboration for different social actors (such as researchers, policy-makers, social entrepreneurs) and different disciplines (sociology, economy, management studies and others), to give a new centrality to the social dimension of innovation and to close the gap between social and technological innovation, are good reasons to continue using this term and dedicating more effort to its analysis.

Digital social innovation

Social innovation has emerged as an alternative to technological innovation or, better, as a necessary complement to it. In this connotation, as mentioned above, examples of social innovation are fair trade initiatives, Amnesty International, microfinance, participatory budgeting models such as that of Porto Alegre, the Open University, emission trading, international labour standards and the fare trade among others (Mulgan et al., 2007; Phillis, Deiglmeier, Miller, 2008).

This understanding of social innovation, however, is now challenged by the role that the Internet is playing and can play in the future in terms of fostering social innovation. The term Digital Social Innovation is emerging as a way of indicating digitally enabled or supported social innovation; the term is used by the research project, leaded by NESTA and financed by the EC within the CAPS domain titled Digital Social Innovation, and is used also by the Young Foundation). Social media, connected to the Internet of Things and to big and open data are seen as new instruments for fostering social innovation both in its institutional and grassroots understanding. By adding the word “digital” to the term social innovation, it impacts the interpretations of both “social” and “innovation”.

Here, social does not refer to a local community per se but can consider also online social interactions and online social communities across geographical boundaries. The term innovation is now also applied to technology as ‘digital social innovations’ are said to create new online instruments (new ICT products and services) that enable social innovation and take advantage of the network effect typical of the Internet. Process innovation in these terms then implies a new way of collaborating, creating and sharing knowledge online. The research in the field is still at an early stage but a preliminary mapping of digital social innovation is provided by NominetTrust (http://www.socialtech.org.uk/), a spin-off of one of the main global Internet registries that provides support and findings for digitally based social innovation initiatives. The similarities between the term Digital Social Innovation and CAPS are evident.

In this elaboration of the term social innovation, the opposition between the technological and the social dimension of innovation seems to dissolve and, to a certain extent, technology ‘becomes’ social. Technology in general, but mainly social media, are seen as important instruments able to benefit society more than individual participants or its promoters when used for social innovation initiatives. The interest of individuals to participate, their growing role as content creators and the possibility to establish and nurture social relationships across geographical borders are seen as element to be exploited in developing and promoting new solutions to social issues.

The problem to defining social innovators, present in the original concept, can also be seen for the digital domain: digitally-enabled social innovation can be promoted by grassroots movements, by entrepreneurs (social or not) and/or by public bodies. As in the face-to-face world social innovation initiatives can be profit or not-for-profit. Examples of digital social innovation include Wikipedia (with reference to knowledge creation and sharing), Change.org which allows users to launch campaigns as instruments for political participation, crowdfunding platforms such as Kickstarter that innovate fund-raising models by asking individuals to economically support an idea, project or production, or Atmosfair (https://www.atmosfair.de) that allows travellers to calculate and offset the impact of their flights, generating funds to be used by the organisation to finance renewable energy projects.

Digital social innovation is seen as promising due to the ubiquitous nature of social networks that can help to reach people normally disconnected from public and local services and to appeal to the youngest generation for which online life may appears more relevant or easier to access that face to face participation at the community level. Never the less, the risk to engage those that are already engaged and to wider the gap related to digital divide, lack of digital skills and similar, it is relevant and deserves further analysis.

Today, not much systematic investigation is readily available on social innovation, and digital social innovation in particular; the definition is still problematic and research on models, methodologies and tools for stimulating, supporting and understanding social innovations are on-going (The Young Foundation, 2010a; Murray, Caulier-Grice, Mulgar, 2010a). Some initial insights are offered by Moulaert et al. (2005) who analysed how different disciplines have considered specific aspects of social innovation, also BEPA (2010) categorizes social innovations according to their outputs and Ilie and During (2012), following a post-structuralist approach, study social innovation by following three discourses around the term, that is, governmental, entrepreneurial and academic. Most of the work conducted so far focuses on defining social innovation, analysing the processes by which it is emerging and flourishing, and map experiences of social innovation world-wide. The attention is devoted to the description of concrete experiences for abstracting models for social innovation replicability and scaling-up. Little has been done so far to analyse the results of social innovation initiatives; to evaluate the benefits produced by public-funded programmes and to compare the effects of social innovation projects with previous and alternative models of tackling social issues.

1.3 CAPS, Social Innovation and Digital Social Innovation as research field

The concept of social innovation is still nascent and the different forms it can take have not yet generated a robust way of analysing and measuring its impacts (Bund et al, 2013).

In fact, methodologies for assessing the outputs and the impacts of social innovations are still at a early stage of development (Bund and others, 2013). Research in the field is still largely relying on case studies and qualitative methodologies, not allowing comparisons and aggregations of data are the research option most used (Cajaiba-Santana 2014; Biggs and others, 2010; Smith and Seyfang 2013).

Murray and others (2010a) list a variety of methods; this document was used as a point of reference in developing the IA4SI methodology, which is based, indeed, of some of the methodologies suggested. Those include: standard investment appraisal methods, cost-benefit analysis and cost-effectiveness analysis, stated preference methods, social accounting methods, quality of life measures, social impact assessment, comparative metrics or benchmarks, user experience surveys, etc.

In this regard, it is important to notice that social innovation cannot be considered as synonymous with social entrepreneurship or the third sector in general. Social innovation, in fact, sees the collaboration of different actors, which may include, but are not limited, to social entrepreneurs; it generally happen in mixed consortiums and tend to have more liquid forms of organisation than classical forms of the third sector such as charities, cooperatives and the alike.

Assessment of social entrepreneurship and of the third sector impacts are regularly calculated both at enterprise and at country level. Corporate social responsibility initiatives - which may overlap with some forms of social innovation as they are delivering service in a more just or sustainable way - are often assessed using ad hoc social return of investment (SROI) instruments and philanthropic organisations use multiple, non standardised methods for supporting decision making processes related to investments in development programs (see paragraph 2.3). However, as we will see, we can use the lessons learned from this “sector” only in a limited way as IA4SI is dealing with international, research-based projects and not to entrepreneurship or public driven initiatives (Passani and others, 2014). The project as an organizational entity is understood by management and organization scholars as a temporary organizational form and is increasingly prevalent in contemporary society. While some consider such forms of organization as the ‘organizational equivalent of a one-night stand’ (Meyerson et al. 1996: 167), others view the project as a temporary organization ‘to which resources are assigned to undertake a unique, novel and transient endeavour managing the inherent uncertainty and need for integration in order to deliver

beneficial objectives of change' (Turner & Müller 2003: 7). IA4SI is aligned with this second view on projects.

A related topic is the localisation of impacts, especially relevant for digital social innovations, which are expected to produce benefits in different territorial contexts. It is relevant to understand if, and to what extent, the online tools for social innovation enable transformation at local community level and if so, how this happens (Young Foundation, 2010). Impact assessment appears extremely relevant in demonstrating the validity of the social innovation approach, its articulations at institutional, entrepreneurial and grassroots levels, its capability in producing new collaborations among these levels and its multiple applications (such as global warming, employment, education, health, political participation and other pressing social challenges).

The research on impact assessment is particularly challenging as social innovation is intended to produce positive changes in terms of individuals and groups wellbeing and to be more efficient, effective and just that alternative solutions (Philip, Deiglmeier and Miller, 2008). Operationally defining what well-being improvement is, how to measure improvement in social justice and finding the appropriate means of comparison among initiatives are the main challenges of current research themes in the field. This research area confines, but does not perfectly correspond, to topics such as social capital, intangible assets, public goods, alternative economic and non-economic statistical analysis (witch are criticising the role of GDP in assessing national growth rates), local development and participatory methods, among others.

Analysing the effects of social innovation initiatives can also be helpful in refining the understanding of the social innovation concept itself, as well as in orienting policies. It is useful to see how initiatives perform in terms of impact, sustainability and scalability. This can help in distinguish social innovation for other processes of social and institutional change and can lead to a different management of funds.

Another focal point of investigation is related to the interdisciplinary nature of social innovation and what it can mean, or achieve in terms of collaboration among different stakeholders. Social innovation initiatives can serve as a testing ground for new collaborative processes and for instruments fostering such collaborations.

Social innovation is a term deeply rooted in the current socio-political and economic situation. The role of governments, trade unions, associations, family and other social institutions seems to appear to be weaker than in the past. New social challenges have emerged and some of the traditional ways of managing social issues (market-or government-based) seem to be less and less able to properly answer these challenges. Citizens are looking for new forms of participation, information availability is growing in exponential terms but it is increasingly difficult to navigate and to evaluate in terms of trustworthiness. Climate change calls for lifestyle transformations, cities are growing in complexity and inhabitants are demanding more customised services and a higher quality of life. In this scenario, new and emerging digital technologies, especially those ones such as social media, that are better at involving users in content creation, are seen as potential new spaces for collaboration and self-organisation that are able to propose new production, consumer and lifestyle models. In this view, social innovation, and its digital counterpart is emerging as a promising concept for describing new patterns for innovation while, at the same time, positively changing social relationships of society at large. Yet, some further refinements are needed to facilitate better and more fluid collaborations among disciplines and stakeholders and more research is needed for validating its results.

IA4SI project wishes to contribute to the debate in the field by analysing the first 15 CAPS projects, their objectives, outputs and impacts. Thanks to the close collaboration with CAPS projects and the data that will be gathered and analysed at aggregated level, some of the research topics mentioned above can be addressed, and improve our understanding of how to describe the results of initiatives that are interdisciplinary in nature and multi-situated (online, offline, at local level and international level possibly at the same time) and multi-stakeholders.

Concluding this section, we can operationalize CAPS projects by interpreting them as a sub-category of the wider concept of digital social innovation. They will serve as the main target of drawing out the IA4SI methodology.

CAPS projects are ICT-enabled pilot initiatives, which address pressing social issues and sustainability issues by promoting the active participation of European citizens and/or rely on their capability of proving and sharing information. CAPS projects are digital social innovation initiatives and as such are expected to propose innovative solutions which should be more efficient, effective, just and sustainable that available ones. CAPS initiatives are multidisciplinary in nature and most of them have a relevant research aspect.

By analysing the current CAPS projects, it is possible to group CAPS stakeholders in four main categories: research, business, civic society and policy-makers.

More precisely, CAPS stakeholders can be described by the following:

RESEARCH

- Universities
- Research centres
- Academic researchers
- Independent researchers
- Graduate students
- Other EU projects
- Any other research-related organisation/professional

Business

- ICT large companies
- Non-ICT large companies
- ICT-SMEs
- Non-ICT SMEs
- Cooperatives and social entrepreneurs
- Consultants and self-employed workers
- Utilities (water, energy, etc.)

CIVIL SOCIETY

- NGO, Associations and charities
- Umbrella organisations
- Trade unions and parties
- School, Teachers, educators
- Activists and social movements
- P2P producers
- Bloggers or content producers
- Citizens at large
- Other civic society organisation

POLICY-making

- Local policy-makers
- National policy-makers
- EU policy-makers
- Global policy-makers
- Local governmental bodies and officials
- National governmental bodies and officials
- EU governmental bodies and officials
- Global governmental bodies and officials
- Interest groups

Considering now the topics covered by on-going CAPS projects, the topic suggested by the EU programme and Call10, the categories used by the Digital Social Innovation projects [3] for categorising European initiatives in the field, and the categorisation of social innovation projects proposed by the Tepsie project (Bund and others, 2013), the following categorisation could be made:

- Energy and environment
- Social inclusion
- Participation and democracy
- Economy: production and consumption

[3] www.digialsocial.eu

- Knowledge, science and information
- Rights
- Finance
- Culture and art
- Health and wellbeing
- Community creation, renewal and reinforcement
- Work and employment
- Neighbourhood regeneration and housing

Each of the on-going CAPS project works on one or more of these topics, or domains. At the present stage, none of them is active in the domain of “Neighbourhood regeneration and housing” yet which is central in the social innovation debates. Also, the “work and employment” and “culture and art” topics seem not be represented in the current CAPS activities, but considering the future application of the methodology, it is worth to consider also these domains/topics.

The following figure lists the on-going projects that are participating in the development of the IA4SI methodology and who are invited to test and use it throughout the project’s lifetime. They are divided according to the three typologies proposed by the EC on the CAPS dedicated website (http://ec.europa.eu/digital-agenda/en/caps-projects).

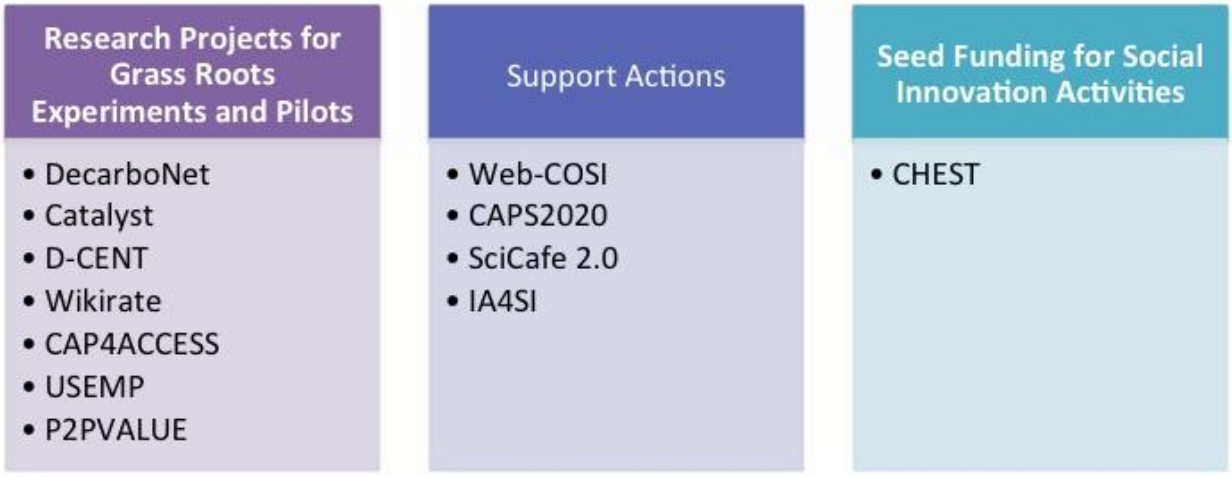

Fig. 2 – On-going CAPS projects

Most of the projects started in October 2013, with the exception of Web-COSI, which started in January 2014. Furthermore, USEMP and P2Pvalue were not financed by Call10 and were integrated in the CAPS domain due to the topics they investigate. Recently, another project called FOCAL part of the Network of Excellence on Internet Science was added to the CAPS domain. The opportunity to engage FOCAL in the IA4SI activities will be investigated in the next months, when the project will be in more advanced stage of development. The study “Digital Social Innovation” is also part of the CAPS domain even if, due to its pure research-oriented nature, it will not be engaged in the assessment.

2. IMPACT ASSESSMENT: FRAMING THE SCOPE AND THE CHALLENGES FOR THE IA4SI METHODOLOGY

This chapter introduces the IA4SI methodology by framing it in the wider context of impact assessment. More specifically, this chapter presents the methodological pillars on top of which IA4SI methodology is built. It is important to recall that IA4SI build on previous European projects in the field of impact assessment such as SEQUOIA[4], ERINA+[5] and MAXICULTURE[6]. The first two projects ended, while MAXICULTURE is still running but its methodology has been accepted by the EC in the last project review held in March 2014. Those previous projects represent important testing of the overall IA4SI framework and offered important lessons learned that have been incorporate in the IA4SI methodology described in chapter 3. Such previous experiences supported the definition of the IA4SI framework but it is important to stress that most of the indicators and variables that are described in chapter 3 have been developed ad hoc for the CAPS domain. Finally, in the previous experience the environmental impact assessment was very limited as in the case of SEQUOIA or was absent at all as in the case of ERINA+ and MAXICULTURE. We will see in the following paragraphs and in chapter 3 why the environmental impact has been enlarged and acquired a higher relevance.

2.1 Impact assessment and impact value chain: framing the IA4SI methodology

The guide to impact assessment developed by the EC INFOREGIO Unit (European Commission, 2012b:119) defines impact as,

> "a consequence affecting direct beneficiaries following the end of their participation in an intervention or after the completion of public facilities, or else an indirect consequence affecting other beneficiaries who may be winners or losers. Certain impacts (specific impacts) can be observed among direct beneficiaries after a few months and others only in the longer term (e.g. the monitoring of assisted firms). In the field of development support, these longer-term impacts are usually referred to as sustainable results. Some impacts appear indirectly (e.g. turnover generated for the suppliers of assisted firms). Others can be observed at the macro-economic or macro-social level (e.g. improvement of the image of the assisted region); these are global impacts. Evaluation is frequently used to examine one or more intermediate impacts, between specific and global impacts. Impacts may be positive or negative, expected or unexpected".

This definition shows that impacts tend to be observable only after the end of a project. This is the first point to be made in order to appropriately frame the IA4SI mission. IA4SI will not be able to capture the impacts that CAPS project will have on their users after the end of their activities, as the methodology will be applied to on-going CAPS projects. Therefore, the IA4SI methodology and assessment focuses on **expected** impacts and will describe, coherently with the definition of impact provided by the International Association for Impact Assessment (IAIA), "the difference between what would happen with the action and what would happen without it[7]". Nevertheless, it is important to note that the IA4SI methodology can be used also when these projects will be completed, so that, in synthesis, the methodology can be useful in the on-going project phase and

[4] For an overview of the SEQUOIA methodology and results see Passani, Monacciani, Van Der Graaf, Spagnoli, Bellini, Debicki, Dini, 2014. The compete methodology is described in Monacciani, Navarra, Passani, Bellini, 2011 and a practical approach to its usage is described in Monacciani, Passani, Bellini, Debicki, 2012.

[5] The ERINA+ Methodology and related tools is described in Passani and others (2013)

[6] The MAXICULTURE methodology is described in Passani, Bellini, Spagnoli, Satolli, Debicki, Ioannidis, Crombie, 2014.

[7] Available at http://www.iaia.org/publicdocuments/special-publications/What%20is%20IA_web.pdf

in their ex-post phases. The methodology is not meant to be used for ex-ante evaluation, for example, when evaluating future CAPS proposals if not with relevant adaptations.

In synthesis, running an impact assessment means answering the question “what is the difference a CAPS project make at socio-economic level, at environmental level and at political level?” This will be done by mapping the inputs, outputs, outcomes and the expected impacts of CAPS projects. In other words, this will be done by applying the value chain approach, which is also known as logic model, or logic chain.

In this view, as shown in the following figure, the term “impact” is used to refer to results at the furthest end of the logic chain and is the consequence of project activities, outputs and outcomes.

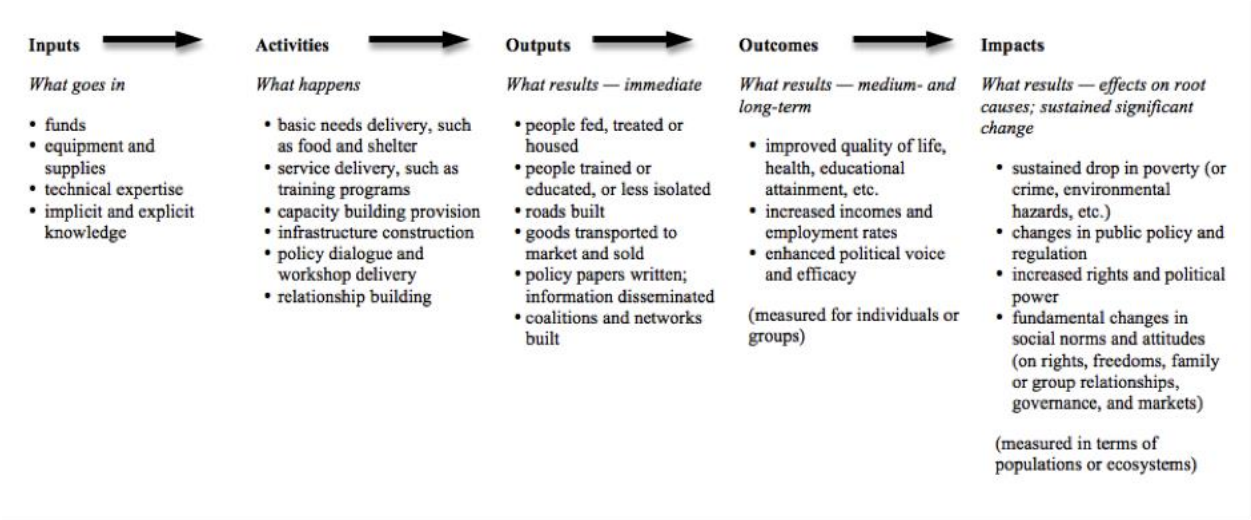

Fig. 3 - Logic model. Ebrahim and Rangan (2010:49**).**

Adapting from Epstein and McFarlan (2011), it is possible to define the main steps of the value chain as follows:

- **Inputs:** the key tangibles (monetary) and intangibles (non-monetary) investments made in a project. The analysis of the input is important at the project level and at aggregated level both when running a qualitative analysis and when applying quantitative method such as the Cost-Benefit analysis which will be used in IA4SI (described in paragraphs 2.2)
- **Activities:** the specific programs or actions that the project undertakes. In the case of CAPS projects the research, development and piloting activities performed.
- **Outputs:** tangible and intangible products and services that are the result of the organizations activities. Describing outputs means describing the observable results of a project such as the number of published scientific papers, the number of released software, the number of developed policy recommendations, etc. They need to be constantly monitored during the project lifecycle. IA4SI will not consider all the outputs of a project (for example, it will not consider the number of produced deliverables), but only those outputs that can be of help for evaluating the project impacts, i.e. does that have a logic link with impacts. This is because IA4SI does not want to duplicate the work already conducted by the EC in its monitoring and review processes, in this way also limiting the effort to be invested in the assessment by CAPS projects. The analysis of outputs is needed also in order to evaluate project effectiveness and sustainability.
- **Outcomes:** specific changes in behaviours and individuals affected by the delivery of the services and products created by the projects. Analysing outcomes means analysing the

short-time effect produced by the project on its stakeholders. The main difference between outcomes and impact is the time frame in which they can be observed: outcomes are short-term effects while impacts are long-term effects. Additionally, outcomes are observable at micro and meso level while impacts are generally observed at macro level: i.e. on society and economy as a whole (KEA, 2012a). The IA4SI methodology develops a set of variables that merge outcomes and expected impact as suggested, among others, by the KEA Benchmark Methodology (KEA, 2012a). This choice is guided by the fact that IA4SI will observe on-going projects so that long-term impacts will not be, as mentioned, directly observable. The indicators selected, however, assure the possibility to map both outcomes and expected impacts. Moreover, concerning the economic impact it is necessary to stress the fact that - due to the restricted number of projects under assessment and considering the distributed nature of projects (that do not focus on a single territory) - IA4SI will not assess the impact on the European or local/national economy. Rather it will assess the sustainability of each of the project outputs, the economic benefits a project will provide to the project's consortia and to the users, and its impact on the development of new business models and on the attractiveness of a territory. Similarly, social impact will consider the individual dimension and the local communities, and will not generate hypothesis on the impact on society intended at national level or European one.

- **Impacts:** benefits to the communities and society as a whole as a result of the project outcomes. Impacts are the net difference made by an activity after the outputs interact with society and the economy. They are long-term and long-lasting effects of an action and can be, as outcomes, direct or indirect, intentional or unintentional, positive or negative.

The terms just described are important in the IA4SI methodology as an input-output-outcome-impact model of impact assessment is followed. And, it will also be reflected in the Self-assessment toolkit that CAPS projects will use for entering the data about their projects and for visualising the assessment results (see paragraph 5.1). Paragraph 3.9 shows the indicators and variables that are related to the logic model. Before describing the techniques used in IA4SI for describing and quantifying the projects impacts, it is worth mentioning that a preliminary step needs to be undertaken prior to applying the logic model, i.e. the definition of the baseline.

Baseline definition

In order to describe and possibly quantify the differences produced by a CAPS project, or by any other innovative initiative, it is necessary to have a description of alternative scenarios or counterfactual scenarios. Typically, the counterfactual scenario represents the situation without the project outputs, which could be defined as "baseline scenario".

This will usually be a forecast of the future without the project outputs. A sort of no-investment scenario describing what will happen in the future in the context under consideration without the project outputs (Monacciani, Passani, Bellini, Debicki, 2012). In this way, it will be excluded from the assessment of the outcomes and impacts that would have occurred anyway, even without the project.

In the case of IA4SI, it is also necessary to guide the CAPS project in considering only the outcomes and impacts effectively related to the project activities and outputs, excluding pre-existing results. In fact, some of the CAPS projects build on pre-existing technological solutions and online communities. For this reason, it will be necessary to distinguish, for example, the number of users that exist before the start of the project and the number of users that have been added to the online community thanks to the project activities.

For this reason at the beginning of the impact self-assessment toolkit (SAT[8]), CAPS projects will be requested to:

- Define their stakeholders by selecting them from a proposed list. In this way they will answer the fundamental question: who will be the direct and in-direct beneficiaries of the project?
- Select from a list the expected impacts and, where possible, define quantitative targets. In this way, the projects will personalise their assessment according to the project objectives and the SAT will present them only those questions that are related to the selected areas of impact.
- Define the baseline scenario
- Define the projects' outputs

Only at this point, the project may start to describe and quantify its outcomes and impacts.

The baseline scenario (without-project scenario) is the most suitable counterfactual scenario used in the context of research and pilot projects. In fact, the alternative would be to ask projects to compare themselves with other already existing solutions. This will be the classical request for commercial innovations and, in that case, the evaluator would map all commercial initiatives that have some similarities with the project under assessment and/or that a potential user can see as an alternative to the project under analysis. He/she should, then, describe such initiatives and their outputs and possibly highlight the similarities between the product under analysis and the initiatives identified. IA4SI consortium has considered the possibility to follow this path viewing commercial or non –commercial alternatives to CAPS projects outputs, such as other Digital Social Innovation projects available online, but the topic and activities proposed by CAPS projects seems to be not easily comparable with what already is available. Moreover, as CAPS projects develop and integrate different services, this would lead to a rather complex analytical activity as each service or its component could deserve a baseline scenario. For this reason, the without-project scenario seems the most appropriate counterfactual scenario for the CAPS impact assessment framework.

2.2 Main approaches used in the IA4SI methodology

In this paragraph we will describe the evaluation techniques that will be used for describe and quantify the difference produced by CAPS projects on this beneficiaries.

Evaluation techniques to perform an impact assessment are numerous. For example, in Berghout et al. (2001), 65 methods were identified. Each differs in its level of detail, the range of considered stakeholders, the characteristics of the required data and its final aim. The selection of an appropriate method is critical since evaluation accuracy and success depends on the suitability of techniques and the rigor with which they are applied [Berghout (2002), Khalifa et al. (2001), Pouloudi et al. (1999)].

According to Evalsed manual (European Commission, 2012b), four main methodologies are currently used for socio-economic impact assessments:

- *Contingent evaluation*: it is called also priority evaluation method. Its aim is to involve the general public in decisions. The method combines economic theories with social surveys to simulate market choices and to identify priorities of choices and preferences. This approach is useful for decision-making, especially with techniques using value judgements. The aspects of the current scenario are compared to an ideal scenario to

[8] See IA4SI deliverable D3.1 "Self-Assessment Toolkit, User Data Gathering Interphase and Citizens Engagement Platform" for a further information about SAT

assess public preferences. This method is usually applied in an environmental impact assessment, especially to evaluate non-marketable environmental goods. As this method is normally applied before the start of an investment/project and considering the final aim is to orient policy choice, it will not be used in the IA4SI methodology.

- *Cost-Benefit Analysis (CBA):* it is aimed at evaluating the net economic impact of a public project involving public investments. A CBA is used to determine if project results are desirable and produce an impact on the society and on the economy by evaluating quantitatively monetary values. Compared to other accounting evaluation methods, a CBA considers externalities and shadow prices, allowing also the consideration of market distortions. Usually, a CBA is used in ex-ante evaluations for the selection of an investment of a project or in the ex-post evaluation in order to assess the economic impact of project activities. In IA4SI this approach will be used for analysing the economic impact of CAPS project. However, due to the no-profit nature of CAPS projects and considering their peculiarities in terms of outputs, the Cost-Benefit analysis will be applied using the willingness to pay and the willingness to donate as main monetary values.
- *Cost-Effectiveness Analysis (CEA):* it is a method for selecting the most effective alternative in terms of costs between projects with the same objective. A CEA is used for evaluating benefits that are not expressed in monetary values. It is not based on subjective judgements and it is not useful in case of projects with many different objectives (in this case a weighted CEA is used). The main objective of a CEA is to evaluate the effectiveness of a project, but it does not consider the efficiency. A CEA is mainly applied to projects in the health sector with a strict definition of the programme objectives. A CEA should be applied only to compare simple programmes providing the same kind of impacts. Within the context of CAPS projects, the IA4SI team decided to not apply the CEA as the context in which the projects are developing Digital Social Innovation initiatives is complex and we prefer to use the Multi-Criteria Analysis, which is more useful for assessing different impacts;
- *Multi-Criteria Analysis (MCA):* it is used to evaluate non-monetary values of a project and to compare and aggregate heterogeneous values (tangibles and intangibles, monetary and non-monetary). A MCA combines different decision-making techniques for assessing different impacts of the same project. It is aimed at identifying the opinion expressed by all stakeholders and end-users of a project in order to formulate recommendations and to identify best practices. The MCA will be used for evaluating the social and political impacts but also for the environmental and economic impact that cannot be expressed in monetary terms (Mendoza and Macoun, 1999; Mendoza and Martin, 2006).

It was decided then to ground the IA4SI methodology on the Cost-Benefit analysis (CBA) and on the Multi-Criteria analysis (MCA) in order to be able to describe impact measurable in monetary terms and impact non measurable in monetary terms[9]. As we will see in the following paragraph, there is not a ready-to-use impact assessment methodology for social innovation, Digital Social Innovation or CAPS, and a single instrument cannot be sufficient in mapping and describing the outputs and impact of research project which focus on very different topics, engage several kind of stakeholders and have a research and innovation focus. For these reasons, besides Cost-Benefit analysis and Multi-Criteria analysis IA4SI will also make use of an emerging approach called

[9] Please refer to Passani, Bellini, Spagnoli, Ioannidis, Satolli, Debicki, Crombie, 2014 for a more elaborated analysis of these two techniques and the evaluation of their pros and cons. Other references on the Cost-Benefit Analysis and the Multi-criteria analysis are: Brent, 2007; EC, 2008; Department for Communities and Local Government, 2009.

Social Media ROI, and will adapt the Environmental Impact Assessment framework to the needs of CAPS domain. Finally, IA4SI will explore the changes in opinions and behaviours generated by CAPS project through the user survey that will take advantage of the Stated Preference Techniques and of the Revealed Preference methods.

- *Social Media ROI* is described in more details in paragraph 3.3; in this context is sufficient to say that Social Media ROI represents an adaptation of a classical measurement of investments, which is the Return of Investments (ROI). ROI is measure used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. To calculate ROI, the benefit (return) of an investment is divided by the cost of the investment; if the ROI is negative it means that the investment has a cost higher than the benefit it produces.
- *Stated preference methods, Priority evaluation method, and Revealed Preference methods*. Stated preference methods represent a set of pricing techniques where respondents are asked how much they would pay for avoiding an intervention perceived as negative for the themselves or their community (like a degradation of the environment) or how much they would ask as a compensation[10]. Similarly, the priority evaluation method is based on the simulation of choices in a market place. Normally, respondents are requested to use a hypothetical allocated budget, and use it for purchase a defined number of items choosing from a list. The hypothesis behind these approaches is that respondents will buy what they consider more valuable. In this way it is possible to derive their values and then monitor how such values change over time (EC, 2012b). Both approached ask people to directly state their values, rather than inferring values from actual choices, as the "revealed preference" methods do. This second set of techniques observes the actual habits of respondents and derive value form them. For example, respondents are asked to declare how much they donated for charities in the last year and to specify the filed of action of such charities, how much they spent in energy efficient measures, etc.
  There is a large debate on the pros and cons of stated and revealed preferences techniques, especially among economist, but IA4SI team see them as complementary and will use both of them in the analysis of users behavioural changes. Both methods will inform the users survey that IA4SI will conduct by engaging CAPS projects users through the User Data Gathering Interface (UDGI, see par. 5.1). CAPS users will be asked, on one hand, to describe their actual habits with reference to volunteer activities, political participation, environmental-friendly habits, related expenses and so forth and, on the other hand, questions based on state preference methods and priority evaluation methods will be also included. The survey will be done at least twice in the CAPS project life-cycle in order to observe any change in users behaviours. Clearly, there is an issue of attribution as it is not easy to understand if the changes in users behaviours are the consequences of the CAPS project activities or is due to external factors. For this reasons control questions will be included[11] and the results of the analysis will be conducted with due attention.

[10] This definition is based on the OECD one available at http://stats.oecd.org/glossary/detail.asp?ID=6575

[11] At the present stage the user survey is still under development, but a possible option would be that of comparing the changes of highly engaged users with those that are not so intensely engaged. In this way, if the behavioural changes are observed also in the low-engaged group, they could be interpreted as not related to the project under assessment.

2.3 Impact assessment for social innovation

The European Commission document "Strengthening social innovation in Europe" states: *"Assessment is an emerging agenda. (…) Unfortunately there is no simple, single solution to better assessment, no single tool that can transform understanding of how to tap into social innovation; instead better answers emerge from a broader range of experiences, insights and data" […]*

"Data system struggle to cope with the issue – for social innovation is an approach, rather than a sector, with achievements that are often centered on new types of relationships and changed minds rather than tangible products. It is unlikely that there will ever be one single social innovation indicator in the EU" (European Commission, 2012a: 7).

On the same page the TEPSIE project (Theoretical, Empirical and Policy foundations for building Social Innovation in Europe): "*A central complain in the debate is the missing empirical data which is at least partially a result of a lack of approached to measure social innovation*" (Bund and others, 2013). These difficulties are also acknowledged by a document elaborated for the EC by the GECES Sub-group on Impact Measurement titled "Proposed Approaches to Social Impact Measurement in European Commission legislation and in practice relating to: EuSEFs and the EaSI" (2014).

All these documents stress the fact that effective assessment can be overcome in the field of Social Innovation by the following main potential issues:

- Cross-cutting nature of social innovation: social innovation is more an approach than a sector so that impacts can be observable in very diverse field from education to health, from political participation to environment.
- Diversity of measures of impact: in the private sector there are accepted measure for the economic assessment, but for the analysis of CAPS projects we have to invent a completely new methodology related to the specific framework of analysis
- Definition of social innovation: as we shown in chapter one there is not an univocal definition of Social Innovation and also the BEPA reports link this issue with the lack of evidences: "*The lack of data on the social innovation sector has various causes — first and foremost, (…) the very concept of social innovation is far from having a clear definition*" (BEPA, 2011).
- Complexity of relationships in social innovation: different actors, new models of collaborations such as public private partnership (PPP).

Both the European Commission framework (2012a) and the TEPSIE "Blueprint of Social Innovation Metrics" (Bund and others, 2013) offered interesting inputs in the development of the IA4SI methodology. Both documents propose a methodological framework addressing policy-makers as main target and, especially in the TEPSIE document the focus is on evaluating enables, framework conditions and impacts of social innovation programmes at macro level. As IA4SI focus is on micro and meso levels of analysis (the methodology considers projects as main point of analysis, not programmes, not innovation systems); for this reasons their messages have been taken on board and their main components carefully considered but their approaches have been adapted to IA4SI purposes.

For example, TEPSIE proposed a set of indicators for mapping the framework conditions at country level: these indicators have the goal of comparing countries and evaluate how they are able to facilitate social innovation. Among others, the indicators proposed refer to gender equality, environmental sustainability, policy awareness, membership in civic society organisation, academia resources deployed on social innovation. All these dimensions are also considered by the IA4SI methodology as the underline conceptualization of Social Innovation is very similar; moreover, some of the source of data suggested in the document have been considered for:

- building IA4SI indicators
- supporting the aggregated analysis by considering them as external benchmarks.

Moreover, the TEPSIE document links and grounds social innovation to the research on innovation, especially the technological-driven one represented by the OECD Oslo manual (2008) which TEPSIE takes as main point of reference. This is an important term of reference that IA4SI also considered within the economic impact, under a specific dimension dedicated to innovation. At the same time, during the first IA4SI workshop, CAPS projects representatives warded the IA4SI consortium in taking only the Oslo Manual as point of reference because Digital Social Innovation is not only about products and services, but also processes and synergies among actors so that more indicators about open innovation and non-technological innovation have ben added.

With reference to the framework provided by the European Commission (2012a), it focuses on three related aspects for supporting policy development: progress of social innovation take-up, extent of barriers to social innovation and impact of social innovation by field. In IA4SI the third aspect was particularly relevant “impact of social innovation by field”, but also the take-up potential of CAPS project outputs and the social innovation approach in general will be considered in the aggregated analysis.

The GECES sub-group on Impact Assessment (2014) proposes a general framework for project impact assessment, but do not suggests indicators and variables. In this way, the possibility to merge results and compare the performance of different interventions in a quantitative way is precluded. By following the proposed framework it will be still possible to create a narration about the interventions, but only considering them as single entities. IA4SI is trying to do something different allowing the EC to consider CAPS projects both as single entities and as part of a community, which can deliver impact at aggregated level. For this reason, IA4SI is looking for a point of equilibrium between the need of personalisation of each CAP project and the need to elaborate results at aggregated level. The solution proposed is a modular set of indicators mapping various potential areas of impact among which the CAPs projects will be able to choose the most appropriate for their projects. In this way, there will be a set of indicator common to all projects and another set of more personalised indicators with the aim of capturing the peculiarities of each project. The GECES document propose five key terms as a base for impact assessment which are the well-known Impact Value Chain for which an intervention can be assessed by analysing its input, activities, outputs, outcomes and impacts. As already mentioned, IA4SI methodology is based on the Impact Value Chain so that it is possible to see a substantial convergence, even if the definition of the five terms is slightly different from the one provided by the document[12].

In building the IA4SI methodological framework, others points of references came from the no for profit sector also labelled as the “third sector” or the “voluntary sector”, consisting of stakeholders commonly involved in philanthropic donations or investments, such as foundations, individual donors, non-profits, non-governmental organizations and social impact investors (Flynn and Hodgkinson eds, 2001). Of course Social Innovation and Digital Social Innovation are not synonymous with the no for profit sector, however many actors from this sector can be engaged in social innovation initiatives and the no for profit sector is dealing with social issues as its main mission and share with CAPS the need of assessing their impacts. For these reasons the IA4SI consortium decided to investigate how the sector is dealing with this issue.

[12] The document defines impact as the extents to which that change arises from the intervention, i.e. address the attribution issue of outcomes. IA4SI define impact as the long-lasting, long-term effects of the interventions.

Non-profit sector and impact assessment

Due to its valuable contributions in various areas of society, the non-profit sector has an impact globally that is believed to be quite substantial (Salamo et al, 2000). However, one of the hardest things to measure for this sector, is the impact an organization is having as their impact are mainly non-monetary. In fact, most non-profits have not much focused on measuring it until quite recently. While numbers are relatively straightforward to measure and have, for a long time, been the go-to measurement and assessment of non-profit success (Sawhill & Williamson, 2001), they do not give a full or comprehensive view of the organizations contribution. Recently, a call for public accountability is on the rise, as is the growing governmental scrutiny to demonstrate impact. Resources have tightened during the economic crisis and, at the same time, there is a clearer focus on the scope and structure of the non-profit sector. This all lays the ground for the increased interest and need for measuring third sector impact on society (Embrahim & Rangan, 2000; Salamon et al 2000). Besides the anecdotes, whose generalizability is difficult to assess, there exists rather little information on the actual difference these organizations make (Salamon et al, 2000).

Feeling the pressure of measurement, non-profits can be seen to rely on performance measurement systems, which are developed to evaluate success towards achieving their mission (Epstein & McFarlan, 2011; Ebrahim and Ragnan, 2010). Going beyond financial metrics, non-profit organizations are increasingly starting to use various methods to measuring performance aspects, such as efficiency, effectiveness, outcomes, and impact. The different approaches and methods depend on the organizations' field, focus, scope, size and target "clientele". The differences in approaches can even be seen in the terminology and conceptualization that is used (Salamon et al, 2000). While others speak of impact, others feel the pressure to pay attention to performance measurement (Ebrahim and Ragnan, 2010).

Different methods employed can be captured in three main categories: goals-based, outcomes-based and process-based. Goals-based evaluation assesses the extent to which programs meet goals and how they could progress in the future. Making a parallel with CAPS domain, this recalls the European review process in which the DoW is used as a point of reference for evaluating achievements. Outcome-based measurement measures whether and how programs make a real difference in the lives of people. And, this is also what the IA4SI methodology is interested in doing. Process-based evaluations, by contrast, are less about goal achievement and more about understanding how a program operates, and the results are produced. Process-based evaluations are useful for on-going, long-term programs that appear to have developed inefficiencies over time (Anheier, 2005). Also, this dimension is covered by IA4SI in analysing some project activities, their success rate, and their capability to be sustainable in the future[13].

[13] Though goal-based evaluations have been claimed as the most commonly used evaluations, outcomes-based evaluation is increasingly being used. Many organizations rely on breaking down the organization's resource gathering and disbursing activities into different clusters and analysing them in parts (Salamon et al, 2000; Ebrahim & Ragnan, 2010; Epstein & McFarlan, 2011). This method allows for the development of metrics that provides insights into how the organization is performing against its mission. Also, in this sector the impact value chain is the most used approach even if, as Ebrahim and Ragnan observe, the attention to outcomes has also being criticized, especially by practitioners, who suggest that though outcome measurement appears to be a clear way of informing funders what is being done with the money they put in, this outcome measurements draws already scarce resources away from services and it emphasizes maybe too much the outcomes for which the causal links are unclear (Glasrud, 2001: 35 cited in Ebrahim and Rangan, 2010: 12). This reflects then listening more to funders wishes than actually bing interested in findings ways to improving services and results (Torjman, 1999: 5 cited in Ebrahim and Rangan, May 2010: 12). This risk is also mentioned by the GECES sub-group and is the reason why IA4SI toolkit will allow projects to select the areas of impact that are more relevant for them in this way saving time.

Though the task of social value measurement or impact assessment is not easy, several organisations have found ways to overcoming this challenge. Concepts like Social Return on Investment (SROI) and “Ongoing Assessment of Social Impacts ”(OASIS_method) by REDF (Roberts Enterprise Development Fund) involves assigning a monetary value to social improvements in which a reduction in social costs is assumed to be accrued and constantly monitoring client’s outcomes.

However, the use of SROI is also not without criticism: while the SROI may be a highly useful too to non profits to estimate the cost savings or revenue contributions that result from the interventions of the organization, the fact is that only a few non profits will have the financial and human resources available that are required to create and manage such a SROI system (Emerson and Cabaj, 2000: 14). The complexity of this methodology, and the need to find economical proxies for the social benefit produced by the interventions is the reason why IA4SI in not using this methods and preferred the Multi-Criteria one, which allow to combine quantitative and qualitative data, monetised and non-monetised data. Moreover, it is difficult to create a system of proxy that is reasonable for all CAPS projects, active in rather different fields and it will also request a constant update, while the IA4SI methodology is meant to be stable so to be used also for future projects.

There are differences in who should be concentrating on the **long-term impacts** versus **shorter-term results**. As it is not feasible, or even desirable, for all organizations to develop metrics at all levels on the logic chain. More importantly, non profits should work towards building systems and structures for measurement that support the achievement of organizational mission, especially the goals that an organization can reasonably control or influence.

In addition, when nonfinancial metrics are combined with a financial performance metrics, the organizations can have a more holistic view of their performance and a better understanding of the impact they are having on their target communities (Epstein & McFarlan, 2011: 34).

2.4 The process followed for developing the IA4SI methodology

IA4SI methodology described in this section has been elaborated starting from an extensive literature review on Social Innovation, Digital Social Innovation, impact assessment methods for these domains and conceptually close domains such as the third sector, development-related investments and online communities assessments.

Beside this, IA4SI team carried out phone/online interviews with the representatives of all CAPS projects and, before doing so, analysed all their public available documents (presentations, fact-sheets, websites). The interviews were very useful for better framing their actual goals, activities and expected impacts, and the planned engagement strategies and community building processes. The information gathered through literature review, document review and interviews were used as starting point for a brainstorming session held in Brussels in February (during the Concertation meeting); all CAPS projects were present and actively participated. In that occasion the CAPS community exchanged ideas on their impacts and way of mapping/measuring them.

As the figure below describes, the first version of IA4SI methodology - including vertical indicators and a selected number of sub-categories and related indicators - have been presented in the first IA4SI workshop, held in Rome on April the 4th. All CAPS projects were represented in the workshop; facilitation techniques and team-working techniques were used for gathering feedback about the proposed indices, subcategories and indicators.

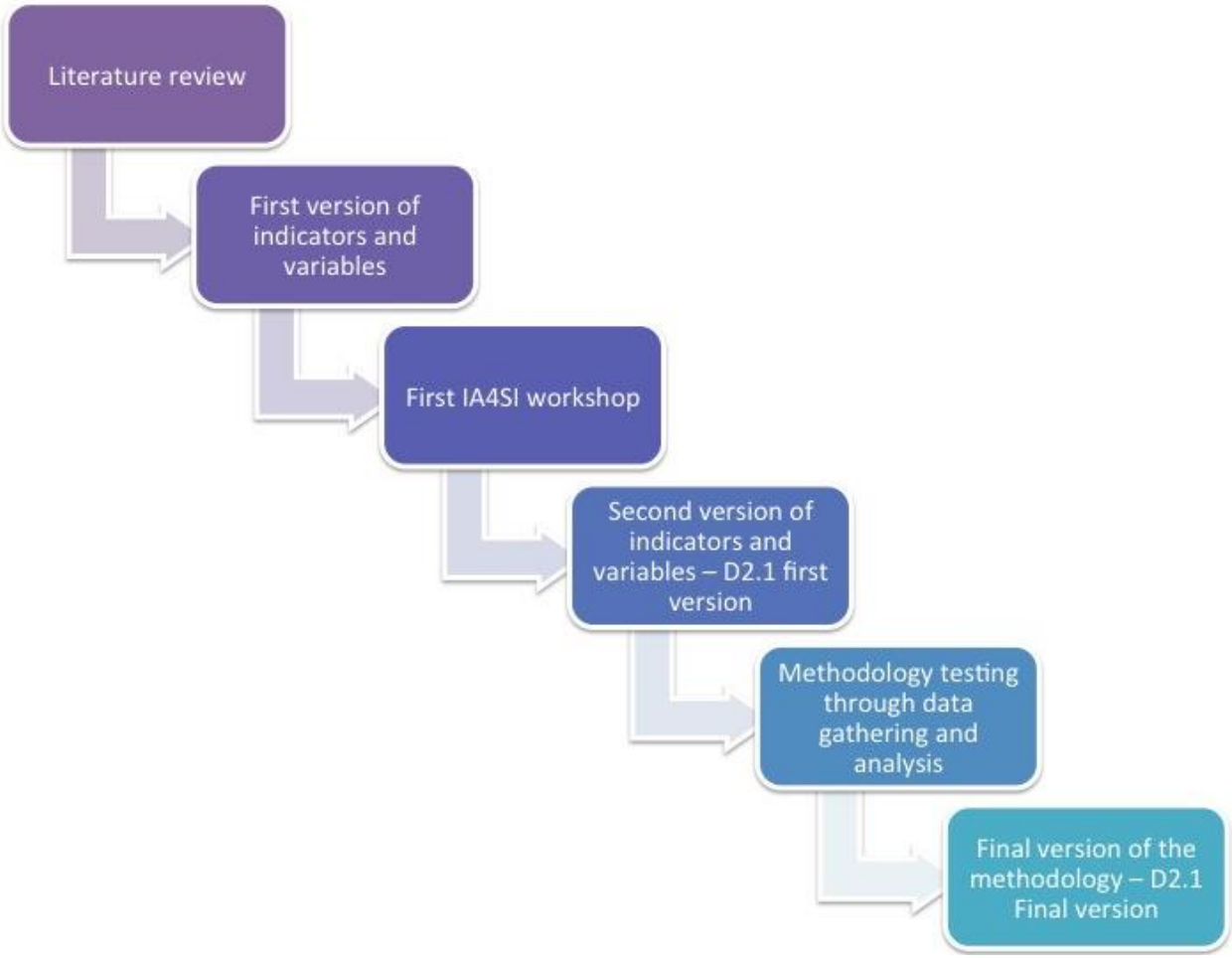

Fig. 4 -The process leading to the final version of the IA4SI methodology

Deliverable 5.1 “Workshops report” describes the activities performed during the workshop and its outputs in a detailed way. Below the main feedback gathered for the four vertical indices and the changes introduced after the 1st project workshop are summarized.

The interaction with CAPS projects, however, started well before the 1st project workshop; in fact, during the first Concertation Meeting held in Brussels in February 2014, a preliminary brainstorming about impact assessment was conducted together with CAPS projects. In that occasion the areas of impact emerged from the literature review, from the analysis of available information about CAPS projects and from phone interviews conducted with all CAPS projects representatives were proposed and discussed. In that occasion CAPS projects commented on the proposed areas of impacts and supported the elaboration of indicators and variables that, successively, informed this methodology.

As mentioned earlier, this deliverable has to been seen as a working document as CAPS projects will be requested to provide more feedback in the near future: they will receive a shorten version of this deliverable and their suggestions will be gathered. Then, CAPS will be requested to start using the IA4SI toolkit the results of which will provide IA4SI team with more feedback not only about the Toolkit, but also about the underline methodology, which will be fine-tuned and presented in D2.1 IA4SI Methodological framework – Final version (December 2015). In the next sections we summarize the main changes introduced in the dimensions, indicators and variables as a results of the first IA4SI workshop.

Changes introduced in the Social and Political impact index as a result of the first IA4SI workshop

At the time of the workshop “political impact” was a sub-category of the social impacts but it clearly emerged that this sub-category was important for projects and also that political impacts were cross-sectorial so that it was possible to expect impacts related to economic policies or to environmental policies. For this reason it was decided to create a forth category of impact and the Political impact become a complex index.

The social impact index, at the time of workshop, was articulated as in the figure below.

	Areas of impacts
Social impacts	Impact on community building and empowerment
	Impact on participation and democracy (policy awareness, political participation, impact on policies, on policy-making and on institutions)
	Impact on information flows (quality, accessibility, sharing, etc.)
	Impact on training and human capital
	Impact on ways of thinking, values and behaviours
	Impact on science and academia

The areas of impact were generally accepted, but in order to make the discussion more focused, the indicators related to “Impact on community building and empowerment” and “Impact on

participation and democracy" were presented following participants request, so that the discussion focused mainly on these two areas of impact.

An interesting topic discussed was the difference made in the methodology between online and off-line communities. It is clear to IA4SI partners that the dichotomy between online and offline impact make sense only at analytical level as the two domain are inextricably interlinked. Participants understood the annalistic necessity of this distinction and suggested to find more appropriate labels so that now the labels refer to online-communities and local communities.

With reference to the impact of CAPS on behaviours, the participants questioned if change is always positive and as it is not always the case, suggested to allow project to describe the changes they expect to see in their users behaviours and opinions and this is suggestion have been integrated too.

Other important comments were related to the relationship between governments and citizens. In fact, following the OCDE research in the field, IA4SI was proposing to investigate the capability of CAPS of improving the trust of citizens for government, while participants stressed the need of making governments trustworthy. By changing prospective indicators, the accent moved from impact on citizen trust for governments to CAPS project impacts on citizens' capability to influence policy-makers and institutions.

CAPS projects also suggested to clearly distinguish different level of policy—making sure that now each policy-related dimension ask to specify if the impact is at local, national or European level. It was also mentioned for a project to get in touch with policy-makers in a more indirect way by working with umbrella organisations and NGOs with a longer experience in lobbying activities. This option was also added.

The suggestion to better frame changes in the time spent by users in informing themselves, in providing info to others and in debating them was also integrated in the new version of the political impact index and some questions addressing CAPS users were also taken on board such as the following:

- Change in how users get in touch with government/institutions (for example by following prime ministers on twitter)
- If and to what extent CAPS projects impact on users awareness on specific topics, not only on political-related issues.
- Not only if users will be engaged in more campaigns thanks to the participation in CAPS but also if they change the topics of campaigns. If, for example, they can move from being active for the environment to be active on human rights.

With reference to the impact on community building and empowerment CAPS project suggested to include in 'impact on SI and CAP community' and use as indicator the number of publications being shared by others – be it academics, practitioners or media – outside the CAPS-community. IA4SI team preferred to use other variables for covering this dimension, which is indeed very important and proposed, as it will be shown in the next chapter the number of collaboration among CAPS projects, the capability to include actors normally not participating to EU ICT-based projects (such as NGOs, associations, etc.), capability to export the SI approach outside the domain, capability to foster a dialogue and a collaboration among different actors such as governmental bodies, social entrepreneurs, researchers, and similar.

Besides the specific suggestions here summarised, the discussion with CAPS project was very useful in developing a common language and understanding of expected social and political impacts. As a result dimensions were added or deleted and variables were re-thought.

Changes introduced in the Economic impact index as a result of the first IA4SI workshop

The first version of the IA4SI economic impact assessment methodology included seven main areas of impact:

- Impact on Employment: the impact that the CAPS projects have on increasing employment within the social innovation sector and their contribution to new job creation, employment of researchers.
- Impact on the Social Economy: the impact of the CAPS projects on the Social Innovation community and society by improving crowdfunding activities, microfinance, impact on Social Finance (the ability of the project to attract philanthropic foundations, wealthy individuals and institutional funds directing private capital flows into social enterprises) and the impact on the scaling up (the impact of CAPS projects on increasing the scaling of users activities and encouraging the development of new business activities).
- Impact on economic empowerment: the impact on increasing the incomes and economic opportunities of online and offline communities and the impact on the volunteer economy.
- Impact on entrepreneurship: the impact of the CAPS projects on the capability to increase and improve entrepreneurship initiatives of their users and the impact on impact on new businesses created: start-ups, spin-offs, new contracts.
- Impact on competitiveness: this category of impact includes the capability of CAPS projects to innovate business models, to have an impact on revenues of their users, to create new market opportunities by supporting their users to enter new markets and Impact on new categories of beneficiaries and user-driven innovation.
- Impact on business performance: the impact of the CAPS projects on exploitation transfer of ideas and outputs, the impact on the value of the benefit and the impact on other sectors.
- Impact of the technological output: this category of impact includes the impact of CAPS projects' outputs on service innovation, product innovation, process innovation, organizational innovation and marketing innovation.

During the first session of the first IA4SI workshop in Rome the IA4SI team presented the seven areas of impact relevant for the assessment of CAPs projects' economic impact. These seven areas were discussed with a group of three representatives of three different CAPs projects: Wikirate, Web-COSI and CAP4Access. According to these projects, the main objective of CAPs projects is to enlarge the number of stakeholders and to take into account not only the direct users of the projects. The economic impact of projects can be assessed in terms of reducing the economic burdens for users, in fact, one relevant impact is on building and empowering communities. The other areas of impact that are relevant for CAPs projects are impact on entrepreneurship, on competitiveness, on ICT-Driven Innovation attracting more funding/cost saving. Indirect effects of social impacts that can affect also economic dimensions should be considered.

The discussion of the Economic area of impact was really useful for the IA4SI team in order to better define the framework of the CAPs projects and the potential issues/obstacles related to the economic impact assessment within the Social Innovation field. In particular in this domain, it will be very difficult to projects to assess quantitatively their potential or actual economic impact. The assessment should be focused mainly on potential impacts considering a long-time frame (at least, three years after the end of the project).

More specifically, the IA4SI team discussed the indicators included in the following two areas of impact: ICT driven innovation and Social Economy with the representatives of these CAPs projects: CHEST, WEB-Cosy, USEMP, D-CENT and P2P VALUE.

In terms of impact on ICT-driven innovation, the CAPs projects suggested to focus more on incremental innovation assessment, and less on disruptive innovation. It is also relevant to assess the diffusion, uptake and usage of Social Innovation. The organisational Innovation indicator has to be expanded, including new forms of organisational innovation. The assessment of product Innovation in R&D focused only on projects is limited. In terms of assessment of cost saving, time saving and Willingness to Pay for the services/products developed by the CAPs projects they sustain that only the Willingness to pay can be evaluated. Time saving can be useful to analyse only services innovation. The projects support that the indicators presented in this area of impact may be useful to better understand the possible achievements of each project, however, they were considered to be too many and should be reduced.

In terms of Impact on Access to Finance, the projects suggest that it can be useful to analyse how many microfinance instruments have been developed by the users of the project. The evaluation should be an ex-post evaluation as it is really difficult for the projects to analyse direct impacts during the first year. It is relevant to assess mainly the users sustainability and not the sustainability of the projects. In terms of impact on scaling up, the CAPs projects sustain that the evaluation of the number of spin-offs created it is not relevant for research projects, instead, the number of patents, IPRs developed and businesses created are relevant and should be included here. The scaling up cannot exclude also the impact on entrepreneurship that should be moved to the impact on the Social Economy. Some of the projects do not understand the meaning of impact on Social Economy and suggest providing clear definitions for each area of impact in the methodology and in the toolkit. The assessment should include questions about maintenance of the software offering at the end of the project and sustainability of business models (build in). The indirect richness developed by the CAPs project is also relevant within this field. The projects also suggest to include indicators about the sharing economy and collaborative economy.

The CAPs projects also sustain that the Impact on employment should take into account also the incomes generated by the projects in terms of employment and not only the numbers of people employed. The impact on the volunteer economy should be moved to the impact on employment.

According to the feedback gathered, the IA4SI team developed a new version of the economic impact assessment methodology, by reducing the areas of impact and including the indicators required in sub-dimensions. The Impact on Employment was included in the IA4SI Social impact methodology, as agreed during the First IA4SI Workshop with CAPS projects.

Currently the latest version of the IA4SI methodology considers three main areas of impact:

- Users Economic Empowerment
- The Economic Value Generated by the project
- Impact on ICT driven innovation.

In the economic impact section, in chapter 3 we will describe more in detail the three areas of the economic impact.

Changes introduced in the Environmental impact index as a result of the first IA4SI workshop

During the participative session of the first IA4SI workshop, the team presented to CAPS projects the following framework referred to environmental impacts:

Areas of Impact:

- CO2 emissions
- Waste
- Water and other natural resources
- Mobility
- Energy efficiency

- Protection of biodiversity

Dimensions:

- Internal to project: projects' environmental impacts and management
- Users change in way of thinking
- Users behaviour change
- Impact on environmental policies
- Rebound effect

At the beginning of the session, IA4SI team explained to the participants the background of the environmental framework. The methodologies concerning this field of research have widely spread as a result of the growing necessity of environmental impact assessment for different areas of the human activity. Among the areas of impact acknowledged by the literature, IA4SI has selected the ones relevant for the CAPS assessment. It has then worked on the different dimensions in which the impacts can produce their effects, identifying five dimensions that are mostly suitable for every areas of impact.

The discussion of the Environmental impact index with CAPS project has produces many useful results and indications for the IA4SI team. The session produced two main outcomes: firstly, it has clearly emerged that the management of the projects environmental impacts is currently perceived from the participants as a side effect of the implementation of a Corporate Social Responsibility strategy. This is probably due to the absence of project with a strong focus on environmental issues, with the noticeable exception of Decarbonet. Secondly, the projects has express a general need for a simplification of the framework, both in terms of areas of impacts and of dimensions, mainly for lack of data or results in some specific areas.

As a further indication along the line of the simplification, the participants has underlined the long-term nature of environmental strategies and environmental impacts data-gathering, suggesting a modular and progressive assessment of their performances in this area. This concern has been satisfied by IA4SI team explanation that the Self-Assessment Tool has already be designed to be a modular one, and the projects will assess their results only on the environmental areas that they will select according to their activities and interests.

More punctual indications concerned some terminology issues: it was suggested to change "waste" into "solid waste", since this is actually the kind of waste the methodology is going to assess; and it was suggested to change "mobility" into "transport", to avoid confusion with the social meaning of the word. Both suggestions have been accepted. It is moreover suggested to add "Sustainable consumption" among the areas of impact. This entry was originally part of the methodology, and it had been suppressed after an IA4SI internal debate to avoid a concept that could have been to complex for the project. IA4SI proposal aimed at including the data gathering of the sustainable consumption by assessing the indicators concerning "Water and other natural resources". Since the projects clearly stated that this last entry was less clear to them and less coherent with the data produced by their activities, IA4SI team decided to eliminate it in favour of the re-introduction of the "Sustainable consumption" one.

A second participative session was dedicated to the discussion of the indicators of the "CO2 emissions" areas of impact". The participants expressed a general concern about the possibility of having estimates and proxies mixed with hard data among the impact assessment results. The answer to this concern has mainly revolved about the fact that the tool will serve for self-assessment purposes and the projects will be able to know which level of approximation they reach during the data gathering process.

Also during this session participants made some punctual suggestion about terminology: "CO2" as an area of impact to be changed into "Greenhouse gases emissions", and "CO2 reduction for internal project" to be changed into "Carbon footprint". IA4SI team decided to accept the first

suggestion and to decline the second. At this stage it is in fact not possible to put the projects through a proper carbon footprint assessment and the terminology would then result incorrect.

As a final remark, CAPS project requested to clearly specify the time scale of the assessment while framing the questions concerning the indicators.

Following this workshop the methodology has been reviewed accordingly to the inputs received. The reviewed methodology will be presented in details in chapter 3.

3. IA4SI METHODOLOGY

This chapter describes the IA4SI indices, indicators and variables, which will be used for describing and quantifying the outputs, outcomes and impacts developed by CAPS projects. It is important to remember that the methodology is modular so that each CAPS project will be able to personalise it by defining those parts that are more relevant for the activities developed. The indices described here correspond to the operational definition of the expected impact of CAPS projects and domains as emerging in the literature review, in the interviews with CAPS projects coordinators and by the analysis of related EU work programmes and working documents. With reference to the latter

3.1 The overall frameworks

As described in chapter 2, the IA4SI methodology finds its fundaments, mainly, in the Cost-Benefit analysis, in the Multi-criteria analysis and in the Social Media ROI, it is a quali-quantitative multi-stakeholders methodology, which engage projects coordinators, their partners, project users and European citizens. The assessment will be conducted by using 8 synthetic indices: 4 of them are related to specific areas of impact and related sub categories and are visualised in the figure that follows. These indices can be called vertical indices. Each vertical indices is composed of other indices each corresponding to a specific subcategory; for example the synthetic index Social impact is composed of 6 indices, one for each subcategory such as Impact on Community building and empowerment", "Impact on information", etc. The vertical indices and their composition are described in detail in paragraph 3.2.

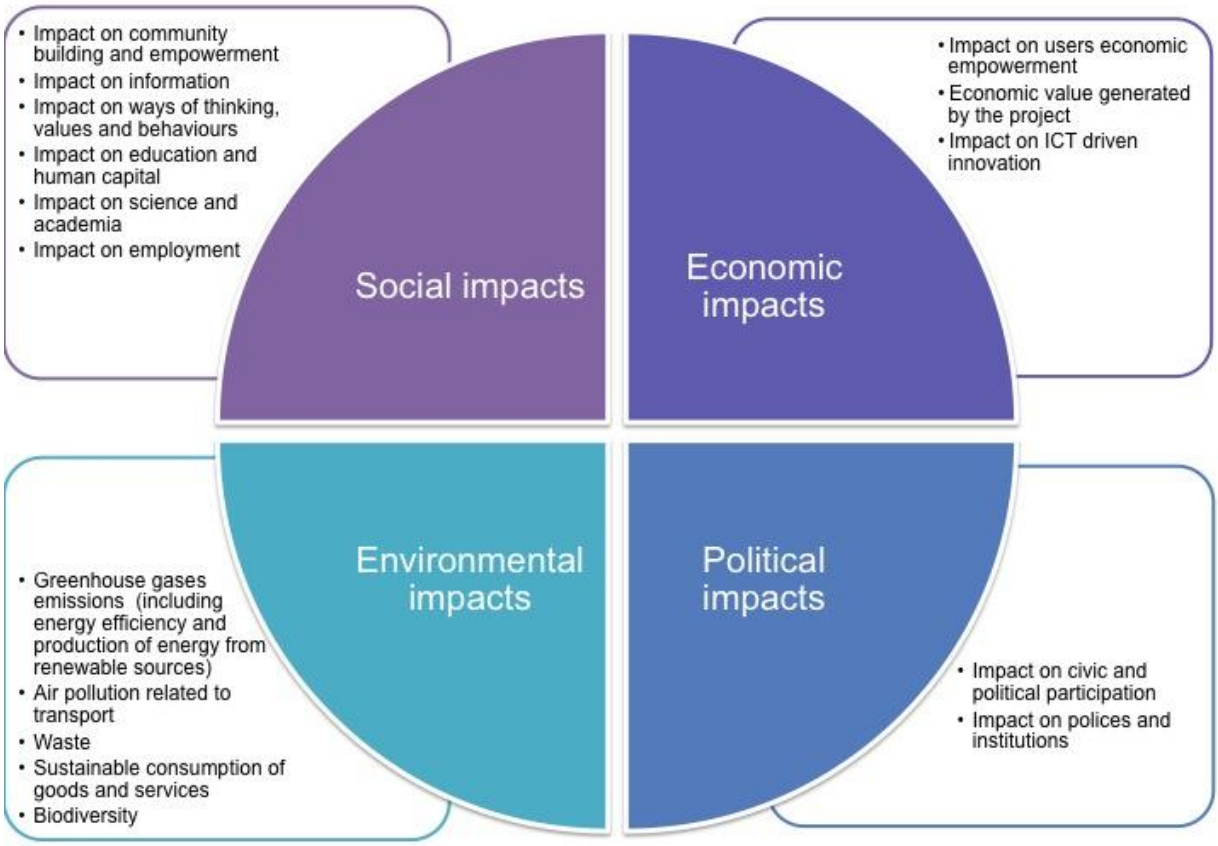

Fig. 5 – IA4SI vertical indices

Considering the FP7 - ICT work programme 2013 which financed the first CAPS projects, it is possible to recognise that the expected impacts stated in the work programme are covered by the vertical index identified in the IA4SI methodology. In fact, the expected impact in the work programme is described as follows:

"*The overall expected impact is the emergence and take-up of new sustainable organisational and behavioural models at individual and community levels, resulting in sustainable social and economical innovation improving the quality of response to societal and economic challenges, such as growth, employment, inclusion, education, community development, health, environment, energy, and quality of life at large*" (http://cordis.europa.eu/fp7/ict/docs/ict-wp2013-10-7-2013-with-cover-issn.pdf).

The first societal and economic challenge identified (growth) is investigated at micro level by the economic impact index; employment, inclusion and community development are analysed by the social impact index while the environment challenge is analysed in the environmental index. Health is not covered in this version of the methodology, as current CAPS project are not dealing with this topic. It would deserve an ad hoc analysis. The last challenge mentioned, "quality of life," is the result of positive impacts in the above-mentioned dimensions and cannot be synthetized in a single index, while it can be analysed by looking at the achievements of CAPS projects in all the areas of impact that the IA4SI methodology studies.

Besides the four vertical indices, the IA4SI methodology incudes 4 transversal indices that provide information about the process followed by the CAPS projects in determining their impacts. In other words, the transversal indices are related to the attributes of the innovation developed. The four indices, visualised in the figure below are: efficiency, effectiveness, sustainability and fairness. These four indices are inspired by Philip, Deiglmeier and Miller (2008:36), that describe social innovation as a solution which is meant to be more "*more effective, efficient, sustainable, or just than existing solutions*."

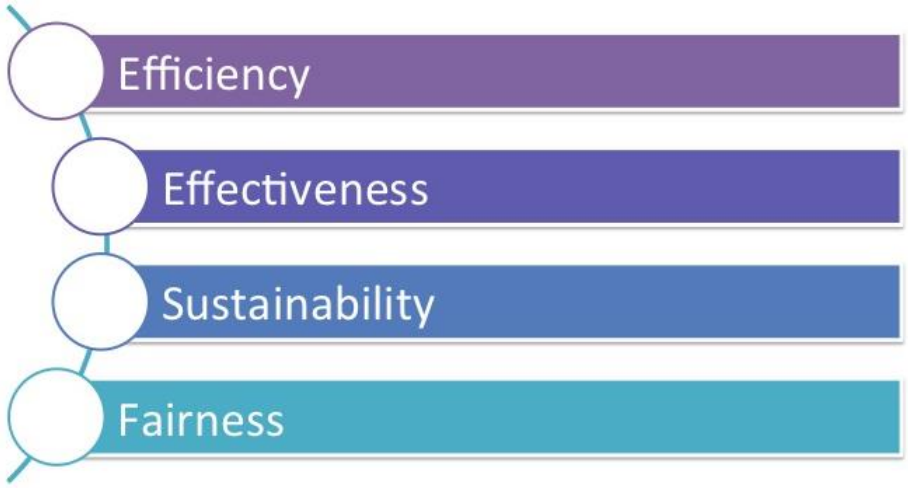

Fig. 6 - Transversal indices

The IA4SI transversal indices are described in paragraph 3.6

All the indices described here will be visualised in the IA4SI self-assessment toolkit and will constitute the core of the assessment analysis at the project and at aggregated/domain level.

3.2 Social impacts

This area of impact (and related index) considers the changes produced by CAPS projects to the specific aspects of social interaction at micro and meso level. At micro level we are interested in understanding the changes occurred at the individual level of project users and - to a certain extent – of project partners. At meso level we investigate the social relations at group and organisational level, such as impact on local communities and impact on specific social groups (like the ones at risk of social exclusion).

The social impact index is composed of the following 6 sub-categories:

- Impact on community building and empowerment
- Impact on information
- Impact on ways of thinking, values and behaviours
- Impact on education and human capital
- Impact on science and academia
- Impact on employment

Besides these sub-categories, which form a specific index each, it will be possible to evaluate also the impact of CAPS on Social Capital and on Social Inclusion. This will be done by aggregating variables that are included in the different dimensions and sub-dimensions in dedicated complex indices. The definition and relevance of these two aspects, Social Capital and Social Inclusion, are described at the end of this chapter.

Impact on community building and empowerment

One of the central characteristics of Digital Social Innovation is that of engaging a certain number of users, able to create a network effect so that new forms of organisations, new opinions, behaviours and, more generally, new ways of tackling pressing social needs can be spread at social level. In the subcategory “impact on community building and empowerment”, the IA4SI methodology will:

- Map the users of the CAPS platforms
- Describe how they use the platform
- Investigate the relationship between online communities facilitated by the CAPS platforms and local communities not directly engaged on the platforms
- Investigate how CAPS projects can support the empowerment of online and local communities
- Investigate the CAPS community itself, the internal level of collaboration and the relationship with other Social Innovation actors and actors from other domains.

This sub-category of social impact, which corresponds to a synthetic index, is composed of 5 dimensions which are:

- Online community building
- Online community empowerment
- Local community building
- Local community empowerment
- Impact on Social Innovation and CAPS communities

As mentioned in paragraph 2.4, the distinction between online communities and local communities does not reflect an opposition between online and offline “worlds” as it is clear that the two are fully interconnected nowadays. In fact, the same persons can be interacting, at the same time, in an online community and with the neighbourhoods. An example is if participants of a manifestation post pictures on twitter with the aim of asking for more cycling routes. The distinction is, nevertheless, needed for analytical purposes and because some variables that can be used for

analysing online communities are different from the ones to be used when looking at local, face-to-face communities.

Another central term in this sub-category is “community empowerment”. This concept, which emerged during the ’80 and that is used in the community psychology, health promotion and liberation education (Laverack, and Wallerstein, 2001), needs to be defined from an operational point of view as it tends to be vague and difficult to measure. The concept of community empowerment is very close and in some sense overlapping with terms and concepts such as community capacity, community competences, social capital and community cohesiveness. However those may lack to point out the procedural aspects of community empowerment and the dimension of power relationships and their changes (Laverack, and Wallerstein, 2001). In fact an empowered community is a community able to act towards a common objective and to promote the desired change. The guide for community empowerment developed by Community Development Exchange (CDX) and Changes, (http://www.iacdglobal.org/files/what_is_community_empowerment.pdf) defines an empowered community as a community, which is:

- Influential
- Organised
- Confident
- Inclusive
- Co-operative

The IA4Si methodology explores the capability of CAPS users and related communities to influence polices and policy-making under the category of political impact. In this sub-category community inclusiveness and collaborations are explored. The organisational aspects are touched but not fully investigated, as analysing the organisational practices of online and local communities appear too complex at the present stage of research and it would risk to further increase the complexity of this methodology. With reference to the capability of a community to be confident, this aspect can be seen as a pre-requisite of being active and be able to self-organise and be heart at social and political level. So that it appears not necessary – at least at the present stage – to develop ad hoc variables covering this aspect. The aspect of inclusiveness is addressed by a dedicated index (Social Inclusion), which is described at the end of the social impact section. Within the subcategory under discussion, however, the capability of CAPS projects to be inclusive is addressed by gathering information on the diversity of the online networks created. In fact, the IA4SI methodology will analyse how online and face-to-face communities engaged by CAPS are diverse in terms of age, gender, education and income levels and if they develop tool and/or carry out activities dedicated to the inclusion of categories at risk of social exclusion or at risk of discrimination. Then, the level of collaboration within CAPS communities, among CAPS projects and between CAPS projects and other social actor is also investigated in this sub-category and frther addressed by the social capital index described at the end of the social impact session.

Finally, with reference to the concept of community, it is important to remember that this is one of the most controversial terms in social science. George Hillery, subjected 94 sociological definitions of the term "community" to qualitative and quantitative analysis and identified sixteen different definitions within the sample (Hillery, 1955). The only element in common among all the definitions is that all of them deal with people. By looking at what the majority of the definitions have in common, it is possible to isolate the following elements: social interaction, area, and a common tie or ties. Therefore, the minimal definition of community can be: a group of persons that interact in a certain geographical area and share social ties. This minimal definition is far from the definition of community developed by Tonnies (one of the first to analyse this term), for which community is the ideal form of organic social groups, where members are connected by a sense of belonging and solidarity which is opposed to the industrial society, where people are individualised and isolated. The IA4SI definition of community is positioned between these two extremes and see local

communities as groups of people that share the same territory, have close and frequent relationships, share some values, believes and objectives and represent themselves as a community (have a shared identity). Regarding online communities, these do not share a territory, but still share some values, norms and objectives; theis interactions are not face-to-face but mediated by social media or, more generally, by technological means of communication (Rheingold, 1993; Porter, 2004).

In developing the indicators and variables related to the online community creation, which have the aim of describing the CAPS platforms from the point of view of users' interactions among themselves and with the platform itself, important points of references have been[14]:

- The synthesis of main features of social media called Software Building Blocks, known also as honeycomb (Pereira, Baranauskas and da Silva, 2010; Kietzmann and others, 2011), which is here used when asking CAPS projects to describe how many users (in proportion on the total number of users) actually use each available features and, of course, for mapping their main features.
- Rowe and Alani (2012), suggest a review of metrics used for evaluating the health of online communities and propose and validate a set of indicators. This paper and related ones were used by the IA4SI team for developing a set of indicators and variables able to describe the online activities of CAPS users. Indicators and variables are related to the number of users of the CAPS community, the rate to which they abandon the community and their level of interaction through posts. As at the time of writing it is not yet known which analytics CAPS projects use for monitoring the usage of their platform, these indicators appear useful and sufficient as data can be gathered quite easily. With the aim of refining the analysis, more variables could be added in the future if a tendency of using more articulated analytics will emerge among CAPS.
- Interactions with CAPS projects, which suggested various variables and offered interesting topics of analysis.

In conclusion, it is important to acknowledge that some of the variables included in this index will be used for building the index of social capital and of social inclusion that are described at the end of this chapter.

[14] The IA4SI consortium thanks Lara Schibelsky Godoy Piccolo (Decarbonet project) for sharing these references with us.

DIMENSION	INDICATOR	VARIABLES
ONLINE COMMUNITY BUILDING	Change in number of users signed in	Link between the CAPS initiative and pre-existing online platforms/communities
		Description of pre-existing platforms/online communities
		Number of platform users at the beginning (day one) of the project
		Number of platform users at the time of the assessment
		Number of users that left the network since the beginning of the project until the time of the assessment
	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 *
	Main feature of the platform	Main features offered by the platforms
	Features used by the users	Features used by the users
	Communication on the platform	Communication on the platform
	Network density	Network density
ONLINE COMMUNITY EMPOWERMENT	Number of groups spontaneously created by the users	Number of groups spontaneously created by the users
	Project capability to influence trust among users	Self-assessment on project capability to influence trust among users
		Sharing of personal data among users
	Number and description of tools/instruments provided by the project in order to reduce power asymmetries on their platform	Project attention to power asymmetries in online interactions
		Number of tools/instruments provided by the project in order to reduce power asymmetries
		Description of tools/instruments provided by the project in order to reduce power asymmetries
	Project capacity of empowering users by providing features/tools for data management/privacy management	Presence of features/tools allowing data management/privacy management
		Description of the features/tools provided
	Network diversity	Ratio between men and women on the platform

		Number of project activities dedicated to fostering gender equality * success rate
		Ratio between young, adult and old people
		Self-assessment of user belonging to categories at risk of social exclusion
	Ratio between highly educated users and not highly educated ones	User survey
	Cultural background composition of the users group	User survey
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 themself
		Instruments provided to users for self-organise themself local
	Number and description of tools/instruments provided by the project in order to reduce power asymmetries in local communities/groups	Project attention to power asymmetries in local interactions
		Number of tools/instruments provided by the project in order to reduce power asymmetries in local communities/groups
		Description of tools/instruments provided by the project in order to reduce power asymmetries
	Number of participants to events organised by the project addressing local communities	Number of participants to events organised by the project addressing local communities
LOCAL COMMUNITY EMPOWERMENT	Project capability to influence frequency of social contacts	*(User survey)*
	Project capability to influence the quality of social relations	*(User survey)*
	Project capability to influence trust among local communities members	*(User survey)*

	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
		Success rate of project activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities
		Description of main activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities
		Number of project activities dedicated to fostering gender equality in local communities
		Average success rate of activities dedicated to fostering gender equality in local communities
	Creation of new civic-society organisations and spontaneous local groups thanks to project activities	Number of new civic society organisation and/or informal groups created at local level thanks to project activities
IMPACT ON SI AND CAPS COMMUNITIES	Formal and informal collaborations with other CAPS projects	Number of formal and informal collaborations with other CAPS projects
		Description of collaborations with CAPS projects
	Number of new partners (partners not collaborating before the project writing)	Number of new partners (partners not collaborating before the project writing)
	Number of partners which are new to UE-funded ICT projects	Number of partners which are new to EU-funded ICT projects

	Formal and informal collaborations with SI initiatives outside the CAPS domain	Number of formal and informal collaborations with SI initiatives outside CAPS domain
		Description of collaborations with SI initiatives outside the CAPS domain
	Formal and informal collaborations with actors outside the SI and CAPS domain	Number of formal and informal collaborations with actors outside the SI and CAPS domain
		Description of collaborations with actors outside the SI and CAPS domain
	Number of instruments/activities provided for CAPS networking and success rate	Number of instruments/activities provided to CAPS project for networking
		Description of instruments/activities provided to CAPS project for networking
		Number of CAPS project participating
	Activities developed by the project to bring together public administrations, foundations, social investors and social finance intermediaries with civil society and the third sector	Number of activities developed by the project to bring together innovative public administrations, foundations, social investors and social finance intermediaries with social innovation initiatives, civil society and the third sector
		Average success rate of the activities organised
	Project self-assessment of its capability to spread SI model	Project self-assessment of its capability to spread SI model

Impact on information

CAPS are expected "to support environmentally aware, grassroots processes and practices **to share knowledge**, to achieve changes in lifestyle, production and consumption patterns, and to set up more participatory democratic processes" (*https://ec.europa.eu/digital-agenda/en/collective-awareness-platforms-sustainability-and-social-innovation*). Under the subcategory "impact on science and academia", scientific knowledge produced by CAPS projects, such as papers, conference proceeding, IPRS and similar, will be covered. Under the subcategory "Impact on Information", the focus will be on projects' capability to provide access to high-quality information, provide users with necessary tools for navigating information and positively influence information asymmetries. This subcategory investigates an aspect that has strong influence on other aspects, such as "Impact on way of thinking values and behaviours", "Impact on community building and empowerment" and political impacts as a whole. In fact, having access to information and being supported in sharing information is a condition sine qua non for changing opinions, habits and being civically and politically engaged.

The impact on information index comprises three dimensions:

- Access to information and sharing of information
- Quality of information
- Data management policies

The first dimension investigates, first of all, the "quantity" and the typology of information produced or exchanged on the CAPS platforms. Thanks to the first three indicators (see table below) it will be possible to monitor the increase of available information during the development of CAPS projects. At the present stage the methodology considers different forms of information such as:

- Articles/long post/structured content
- Short post/status updated
- Forum discussions
- Forum entries
- Images
- Videos
- Other (please specify)

Thanks to the category "other" it will be possible to refine this list of possible information forms and fine-tune it with the content actually shared on the CAPS platform, which is difficult to predict at the time of writing.

Then the capability of CAPS projects to provide access to information that is independent, balanced and represents politically diversified opinions is investigated. In order to explore this important dimension, the IA4SI methodology adapts some of the questions proposed by the FreedomHouse (http://freedomhouse.org) survey on on-line media information freedom (Freedom on the Net report, 2013)[15]. The methodology used in the Freedom on the Net survey examines the level of internet freedom through a set of 21 questions and nearly 100 accompanying subpoints, organized into three groupings:

- *"Obstacles to Access* - including infrastructural and economic barriers to access; governmental efforts to block specific applications or technologies; legal and ownership control over internet and mobile phone access providers.

[15] The questions modulated by the FreedomHouse survey are indicated with an asterisk.

- *Limits on Content* - including filtering and blocking of websites; other forms of censorship and self-censorship; manipulation of content; the diversity of online news media and usage of digital media for social and political activism.
- *Violations of User Rights* - including legal protections and restrictions on online activity; surveillance and limits on privacy; repercussions for online activity, such as legal prosecution, imprisonment, physical attacks, or other forms of harassment" (http://freedomhouse.org/report/2013-methodology-and-checklist-questions#.U8zWkqhFSMN).

As IA4SI is not analysing a specific country, the majority of the indicators in the FreedomHouse survey are not applicable per se, but under the grouping "Limits on Content" a set of questions able to map the capability of online media to provide fair, unbiased and diversified information were studied and appeared useful for the IA4SI purposes. Those questions were adapted when needed and included in the IA4SI methodology. The use of indicators included in the Freedom on the Net survey will allow the IA4SI team to use the international survey as a background in the analysis of CAPS results.

Finally, the first dimension investigates also the capability of a project to tackle the issue of information asymmetries by providing ad hoc tools. The topic of information asymmetries emerged as relevant in the first brainstorming on impact assessment carried out with the CAPS projects in Brussels, in February 2014. Information asymmetries can be related to government-citizens relationships (Open government phenomena, citizens capability of monitoring policy-makers actions, etc.), but can invest also the relationship between citizens and enterprises (consumers rights, access to corporate responsibility information of enterprises, access to environmental data about productions, etc.) and the gap between scientifically sound information and often-misrepresented journalist versions of scientific data, discoveries and similar.

The second dimension tackles the issue of information quality. Information quality is commonly seen as a multi-dimensional concept, the precise dimensions to be considered vary from author to author. As Knight and Burn (2005) point out in their literature review on the topic, information quality is used as synonymous of "data quality" which is described as data that is "Fit-for-use". This implies that the concept of information quality is relative, as data that fits a specific purpose may not be useful for other purposes. Most commonly considered dimensions are: Accuracy, Consistency, Security, Timeliness, Completeness, Concise, Reliability, Accessibility, Availability, Objectivity, Relevance, Usability and Understandability (Knight and Burn, 2005).

These dimensions, opportunely adapted to the CAPS domain, will be investigated mainly through the CAPS users survey. In fact, the users are the ones to be engaged in this evaluation. The projects will be asked to report about instruments developed or used for providing users with the possibility of verifying the information quality.

Through the third dimension, the IA4SI team will investigate the CAPS projects' approaches in terms of user data management, information standard used and standardisation policies.

DIMENSIONS	INDICATORS	VARIABLES
ACCESS TO INFORMATION AND SHARING OF INFORMATION	Typology of information- data available on the platform	Typology of information- data available on the platform (selection from a list including: • Articles/long post/structured content • Short post/status updated • Forum discussions • Forum entries • Images • Videos • Other contents)
	Change in the number of available information	Number of information for each typology selected in the previous question at the beginning of the project
		Number of information for each typology selected in the previous question at the time of the assessment
	Project self-assessment of its capability to improve users access to a range of local and international news sources of information	Project self-assessment of its capability to improve users access to a range of local and international news sources of information
	Project self-assessment of its capability to improve users access to media outlets or websites that express independent, balanced views*	Project self-assessment of its capability to improve users access to media outlets or websites that express independent, balanced views
	Project self-assessment of its capability to improve user access to sources of information that represent a range of political and social viewpoints*	Project self-assessment of its capability to improve user access to sources of information that represent a range of political and social viewpoints
	Project self-evaluation of its capability to influence information asymmetries	Project self-evaluation of its capability to influence information asymmetries
	Number of tools/activities developed by the project for influencing information	Number of tools/activities developed by the project for influencing information

	asymmetries	asymmetries
		Description of tools/actions developed by the project for influencing information asymmetries
QUALITY OF INFORMATION	Instruments provided by the project allowing users to verify the quality of the information he/she accesses	Number of instruments provided allowing users to verify the quality of the information he/she accesses
		Description of the instruments provided by the project allowing users to verify the quality of the information he/she accesses
	Users evaluation of the quality of information provided by the project platform	Users evaluation of the quality of information provided by the project platform
DATA MANAGEMENT POLICIES	Project policy in terms of data management/governance	Personal and sensitive data policy
		Data management/governance
	Project policy in terms of standardisation	Project compliance with state-of-the art standards
	Project policy in term of content licences	Projects' support to open standardized licences

Impact on way of thinking, values and behaviours

The Horizon2020 work programme 2014-2015, when introducing CAPS, declares:

"The resulting collective intelligence will lead to better informed decision-making processes and empower citizens, through participation and interaction, ***to adopt more sustainable individual and collective behaviours and lifestyles****".* (http://ec.europa.eu/research/participants/portal/doc/call/h2020/common/1587758-05i._ict_wp_2014-2015_en.pdf).

The area of impact described in this paragraph tackles the least part of the sentence, i.e. the changes introduced in citizens way of thinking and behaviours, especially the ones related to more sustainable individual and collective behaviours and lifestyles.

It is not easy to monitor changes in opinions, ethical orientations and behaviours. The main challenge is attribution (Bund and others, 2013). In fact, even when observing a change, it is very difficult to associate that change to a defined input. It is possible, for example, to monitor an awareness raising campaign about HIV in terms of number of persons informed through different channels, but it is not possible to say that the decrement of HIV infections is a result of that specific campaign. The issue is complicated by the fact that changes in opinions and behaviours are influenced by the number of people that decide to assume certain behaviours: the more people assume a new behaviours the easier it becomes to see this change spreading across the population (network effect).

For overcoming the attribution problem normally researchers use user/target audience surveys and, when possible, compare them with control groups not exposed to the awareness raising campaign or related actions. Therefore, quasi-experimental research design is the most used one for this kind of analysis.

The IA4SI methodology follows this path and will investigate this area of impact mainly through a user survey. CAPS projects will be asked to describe the topics where a change in opinion or behaviours is expected (consumption models, environmental-friendly choices, etc.) and to describe the activities undertaken and the number of people reached in order to reach the behaviour change. The dynamic related to the number of users and participants (included in the index community building and empowerment) will be also included in the analysis in order to monitor the potentiality in terms of network effect.

In parallel, CAPS users will provide data about their current values, opinions and behaviours trough the User Data Gathering Interface. The survey will be repeated at different stages of CAPS project development in order to monitor possible changes. Currently it is not possible to plan a control group, as the CAPS users universe is not defined yet. Once we will have more information about the users (the number of users engaged and their main profiles) the IA4SI consortium will evaluate the possibility to apply a quasi-experimental research design. In the meantime, it was decided to use the World Value Survey as a useful point of reference in the analysis of changes in opinions and behaviours and as a mean of comparison between CAPS users and the overall population.

The World Value Survey is a global network of social scientists studying changing values and their impact on social and political life; it started in 1981 and analyses 100 countries, representing 90% of the world population with a common questionnaire. So far the questionnaire has been distributed to 400,000 respondents. The World Value Survey covers many different topics such as national identity, role of women in society, political participation, civic participation, attitudes toward the environment, etc. As the questionnaire has been developed by an international network of experts and has been tested and improved several times, the IA4SI team will use some of the questions of the survey for investigating the CAPS users values and behaviours on relevant topics. In this way, it will be possible to see if CAPS users are in line with the value propositions of the European citizens (or of the nationality they belong to) or if they show relevant differences.

Similarly, it will be possible to monitor changes in different periods. Some variables/questions have been already identified as relevant, but in order to finalise the user survey it is needed to have preliminary data on the topics CAPS project are tackling. In fact, the user survey needs to have a limited number of questions and it will, therefore, focus only on the specific topics covered by current CAPS projects. The possibility to expand it to other area, possibly relevant for future CAPS projects, will be evaluated when developing the final version of this methodology.

With reference to the attribution issue, another possible comparison is between users that interact very frequently on CAPS platforms and those who interact only occasionally. In this sense, by proposing the survey at an advanced phase of development or at the end of CAPS projects, it will be possible to define some hypothesis on the impact of CAPS projects on users changes in opinions and behaviours. In fact, if changes are observable both among users that interact frequently on CAPS platforms and among those who interact less, it is probable that the observed change is not determined by the CAPS projects but, more probably, by changes that are occurring at social level. Finally, if it will be possible to create a control group, it will be possible to derive more robust conclusions.

Besides the World Value Survey, the user survey will also be influenced by *Stated preference methods, Priority evaluation method, and Revealed Preference methods*. These methodologies have been introduced in paragraph 2.2 and it is here sufficient to remember that this methodologies map declared or effective spending choices of users and use them as proxy of their values and opinions. So that a person who spent 150 euro in the last year for supporting an environmental organisation (or who declares that the person would donate this amount for this cause and not for others) is seen as more interested in environmental sustainability than one that spent or is wiling to donate zero Euro for environmental-related initiatives.

DIMENSIONS	INDICATORS	VARIABLE
CHANGES IN OPINIONS/WAYS OF THINKING	Topics were opinion change is expected to happen	Topics were opinion change is expected to happen
		Detailed description of topic and subtopics
	Awareness raising and campaigning activities organised by the project on the selected topic	Number of awareness raising and campaigning activities organised by the project on the selected topic
		Number of people participating in awareness raising and campaigning activities
	Change in opinions	*(users survey)*
CHANGE IN BEHAVIOURS	Topics were changes in behaviours are expected to happen	Topics were changes in behaviours are expected to happen
		Detailed description of topic and subtopics
	Activities performed by the project in order to achieve the expected change in users' behaviours	Activities performed by the project in order to achieve the expected changes in users' behaviours
	Number of people participating in the activities	Number of people participating in the activities
	User changes in behaviours	*(users survey)*
	Other activities performed with the aim of changing users opinion, values, values and behaviours	Other activities performed with the aim of changing users opinion, values and behaviours

Impact on education and human capital

This subcategory will investigates if and to what extent projects are working on the transfer of their research results and, more generally, the knowledge produced by the projects to users, the training system (the school system and universities) and to workers. With reference to human capital, we use this term referring to the competencies, skills and abilities that workers have or acquire through formal and informal education and on the job and that constitute one important productive factor of any organisation (profit or not-for-profit) (Schultz, 1961). We are, therefore, interested in knowing if CAPS projects improve the human capital of their users and/or of the professionals working in the projects. A special attention is dedicated to eSkills as a lack of such skill may result in the impossibility to benefit from Digital Social Innovation. It is therefore interesting to see if and to what extent CAPS projects address this issue. For a wider analyses of the concept of human capital and the methodological issues related to its measurement, please refer to Boarini, d'Ercole and Liu, 2012).

Beside this, the methodology will investigate also the capability of projects in having an impact on personal development, i.e. character development, critical thinking and creative problem-solving, as this may represent an important aspect when considering – as social innovation does –new solutions for pressing social needs. Finally, the impact on educational policies and the training sector will be investigated.

This subcategory comprises the following three dimensions:

- Training provided by the project, which refers to projects outputs in terms of hours of training provided, number of persons trained, efficiency of the training provided, topic covered and contributions in the development of innovative tools for training and education;
- Impact on human capital. It refers to the capability of the project to promote eSkills, personal development and an increment in users investment in education as well as the enhancement of human capital of persons employed in the CAPS projects;
- Change in training curricula, educational policies and personal investments in education. It refers to the impact of the projects on the training/educational sector and related policies.

With reference to the capability of the projects to influence users' investment in education, the IA4SI methodology takes as point of reference the OECD indicators "Number of hours per week spent on self study or homework" and "Instruction time per year" (http://www.oecd.org/site/progresskorea/44111355.pdf, p.25). In this way the CAPS projects will have a clear indication of what to consider when answering. At the same time, these indicators will be used in the user survey. Therefore it will be possible to monitor eventual changes in the investments in education.

DIMENSION	INDICATOR	VARIABLES
TRAINING PROVIDED BY THE PROJECT	Training efficiency	Hours of training provided by the project
		Number of persons trained
		Budget allocated to training
	Topic covered by the training activities	Description of topics covered by the training activities
	Tools for education/training developed by the project	Number of tools for education/training developed by the project
		Description of the tools developed
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 how the project support the personal development of its users
	Project self-evaluation of its capability to improve the skills of people employed within the consortium	Project self-evaluation of its capability to improve the skills of people employed within the consortium

		Description of how the project support the improvement of skills of people employed within the consortium
CHANGE IN TRAINING CURRICULA, EDUCATIONAL POLICIES AND PERSONAL INVESTMENTS IN 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 training curricula of secondary and higher education
		Description of the results achieved in the area and of the action undertaken
	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 the results achieved in the area and of the actions undertaken
	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

Impact on science and academia

Under this subcategory information about the projects' outputs in terms of knowledge creation and on the channels they use for transferring such knowledge outside the CAPS domain will be gathered. The scientific impact of projects and their capability to make their research results available to a wide audience will be investigated. This is in fact the condition sine qua non for reaching an impact in the scientific domain, on academia and beyond. Through this subcategory it will be also possible to see if the projects are able to support new research or positively influence the research-related working routines (Passani et al, 2014). Attention is dedicated to the interdisciplinary dimension of the CAPS projects, which is particularly evident when looking at the consortium composition and which deserves a closer analysis.

This subcategory rely on the following three dimensions:

- Knowledge production
- Knowledge sharing
- Impact on research processes and academia

The first dimension will gather data about the number of publications with and without impact factor produced and will measure the average impact factor of CAPS researchers. Beside this, considering the fact that publications in journals with impact factor take times and classically happen at the end of the projects or even later, other forms of knowledge production will be evaluated. The IA4SI team will, therefore, gather information about books, non-peer reviewed papers, conference proceedings and similar.

A typical indicator of knowledge production is represented by patents and patent applications (OECD, 2008). From the background analysis of the CAPS projects a tendency emerged towards Open accesses and Open software approaches so that most probably the consortia will not work towards patents applications. Nevertheless, this indicator is included in the methodology, for reasons of completeness comprehensiveness and for allowing the EC to compare the CAPS domain with other research fields, which most probably will have this indicator in their assessment. Another indicator used in this dimension is related to Intellectually Property Rights (IPRs), which will probably be more populated. Under the category IPRs, CAPS projects will be asked to list all innovation produced to which copyright or trademarks could be appointed and, more generally, all the innovation and discoveries that could be legally recognized as exclusive creations of CAPS consortia or members. CAPS projects will be asked to list not only those innovations that will be actually protected by IPRs instruments, but also the ones that have such potential. In fact, as for the case of patents, CAPS projects could desire to keep all their outputs completely open and un-protected. Open licences such as Creative commons licences will therefore be considered.

Additionally, the first dimension will also investigate the level of interdisciplinarity of the research undertaken which is very relevant for the CAPS domain that sees a strong collaboration between computer sciences and social sciences. .

The second dimension evaluates the capability of CAPS projects to disseminate the knowledge produced. In this sense, besides the scientific publications already investigated in the first dimension, it will be useful to monitor the dissemination activities of the projects, both online (through project website and social media) and through conferences and events. Dissemination activities targeting the general public will be also investigated and specific variables have been introduced in order to map the projects' capability to support knowledge transfer between universities/research centres and the social innovation domain.

Finally, a third dimension is dedicated to the analysis of impacts on research processes and academia. Here the IA4SI team will analyse the project capability to open new research fields, improve the research routines (by making them more efficient, for example) and influence the academia every day life. This last indicator was suggested by the CAPS projects in the first

brainstorming session conducted by the IA4SI project and it refers to the project capability to open the academia to new ways of sharing knowledge, use and give value to non-official statistics and similar. As the possible way of influencing the academia are difficult to predict at the time of writing, this indicator is mainly descriptive. The IA4SI team will probably be able to develop a structured set of possible answers after the first assessment of CAPS projects.

DIMENSION	INDICATOR	VARIABLES
KNOWLEDGE PRODUCTION	Scientific impact	Number of peer reviewed articles with impact factor[16]
		Number of peer reviewed articles without impact factor
		Number of researches
		Number of non-self citation of the works published
		Number of non-peer reviewed articles, books, book's chapters, conference proceedings and other electronically published of printed scientific outputs (excluding deliverables)
		Topics covered by the publications
	Number of patent and patent application developed by the project	Number of patent and patent application developed by the project
	Number of IPRs developed by the project	Number of IPRs developed by the project
	Project level of interdisciplinarity	Number of disciplines represented
		Project self evaluation of the relevance of interdisciplinary activities
		Description of interdisciplinary

[16] The Number of peer reviewed articles with impact factor will be divided by the number or researchers in the consortium in order to obtain the average impact factor of project publications per researcher

		work
KNOWLEDGE SHARING	Use of open access	Use of open access
	Sharing through social media	Use of social media for sharing its research outputs
		Number of twitter followers
		Number of “friends” on Facebook or equivalent in other social platforms (i.e. Research gate, Academia, LinkedIn, etc.)
	Dissemination through project website	Use of project website for sharing project research results
		Number of deliverable downloads
		Number of articles downloads
	Sharing through events	Number of events in which your research results have been presented
		Number of average participant for each event
	Other channel for sharing research results	Other channel for sharing research results
	Number of non-scientific dissemination outputs/activities	Number of articles published on non-specialised magazines, newspapers and online magazines/blogs, etc.
		Number of TV (including WebTV) appearances
		Number of events organised addressing a non-academic audience
		Average number of participants
	Project self-evaluation of its capability to support knowledge transfer between universities/research centres and social innovation domain	Project self-evaluation of its capability to support knowledge transfer between universities/research centres and social innovation domain

		Description of how the project supports knowledge transfer between universities/research centres and social innovation domain
IMPACT ON RESEARCH PROCESSES AND ACADEMIA	Project self-evaluation on its capability to improve research processes	Project self-evaluation on its capability to improve research processes
	Project self-evaluation of its capability to allows its partners and users to perform research activities that would otherwise have been impossible	Project self-evaluation of its capability to allows its partners and users to perform research activities that would otherwise have been impossible
	Description of how the project allow new research activities	Description of how the project allow new research activities
	Project self-evaluation of its capability to influence changes in the everyday life of academia institutions	Project self-evaluation of its capability to influence changes in the everyday life of academia institutions
		Description of the results achieved in the area and of the actions undertaken

Impact on employment

Through this subcategory IA4SI will analyse two related impacts: on one hand it will investigate if and to what extent projects will contribute to the creation of new job places and, on the other hand, it will see if and how their outputs will change the working routines of their users and stakeholders. The EU 2020 Agenda, as the previous Lisbon agenda, expects the investment in research and innovation to have a positive impact on European employment in terms of more and better jobs. Therefore, the IA4SI team considers this subcategory as relevant even if we are aware of the fact that these impacts occur, generally, after the end of EU projects, when and if the product/service developed by the projects is exploited. In this sense, the creation of start-ups is already a good proxy of a possible positive impact on employment. This subcategory also identifies the contribution of the project to improve the working practices of social innovation institutions and of the third sector.

DIMENSIONS	INDICATORS	VARIABLE
IMPACT ON JOB CREATION (DIRECTLY DEVELOPED BY THE PROJECT)	New job places generated	Number of persons recruited specifically for the project
	Impact on researchers employment	Number of researchers working in the project
		Number of young researcher employment
	Impact on woman employment	Rate of woman in the project
	Number of spin-offs and start-ups generated by the project	Number of spin-offs and start-ups generated by 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
IMPACT ON EUROPEAN EMPLOYMENT AND WITHIN THE SOCIAL INNOVATION (SI) SECTOR	Project self-evaluation of its impact on employment	Project self-evaluation of its impact on employment
	Project self-evaluation of its capability to have an influence on the percentage of people employed in the third sector and in the SI sector	Project self-evaluation of its capability to have an influence on the percentage of people employed in the third sector and in the SI sector

IMPACT ON WORKING PRACTICES AND ROUTINES	Project self-evaluation of its capability to contribute to improving the working practices of the third sector and of people/organisations working in SI	Project self-evaluation of its capability to contribute to improving the working practices of the third sector and of people/organisations working in SI

Social capital and social inclusion

As mentioned, beside the areas of impact/indices so far described, IA4SI methodology will also investigate other two complementary areas, which are transversal to several social indices: social capital and social inclusion. A dedicated complex indicator will be dedicated to each of them.

The term **social capital** indicates the links between individuals, the related social networks, the norm of reciprocity and the sense of trust that arises from them (Putnam, 1995). In other terms, it is the capital a person or organisation owns thanks to its participation to social relationships (Portes, 1998). IA4SI will investigate the networks between CAPS projects, the relationships between actual CAPS projects and previous EU-funded projects and the collaboration with other organisations and SI initiatives (outside the EU environment). Additionally it will evaluate the CAPS capability to positively influence networking and trust among their users (this will also be investigated through the user surveys). Finally, the relationship between binding social capital and bridging social capital (Putnam, 1995) will be also investigated. In extreme synthesis it is possible to say that *binding* social capital refers to social networks between homogenous groups, while bridging social capital is used when networking takes place among heterogeneous groups. It is interesting to see if CAPS projects are building communities that are homogeneous from the point of you of users profiles or if, to the contrary, they are able to put in touch persons that show high levels of diversity (in terms of educational levels, age, gender and income). At aggregated level, the data about social capital will be used for running a network analysis (see paragraph 5.2), while at project level social capital will become an index. The analysis of the relationships among CAPS projects and with other organisations is also important as “a test of legitimacy and fairness […] The inclusion of a large number of parties meaning in any case that they (the social innovation initiatives and, in this case, CAPS projects) will probably give feedback along the process and try to improve the solution” (Bund and others, 2013: 22).

Linked to the topic of bridging social capital is the topic of social inclusion. Under this index the capability of CAPS projects to engage users belonging to vulnerable social groups and at risk of exclusion exclusion will be evaluated. For evaluating this topic, the IA4SI methodology follows the definition of ”groups at risk of extreme poverty and social exclusion” provided by the Social Protection Committee Indicators Sub-group for the Europe 2020 poverty and social exclusion target (the sum of persons who are: at risk of poverty or severely materially deprived or living in households with very low work intensity as a share of the total population, expressed in numbers or shares of the population[17]). It also includes the groups at risk of discrimination as listed by the EU in Art.13 of the Treaty establishing the European Community, which recognise the following grounds for discrimination: sex, age, gender, racial or ethnic origin, religion or belief, sexual orientation and disabilities. Questions dedicated to this topic are included in different indices, from civic participation to community building and empowerment, from political participation to economic

[17] **ec**.europa.**eu**/**social**/BlobServlet?docId=10421&langId=en

impact and will also be investigated through the user survey.

3.3 Economic impacts

This area of impact and associated indices considers all the relevant economic results that CAPS projects develop along their lifetime. IA4SI provides an economic assessment of CAPS projects focused on their microeconomic impacts. Indeed IA4SI is not aimed to explore the macroeconomic impacts (i.e. the effects produced on Gross Domestic Product) nor to discover the direct impacts at programme/policy level. On the other hand CAPS projects mainly develop microeconomic impacts, especially in terms of positive economic results for each partners of the Consortium, end-users and general stakeholders of the projects.

Starting from the analysis of these impacts, the IA4SI team has identified several indicators and related variables that will be used for assessing meso-economic[18] impacts of CAPS projects. The methodology takes into account the difficulties emerged during the discussions developed in the First Workshop in Rome of providing an economic and monetary value to the impacts developed by CAPS projects.

Economic impact, has been articulated in 3 subcategories. Each subcategory is defined here below:

Users Economic Empowerment

The first subcategories of impact is aimed at analysing the contribution of CAPS projects to support users to increase their incomes and reduce their costs. The area is divided in two main dimensions: “Impact on access to finance” and “Impact on entrepreneurship and income generation for the users”. The first dimension analyses the ability of projects users to attract more investments/funding through the project activities. The second dimension is aimed at evaluating the impact of the project on encouraging the users to develop new business activities, increasing their incomes and improving investment risk diversification opportunities.

The Economic Value Generated by the project

This subcategory is aimed at assessing the economic impact developed by the CAPS projects through their outputs. The area is divided in three main dimensions: “Economic results”, “Business models”, “Competitiveness and exploitation”.

Impact on ICT driven innovation

This subcategory assess the impact of the CAPS projects in terms of developing innovation and is divided in 4 main dimensions: “Product innovation”, “Process innovation”, “Organizational innovation” and “User-driven and open innovation”. For defining the relevant indicators and variables to be included in this macro-area of impact the IA4SI team followed the innovation definitions provided by the OECD (2005), for the three sub-dimensions product, process and organizational innovation. In terms of identification of indicators and variables to be included in the user-driven and open innovation, a sub-dimension suggested by the CAPS projects during the first Workshop in Rome, the IA4SI team followed the definition of Murray et al. (2010b), as explained more in detail in the following paragraphs.

In this section are analyzed in detail the three main dimensions of the IA4SI economic impact assessment methodology, by describing in detail each area of impact.

[18] The term meso-economic indicated impacts which are between the micro and the macro level.

Users Economic Empowerment

The dimension called “Impact on access to finance” is divided in two main parts. The first section is aimed at analyzing the project capability to increase the access to finance of its users and specifically also the access to emergency finance. This is relevant in the case of Social Innovation projects, as stated in Murray (2010a), a wide range of financial tools should be used especially at early stages of each projects and this constitutes a driver for the success of the project. The second part of the “Impact on access to finance” is aimed at assessing the increase of money for the users and it dedicated only to the projects that are developing crowdfunding initiatives. To consider crowdfunding initiatives is more than relevant in the context of Digital Social Innovation initiatives. Even if within the current CAPS projects framework only a project (CHEST) is developing activities on crowdfunding, we expect that in the next future more CAPS projects improving crowdfunding activities will be funded. In fact, according to Moisseyev (2013), crowdfunding can produce several benefits to the society, such as: creating publicity for the projects and validating their results, it is a research tool, projects can evaluate potential demand for their ideas through crowdfunding and it performs promotion functions.

The second sub-dimension of the Users economic empowerment area of Economic impact is Impact on entrepreneurship and income generation for the users. This dimension is aimed at analyzing the impact of CAPS projects on encouraging their users to develop new business activities, entrepreneurial initiatives and new business ideas. Related to this dimension is also the capability of the project to increase income for the users of the project, to diversify income resources and the resilience of users coping with potential unexpected financial crises. As stated in the Social Guide developed by the European Commission (2013b), to increase the adoption of Social Entrepreneurship is one of the main objectives of European Union. Many social enterprises in Europe can achieve a greater impact if their specific solution really meet social needs and is applied on a larger scale. Within this context, one of the potential impact of the CAPS projects can be that of supporting their users to create new business and develop new entrepreneurial activities. The indicators identified for the evaluation of the “Impact on entrepreneurship” of CAPS projects are mainly focused on Kramer (2005) which explore the various approaches to evaluate the specific field of Social Entrepreneurship, a research based on a scan of the relevant literature and on interviews with funders, Social Entrepreneurs and scholars in the field.

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
		Number, type, description of instruments for increasing access to finance
	Impact through crowdfunding	Money attracted by the project through crowdfunding
		Number of crowdfunding activities/initiatives funded by the project for its users
		Project self-evaluation of improving the capability of users to diversify risk investments through crowdfunding initiatives
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 by 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 to improve user support in diversifying income resources	Project self-evaluation of its capability to improve user support in diversifying income resources
	Project self-evaluation of its capability to increase the incomes of users	Project self-evaluation of its capability to increase the incomes of users

	Project self-evaluation of its capability to increase the resilience of users coping with crises	Project self-evaluation of its capability to increase the resilience of users coping with crises

The Economic Value Generated by the project

The first dimension called “Economic results” aims to evaluate the economic impact of the outputs developed by the CAPS projects in terms of Cost-benefit and Return on Investments (ROI). From the analysis were excluded time saving and cost-saving, as required by the CAPS projects during the First Workshop in Rome, as explained more in detail in paragraph 2.4.

Within this first dimension is included also the analysis of Digital Social Innovation ROI of CAPS projects, derived from Etlinger and Li (2011) that the IA4SI team adapted to the specific context of the Digital Social Innovation. With reference to the definition of the ROI applied to the context of Digital Social Innovation, as defined by the IA4SI team, we dedicated a specific section in paragraph 3.3. This dimension includes another indicator relevant within the context of Social Innovation which is the analysis of the altruistic use, aimed at analysing if and how much the users of CAPS projects are potentially willing to pay for the services developed by them, knowing someone else might like it, as defined by Murray et al. (2010b).

The second dimension analyses the contribution of the project for the creation of new business models, the development of new market opportunities for the partners of the project, the increasing of informal and informal collaborations with business partners and the collaboration with the industry. According to NESTA (201a), the indicator relevant for the analysis of business models within the Social Innovation field is the analysis of business collaborations developed during the lifetime of the project. Kramer (2005), sustains that is also relevant to evaluate the innovativeness of the business models adopted.

The third dimension aims at providing an analysis of competitiveness of the projects and their capability to keep pace with competitors. This area considers also the success of the exploitation and transfer activities of the CAPS projects, in terms of number of persons able to be dedicated to exploitation and innovation transfer within the consortium of each project, number of activities for the transfer of each project output and Project self-evaluation of the success of transfer activities, as required by the European Commission within the Framework of Horizon 2020 (2013a).

DIMENSION	INDICATOR	VARIABLE
ECONOMIC RESULTS	Project self-evaluation to increase the resource pooling of users	Project self-evaluation to increase the resource pooling of users
	Cost saving related to resource pooling	Cost-saving related to resource pooling
	ENPV; B/C; DPBP; B/C*; ENPV*, DPBP*	Output cost of development
		Output cost for updating/maintaining after the end of the project
		Output end/users
		Willingness to pay
		Willingness to donate
		Timing of the benefit
	Digital Social Innovation ROI	Revenue generation
		User experience
	Altruistic use	Altruistic use
	Price range for using the platform after the end of the project	Price range for using the platform after the end of the project
BUSINESS MODELS	Project Business Models	Project Business Models
	Partner Business Plan	Partner Business Plan
	New market opportunities for partners	New market opportunities for partners
	Number of business collaborations	Number of business collaborations
	Collaboration with the industry	Collaboration with the industry
	Value chains	Value chains
	Project self-evaluation of being able to generate a new	Project self-evaluation of being able to generate a new

	business model	business model
COMPETITIVENESS AND EXPLOITATION	Project competitors	Project competitors
	Project self-evaluation of its impact on the project team's capability to keep pace with competitors	Project self-evaluation of its impact on the project team's capability to keep pace with competitors
	Number of persons dedicated to exploitation and innovation transfer	Number of persons 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
	Project self-evaluation of the success of transfer activities	Project self-evaluation of the success of transfer activities

Impact on ICT driven innovation

This area assess the impact of the CAPS projects in terms of developing innovation and is divided in 4 main dimensions: product innovation, process innovation, organizational innovation and user-driven and open innovation.

More in detail, the first area identifies the type and nature of the product innovation, including the analysis of technological readiness level of the platform, the contribution of the project for increasing the efficiency of already existing technologies and quality of products. The second dimension, the impact on process innovation, analyses the ability of the project to improve the processes for the creation of new social ideas, to introduce a new or significantly improved service offering that will reduce the actual delivery time and to reduce the delivery time of new service offerings. The identification of indicators to be included in these two areas of impact follows the definition of product and process innovation provided by the OECD (2005).

The third dimension, impact on organizational innovation, analyses the impact of the project on the definition of new organizational models enabling the users to better structuring their activities, to improve the access to spaces for collaboration, to develop routinized processes for capturing and using new ideas in new or improved service offerings and to implement new concepts for the structuring of users activities. These indicators also followed the definition of organizational innovation provided by the OECD. Moreover, this area of impact is aimed at analysing if and how the projects contribute to improve the working practices of CAPS users, as required by the European Commission (2012).

The last dimension considers both the impact of the CAPS projects on user-driven innovation, defined as *"the innovation created by the user to obtain a higher user value as opposed to commercial innovations taking place within companies"* (2005); and open innovation defined as *"the process of harnessing the distributed and collective intelligence of crowds. It is based on a number of principles, including: collaboration, sharing, self-organisation, decentralisation, transparency of process, and plurality of participants"* (2010b, p. 38).

Hence, the impact on user-driven innovation is aimed at evaluating the contribution of the CAPS projects for implementing new methods for identifying user needs, the collaboration of the users in the development of the technological outputs producing a cost saving and improving the quality of the technological outputs. The impact on open innovation analyses the increase of transparency

processes for the users of the CAPS projects, the use of open standards, the involvement of core developers for the improvement of the open standards, the number of downloads of the software and the success of the API developed.

DIMENSION	INDICATOR	SOURCE OF INSPIRATION
IMPACT ON PRODUCT INNOVATION	Impact on existing technologies efficiency	Impact on existing technologies' efficiency
		Description of the nature of innovation for each output
	Project self-evaluation to increase the quality of pre-existing products	Project self-evaluation to increase the quality of pre-existing products
		Description of the technological readiness level of the outputs
IMPACT ON PROCESS/SERVICE INNOVATION	Project self-evaluation of having an impact on process innovation	Project self-evaluation of having an impact on process innovation
		Description of typologies of process innovation
	Project self-evaluation of routinized processes for capturing and using new ideas for new or improved service offerings	Project self-evaluation of routinized processes for capturing and using new ideas for new or improved service offerings
	Project self-evaluation of management strategies or business practices for new or improved service offerings	Project self-evaluation of management strategies or business practices for new or improved service offerings
	Project self-evaluation of reduction in delivery time of new service offerings	Project self-evaluation of reduction in delivery time of new service offerings
IMPACT ON ORGANISATIONAL INNOVATION	Project self-evaluation to implement a new organisational method for users	evaluation to implement a new organisational method for users
	Project self-evaluation to implement new concepts structuring users activities	Project self-evaluation to implement new concepts structuring users activities

	Project self-evaluation of its capability to contribute to improve the working practices of CAPS users	Project self-evaluation of its capability to contribute to improve the working practices of CAPS users
IMPACT ON USER DRIVEN & OPEN INNOVATION	Project self-evaluation of developing a user-driven innovation project	Project self-evaluation of developing a user-driven innovation project
	Project self-evaluation to implement new methods for identifying users needs	Project self-evaluation to implement new methods for identifying users needs
	Project self-evaluation of the relevance of user engagement in the development of the technological outputs for increasing cost saving	Project self-evaluation of the relevance of user engagement in the development of the technological outputs for increasing cost saving
	Project self-evaluation of improvements made in the quality of technological outputs by user collaboration	Project self-evaluation of improvements made in the quality of technological outputs by user collaboration
	Gathering feedback mechanism	Gathering feedback mechanism
	Research on users demand	Research on users demand
	Project self-evaluation of developing an open innovation project	Project self-evaluation of developing an open innovation project
	Project self-evaluation of increasing transparency for the users	Project self-evaluation of increasing transparency for the users
	Implementation of open standards	Implementation of open standards
		Description of open standards used
	Implementation of open source	Implementation of open source
	Number of core developers contributing to open source	Number of core developers contributing to open source
	Number of external developers contributing to open source	Number of external developers contributing to open source

	Number of downloads of project open source outputs	Number of downloads of project open source outputs
	Existence of API	Existence of API
	Access through API	Access through API

Digital Social Innovation ROI

A complete model for assessing the economic value of Digital Social Innovation projects should take into account not only the costs and the benefits developed by the CAPS projects, but also the ROI generated, in order to evaluate the efficiency of the investment. This is very relevant especially for the projects entering the phase of product/service development. To this end, the IA4SI team has decided to develop a model for the analysis of Digital Social Innovation ROI, adapted from the traditional model used for assessing the "Social Media ROI".

The analysis of the literature developed by the IA4SI team considered also the standard measures commonly used for providing a monetary value of Social Networks. More in detail, we considered a study developed by the P2P value project (2014:13), which provides the following methods applied to the peer to peer platforms:

1) Monetary achievement regarding value of the multi-sided markets built upon a commons (i.e. selling services on the top of a FLOSS; selling advertising in a commons platform; (P2P or not P2P) markets built upon information, evaluations, reputation systems generated as commons by the collaborative production; commercialization of the trade-mark in different ways; markets of applications built upon a platform; etc.)

2) Monetary achievement regarding fundraising: sponsors, donations, venture capital number of sponsors and amount of donations.

Within the context of CAPS projects, the IA4SI team decided that the first method cannot be applied as the CAPS projects are not developing services that will be sold on the market, neither selling advertising through their digital platforms. For the same reason we decided to avoid using the metrics developed for estimating the value of a Social Network such as Facebook, as in Deloitte (2012), as each Social Network is a stand-alone unit producing different economic results.

The second typology of analysis has been applied to the IA4SI methodology for assessing the Impact on users Economic empowerment and more specifically through the following indicator: Number of instruments and type (Microfinance instruments, seed-funding, crowdfunding initiatives, community currency, digital currency).

Indeed, most of the CAPS projects are developing online platforms and social networks are used not as the main output of the project but as an instrument for dissemination and exploitation of their results. Hence, for the evaluation of the ROI generated by the CAPS projects we will use Social Media metrics adapted for the context of Digital Social Innovation.

Before explaining the process for the identification of the ROI model for Digital Social Innovation, it is needed to provide a definition of Social Media ROI. There is still not a clear and accepted definition of Social Media ROI. However, according to Blanchard (2011), ROI is a business metric and not a media metric. Social Media ROI is determined by Lead Generation, Social Mention Website traffic, Followers/Fans and Sales (as a complementary standard measure), as specified by the following figure (2012), which provides also several concrete examples of Social Networks used in order to increase Social Media ROI.

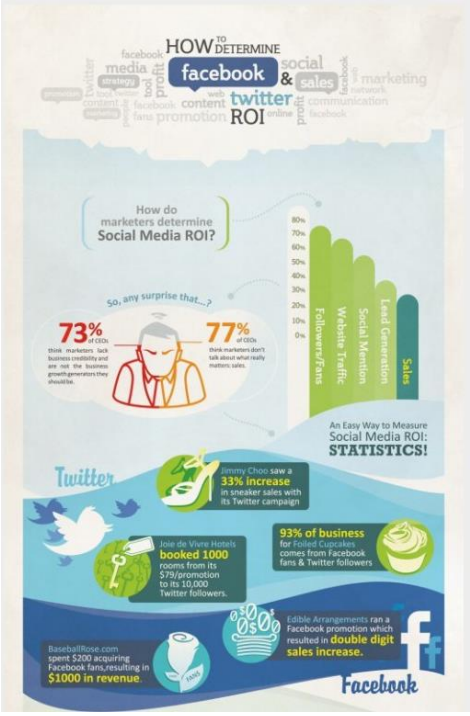

Fig. 7- Social Media ROI, Blanchard, 2012[19]

Blanchard, provides a definition of the elements that should be included in the Social Media ROI Pyramid and that are needed in order to evaluates the Social Media ROI. At the bottom of the pyramid there are the engagement data provided by community managers, developers, designers, agency partners and IT. This layer includes social networks analytics and traditional web analytics. A measurement of this layer is provided by considering for example Number of clicks, fan, followers, views, etc … The second layer is called Social Media Analytics and is developed by the Social Strategist and by the internal stakeholders/clients. This layer is constituted by the share of voice, resonation, Word of mouth (WOM), support response and insights intake. The last layer on the top of the pyramid is called Business Metrics and is managed by the Executives. This layer includes Revenue, Reputation and the Customer Satisfaction Index (CSAT). The following figure explains the entire process.

[19] Some more thoughts on Social Media and ROI, available at http://thebrandbuilder.wordpress.com/2012/10/22/some-more-thoughts-on-social-media-and-roi-infographic/

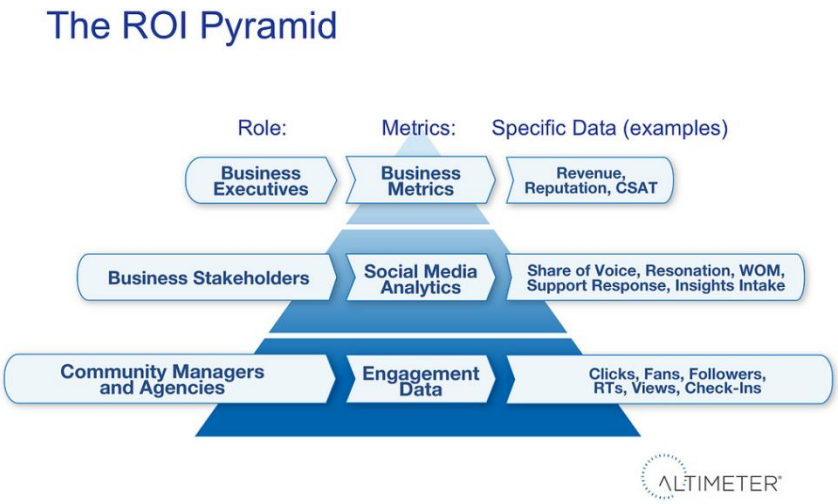

Fig. 8 -The Social Media ROI Pyramid,

From the analysis of the literature review emerged a model for the calculation of Social Media ROI that can be easily adapted to the context of CAPS projects. The model has been developed by Susan Etlinger (2011) of Altimeter. She identified the following sample measurement formulas:

Use Case	Example	Sample Formula
Brand Health	Social Share of Voice	Brand Mentions --- Total Competitive Mentions on Social Channels [Brand + Competitor A + Competitor B + Competitor C ...]
Marketing Optimization	Relative Campaign Engagement	Retweets + likes + fans per dollar spent of Campaign A --- Retweets + likes + fans per dollar spent of Campaign B
Revenue Generation	Visit Loyalty by Social Channel	Total Website Visitors from [Social Network] Who Have Returned Within Past 30 Days --- Total Website Visitors from [Social Network]
Operational Efficiency	Community Impact	Average purchase value on [Social Network or community] --- Average Purchase Value [all channels]
Customer Experience	Social Service Level	Number of Service Issues on [Social Network] Acknowledged within 4 Hours --- Total Number of Service Issues Noted on [Social Network]
Innovation	Idea Acceleration	Number of [IDEA] Topic Mentions in [END DATE] --- Number of [IDEA] Topic Mentions in [START DATE]

Source: Altimeter Group

Fig. 9 - Social Media ROI Model, Etlinger and Li C., 2011:18

The formulas proposed in the model, as Etlinger suggested, are a starting point for reflection in order to allow other researchers to develop the metrics that best describe value for their specific field and context. To this end, the IA4SI team has adapted these formulas to create a Digital Social Innovation ROI. We started from the consideration that CAPS projects are developing online platforms and not social networks. According to these preliminary considerations, the ROI model developed by the IA4SI team will provide the following 2 composite indices:

1. Revenue generation
2. User experience

From this model is excluded the analysis of the operational efficiency and Innovation evaluated by the model of Etlinger, as the IA4SI team already included the analysis of the efficiency of CAPS projects as a transversal index and Innovation within the Economic impact methodology. Within the context of IA4SI where the CAPS projects are developing Digital Social Platforms we can only use the Revenue Generation and the Customer Experience indices, as the CAPS projects will not develop marketing campaigns and they will not sell brands on the market. Instead the other two indices are relevant for analysing the revenue generation and the user experience of CAPS projects. Below we provide more in detail the 2 composite indices and the related formulas.

1. Revenue generation of CAPS projects is assessed by the IA4SI team by comparing the total number of platform returning visitors and the total number of visitors of the platform.

$$\text{Revenue generation} = \frac{Total\ platform\ visitors\ returned\ within\ past\ 30\ days}{Total\ platform\ visitors\ within\ past\ 30\ days}$$

2. The IA4SI team assumed that the CAPS projects are or will be put in place the ticketing or service support systems for the platforms they will develop. The user experience is analysed by comparing the number of service issues on the platform within 4 hours and the total number of the service issues noted on the platform.

$$\text{User experience} = \frac{\text{Number of bugs reported on the platform noted within 24 hours}}{Total\ \text{number of the service issues noted on the platform}}$$

3.4 Environmental impact

With the aim of developing a matrix of indicators to allow CAPS projects to make an effective assessment of their environmental impacts, IA4SI started from the 'nature' of CAPS projects themselves in order to understand which areas of impact they can affect.

As illustrated in the first chapter of this deliverable, it is explicitly stated that CAPS should provide "societally, environmentally and economically sustainable approaches and solutions to tackle societal challenges", and among the examples of CAPS targets we find "comparing individual lifestyles against some ecological / environmental benchmark" and "promoting sustainable and collaborative consumption, as a basis for an effective Low-Carbon economy". The environmental component is, hence, among the priority targets of these specific projects. Which aims at producing intangible goods such as networking platforms, knowledge sharing, virtual tools, and to operate trying to intercept and involve the highest possible flows of users, upon which the effectiveness of the projects themselves are said to depend.

This means that CAPS' impacts on the environment are bound to be quite similar in their nature to the ones of social media and computer-mediated social networks (CMSN, as in Oakley and Salam, 2014), and can be seen to show their effects within two main dimensions:

- the environmental impact of the projects themselves, and
- the impact on users environmental behaviour.

Based on these main dimensions associated with the CAPS projects, each impact area within the matrix has been analysed accordingly. As mentioned in the second chapter of the deliverable, the first version of the methodology included more dimensions, such as projects influence on users way of thinking or on policies. In the light of the feedback received during the first workshop about the assessment framework, IA4SI team elected to analyse these dimensions within other vertical indices for which these dimensions were more relevant (namely the social and the political ones).

Similarly, based on the specificities of CAPS projects, IA4SI selected the environmental areas of impact to be included in the assessment as the list of impact areas can in fact be very wide (the literature reports tens of them (Glasson 2011, EUROSTAT 2007, Canter, 1999). Based on the expected impacts of the project activities IA4SI decided not to include some impact areas that are mentioned in much of the literature but are not relevant for the current CAPS projects. Hence, the matrix does not take into account impacts on water, soil, animal welfare, and habitat depletion, despite those being considered essential in most of the mainstream environmental impact assessment literature.

The feedback received from the projects during the IA4Si first workshop in Rome confirmed that our assumptions were correct. Also because, at the present stage, the level of awareness and the data available from CAPS projects about environmental issues are still unclear. Our strategy also helped to keep the environmental matrix as clear and as simple as possible, which helped not to discourage projects along the way. To this end, it is important to underline that currently only two out of fifteen projects have direct (Decarbonet) or indirect (Wikirate) interest in environmental issues. Moreover, as already outlined in the Economic Impacts chapter, the impact scale is relatively small due to their particular interest as well as being at the very early stages of development. It is very likely, then, that most of these projects are not going to be able to finalize this part of the assessment. Nonetheless, as outlined above, a contribution to environmental awareness and environmental sustainability is expected from CAPS projects, hence, IA4SI has considered the development of this section as an integral part of the assessment.

Environmental Impact: approach, dimensions and areas

The indicators and variables against which the projects will be assessed have been mainly extrapolated from the methodology developed by the Organizational Environmental Footprint (OEF), "a multi-criteria measure of the environmental performance of a goods/services-providing Organisation from a life cycle perspective" (EC 2013c/179: 112). This approach is based on the two main assessment tools for environmental impact assessment currently in use among the scientific community at the international level:

- The Greenhouse Gases Protocol (GHG): it is an accounting tool for GHG emissions and it is the foundation of almost all the GHG standards and programs currently in use around the world. It is both a production-based and consumption-based approach, which means that emissions are calculated both indirectly from production data (fossil fuels usage and industry and agriculture processes) and directly from consumption data (raw materials flows, national consumption and international trade). The assessment is organized in three progressive stages: Scope 1 (project/product/activity direct emissions from sources owned or controlled by them), Scope 2 (project/product/activity emissions resulting from the generation of electricity, heat or steam) and Scope 3 (all other indirect emissions produced from sources not directly controlled by the project/product /activity under assessment but necessary for its development). Basing on this approach, the GHG Protocol developed different accounting standards for different uses, such as business and organizations, products, value chains[20].
- The Life Cycle Assessment: it is a method to quantify "resources consumed and emissions as well as the environmental and health impacts and resources depletion issues that are associated with any specific goods or services ("products")" (ILCD,2012:8). The main characteristic of the approach is to include the entire life cycle of the item under assessment "from cradle to grave" (from raw materials extraction to processing, manufacture, distribution, maintenance, disposal). The process is based on data derived from unit process (project, product or organization under assessment) or from economic input-output national statistics (ILCD, 2012:17).

The identification of the dimensions and areas of impacts of the IA4SI methodology are grounded on these approaches; similarly specific indicators and variables are also based on these points of reference.

Before outlining the details of the areas of impact and their indicators, casting a closer look at the dimensions of the framework is necessary. As anticipated, the Environmental Impact Index deals with dimensions differently from the other vertical indices, because of the fact that CAPS activities can produce two specific sets of environmental impacts: the one produced by the projects themselves, and those produced by users of the projects. Both dimensions have been defined according to impact area, and are described next.

The literature about projects' environmental impact is wide and diverse (DEFRA 2008, INEM 2002, Glasson 2011, OECD 1992) but, given the intangible nature of the goods produced by CAPS and their mostly light dimension and structure, for each one of the areas of impact a relevant selection of possible indicators could be identified, moving from the dimensions on which the projects produce their impacts.

About user behaviour, it is the behaviour that "consciously seeks to minimize the negative impact of one's actions on the natural and built world"" (Kollmuss and Agyeman, 2002). It has by now been acknowledged that social media and information technology have a great potential in terms of influencing people's environmental awareness and of pushing them into action (Oakley and

[20] For an overview of the standards: http://www.ghgprotocol.org/standards

Salam, 2014). In this view, CAPS are expected to behave similarly, and are going to be assessed against these potentialities also by using the CAPS user survey (User data gathering Interface).

Another area of enquiry has been introduced for CAPS project, separated from both the selected areas of impact and the two dimensions illustrated above. In the IA4SI self-assessment, the projects will be required to estimate the potential "rebound effect" (RE) of their activities from an environmental point of view. The rebound effect is the common definition given to the Javon's paradox: contrary to popular believe, an increase in technology efficiency is very likely to bring an increase in resources consumption (Alcott, 2005). Within the environmental context, the RE has been initially related to energy consumption and later to other sustainable consumption issues. It concerns the backfire effect that awareness about self-engagement and technological availability can produce, bringing people (in this case projects' users) to increase their consumption and their environmental unfriendly behaviours (Herring, Sorrel et al, 2008). It is a quite new and still in progress area of research, yet there is an increasing interest from researchers about the issues and a view from CAPS and CAPS users might add a significant piece of information to the debate.

After having selected the appropriate literature for analysing CAPS environmental impacts, IA4SI has identified four areas of environmental impact relevant for CAPS projects:

- Greenhouse gases emissions (including energy efficiency and production of energy from renewable sources)
- Air Pollution related to transport
- Solid Waste
- Sustainable consumption of goods and services
- Biodiversity

The selection has been made taking into account the very concrete activities and targets of the projects. Each impact area will be shortly explained according to this criterion. As already mentioned in the second chapter, it is important to note that the data gathering process underpinning environmental indicators requires time as well as to develop adequate environmental internal policies. In their feedback to the first methodology proposal, CAPS projects expressed their concern about not being able to realize a timely assessment at this stage, or, to obtain a negative result because of lacking a long-term view. Improvement in the projects' environmental impacts is going to be assessed by periodically repeating the self-assessment.

Greenhouse Gases emissions (including energy efficiency and production of energy from renewable sources)

As hinted at in the introduction, climate change has risen as a major issue within the scientific and political scenario over the last decades, mainly for two reasons: the availability of data and it being the issue at heart for people, project and administration in everyday life.

Greenhouse Gases (GHG) emission are the major cause for climate change, since they are "those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere and clouds. This property causes the greenhouse effect" (IPCC 2001: 274).Given the nature of CAPS activities, IA4SI established that the only significant source of greenhouse gases emissions comes from travel. To calculate the resultant carbon accounting IA4SI assessment will rely on internationally validated calculation tools, such as the Greenhouse Gases Protocol. The GHG Protocol is "the most widely used international accounting tool for

government and business leaders to understand, quantify, and manage greenhouse gas emissions".[21]

In order to sketch a comprehensive picture of the project impacts on GHG emissions, CAPS will also be required to account for potential compensation activities they may develop, for their energy consumption and for the percentage of renewable/efficient energy they may purchase. This indicator in fact is still relevant, although the debate about emission compensation is quite alive, with a significant component of the environmentalist world accusing the compensation systems to allow the maintenance of the "business as usual" approach (Lohmann, 2009). Moreover, given the link of CAPS projects to innovative technologies enhancing environmentally sustainable solutions, the projects are required to evaluate their contribution to the dispersion of low-carbon technologies.

About users' behavioural change, four indicators could be identified to assess the most likely output of a CAPS project that engage in GHG reduction and energy efficiency: users' compensation activities, users' shift to renewable/efficient energy provider, users' awareness and users' activation.

[21] http://www.ghgprotocol.org/calculation-tools

DIMENSIONS	INDICATORS	VARIABLES
PROJECT ENVIRONMENTAL IMPACT CONCERNING GREENHOUSE GASES EMISSIONS	Greenhouse gases production	Travels by flight within Europe and the Mediterranean region
		Travels by train within Europe and the Mediterranean region
		Travels by flight outside Europe and the Mediterranean region
	CO2 compensation	Tons of CO2 compensated
	Energy consumption	kWh or percentage of energy consumption
	Renewable /efficient energy purchasing in kWh or percentage	kWh or percentage of purchased renewable/efficient energy
PROJECT IMPACT ON ENVIRONMENTAL BEHAVIOURS RELATED TO THE GREENHOUSE GASES ISSUE	Project self assessment of its capability to provide easier access to low carbon technologies	Project self assessment of its capability to provide easier access to low carbon technologies
	Number of compensation activities performed by the users since their engagement with the project (perception of the project vs. users questionnaire)	Number of compensation activities performed by the users since their engagement with the project according to the project
	Number of users who changed energy provider from carbon based to green sources or performed other actions oriented to greenhouse gases reduction	Number of users + *(user survey)*
	Number of more queries about energy sources (old provider)	Number of more queries about energy sources (old provider)
	Project self-assessment of its capability to contribute to the change in users participation to environmental-related actions (earth hour, earth day, local car free days, critical mass, etc.)	Project self-assessment of its capability to contribute to the change in users participation to environmental-related actions (earth hour, earth day, local car free days, critical mass, etc.)

Air Pollution related to transport

Among the various pollutions that human activities can diffuse in the environment, air is one of the most critical one for human health and it entails the “contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere”, as defined by WHO[22]. One of the main causes for the quick increase of urban air pollution is the inefficient use of fuel for transport, together with power generation and other human activities related to household management.

IA4SI assesses that, although is not possible to ask CAPS to be accountable for the exact measure of their contribution to urban air pollution, it is still very useful for them to conduct a qualitative assessment focusing on their sensitivity towards this issue, for both the project and their users. In case of indication of a high engagement with the issue, the projects are required to briefly list the undertaken actions (i.e. internal policies, awareness initiatives, etc.).

The projects will also be required to evaluate their contribution to innovative solutions for transport-related sustainable choices and the reduction of air pollution (if any) resulting from their actions.

[22] http://www.who.int/topics/air_pollution/en/

DIMENSIONS	INDICATORS	VARIABLES
PROJECT ENVIRONMENTAL IMPACT CONCERNING AIR POLLUTION RELATED TO TRANSPORT	Project self evaluation of internal sensitivity towards the air pollution related to transport issue	Project self evaluation of internal sensitivity towards the air pollution related to transport issue
	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 AIR POLLUTION RELATED TO TRANSPORT ISSUE	Reduction of air pollution due to sustainable transport choices in tons or in percentage	Reduction of air pollution due to sustainable transport choices in tons or in percentage
	Project self evaluation of the increase in users' sensitivity towards the air pollution related to transport issue (e.g. public transport/cycling instead of taking the car, etc.)	Project self evaluation of the increase in users' sensitivity towards the air pollution related to transport issue (e.g. public transport/cycling instead of taking the car, etc.)

Solid Waste

Waste is another major issue in the project management and project environmental assessment framework, and is defined as “substances or objects, which the holder intends or is required to discard” (EC, 2008: 4). CAPS are required to make both a quantitative and qualitative assessment of how they dispose of the main waste they could produce via their activities. The high level of digitalization of CAPS work and tools makes the Waste Electrical and Electronic Equipment (WEEE), the most significant waste produced by this kind of projects. The European Union has developed the currently most advanced legislation about WEEE (Directive 2012/19/EU), but despite that only one third of the WEEE produced inside the European Union result correctly managed (Ongondo et al, 2011). CAPS projects are expected to reach a robust level of awareness about this issue and to act accordingly. Keeping this target in mind, self-assessment is considered as a first step in this.

The projects will also assess their engagement with user awareness and activation about the overall waste issue.

DIMENSIONS	INDICATORS	VARIABLES
PROJECT ENVIRONMENTAL IMPACT CONCERNING WASTE	Production of waste in kg or in percentage	Number of brochure printed
		Number of publications printed
		Number of books printed
		Number of gadget produced
		Number of WEEE produced
	Number of different sorted waste	Number of different sorted waste
	Level (in %) of recycled / reused waste in relation to total waste production	Percentage of recycled / reused
		Percentage publications recycled / reused
		Percentage of books recycled / reused
		Percentage of gadget recycled / reused
		Percentage of WEEE recycled / reused

	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
PROJECT IMPACT ON ENVIRONMENTAL BEHAVIOURS RELATED TO THE WASTE ISSUE	Reduction of waste in kg or in percentage of waste produced by users	Kg or percentage of users' waste reduction
	Number of waste reduction activities performed by the users since their engagement with the project	Number 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.)

Sustainable consumption of goods and services

As anticipated, the introduction of the concept of "sustainable consumption" within the IA4SI framework for CAPS self-assessment has been thoroughly debated among the projects themselves. Other proposals from the IA4SI team (i.e. "raw materials consumption") were considered too specific or potentially confusing for projects that do not deal with environmental issues as a main target. On the contrary, sustainable consumption seems to be a quite popularized and accessible concept, as defined by the Oslo Symposium in 1994: "the use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations".

Once again, the concreteness of CAPS activities has been taken into account, in order to ask the projects data about sustainable management of their procurement, events and services. The projects are also required to illustrate to what extent, if any, they contribute to their users transiting towards sustainable consumption and to raising overall awareness about this issue.

The methodology does not assess the sustainability of the CAPS projects' production in terms of raw materials purchasing and processing, as the projects generate mainly intangible goods.

DIMENSIONS	INDICATORS	VARIABLES
PROJECT ENVIRONMENTAL IMPACT CONCERNING SUSTAINABLE CONSUMPTION OF GOODS AND SERVICES	Number of green / local / ethical products used by the project compared to the total number of products used - in percentage	Number of green / local / ethical products (i.e. project equipment, publications, gadgets) used by the project compared to the total number of products used - in percentage
		Number of green / local / ethical green events (i.e. green menu, green location) organized by project compared to the total number events - in percentage
		Number of green / local / ethical services (i.e. car for rental, hotels) chosen by the project compared to the total number of services used - in percentage
PROJECT IMPACT ON ENVIRONMENTAL BEHAVIOURS RELATED TO THE AIR POLLUTION RELATED TO THE SUSTAINABLE CONSUMPTION ISSUE	Increase of green / local / ethical products purchased by users in relation to start of the project- in percentage	Increase of green / local / ethical products purchased by users in relation to start of the project- in percentage
	Number of promotion of sustainable consumption activities performed by the users since their engagement with the project (perception of the project vs. users questionnaire)	Number of promotion of sustainable consumption activities performed by the users since their engagement with the project according to the project
	Number of organization/companies/products intending to introduce eco labels as a result of the project	Number of organization /companies/products intending to introduce eco labels as a result of the project
	Number of green labels or certifications for products or services promoted by the initiative	Number of green labels or certifications for products or services promoted by the initiative

Biodiversity

Biodiversity, defined as “the numbers and relative abundances of different genes (genetic diversity), species, and ecosystems (communities) in a particular area.” (IPCC, 2001, 367), is one of the major environmental indicators to understand the earth’s health. And, while assessing a project’s impacts, the biodiversity loss rate contributes to understand the range of its activities impacting on the environment.

The impact on biodiversity loss does not strictly apply to CAPS, given the absence of significant space-consuming and raw materials-consuming activities. Anyway, IA4SI finds it important to assess the level of awareness of the projects about this issue, enquiring about their or their users’ commitment in supporting conservation initiatives.

Dimensions	**Indicators**	**Variables**
Project environmental impact concerning biodiversity	Number of biodiversity conservation initiatives supported by the project	Number of biodiversity conservation initiatives supported by the project
Project impact on environmental behaviours related to the biodiversity issue	Number of biodiversity conservation initiatives supported by the users	Number 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

3.5 Political impacts

As stated in the definition of CAPS proposed by the EC: "*The Collective Awareness Platforms are expected to support environmentally aware, grassroots processes and practices to share knowledge, to achieve changes in lifestyle, production and consumption patterns, and* ***to set up more participatory democratic processes****" (*https://ec.europa.eu/digital-agenda/en/collective-awareness-platforms-sustainability-and-social-innovation*).*

The political impact index was initiated by looking at the capability of a project to have an impact on "participatory democratic processes" but, more generally, to have an impact on the users and, of European citizens political participation in general. Conducting a literature review in the field, the link between civic participation and political participation emerged immediately.
In fact, there is no univocal definition of political participation. The main differences among authors are related to the actions that can be defined as political and those that should not be considered political. On the latter there is a specific discussion if only legal actions can be defined as political (e.g. voting, manifesting, etc.) or also illegal ones (e.g. illegal strikes, occupation of buildings, etc.). In a first approximation for a definition in IA4SI it is possible to define political participation as: "activities that have the intent or effect of influencing government action – either directly by affecting the making or implementation of public policy or indirectly by influencing the selection of people who make those policies" Verba et al. (1995: 38). Thanks to the analysis of CAPS data it will be possible to see which kinds of activities the CAPS community understand as linked to political participation. In fact, the instruments provided by the projects in offering new channels/way of political participation will be analysed.
Civic participation, which can be seen as a complement of political participation or as part of the political participation, "refers to the ways in which citizens participate in the life of a community in order to improve conditions for others or to help shape the community's future" (Adler and Gogging, 2005). So, civic participation or engagement can make reference to citizens' participation to associations and other civic society organisms or to self- organise in grassroot movements and organisations. The Civic Society Index developed by CIVICUS defines civil society as "the arena, outside of the family, the state, and the market where people associate to advance common interests" (http://www.civicus.org/new/media/CSI_Methodology_and_conceptual_framework.pdf). It is important, in any case, to remember that the concept of civic society and related organisations may vary considerably in different cultural settings so that, also in this case, an univocal definition is not yet available.

Beside the EC definition of CAPS, important points of reference – as for the social impact index – were the OECD Better Life Index, the Eurostat Quality of Life Index and the Istat "Benessere Equo e sostenibile[23] (BES)" set of indicators. Other, related sources were; the Tepsie project (Bund and others, 2013) and the Civic Society Index (http://www.civicus.org/csi/).

The OECD Better Life Index, considers the category *Civic engagement* and defines it as citizens involvement in democracy. The indices that build this category are: *Voter Turnover* (the **percentage of population that voted** during an election on the total number of persons registered for voting) and the *Consultation on Rule-making* indicator, which "describes the extent to which formal consultation processes are built-in to the regulatory law-making process. The indicator is based on a composite index comprised of various information on the openness and transparency of the consultation process. It refers to the existence of institutional practices but does not, however, gauge whether these procedures are in fact effective" (http://www.oecdbetterlifeindex.org/topics/civic-engagement/).

[23] The title of this study can be translated as "Equal and just welfare". It represents the Italian effort in developing official statistics on welfare, following the beyond GDP international debate.

The Eurostat Quality of Life Index considers the topic of political participation under the categories *Governance and Basic Rights*, which is composed by the following indices: trust and/or satisfaction in institutions, trust and /or satisfaction in public service, Discrimination and equal opportunity, Active citizenship (http://epp.eurostat.ec.europa.eu/portal/page/portal/gdp_and_beyond/quality_of_life/data/governance_basic_rights). The last dimension (active citizenship), which is the one most interesting in the context of CAPS, is still under development and it is not yet defined from an operational point of view.

The Istat "Benessere Equo e sostenibile" (BES) articulates the topic *Politics and Institutions* in the following dimensions: Civic and political participation, Trust in institutions and social cohesion and Shared norms and values. The last dimension is not defined yet from an operational point of view, while the other two are composed by 13 indicators which are: voting turnover, civic and political participation, trust for the parliament, trust in the judicial system, trust in political parties, trust in local institutions, trust in other kinds of institutions, women in parliament, women in local governments, women elected in decision-making institutions, women in board of governors of companies listed in the stock exchange, average age of Italian members of the Parliament, length of civil trials (http://www.misuredelbenessere.it/index.php?id=35).

In synthesis it is possible to group the dimensions considered by the various studies in four categories: civic participation, participation in elections, trust in government and institutions (and the related topic of transparency) and equal opportunity in political and civic participation. IA4SI considers all these categories. However a further explanation is needed on the category "trust in government and institutions". In fact, in the first version of the indicators developed by the IA4SI team there were variables related to project capability to increase citizens' trust for institutions and policy makers. This was discussed by the CAPS projects during the first IA4SI workshop and participants stressed the value judgment behind this topic, i.e. the fact that there is a tendency in giving for granted that citizens should trust governments and institutions in an increased way, while according to some of the participants the problem is the other way around. In other terms, governments and institutions are the ones that should work in a way to acquire more trust. In fact, CAPS projects can increase the transparency of institutions and governments and, if providing more and better information to citizens, this might result in an increment of trust for them. To the contrary, it might highlight the phenomenon of miss-regulation, corruption and similar, and, as a consequence, might result in a decrease of trust in government and institutions. For this reason, the IA4Si team decided to delete the questions related directly to trust for government and institutions and to keep the ones related to increment in transparency. In any case, it will be possible to analyse CAPS users' trust in governments and institutions through the user survey.

Beside the indicators deriving from the above mentioned sources, the IA4SI team also considered the direct impact that the project and its users can have in influencing policies and institutions. Building on previous projects in the field of European research project impact assessment, the capability of projects to develop policy recommendations and support their up-take by local, national and European institutions and policy makers will be evaluated. Similarly, in the case of CAPS, it is useful to analyse if and to what extent CAPS users, thanks to the instruments provided by the CAPS projects, are able to autonomously influence policy-makers and institutions.

Consequently, the political impact index is divided into the following sub-categories:

- Impact on civic and political participation
- Impact on policies and institutions

The first sub-category, which corresponds to a dedicated index, is divided into the following dimensions:

- Impact on citizens/users political awareness
- Impact on citizens/users civic participation
- Impact on citizens/users political participation

The following dimensions compose the second sub-category:

- Project capability to influence policies and institutions
- CAPS users impact on policies and institutions.

The table below shows indicators and variables for each of the above-mentioned dimensions. Indicators and variables are inspired by the sources mentioned at the beginning of this paragraph but do not coincide completely as some indicators do not make sense for CAPS projects. The indicator vote turnover will not be included. In fact, it is important to remember that the focus of the IA4SI methodology is on micro and meso phenomena and not on macro ones. It is difficult to imagine that a single, two-year long project can have an influence on vote turnover at national or European level. This means that we cannot use official statistics as benchmarks. In fact, IA4SI analysis need to be grounded on data that project representatives are able to provide, i.e. related to their activities, outputs and observable effect on users. Similarly, the topic of equal opportunities in civic and political participation cannot be addressed in IA4SI by looking at the number of women in parliaments, as CAPS projects will not influence this figure. This topic will be covered by looking at the project capability to engage users, which are normally not engaged in social and political activities as the ones belonging to categories at risk of social exclusion. An important feedback from the CAPS projects during the first IA4SI workshop was the necessity to monitor the risk of rebound effects: CAPS project could end up in engaging users that are already engaged in civic and political participation, in this way widening the gap with not-engaged. Such an analysis will be done by asking the CAPS projects about their capability to engage users at risk of exclusion and by analysing the CAPS users' profiles through the User Data Gathering Interface.

Impact on civic and political participation

DIMENSIONS	INDICATOR	VARIABLE
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
	Main social/political topics discussed by users	Main social/political topics discussed by users
	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
		Description 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
	Project capability to improve civic	Project self-evaluation of its

	participation of citizens belonging to groups at risk of discrimination	capability to improve civic participation of citizens belonging to groups at risk of discrimination
		Please describe how you reach this objective
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
		Description 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 groups at risk of discrimination	Project self evaluation of its capability to improve political participation of citizens belonging to groups at risk of discrimination
		Description of action undertaken for reaching this result

Impact on policies and institutions

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
	Policy level engaged: international national or local	Policy level engaged: international national or local
		Description of the institutions addressed
	Theme covered by the policy recommendations	Theme covered by the policy recommendations
	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
	Policy level engaged: international national or local	Policy level engaged: international national or local
	Theme covered by the meeting/conference	Theme covered by the meeting/conference
	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
	Other actions undertaken by the project for influencing policy makers	Description of other actions undertaken by the project for influencing policy makers
	Number of policies/regulations/laws changed or updated by the project	Number of policies/regulations/laws changed or updated by the project

	Description of the policies/regulations/laws changed or updated by the project	Description of the 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
	Description of institutions created or changed by the project and the process followed for achieving this goal	Description of institutions created or changed by the project and the process followed for achieving this goal
CAPS 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
	Policy level engaged: international, national or local	Policy level engaged: international, national or local
	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
	Other actions undertaken by users for influencing policy makers	Other actions undertaken by users for influencing policy makers
	Number of policies/regulations/laws changed or updated by project users	Number of policies/regulations/laws changed or updated by project users
	Description of the policies changed	Description of the policies changed
	Number of institutions created or changed by project users	Number of institutions created or changed by project users
	Description of institutions created or changed by project users	Description of institutions created or changed by project users

3.6 Transversal indices: efficiency, effectiveness, fairness and sustainability

In this paragraph we will introduce and define the four transversal indices of the IA4SI methodology. The indicators and variables that compose these indices are those already presented in the vertical ones, but re-arranged accordingly to the definitions that follow. The aim of the transversal indices is, as already mentioned, to capture attribute and characteristics of the project outputs and activities that, being a specific kind of social innovation, are expected to be more efficient, effective, sustainable and just that alternative solutions (Deiglmeier and Miller, 2008:36).

Efficiency: describes the extent to which time or effort are well used for achieving the expected results. It is often used with the specific goal of relaying the capability of a specific application of effort to produce a specific outcome effectively with a minimum amount of waste, expense or unnecessary effort. Efficiency has widely varying meanings in different disciplines. In general, efficiency is a measureable concept, quantitatively determined by the ratio of output to maximal possible output. In the IA4SI context we are interested in evaluating both the economic efficiency of project activities and its environmental efficiency.

Indicators	**Variables**
Outputs development efficiency	Number of outputs development
	Cost of development
Project self-evaluation of its capability to increase the resource pooling of users	Project self-evaluation of its capability to increase the resource pooling of users
Impact on existing technologies efficiency	Impact on existing technologies efficiency
Project self-evaluation to increase the quality of pre-existing products	Project self-evaluation to increase the quality of pre-existing products
Project self-evaluation of cost saving developed thanks to the users engagement in the technological outputs development	Project self-evaluation of cost saving developed thanks to the users engagement in the technological outputs development
Project self-evaluation of improvements in the quality of the technological outputs thanks to the users collaboration	Project self-evaluation of improvements in the quality of the technological outputs thanks to the users collaboration
Average impact factor of project publication per researcher	Number of publications with impact factor
	Number of researchers in the project
Training efficiency	Hours of training provide by the project
	Number of persons trained
	Budget allocated to training
Project self-evaluation on its capability to improve research processes	Project self-evaluation on its capability to improve research processes

Greenhouse gases production	Travels by flight within Europe and the Mediterranean region
	Travels by train within Europe and the Mediterranean region
	Travels by flight outside Europe and the Mediterranean region
CO2 compensation	Tons of CO2 compensated
Energy consumption	kWh or percentage of energy consumption
Renewable /efficient energy purchasing in kWh or percentage	kWh or percentage of purchased renewable/efficient energy
Project self evaluation of internal sensitivity towards the air pollution related to transport issue	Project self evaluation of internal sensitivity towards the air pollution related to transport issue
Production of waste in kg or in percentage	Number of brochure printed
	Number of publications printed
	Number of books printed
	Number of gadget produced
	Number of WEEE produced
Number of different sorted waste	Number of different sorted waste
Level (in %) of recycled / reused waste in relation to total waste production	Percentage of recycled / reused
	Percentage publications recycled / reused
	Percentage of books recycled / reused
	Percentage of gadget recycled / reused
	Percentage of WEEE recycled / reused
Number of green / local / ethical products used by the project compared to the total number of products used - in percentage	Number of green / local / ethical products (i.e. project equipment, publications, gadgets) used by the project compared to the total number of products used - in percentage
	Number of green / local / ethical green events (i.e. green menu, green location) organized by project compared to the total number events - in percentage

	Number of green / local / ethical services (i.e. car for rental, hotels) chosen by the project compared to the total number of services used - in percentage

Effectiveness: this term refers to the capability of producing an effect and is most frequently used in connection with the degree to which something is capable of producing a specific, desired effect. Effectiveness is, generally speaking, a non-quantitative concept, mainly concerned with achieving objectives. Therefore, it is normally used for evaluating the outputs of a project and to what extent the outputs produced are aligned with the planned outputs.

Indicators	**Variables**
Project self-evaluation of its capability to support the creation of entrepreneurial initiatives by its users	Project self-evaluation of its capability to support the creation of entrepreneurial initiatives by its users
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 to support the personal development of its users	Project self-evaluation of its capability to support the personal development of its users
Project self-evaluation of its capability to improve the skills of people employed within the consortium	Project self-evaluation of its capability to improve the skills of people employed within the consortium
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
Project self-assessment of its capability to improve users access to a range of local and international news sources of information	Project self-assessment of its capability to improve users access to a range of local and international news sources of information
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 curriculum 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
Project self-evaluation of its capability to influence changes in the everyday life of academia institutions	Project self-evaluation of its capability to influence changes in the everyday life of academia institutions
Activities performed by the project in order to achieve the expected change in users behaviours	Activities performed by the project in order to achieve the expected change in users behaviours
Number of people participating in the activities	Number of people participating in the activities

Other activities performed with the aim of changing users opinion, values and behaviours	Other activities performed with the aim of changing users opinion, values and behaviours
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
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 number of bottom-up/grassroots actions	Project self evaluation of its capability to increase the number of bottom-up/grassroots actions
Project capability to improve civic participation of citizens belonging to group at risk of discrimination	Project self-evaluation of its capability to improve civic participation of citizens belonging to group at risk of discrimination
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
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
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
Number of policies/regulations/laws changed or updated by the project	Number of policies/regulations/laws changed or updated by the project
Project evaluation of citizens/users and civic society organisations capability of influencing policy-making	Project evaluation of citizens/users and civic society organisations capability of influencing policy-making
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

Sustainability: by assessing CAPS sustainability IA4SI methodology intends to analyse if and to what extent the projects and their outputs are going to survive to the end of the funding period. It is of particular interest to try and predict whether the impacts produced by project are going to last over time and how long it will continue to deliver benefits to the project beneficiaries and/or other stakeholder after the EU's financial support is expired.

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
	Number, type, description of instruments for increasing access to finance
Project self-evaluation of its capability to reduce the need of users to access emergency finance	Project self-evaluation of its capability to reduce the need of users to access emergency finance
Number of enterprises or business ideas developed by the project users	Number of enterprises or business ideas developed by the project users
Project self-evaluation of its capability to improve user support in diversifying income resources	Project self-evaluation of its capability to improve user support in diversifying income resources
Project self-evaluation of its capability to increase the incomes of users	Project self-evaluation of its capability to increase the incomes of users
Project self-evaluation of its capability to increase the resilience of users coping with crises	Project self-evaluation of its capability to increase the resilience of users coping with crises
Project self-evaluation to increase the resource pooling of users	Project self-evaluation to increase the resource pooling of users
ENPV; B/C; DPBP; B/C*; ENPV*, DPBP*	Output cost of development
	Output cost for updating/maintaining after the end of the project

	Output end/users
	Willingness to pay
	Willingness to donate
	Timing of the benefit
Digital Social Innovation ROI	Revenue generation
Project Business Models	Project Business Models
Partner Business Plan	Partner Business Plan
New market opportunities for partners	New market opportunities for partners
Project self-evaluation of being able to generate a new business model	Project self-evaluation of being able to generate a new business model
Project Business Models	Project Business Models
Partner Business Plan	Partner Business Plan
Number of users for each technological output	Number of users for each technological output
Number of patents developed by the project	Number of patents developed by the project
Number of 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
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

Fairness index will picture the capability of projects to promote social innovation by taking into account equality issues such as the capability of engaging people belonging to categories at risk of social exclusion, foster equal opportunity between men and woman, support users in having access to no-biased information and avoid the re-production of social and economic disparities. As it emerged during the IA4SI first workshop, in fact, there is the risk to engage in project activities social actors that are already sympathetic with the social issues tackled by the project. In other terms, there is the risk to engage people that are already very active at social, economic and political level and contribute to the widening of the gap between active citizens and un-active citizens.

Indicators	**Variables**
Number of tools/instruments provided by the project in order to reduce power asymmetries in online interactions	Number of tools/instruments provided by the project in order to reduce power asymmetries in online interactions
Number of tools/instruments provided by the project in order to reduce power asymmetries in local communities/groups	
Network diversity	Ratio between men and women on the platform
	Number of project activities dedicated to fostering gender equality * success rate
	Ratio between young, adult and old people
	Self-assessment of user belonging to categories at risk of social exclusion
Project self-evaluation of its capability to make local communities more inclusive	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	Number of project activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities
Number of project activities dedicated to fostering gender equality in local communities	Number of project activities dedicated to fostering gender equality in local communities
Number of partners which are new to UE-funded ICT projects	Number of partners which are new to UE-funded ICT projects
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-assessment of its capability to improve users access to media outlets or websites that express independent, balanced views	Project self-assessment of its capability to improve users access to media outlets or websites that express independent, balanced views
Project self-assessment of its capability to improve user access to sources of information that represent a range of political and social viewpoints	Project self-assessment of its capability to improve user access to sources of information that represent a range of political and social viewpoints
Project self-evaluation of its capability to influence information asymmetries	Project self-evaluation of its capability to influence information asymmetries
Number of tools/activities developed by the project for influencing information asymmetries	Number of tools/activities developed by the project for influencing information asymmetries
Project self-evaluation of its capability to improve civic participation of citizens belonging to group at risk of discrimination	Project self-evaluation of its capability to improve civic participation of citizens belonging to group at risk of discrimination
Project capability to improve political participation of citizens belonging to group at risk of discrimination	Project capability to improve political participation of citizens belonging to group at risk of discrimination
Number of young researcher employment	Number of young researcher employment
Rate of woman in the project	Rate of woman in the project

3.7 Take up potentiality

The enabling factors and conditions for the development and up-scaling of CAPS ouptuts requires to take into account two different dimensions: internal and external factors affecting their probability of success and up-scaling. Among the first set of factors we find the business plan and business model of the projects; while external factors include network development, learning and knowledge sharing and institutions. Among the external factors for success, network development can be considered one of the most vital assets for the potential up-scaling of the projects. The role played by collective learning processes and data gathering, in fact, is crucial for their replicability. At an internal level, an essential component for CAPS take up is the innovativeness of the targets and tools proposed by the projects. The innovative elements are often a primary consequence of the necessity to compensate and integrate a lacking social and economical environment and to identify a niche of needs that can be fulfil through new ways of sharing knowledge and produce solutions. In order to scale up the platform should then first offer simple messages user-friendly solutions and tools and then find their way out of their niches (Middlemiss and Parrish, 2009) niche.

Socio-technical innovation can be at core of the scaling up of CAPS, and of their emerging from their “niches of experimentation”. CAPS can be considered hubs for new practices and norms with the potential to trigger widespread system change, despite the tendency of the dominant systems to “lock-in” any potential changing agent. About this constraining factor, an important distinction between technical and social innovation is here in order. On one side, technical innovation is focused on tangible, material improvements in the production and use of technological artefacts that are mostly encouraged and supported from the outside. On the other side, social innovation brings the potential to alter the community capacity for change towards sustainability by breaking current social boundaries, and is hence regarded with more suspicious eyes (Feola and Nunes, 2013; Middlemiss and Parrish, 2009). Hence, a fundamental role is played by the possibility to standardise and codify messages, roles, practices and connection within the singles initiatives and in their reciprocal networking (Seyfang and Longhurst, 2013). To reach this level of institutionalized approach, a long-term vision is essential (Ornetzeder and Rohracher, 2013), together with the tangibility of improvement and solutions generates by the initiative (Feola and Nunes, 2013).

The external replication, diffusion, and transfer of these kind of projects involves many cultural, social and identity-related aspects, since these initiatives should be able to deal with their target issue or domain on the two different levels: individuals engaging with the platform and individuals pushing others to join. Despite the constraints that prevent the crystallization of an effective and predictable process for collective awareness platform to scale up, there are three key elements that can be considered significant indicators. In order to be reproduced, initiatives should present a clear, shared, specific vision together with realistic and achievable expectations; they have to be highly inclusive in their networking activities; and the learning and knowledge sharing processes should propose a wider and innovative knowledge system (Seyfang and Longhurst, 2013).

IA4SI do not propose a synthetic index for take up potential, at least not in this phase, as the analysis of the elements here proposed seems to deserve a qualitative analysis of the data provided by the project, especially the more narrative one that will be gathered through open questions. Never the less, all the aspects mentioned in this definition of take-up potential are presented in the IA4SI methodology so that the IA4SI team will have all the needed information for exploring this important aspect.

3.8 Indicators and variables accordingly to the impact value chain approach

As mentioned in previous paragraphs IA4SI methodology follows an input-output-outcome/impact approach. Here below the IA4SI indicators and variables organised by these categories.

Inputs

Vertical index	Indicator	Variable
Project Information	Instrument of funding	Instrument of funding
	Total budget	Total budget
	EU funding	EU funding
	Project end date	Project end date
	Consortium definition	Name of the partner organisation
		Typology of partner(university, SMEs, etc.)
		Country of the partner
	Internal monitoring/evaluation system adoption	Presence of an internal monitoring/evaluation system adoption
	Internal risk assessment system	Presence of an internal risk assessment system
	Zero scenario	Zero scenario
Social impact	Change in number of users signed in	Link between the CAPS initiative and pre-existing online platforms/communities
		Description of pre-existing platforms/online communities
		Number of platform users at the beginning (day one) of the project
	Number of new partners (partners not collaborating before the project writing)	Number of new partners (partners not collaborating before the project writing)
	Number of partners which are new to UE-funded ICT projects	Number of partners which are new to EU-funded ICT projects
	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 themself
	Number of researches	Number of researches
	Project level of interdisciplinarity	Number of disciplines represented
		Project self evaluation of the relevance of interdisciplinary activities
		Description of interdisciplinary work
	New job places generated	Number of persons recruited specifically for the project
	Number of researchers working in the project	Number of researchers working in the project
	Number of young researcher employment	Number of young researcher employment
	Impact on woman employment	Rate of woman in the project
Economic impact	Budget percentage for Training	Budget percentage for Training
	Budget percentage for Dissemination	Budget percentage for Dissemination

	Budget percentage for Development	Budget percentage for Development
	Project competitors	Project competitors
		Description of project 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
	Gathering feedback mechanism	Gathering feedback mechanism
		Description of the gathering feedback mechanism
	Research on users demand	Research on users demand
		Description of research on users demand
	Project self-evaluation of developing an open innovation project	Project self-evaluation of developing an open innovation project
Environment impact	Greenhouse gases production	Travels by flight within Europe and the Mediterranean region
		Travels by train within Europe and the Mediterranean region
		Travels by flight outside Europe and the Mediterranean region
	Energy consumption	kWh of energy consumption
	Renewable /efficient energy purchasing in kWh or percentage	kWh or percentage of purchased renewable/efficient energy
	N. of green / local / ethical products used by the project compared to the total number of products used - in percentage	N. of green / local / ethical products (i.e. project equipment, publications, gadgets) used by the project compared to the total number of products used - in percentage
		N. of green / local / ethical green events (i.e. green menu, green location) organized by project compared to the total number events - in percentage
		N. of green / local / ethical services (i.e. car for rental, hotels) chosen by the project compared to the total number of services used - in percentage

Outputs

Vertical index	Indicator	Variable
Social impact	Change in number of users signed in	Number of platform users at the time of the assessment
		Number of users that left the network since the beginning of the project until the time of the assessment
	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
	Main feature of the platform	Main features offered by the platforms
	Features used by the users	Features used by the users
	Communication on the platform	Communication on the platform
	Network density	Network density
	List of other analytics collected by CAPS projects	List of other analytics collected by CAPS projects
	Number of groups spontaneously created by the users	Number of groups spontaneously created by the users
	Project capability to influence trust among users	Self-assessment on project capability to influence trust among users
		Sharing of personal data among users
	Number and description of tools/instruments provided by the project in order to reduce power asymmetries on their platform	Project attention to power asymmetries in online interactions
		Number of tools/instruments provided by the project in order to reduce power asymmetries
	Project capacity of empowering users by providing features/tools for data management/privacy management	Presence of features/tools allowing data management/privacy management
		Description of the features/tools provided
	Network diversity	Ratio between men and women on the platform
		Number of project activities dedicated to fostering gender equality success rate
		Ratio between young, adult and old people
		Self-assessment of user belonging to categories at risk of social exclusion
		Ratio between highly educated users and not highly educated ones
		Cultural background composition of the users group
	Instruments provided to users for self-organise themself local	Instruments provided to users for self-organise themself local
	Number and description of tools/instruments provided by the project	Project attention to power asymmetries in local interactions

	in order to reduce power asymmetries in local communities/groups	Number of tools/instruments provided by the project in order to reduce power asymmetries in local communities/groups
		Description of tools/instruments provided by the project in order to reduce power asymmetries
	Number of events organised by the the project addressing local communities	Number of participants to events organised by the project addressing local communities
	Number of participants to events organised by 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	Number of project activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities
		Success rate of project activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities
		Description of main activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities
		Number of project activities dedicated to fostering gender equality in local communities
		Average success rate of activities dedicated to fostering gender equality in local communities
	Formal and informal collaborations with other CAPS projects	Number of formal and informal collaborations with other CAPS projects
		Description of collaborations with CAPS projects
	Formal and informal collaborations with SI initiatives outside the CAPS domain	Number of formal and informal collaborations with SI initiatives outside CAPS domain
		Description of collaborations with SI initiatives outside the CAPS domain
	Formal and informal collaborations with actors outside the SI and CAPS domain	Number of formal and informal collaborations with actors outside the SI and CAPS domain
		Description of collaborations with actors outside the SI and CAPS domain
	Number of instruments/activities provided for CAPS networking and success rate	Number of instruments/activities provided to CAPS project for networking
		Description of instruments/activities provided to CAPS project for networking
		Number of CAPS project participating
	Activities developed by the project to bring together public administrations, foundations, social investors and social finance intermediaries with civil society and the third sector	Number of activities developed by the project to bring together innovative public administrations, foundations, social investors and social finance intermediaries with social innovation initiatives, civil society and the third sector

		Average success rate of the activities organised
	Typology of information- data available on the platform	Typology of information- data available on the platform (selection from a list)
	Change in the number of available information	Number of information for each typology selected in the previous question at the beginning of the project
		Number of information for each typology selected in the previous question at the time of the assessment
	Project self-assessment of its capability to improve users access to a range of local and international news sources of information	Project self-assessment of its capability to improve users access to a range of local and international news sources of information
	Project self-assessment of its capability to improve users access to media outlets or websites that express independent, balanced views	Project self-assessment of its capability to improve users access to media outlets or websites that express independent, balanced views
	Project self-assessment of its capability to improve user access to sources of information that represent a range of political and social viewpoints	Project self-assessment of its capability to improve user access to sources of information that represent a range of political and social viewpoints
	Project self-evaluation of its capability to influence information asymmetries	Project self-evaluation of its capability to influence information asymmetries
	Number of tools/activities developed by the project for influencing information asymmetries	Number of tools/activities developed by the project for influencing information asymmetries
		Description of tools/actions developed by the project for influencing information asymmetries
	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
		Description of the Instruments provided by the project allowing users to verify the quality of the information he/she access
	Project policy in terms of data management	Personal and sensitive data policy
		Data management/governance
	Project policy in terms of standardisation	Project compliance with state-of-the art standards
	Project policy in term of content liences	Project supports to open standardizes licences
	Topics were opinion change is expected to happen	Topics were opinion change is expected to happen
		Detailed description of topic and subtopics
	Awareness raising and campaigning activities organised by the project on the selected topic	Number of awareness raising and campaigning activities organised by the project on the selected topic
		Number of people participating in awareness raising and campaigning activities

	Topics were changes in behaviours are expected to happen	Topics were changes in behaviours are 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 usersopinion, values and behaviours
	Number of people participating in the activities	Number of people participating in the activities
	Other activities performed with the aim of changing users opinion, values and behaviours	Other activities performed with the aim of changing users opinion, values and behaviours
	Training efficiency	Hours of training provided by the project
		Number of persons trained
		Budget allocated to training
	Topic covered by the training activities	Description of topics covered by the training activities
	Tools for education/training developed by the project	Number of tools for education/training developed by the project
		Description of the tools developed
	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
	Scientific impact	Number of peer reviewed articles without impact factor
		Number of non-peer review articles, books, book's chapters, conference proceedings and other electronically published of printed scientific outputs (excluding deliverables)
		Topics covered by the publications
	Number of patent and patent application developed by the project	Number of patent and patent application developed by the project
	Number of IPRs developed by the project	Number of IPRs developed by the project
	Use of open access	Use of open access
	Sharing through social media	Use of social media for sharing its research outputs
		Number of twitter followers
		Number of “friends” on Facebook or equivalent in other social platforms (i.e. Research gate, Academia, LinkedIn, etc.)
	Dissemination through project website	Use of project website for sharing project research results
		Number of deliverable downloads

		Number of articles downloads
	Sharing through events	Number of events in which your research results have been presented
		Number of average participant for each event
	Other channel for sharing research results	Other channel for sharing research results
	Number of non-scientific dissemination outputs/activities	Number of articles published on non-specialised magazines, newspapers and online magazines/blogs, etc.
		Number of TV (including WebTV) appearances
		Number of events organised addressing a non-academic audience
		Average number of participants
Economic impact	ENPV; B/C; DPBP; B/C*; ENPV*, DPBP*	Output cost of development
	Identification of the technological outputs	Identification of the technological outputs
	Number of users for each technological output	Number of users for each technological output
	Number of pilots developed by the project	Number of pilots developed by the project
	Number, type, description of instrument for increasing access to finance	Number, type, description of instrument for increasing access to finance
	Money attracted by the project through crowdfunding	Money attracted by the project through crowdfunding
	Number of crowdfunding activities/initiatives funded by the project for its users	Number of crowdfunding activities/initiatives funded by the project for its users
	Instruments developed to stimulate entrepreneurial activities and networking	Instruments developed to stimulate entrepreneurial activities and networking
	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
	Cost saving related to resource pooling	Cost saving related to resource pooling
	Output cost of development	Output cost of development
	Output cost for updating/maintaining after the end of the project	Output cost for updating/maintaining after the end of the project
	Output end/users	Output end/users
	Willingness to pay	Willingness to pay
	Willingness to donate	Willingness to donate
	Timing of the benefit	Timing of the benefit
	Reputation of the project	Reputation of the project
	Marketing optimisation	Marketing optimisation
	User experience	User experience

	Innovation	Innovation
	Altruistic use	Altruistic use
	Price range for using the platform after the end of the project	Price range for using the platform after the end of the project
	N. of pilots developed by the project	N. of pilots developed by the project
	Presence of Business Models	Presence of Business Models
	Project Business Plan	Project Business Plan
	Partner Business Plan	Partner Business Plan
	New market opportunities for partners	New market opportunities for partners
	Number of business collaborations	Number of business collaborations
	Collaboration with the industry	Collaboration with the industry
	Description of value chains	Description of value chains
	Number of activities for the transfer of each project output	Number of activities for the transfer of each project output
	Project self-evaluation of the success of transfer activities	Project self-evaluation of the success of transfer activities
	Description of the nature of innovation of each output	Description of the nature of innovation of each output
	Description of the type of innovation of each output	Description of the type of innovation of each output
	Project self-evaluation of increasing the quality of pre-existing products	Project self-evaluation of increasing the quality of pre-existing products
	Description of technological readiness level of the outputs	Description of technological readiness level of the outputs
	Project self-evaluation of routinized processes for capturing and using new ideas for new or improved service offerings	Project self-evaluation of routinized processes for capturing and using new ideas for new or improved service offerings
	Description of routinized processes for capturing and using new ideas/services	Description of routinized processes for capturing and using new ideas/services
	Project self-evaluation of implementing a new organisational method for users	Project self-evaluation of implementing a new organisational method for users
	Percentage of performance improvement by reducing administrative or transactions costs	Percentage of performance improvement by reducing administrative or transactions costs
	Project self-evaluation of implementing new concepts for the structuring of users activities	Project self-evaluation of implmenting new concepts for the structuring of users activities
	Project self-evaluation of developing a user-driven innovation project	Project self-evaluation of developing a user-driven innovation project
	Project self-evaluation of cost saving developed thanks to the users engagement in the technological outputs development	Project self-evaluation of cost saving developed thanks to the users engagement in the technological outputs development

	Cost saving due to the user engagement in the development of the technological outputs	Cost saving due to the user engagement in the development of the technological outputs
	Project self-evaluation of improvements in the quality of the technological outputs thanks to the users collaboration	Project self-evaluation of improvements in the quality of the technological outputs thanks to the users collaboration
	Implementation of open standards	Implementation of open standards
		Description of open standards used
	Implementation of open source	Implementation of open source
	Number of core developers contributing to open source	Number of core developers contributing to open source
	Number of external developers contributing to open source	Number of external developers contributing to open source
	Number of downloads of project open source outputs	Number of downloads of project open source outputs
	Existence of API	Existence of API
	Access through API	Access through API
Environment	N. of users who changed energy provider from carbon based to green sources or performed other actions oriented to greenhouse gases reduction	N. of users
	CO2 compensation	Tons of CO2 compensated
	Project self evaluation of internal sensitivity towards the air pollution related to transport issue	Project self evaluation of internal sensitivity towards the air pollution related to transport issue
	Reduction of air pollution due to sustainable transport choices in tons or in percentage	Reduction of air pollution due to sustainable transport choices in tons or in percentage
	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 self evaluation of the increase in users' sensitivity towards the air pollution related to transport issue (e.g. public transport/cycling instead of taking the car, etc.)	Project self evaluation of the increase in users' sensitivity towards the air pollution related to transport issue (e.g. public transport/cycling instead of taking the car, etc.)
	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
	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

	N. of biodiversity conservation initiatives supported by the project	N. of biodiversity conservation initiatives supported by the project
Political impacts	Main social/political topics discussed by users	Main social/political topics discussed by users
	Changes in the social/political topics addressed by users	Changes in the social/political topics addressed by users
	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
		Description of instruments developed by the project offering new channels/way for civic 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
		Description of instruments developed by the project offering new channels/way of political participation
	Number of policy recommendations produced by the project	Number of policy recommendations produced by the project
	Policy level engaged: international national or local	Policy level engaged: international national or local
		Description of the institutions addressed
	Theme covered by the policy recommendations	Theme covered by the policy recommendations
	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
	Policy level engaged: international national or local	Policy level engaged: international national or local
	Theme covered by the meeting/conference	Theme covered by the meeting/conference
	Other actions undertaken by the project for influencing policy makers	Description of other actions undertaken by the project for influencing policy makers
	Number of policies/regulations/laws changed or updated by the project	Number of policies/regulations/laws changed or updated by the project
	Description of the policies/regulations/laws changed or updated by the project	Description of the 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
	Description of institutions created or changed by the project and the process followed for achieving this goal	Description of institutions created or changed by the project and the process followed for achieving this goal

Outcomes and Impacts

Vertical index	Indicator	Variable
Social impact	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 capability to influence trust among local communities members	Project capability to influence trust among local communities members
	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
	Creation of new civic-society organisations and spontaneous local groups thanks to project activities	Number of new civic society organisation and/or informal groups created at local level thanks to project activities
	Project self-assessment of its capability to spread SI model	Project self-assessment of its capability to spread SI model
	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 how the project support the personal development of its users
	Project self-evaluation of its capability to improve the skills of people employed within the consortium	Project self-evaluation of its capability to improve the skills of people employed within the consortium
		Description of how the project support the improvement of skills of people employed within the consortium
	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
		Description of the results achieved in the area and of the action undertaken
	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 the results achieved in the area and of the actions undertaken
	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
	Scientific impact	Number of peer reviewed articles with impact factor
		Number of non-self citation of the works published
	Project self-evaluation of its capability to support knowledge transfer	Project self-evaluation of its capability to support knowledge transfer

	between universities/research centres and social innovation domain	between universities/research centres and social innovation domain
		Description of how the project supports knowledge transfer between universities/research centres and social innovation domain
	Project self-evaluation on its capability to improve research processes	Project self-evaluation on its capability to improve research processes
		Description of how the project improve research processes
	Project self-evaluation on if and how it allows its partners and users to perform research activities that would otherwise have been impossible	Project self-evaluation on if and how it allows its partners and users to perform research activities that would otherwise have been impossible
	Project self-evaluation of its capability to influence changes in the everyday life of academia institutions	Project self-evaluation of its capability to influence changes in the everyday life of academia institutions
		Description of the results achieved in the area and of the actions undertaken
	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
	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
	Project self-evaluation of its impact on employment	Project self-evaluation of its impact on employment
	Project self-evaluation of its capability to have an influence on the percentage of people employed in the third sector and in the SI sector	Project self-evaluation of its capability to have an influence on the percentage of people employed in the third sector and in the SI sector
	Project self-evaluation of its capability to contribute to improving the working practices of the third sector and of people/organisations working in SI	Project self-evaluation of its capability to contribute to improving the working practices of the third sector and of people/organisations working in SI
Economic impact	Project self-evaluation of its capability to increase the access to finance for its users	Project self-evaluation of its capability to increase the access to finance for its users
	Project self-evaluation to reduce the need of its users to access emergency finance	Project self-evaluation to reduce the need of its users to access emergency finance
	Project self-evaluation of improving investment risk diversification opportunities for the users of the project through crowdfunding	Project self-evaluation of improving investment risk diversification opportunities for the users of the project through crowdfunding
	Project self-evaluation of its capability to support the creation of	Project self-evaluation of its capability to support the creation of

	entrepreneurial initiatives of its users	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
	Project self-evaluation of its capability of improving the support to users for diversifying income resources	Project self-evaluation of its capability of improving the support to users for 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
	Project self-evaluation of increasing the resource pooling of the users	Project self-evaluation of increasing the resource pooling of the users
	Innovativeness of the business models	Innovativeness of the business models
	Value chains	Value chains
	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
	Impact on existing technologies efficiency	Impact on existing technologies efficiency
	Project self-evaluation of having an impact on process innovation	Project self-evaluation of having an impact on process innovation
	Description of typologies of process innovation	Description of typologies of process innovation
	Project self-evaluation of management strategies or business practices for new or improved service offerings	Project self-evaluation of management strategies or business practices for new or improved service offerings
	Description of management strategies or business practices in place for new or improved service offerings	Description of management strategies or business practices in place for new or improved service offerings
	Project self-evaluation of reduction in delivery time of new service offerings	Project self-evaluation of reduction in delivery time of new service offerings
	Description of how the project reduced delivery time of new service offerings	Description of how the project reduced delivery time of new service offerings
	Project self-evaluation of its capability to contribute to improving the working practices of CAPS users	Project self-evaluation of its capability to contribute to improving the working practices of CAPS users
	Project self-evaluation of its capability to increase the access to spaces for its users	Project self-evaluation of its capability to increase the access to spaces for its users
	Project self-evaluation of its capability to contribute to improving the working practices of CAPS users	Project self-evaluation of its capability to contribute to improving the working practices of CAPS users

	Project self-evaluation of its capability to increase the access to spaces for its users	Project self-evaluation of its capability to increase the access to spaces for its users
	Project self-evaluation of implementing new methods for identifying users needs	Project self-evaluation of implementing new methods for identifying users needs
	Project self-evaluation of increasing transparency for the users	Project self-evaluation of increasing transparency for the users
Environmental impact	Project self assessment of its capability to provide easier access to low carbon technologies	Project self assessment of its capability to provide easier access to 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
	N. of users who changed energy provider from carbon based to green sources or performed other actions oriented to greenhouse gases reduction	N. of users who changed energy provider from carbon based to green sources or performed other actions oriented to greenhouse gases reduction
	N. of more queries about energy sources (old provider)	N. of more queries about energy sources (old provider)
	Project self assessment of its capability to contribute to the change in users participation to environmental-related actions (earth hour, earth day, local car free days, critical mass, etc.)	Project self assessment of its capability to contribute to the change in users participation to environmental-related actions (earth hour, earth day, local car free days, critical mass, etc.)
	Level (in %) of recycled / reused waste in relation to total waste production	Percentage of brochures recycled / reused
		Percentage publications recycled / reused
		Percentage of books recycled / reused
		Percentage of gadget recycled / reused
		Percentage of WEEE recycled / reused
	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
	Reduction of waste in kg or in percentage of waste produced by users	Kg or percentage of users' waste reduction
	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.)
	Production of waste in kg or in percentage	Number of brochure printed
		Number of publications printed
		Number of books printed
		Number of gadget produced
		Number of WEEE (Waste Electrical and Electronic Equipment) produced
	N. of different sorted waste	N. of different sorted waste
	Increase of green / local / ethical products purchased by users in relation to start of the project- in percentage	Increase of green / local / ethical products 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 organization/companies/products intending to introduce eco labels as a result of the project	N. of organization /companies/products intending to introduce eco labels as a result of the project
	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
Political impact	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
	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 number of bottom-up/grassroots actions	Project self evaluation of its capability to increase the number of bottom-up/grassroots actions
	Project capability to improve civic participation of citizens belonging to group at risk of discrimination	Project self-evaluation of its capability to improve civic participation of citizens belonging to group at risk of

		discrimination
		Please describe how do you reach this objective
	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
		Description of action undertaken for reaching this result
	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
	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
	Policy level engaged: international, national or local	Policy level engaged: international, national or local
	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
	Other actions undertaken by users for influencing policy makers	Other actions undertaken by users for influencing policy makers
	Number of policies/regulations/laws changed or updated by project users	Number of policies/regulations/laws changed or updated by project users
	Description of the policies changed	Description of the policies changed
	Number of institutions created or changed by project users	Number of institutions created or changed by project users
	Description of institutions created or changed by project users	Description of institutions created or changed by project users
Other and unexpected impacts	Additional impact	Additional impact
	Unexpected impact	Unexpected impact

4. CONSTRUCTION OF AGGREGATED INDEX AND BENCHMARKING

The process followed for the construction of aggregated index is the result of a long and constructive work initiated with the ERINA+ project. In the following pages we explain how the IA4SI team has adapted the methodology developed in previous projects (ERINA+[24] and more specifically MAXICULTURE[25]) to the specific context of CAPS projects and Digital Social Innovation initiatives.

The variables listed in the previous paragraphs represent the whole set of data that will be gathered in order to provide a descriptive evaluation and will consider also qualitative data that will not concur to the assessment calculation but that will be useful for the development of projects reports. . The information contained into each variable may flow:

- directly into an indicator that we call “simple indicator” (i.e. number of project publications) or,
- indirectly into “complex indicator” since it needs to be associated to the information provided by other variables (i.e. ENPV, B/C, publications weighted according to journals impact factors, etc. …).

The indicators considered will have different measurement units such as monetary value, years, yes/no, relative values, 1 to 6 points Likert scale. As regards the Likert scale, existing literature (Colman, A. et al. 1997; Dawes J., 2008; Jamieson S., 2004) tested the usage of 5 to 7 points Likert scales showing that these scales are almost indifferent in terms of statistical meaning even wider scales are slightly preferable because the data can have a higher variability. Within the IA4SI assessment model we decided to use a 6 Likert scale approach because with the 6 points scale we want to avoid the case where the respondent uses the choice in the middle (3 in a 5 points scale) when she/he is undecided on the right value. Moreover, for each Likert scale there will be the option “not applicable” in order to have a clear interpretation of grade 1 which may be used, otherwise, when the question is not considered applicable.

Taking into account the specificities of the CAPS context and the fact that the projects are developing really different outputs, the IA4SI team has decided to include the additional option “Not Applicable” (also for non Likert indicators) in order to allow projects to decide whether or not the question is applicable to its specific case; if not the variable/indicator does not concur to the assessment calculation. Indeed, even the tool questionnaire is tailored on projects specificities (action type, stage of development etc.) questions (i.e. variable) not applicable may still be present and it is worthwhile that the project may exclude them from the assessment.

The indicators for each subcategory of horizontal impacts will contribute to build an index (per subcategory) that will itself contribute to build the category index. In the same way the indicators selected for building the transversal impacts will produce the related aggregated indices.

As mentioned, as indicators come with different measurement units they need to be treated before their aggregation into indices. Indeed the final goal the IA4SI methodology is to synthesize the vertical (per category or subcategory) or transversal impacts in indices expressed in a 0-1000 scale in order to make projects easily comparable.

[24] Passani A., Bellini F., Monacciani F., Navarra M., Satolli L., Benedikt J., Schwarz-Woelzl M., (2010)
[25] Passani A., Bellini F., Spagnoli F., Ioannidis G., Satolli L., Debicki M., Crombie D., (2014)

Therefore in order to pass from variables to indices we need to implement the following actions (Nardo M. et al., 2008):

1. Selection of variables as described in the previous paragraphs;
2. Selection and construction of indicators;
3. Normalisation of indicators;
4. Aggregation of indicators into indices and weighting.

4.1 Selection and construction of indicators

As described in paragraphs 5.2 and 5.3 most of the variables collected through the SAT - unless the “open text” and the “service ones” - will flow directly into the assessment model providing simple indicators. On the other hand, some variables will be aggregated in formulas in order to build complex indicators also through the use of external proxy values such as the ones derived from official database and statistics (i.e. hourly cost of labour, average expenditure per night for tourist, journal impact factors etc.). Once the proxy value of each impact has been identified, it will be possible to calculate the related socio-economic benefit by simply multiplying the quantity of the indicator by its value. In this way, we will obtain the quantification of efficiency with reference to a unitary time frame.

The complex indicators calculated for the IA4SI assessment are the following:

- Economic Net Present Value offered and perceived (ENPV and ENPV*): the difference between the discounted total benefits and discounted costs generated by project outputs. The benefits will be evaluated in terms of
    - willingness to pay (i.e. the users’ average willingness to pay multiplied by the total number of users), or
    - willingness to donate (i.e. the benefit for a single user for one year of useg multiplied by the total number of users).

  Consistent with the principles of multi-criteria analysis, when the monetary estimation of project impacts is not possible, it is better to express them in their most suitable metric, providing a multidimensional, disaggregated description of project performance.

  Monetary estimation will be possible using two quantitative values: the willingness to pay and the (estimated) time saving generated by the use of the service, both gathered from the users. The willingness to pay is expressed in Euro per year.

- Benefits/Costs ratio offered and perceived (B/C and B/C*): the ratio between discounted economic benefits and costs (as above). The B/C ratio measure what is the generated by the expense for the project (for example, if the B/C ratio is 2, this means that the expense of 1 € in the project generates 2 € (economic) benefits.
- Discounted Payback Period offered and perceived (DPP and DPP*): gives the number of years needed to break even from undertaking the initial expenditure. Also in this case cost and benefits are discounted to time "zero".
- Willingness to Pay over Costs ratio (WTP/C*): the Willingness to Pay is evaluated by the project users and it is compared to the costs of the project. The users’ Willingness to Pay indicates how much a user is willing to pay for that service. If the total Willingness to Pay (WtP calculated by multiplying the average declared by the users to the number of total users indicated in the project scenario) is greater than the cost of the project, i.e. the ratio WTP/C*> 1, this means the services can be commercially sold on the market or at the very least considered. When, WTP/C*<1 this means it is most unlikely the project can sell this

service and so it would be necessary to investigate alternative business models or at least think about mixed business models (finance and marketing).

- Reliability Indicator (RI): is the ratio between the number of the project users who have filled in the information in the Users Data Gathering Interface and the number of users declared by the project within the scenarios. A ratio that is considered acceptable is of the order of 10%, with 1 user response for every 10 declared. The more this ratio approaches 1, the greater the reliability of indices is as well as the ENPV*, B/C*. DPP* and WTP/C*.

In analytical terms, the indicators can be expressed as follows:

$$\text{ENPV}= \sum_{O=1}^{n}\left(\sum_{t=TBS}^{T+5}\frac{OB_t}{(1+i)^t}-\sum_{t=0}^{T+TC}\frac{OC_t}{(1+i)^t}\right)$$

$$\text{B/C}= \sum_{O=1}^{n}\frac{\sum_{t=TBS}^{T+5}OB_t\,(1+i)^{-t}}{\sum_{t=0}^{T+TC}OC_t\,(1+i)^{-t}}$$

$$\text{DPP}= \sum_{O=1}^{n}\frac{\sum_{t=0}^{T+TC}OC_t\,(1+i)^{-t}}{\sum_{t=TBS}^{T+5}\frac{OB_t\,(1+i)^{-t}}{T+5-TBS}}$$

$$\text{ENPV*}= \sum_{O=1}^{n}\left(\sum_{t=TBS}^{T+5}\frac{OPB_t}{(1+i)^t}-\sum_{t=0}^{T+TC}\frac{OC_t}{(1+i)^t}\right)$$

$$\text{B/C*}= \sum_{O=1}^{n}\frac{\sum_{t=TBS}^{T+5}OPB_t\,(1+i)^{-t}}{\sum_{t=0}^{T+TC}OC_t\,(1+i)^{-t}}$$

$$\text{DPP*}= \sum_{O=1}^{n}\frac{\sum_{t=0}^{T+TC}OC_t(1+i)^{-t}}{\sum_{t=TBS}^{T+5}\frac{OPB_t\,(1+i)^{-t}}{T+5-TBS}}$$

$$\text{WTP/C*}= \sum_{O=1}^{n}\frac{\sum_{t=TBS}^{T+5}WTP_t\,(1+i)^{-t}}{\sum_{t=0}^{T+TC}OC_t\,(1+i)^{-t}}$$

$$\text{RI}=\sum_{O=1}^{n}\frac{Ua_O}{Ud_O}$$

where

- *O* is the number of project output number
- *TBS* (Timing of the benefit) is the time t when project output O starts to produce some benefits. We assume that this can happen in the period between the end of the project *T* (with *TBS*=>*T*) and *T+5*
- *TC* is the time frame after the end of the project (with *TC*=<5) during which cost for updating/maintaining the output may occur
- *OB* is total amount of economic benefits at time *t* generated by the project output *O*. Economic benefits can be measured directly through revenues (do we have these?) or indirectly through individual cost/time yearly savings multiplied by the number of *output end/users*
- *OPB* is total amount of economic benefits at time t perceived by the users of each output *O*. Economic benefits can be measured directly through Willingness To Pay or indirectly through individual cost/time yearly savings multiplied by the number of *output end/users*
- *OC* is the cost of development + updating/maintaining the output after the end of the project at time t
- *Ua* and *Ud* are respectively the number of actual users answering to the user questionnaire and the number of users declared by the project.

Normalisation of indicators

Considering the indicators included in the methodology, we will have different measurement units as well as relative or absolute values, before the aggregation of indicators into indices we need to put in place a mechanism that avoids of "adding up apples and oranges". Therefore, normalisation is required prior to any data aggregation as the indicators in a data set often have different measurement units. According to Freudenberg (2003) and Jacobs et al. (2004) the existing method of normalisation can be listed as follows:

1. Ranking
2. Standardisation (or z-scores)
3. Min-Max
4. Distance to a reference
5. Categorical scales
6. Indicators above or below the mean
7. Cyclical indicators
8. Balance of opinions (EC)
9. Percentage of annual differences over consecutive years

The methods of Min-Max and of the Categorical scales better fits with the IA4SI way to build the synthetic indices.

- **Min-Max** normalises indicators to have an identical range (0-1, 0-100, etc.) by subtracting the minimum value and dividing by the range of the indicator values. If extreme values/or outliers could distort the transformed indicator, statistical techniques can neutralise these effects. On the other hand, Min-Max normalisation could widen the range of indicators lying within a small interval, increasing the effect on the composite indicator. The calculation is performed as follows

$$I_{qp}^{t} = \frac{x_{qp}^{t} - min_p(x_q^t)}{max_p(x_q^t) - min_p(x_q^t)}$$

  where
  x_{qp}^{t} is the value of indicator *q* for projects *p* at time t.
  $min_p(x_q^t)$ and $max_p(x_q^t)$ are the minimum and the maximum value of x_q^t across all projects *p* at time *t*.
  In this way, the normalised indicators I_{qp}^{t} have values lying between 0 (laggard, $x_{qp}^{t} - min_p(x_q^t)$and 1 (leader, $x_{qp}^{t} - min_p(x_q^t)$).

- **Categorical scale** assigns a score for each indicator. Categories can be numerical, such as one, two or three stars, or qualitative, such as 'fully achieved', 'partly achieved' or 'not achieved'. Often, the scores are based on the percentiles of the distribution of the indicator across projects. For example, the top 5% receive a score of 100, the units between the 85th and 95th percentiles receive 80 points, the values between the 65th and the 85th percentiles receive 60 points, all the way to 0 points, thereby rewarding the best performing projects and penalising the worst. Since the same percentile transformation is used for different years, any change in the definition of the indicator over time will not affect the transformed variable. However, it is difficult to follow increases over time. Categorical scales exclude large amounts of information about the variance of the transformed indicators. Besides, when there is little variation within the original scores, the percentile bands force the categorisation on the data, irrespective of the underlying distribution. A possible solution is

to adjust the percentile brackets across the individual indicators in order to obtain transformed categorical variables with almost normal distributions.

$$I_{qp}^{t} = \begin{cases} 0 & if\ x_{qp}^{t} < P^{15} \\ 200 & if P^{15} \le x_{qp}^{t} < P^{25} \\ 400 & if P^{25} \le x_{qp}^{t} < P^{65} \\ 600 & if P^{65} \le x_{qp}^{t} < P^{85} \\ 800 & if P^{85} \le x_{qp}^{t} < P^{95} \\ 1000 & if P^{95} \le x_{qp}^{t} \end{cases}$$

Aggregation of indicators into indices and weighting

After having normalised the indicators in a 0-1000 scale it is possible to calculate the aggregated index for each impact subcategory simply by using the arithmetic mean of that indicators. Recursively, in this same way, it is possible to pass subcategory impact indices to impact area indices and to the overall project index score. This simple method implies that all the indicators and indices for impact areas are equally weighted. This essentially implies that all variables are “worth” the same in the composite, but it could also disguise the absence of a statistical or an empirical basis, e.g. when there is insufficient knowledge of causal relationships or a lack of consensus on the alternative. In any case, equal weighting does not mean “no weights”, but implicitly implies that the weights are equal. Moreover, if indicators are grouped into dimensions and those are further aggregated into the composite, then applying equal weighting to the variables may imply an unequal weighting of the dimension (the dimensions grouping the larger number of variables will have higher weight). This could result in an unbalanced structure in the composite index.

IA4SI methodology allows considering equally weighted indicators or alternatively to build the indices considering the relative weights of indicators. The methodology then allows that experts or policy makers may assign an index of relevance from 1 to 6 (1 is not applicable and not relevant, 2 is applicable but not relevant, 3 is applicable but not very relevant, 4 is applicable and relevant, 5 is applicable and very relevant, 6 is applicable and must have) to each variable of the model in order to create the connected weight that also determines the weight of indicators and indices.

The weighting system works according to the following analytical rules

A. Number of Impact categories

$$N$$

B. Number of variables/indicators per impact category

$$\prod_{j=1}^{N} N_j$$

C. Total number of variables/indicators

$$NN = \sum_{j=1}^{N} N_j$$

D. Weights (absolute) [1…6] assigned from each expert to the indicators

$$\prod_{p=1}^{P} \prod_{j=1}^{N} \prod_{k=1}^{N_j} F_{j,k}^{p}$$

E. Scores (relative) [0…1000] obtained by projects for each indicator

$$\prod_{g=1}^{G} \prod_{j=1}^{N} \prod_{k=1}^{N_j} w_{j,k}^{g}$$

F. Average Weights (absolute) of each impact category

$$\prod_{p=1}^{P} \prod_{j=1}^{N} \bar{F}_j^p = \frac{1}{N_j} \sum_{k=1}^{N_j} F_{j,k}^p$$

G. Average Weights (relative) of each impact category among the impact categories

$$\prod_{p=1}^{P} \prod_{j=1}^{N} \bar{f}_j^p = \frac{\bar{F}_j^p}{\sum_{i=1}^{N} \bar{F}_i^p} = \frac{\frac{1}{N_j} \sum_{k=1}^{N_j} F_{j,k}^p}{\sum_{i=1}^{N} \frac{1}{N_i} \sum_{k=1}^{N_i} F_{i,k}^p} \qquad \prod_{p=1}^{P} \sum_{j=1}^{N} \bar{f}_j^p = 1$$

H. Weight (relative) of each indicator among each impact category

$$\prod_{p=1}^{P} \prod_{j=1}^{N} \prod_{k=1}^{N_j} f_{j,k}^p = \frac{F_{j,k}^p}{\sum_{h=1}^{N_j} F_{j,h}^p} = \frac{\frac{1}{N_j} F_{j,k}^p}{\bar{F}_j^p} \qquad \prod_{p=1}^{P} \prod_{j=1}^{N} \sum_{k=1}^{N_j} f_{j,k}^p = 1$$

I. Weight (relative) of each indicator among the entire set of indicators

$$\prod_{p=1}^{P} \prod_{j=1}^{N} \prod_{k=1}^{N_j} ff_{j,k}^p = \bar{f}_j^p \, f_{j,k}^p == \frac{\bar{F}_j^p}{\sum_{i=1}^{N} \bar{F}_i^p} \frac{\frac{1}{N_j} F_{j,k}^p}{\bar{F}_j^p} = \frac{\frac{1}{N_j} F_{j,k}^p}{\sum_{i=1}^{N} \frac{1}{N_i} \sum_{h=1}^{N_i} F_{i,h}^p} \qquad \prod_{p=1}^{P} \sum_{j=1}^{N} \sum_{k=1}^{N_j} ff_{j,k}^p = 1$$

J. Projects synthetic assessment indices [0…1000]

$$\prod_{g=1}^{G}\prod_{p=1}^{P}\beta^{g,p}=\sum_{j=1}^{N}\sum_{k=1}^{N_j}w_{j,k}^{g}\,ff_{j,k}^{p}=\frac{\sum_{j=1}^{N}\frac{1}{N_j}\sum_{k=1}^{N_j}w_{j,k}^{g}\,F_{j,k}^{p}}{\sum_{j=1}^{N}\frac{1}{N_j}\sum_{k=1}^{N_j}F_{j,k}^{p}}$$

K. Project global index calculated [0…1000]

$$\prod_{g=1}^{G}\beta^{g}=\frac{1}{P}\sum_{p=1}^{P}\beta^{g,p}=\frac{1}{P}\sum_{p=1}^{P}\sum_{j=1}^{N}\sum_{k=1}^{N_j}w_{j,k}^{g}\,ff_{j,k}^{p}=\frac{1}{P}\sum_{p=1}^{P}\frac{\sum_{j=1}^{N}\frac{1}{N_j}\sum_{k=1}^{N_j}w_{j,k}^{g}\,F_{j,k}^{p}}{\sum_{j=1}^{N}\frac{1}{N_j}\sum_{k=1}^{N_j}F_{j,k}^{p}}$$

In order to explain how the weighting system is working we use the following example with 3 projects (x,y,z) evaluated against the 3 vertical impact categories (1,2,3), a small set of variables (6) each one of them evaluated from 2 experts (a and b):

A. Number of impact categories 3

B. Number of variables/indicators per impact category 1, 2, 3

C. Total number of variables/indicators 6 = 1+2+3

D. Weights (absolute) [1…6] assigned from each expert to the indicators

Impact category		1		2			3			
Indicator		1.1	Tot	2.1	2.2	Tot	3.1	3.2	3.3	Tot
Experts	a	6	**6**	1	4	**5**	1	2	3	**6**
	b	2	**2**	3	2	**5**	1	4	4	**9**

E. Scores (relative) [0…1000] obtained by projects for each indicator

Impact category		1	2		3		
Indicator		1.1	2.1	2.2	3.1	3.2	3.3
Project	x	**1000**	**250**	**750**	**330**	**500**	**770**
	y	**500**	**200**	**500**	**1000**	**400**	**100**
	z	**100**	**900**	**700**	**300**	**200**	**100**

In order to build the weighting system to be associated to the projects' indicators, it is needed to derive the following quantities:

F. Average Weights (absolute) of each impact category (arithmetic mean of indicators'' weights in table D)

Impact category		1	2	3	Tot
Expert	a	**6**=6/1	**2.5**=(1+4)/2	**2**=(1+2+3)/3	10.5
	b	**2**=2/1	**2.5**=(3+2)/2	**3**=(1+4+4)/3	7.5

G. Average Weights (relative) of each impact category among the impact categories (ratio between Average Weights (absolute) and their sum in table F)

Impact category		1	2	3	Tot
Expert	a	**0.571**=6/10.5	**0.238**=2.5/10.5	**0.190**=2/10.5	1
	b	**0.267**=2/7.5	**0.333**=2.5/7.5	**0.400**=3/7.5	1

H. Weight (relative) of each indicator among each impact category (ratio between indicator absolute weight and the sum of all weights in the impact category in table D)

Impact category		1	2		3		
Indicator		1.1	2.1	2.2	3.1	3.2	3.3
Expert	a	**1**=6/6	**0.2**=1/5	**0.8**=4/5	**0.167**=1/6	**0.333**=2/6	**0.500**=3/6
	b	**1**=2/2	**0.6**=3/5	**0.4**=2/5	**0.111**=1/9	**0.444**=4/9	**0.444**=4/9

I. Weight (relative) of each indicator among the entire set of indicators (product between Average Weights (relative) of each impact category in table G and the Weight (relative) of each indicator among the impact category in table H)

Impact category		1	2		3			Tot
Indicator		1.1	2.1	2.2	3.1	3.2	3.3	
Expert	a	**0.571**= 0.571*1	**0.0476**= 0.238*0.2	**0.1904**= 0.238*0.8	**0.03173**= 0.190*0.167	**0.06327**= 0.190*0.333	**0.095**= 0.190*0.500	1
	b	**0.267**= 0.267*1	**0.200**= 0.333*0.6	**0.133**= 0.333*0.4	**0.044**= 0.400*0.111	**0.178**= 0.400*0.444	**0.178**= 0.400*0.444	1

J. The calculation of synthetic assessment indices (scale 0-1000) weighted according to the experts opinion can be now obtained by multiplying and sum the scores obtained by the project for each indicator (table E) with the relative weight of each indicator (table I)

		Projects		
		X	y	z
Expert	a	**842**=1000*0.571 +250*0.0476 +750*0.1904 +330*0.03173 +500*0.06327 +770*0.095	**457**=500*0.571 +200*0.0476 +500*0. 0.1904 +1000*0.03173 +400*0.06327 +100*0.095	**265**=100*0.571 +900*0.0476 +700*0.1904 +300*0.03173 +200*0.06327 +100*0.095
	b	**657**=1000*0.267 +250*0.200 +750*0.133 +330*0.044 +500*0.178 +770*0.178	**373**=500*0.267 +200*0.200 +500*0.133 +1000*0.044 +400*0.178 +100*0.178	**367**=100*0.267 +900*0.200 +700*0.133 +300*0.044 +200*0.178 +100*0.178

K. Project global index calculated on the arithmetic mean of the value per expert in table J

Projects		
x	y	Z
749=(842+657)/2	**415**=(457+373)/2	**316**=(265+367)/2

This methodology can be used in order to build aggregated indices in every level of the assessment (impact subcategory, impact category, project level).

4.2 Comparisons and benchmarking

Impact assessment is an important tool to measure "success", but as the literature has shown, in the social innovation context it is rather complex. Where in a market perspective measures tend to be fairly unambiguous such as in terms of scale and profit, in the social domain success measures as well as the tools to achieve results tend to be subject of argument, evaluation and assessment.

More recently, however, increasingly tools and metrics have been developed to guide the examination of particular programmes, meta-analyses and assessments of dynamics of social change, at large (Murray, Caulier-Grice & Mulgan, 2010b). The set-up of the proposed IA4SI impact assessment framework presented earlier also produces results that provide us with the opportunity to compare the CAPS projects and to identify best practices among them. It will also enable the assessment of what project (elements) was most successful and why – and why others were not. This will be done in the aggregated analysis, i.e. in the CAPS domain assessment.

The difficulties, however, can be said to emerge in the project-based assessment. In fact, the IA4SI self-assessment toolkit proposes an automatic visualisation of results. Here, each project is offered to see how it is doing via visualisation. Each index can be dissected underpinned by a visualisation of the results of the constituting factors. This process is guided by the following:

- 8 impact indices (4 vertical and 4 transversal indices)
- 16 indices for the dimensions composing the vertical subcategories

Yet, any data - in order to be correctly evaluated - need a mean of comparison. For example, a project which engages 150 users can see this value as positive if comparing these results with the start of his project when the users were let's say 10, but it will consider this less positive if the average number of users engaged in other CAPS projects is 500. Benchmarking is an adequate method for this purpose[26]. For this reason, the results will be "enhanced" by showing so-called functional, comparative benchmarks (i.e. mean, variance), which allows to compare common elements of a particular set of practices (Ziaie, Wollersheim & Kremar, 2011).

In the benchmarking literature, different approaches and methodologies can be discerned to develop such a study. And, while benchmarking approaches can be distilled from the social domain such as civic engagement, social capital, and well-being, there is no clear-cut, validated and widely adopted approach yet within the (nascent) digital social innovation context (BEPA 2011; Stiglitz et al., 2009; cf. UNDP's Human Development Index; The World Bank).

Due to the relatively small number of CAPS projects, and considering that they are dedicated to different topics and develop very different outputs, it does not make sense to use the average performance of the domain as a benchmark.

In the context of the CAPS projects, three possibilities could be distilled, and were presented to CAPS projects at the first IA4SI workshop:

- External benchmarks based on literature
- External benchmark based on previous assessment exercise held in other ICT-research related domains (SEQUOIA, ERINA+, MAXICULTURE)
- Internal, collaboratively developed, benchmark.

The first option was excluded because at the present stage, the literature on Digital Social Innovation impact assessment is very limited and this is true also for Social innovation initiatives more generally. Moreover, European projects show specific peculiarities so that their results tend

[26] Benchmarking is a continuous process of evaluation of products, services and practices with respect to those of the strongest competitors or of the enterprises recognized as leaders (Maire & Buyiikozkan, 1997: 1).

not to be easily compared with national projects that, often, are more limited in scope, insist on a specific location and have a less research-oriented nature. The second option relies on IA4SI consortium previous experiences in EU projects impact assessment. The reasons for not selecting this option are two-fold: the methodologies applied to other domains are similar in structure, but only a limited number of indicators are comparable. Secondly, the domains assessed are very different in nature as they relate to Software as a Service, Internet of things, e-Infrastructures and DigiCult (ICT applied to cultural heritage).

Hence, the third option was selected as the most suitable one. In order to adhere to feedback gathered during the first workshop, the design of the benchmark framework is based on carefully scrutinizing the project's peculiarities based on KPIs and further co-creation with the projects. The co-creation sessions with the projects. CAPS projects will be asked to collaboratively develop a set of goals to be used as benchmark. This will be done for each vertical index and sub-categories. The benchmark developed by the European CAPS research unit will also be considered during this process and will be used as a starting point for the work with CAPS projects.

In this view, sample benchmarks can include:

- Involvement of new actors (project partners that did not participate to EU projects before at least in the ICT domain and Number of partners which are new to UE-funded ICT projects)
- Direct users
- Patterns of social interaction (demonstration of possible behavioural changes)
- Number of tools/instruments provided by the project in order to reduce power asymmetries
- Number of participants to events organised by the project
- Number of police recommendations developed
- Number of policy-makers aware of project police recommendations
- Scientific impact (number of papers with impact factor and without impact factor)
- Number of IPRs and software licences
- Project level of interdisciplinarity
- Level of empowerment
- Number of instruments provided by the project allowing users to verify the quality of the information he/she access
- Training efficiency
- New job places developed and expected as a result of project outputs
- Number of researchers employed by the project
- Tools developed
- Level and typology of innovativeness
- Sustainability
- Environmental impact

Finally, in the first part of the Self-Assessment Toolkit (SAT), CAPS projects will be asked to describe their goals. Based on this information the IA4SI team may be able to further develop the KPIs.

The KPI system, it is important to note, will be used in the SAT in order to provide an automatic assessment for the projects. It represents a simplification of the impact assessment process that supports CAPS projects in developing a first analysis of their results. The analyses that IA4SI will develop in deliverable 4.1 and deliverable 4.2 will be more complex, and will take all the indicators underpinning the methodology in consideration as well as it will provide multiple comparisons and assessments.

At the beginning of the data gathering, with the collaboratively developed benchmark system will not be available jet, the IA4Si self-assessment tool will offer to CAPS projects two typology of visualisation and comparisons:

- the historical benchmark where each CAP project will be able to compare its performance with their previous assessment
- a radar visualisation with the mean value of the CAPS domain. In this visualisation it will be possible to see the CAPS average performance on the vertical and the transversal indices. The radars visualisation was selected as it describes projects peculiarities without proposing a value judgement. In fact, each project will be able to see, for example, that CAPS projects - on average – have higher social impact than environmental impacts and in this way it will have an idea of its peculiarities (i.e. it will see if its project follow the average or, for example, have higher environmental impacts than the others).

5. DATA GATHERING PROCESS AND ASSESSMENT OUTCOMES

This chapter introduces a new topic related to the methodology, e.g. how the information needed for the impact assessment will be collected. IA4SI will gather data from projects and from their users. Moreover, also European citizens not directly in contact with APS will be engaged through the means of a dedicated tool. In order to do so, ad-hoc tools - that will converge in the IA4SI online toolkit – have been developed. The IA4SI toolkit is not merely constituted by different data gathering instruments, but it also supports the analysis of the data allowing the automatic impact self-assessment of CAPS projects. By using the toolkit, projects will not only be able to enter data, but will also see the results of their assessment in real time. They will be able to save the results and compare them over time based on the benchmarking system that will be designed together with the CAPS projects.

This chapter describes the data gathering process, the IA4SI toolkit and the interactions with IA4SI projects' representatives, their users and the IA4SI team, including the support mechanism that IA4SI will offer to help the projects during their self-assessment.

The figure below visualise the IA4SI toolkit, which is composed of three different tool:

- The Self-assessment toolkit (SAT)
- The User Data Gathering Interface (UDGI)
- The citizens engagement platform (CEP)

Each tool will be synthetically describe in the next paragraphs; for a more detailed analysis of each tool and all the related technical information please refer to the dedicated deliverable: "D.3.1 Self-Assessment Toolkit, User Data Gathering Interphase and Citizens Engagement Platform"

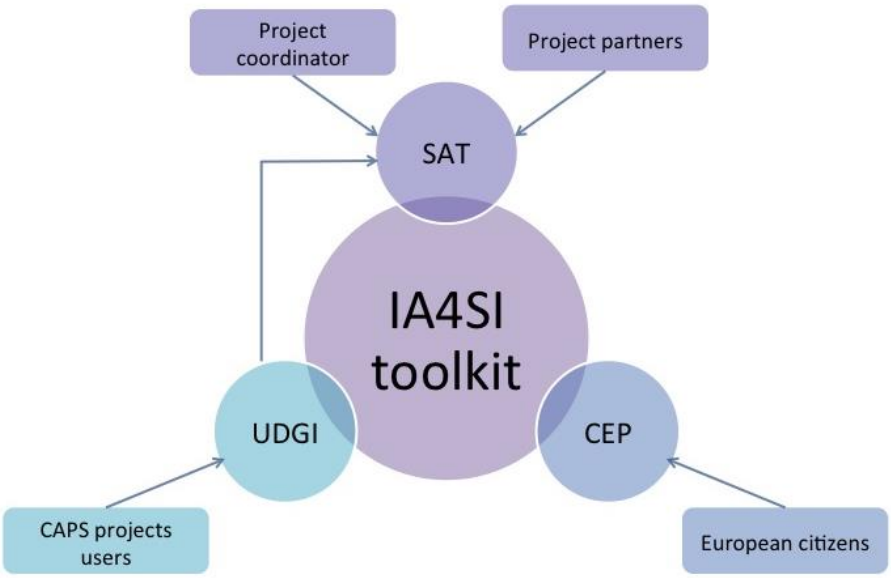

Fig. 10 –IA4SI toolkit

5.1 Data gathering process through IA4SI tools

The data gathering will start in September. The data collection will end in M20 May 2015. In July 2015 the IA4SI team will release Deliverable 4.1 “Project assessment and aggregate domain analysis” which will provide an analysis of the data gathered at project and at aggregated level (CAPS domain as a whole).

As mentioned, the actors engaged in the data gathering are:

- Project coordinators
- Project partners
- Project users (i.e. users of the CAPS project outputs).

In order to access the dedicated online tool for data gathering, projects coordinators will receive a username and a password. Through these credential they will access the dedicated tool in which they will be asked to enter required information and to answer questions. From previous experiences (EU funded support actions ERINA+[27] and SEQUOIA[28]) we learned that project coordinators do not always have all the requested information to reply to all questions. For some information they need to contact other persons in their consortium, such as e.g. the exploitation expert, the financial coordinator or the scientific coordinator. For other information, he/she need to contact all partners and gather data from them, i.e. a list of scientific papers submitted to journals with impact factors. In order to support project coordinators, the IA4SI tool will enable project coordinators to assign specific questions to different project partners (which will receive the credentials for entering the data) and ask partner to fill-in questions addressing them directly. When project partners enter information in the web tool, the project coordinator will then be able to validate the data and to save the information in the system.

The IA4SI team strongly believes in the necessity of engaging projects users in the self-assessment. With the term “projects users” we refer both to direct users engaged by the project in its research activities, as well as potential users that the projects consider relevant for its sustainability and exploitation strategy. Projects users can provide their view on the project outputs and, by so doing they will, on one hand offer a sort of validation of the self-assessment run by the CAPS projects and, on the other hand, will offer important feedback to the projects that, looking at the answers provided by their users can decide to fine-tune their outputs or improve the communication, the support provided, etc. Moreover, in the case of IA4SI, there are some impacts that only users can support us to understand: mainly the ones related to changes in the users opinions and behaviours.

Users will access to a specific section of the toolkit that will gather their evaluation of the projects outputs and will collect information about the benefit derived by using a specific project output. The data will be gathered in an anonymous way and the project coordinator will only see the aggregated assessment made by their users. This will assure projects’ users the maximum freedom of expression.

The data gathered through the IA4SI Self-Assessment Toolkit will not only be used by the CAPS projects for their self-assessments, but also by the IA4SI team that will use the data for:

- Analysing each project
- Analysing the CAPS domain at aggregate level.

[27] http://www.erinaplus.eu/
[28] http://www.sequoiaproject.eu/

Self-assessment Toolkit (SAT)

SAT allows the acquisition of project information. It has been structured to guide the users in gathering the information with simple wizard (a guided procedure). The IA4SI team designed and developed the tool by dedicating particular attention to user experience in order to make the tool as simple and intuitive as possible. The tool will be constantly update considering the feedbacks provided by CAPS project while using it.

The tool will be used by project coordinators and by project partners. Project coordinators will enter the information needed, and will be able to ask to specific partners (one or more) to fill-in specific sections. For example, about scientific production, the coordinator can ask to each partner to indicate the papers with impact factor published in the last year, in the dedicated section. In this way the coordinator will be able to have all the information need in a single place, without collecting the information before entering in the IA4SI tool. The project coordinator will be able to view all information inserted by project partners, with the exception of specific information that can raise issues of privacy and commercial issues (for example, questions related to the business model or growth in turnover generated by the participation to the project). The project partners can insert their specific information, as requested by the tool, and can see all the information of the project inserted by the project coordinator. The wizard interface guides the user through the sections of information acquisition, at the end of which the user can set the parameters for the assessment and launch the project assessment.

The first sections are the focal point of the tool. They enable and give shape to all the other sections. In the first session the user have to provide basic information about the project (project budget, start date, end date, previous experience in the CAPS domain, information about the consortium, etc.), its stakeholders and the expected impacts. In this section, in fact, the user (project coordinator) has to rate the relevance of the four areas of impacts for the project and their sub-areas. The project coordinator will do it by ranking in order of relevance the "icons" related to the impacts: economic impact, social impact, political impact and environmental impact and by following a similar process for the sub-areas/domains. In the second section, he/she will list the main outputs of the project. These two sections are fundamental because they dynamically generate the other sections of the questionnaire, used to gather information about the single outcomes and impacts. I this way, each project will see only those sections and questions that are relevant for them.

The users can modify the information filled in these sections at any time by adding or removing output, or changing the order of importance of the impacts. This will change the results of his assessment. The relevance the project coordinators attribute to each area of impact will create a weighting system that will personalize the IA4SI methodology to project priorities. In fact, not all the projects expect to have the same degree of impact on all the three areas.

The central sections of the tool gather information about specific outcomes and impact showing quantitative closed questions, Likert scales and qualitative open questions.

The last section of the tool shows the result of the impact assessment, i.e. the expected impact of the project under analysis. The project coordinator can select the type of report that wants to create. There are two different types of reports, the temporal one, which allows projects coordinators to make a comparison between their assessments over time, useful to look at the evolution of the project, and the benchmark-based one that allows them to compare their project with the benchmarking system that is actually under development.

Projects will be also able to see the results of the project users assessment and compare their perception of project impact with the perception of their users. The assessment made by projects users is based on the information gathered from the User Data Gathering Interface (UDGI) that is described in the next paragraph.

The self-assessment report visualizes the results of a project accordingly to all the indices and indicators considered by the IA4SI methodology. Moreover, in the report, the project will be able to see how many of its users filled in the UDGI and the result of their assessment at aggregated level.

User Data Gathering Interface (UDGI)

The User Data Gathering Interface shows a simple front-end. Basically, it appears like an online questionnaire structured both for single users and organizations. By using this tool, projects users will be requested to provide their opinion about the output/services they use and their potential impacts. This second tool will gather also some basic information about projects users, so that the IA4SI team will be able to use these data in the analysis of the CAPS domain; it is interesting to see who are the project users in terms of working profile, age, nationality and so forth.

CAPS projects will be able to contact their users autonomously by sending them an invitation by email and by providing a link for accessing the UDGI, alternatively if they prefer IA4SI to engage their users on their behalf, this can be also done. The information gathered by this tool is used during the assessment of the projects and are shown in the assessment report within the SAT.

Citizens Engagement Platform – Impact4you platform

The Impact4you platform is the main tool that IA4SI team will use for engaging citizens in knowing more about CAPS projects and social innovation initiatives, approaches and opportunities. Through the on line platform European citizens that are not directly engaged in CAPS projects will have the opportunity to express their opinion on CAPS outputs, discuss about the services offered them and their potentiality in terms of impact at social level and social up-taking. The platform will be a dynamic online knowledge and collaboration platform supporting content production, thematic discussions, and stimulates collaboration among the participants. CAPS projects will be able to showcase their outputs on the platform and propose questions for European citizens; at the same time, IA4SI team will propose a set of questions that will be then used in impact assessment deliverables, especial at aggregated level. For the IA4SI team the Impact4You platform is a channel for opening up the assessment process to European citizens and, at the same time, open up the European project domain to European citizens showing them the potentialities of European budget investments. From the point of view of CAPS project this platform can offer important insight about how to communicate their outputs to a larger audience and eventually improve their dissemination and exploitation strategies. At the present stage the Impact4you platform is undergoing a set of user tests that will lead to its public lunch in September 2014. More detailed information about the platform and its technical aspect is reported in “D3.1 Self-Assessment Toolkit, User Data Gathering Interphase and Citizens Engagement Platform”.

How the SAT and UDGI evolved through various projects from ERINA+ to IA4SI

This section presents the predecessors of IA4SI SAT and UDGI. In other terms, it present the process followed by project partners (mainly Eurokleis and T6) in different projects before the IA4SI ones. It is relevant for showing the differences and the improvements made from the first project, the SEQUOIA one, to IA4SI.

The SEQUOIA project was the first occasion to apply a methodology for socio-economic impact assessment to European research projects in the area of Software as a Service and Internet of Services.

During SEQUOIA project data were gathered through a classical semi-structured questionnaire. The questionnaire was sent to relevant European project participants and stakeholders. The SEQUOIA project also interviewed key informants in the larger European markets. Interviews has be carried out through personal meetings and telephone discussions and based on a prepared list of topics. Focus groups and workshops with project members and potential beneficiaries of project outputs have been also organized.

The SEQUOIA project constituted the starting point for the development of a socio-economic impact assessment methodology for European project in the ICT field. However, during the SEQUOIA project no webtools were developed.

Instead, within the ERINA+ project, the team has developed a webtool with the aim to help e-Infrastructure projects in the assessment of their socio-economic impact. The assessment model was based on the gathering of data provided by the projects, as well as the information gathered through the projects users and e-Infrastructures stakeholders. In this way an iterative and participative process helped the ERINA+ team to provide the assessment results which vary according to the increase of projects, users and stakeholders participation.

The webtool was constituted of 6 pages. In the first four pages after the introduction (Project Information, Partnerships and Collaborations, Offered Efficiency, Effectiveness) consortia will have to input the data of their projects. The methodology and the assessment focused mainly on offered efficiency and effectiveness. The following figure shows the entry page of the webtool.

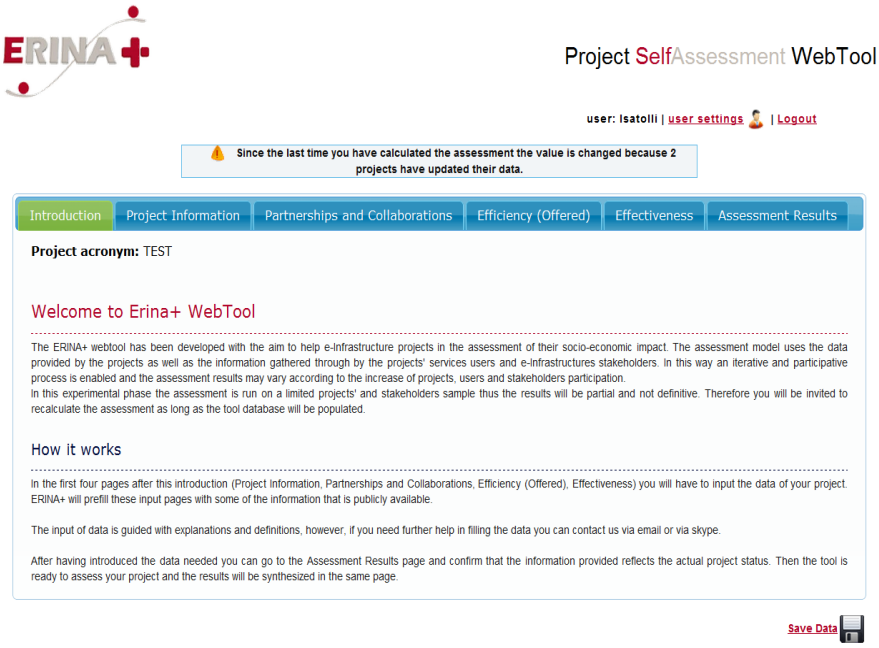

Fig. 11 - ERINA+ toolkit - entry page

The result of the assessment was shown in a form of a report, as presented in the following figure.

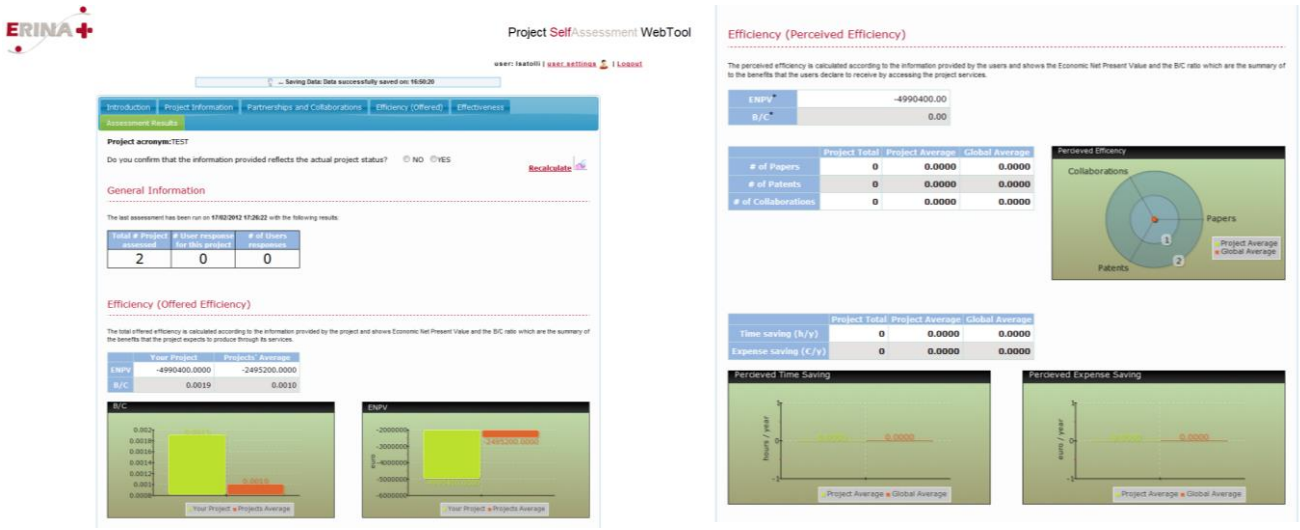

Fig. 12 - ERINA+ toolkit - assessment page

The report shows the general information about the data gathering, such as the number of projects that completed the assessment and the number of users responses. Then, the report focused on the two indices used by the ERINA + project for the assessment of the offered efficiency and of the effectiveness related to the projects within the domain of e-Infrastructures. The offered efficiency provided a cost/benefit analysis and the ENPV (Economic net present value). The analysis of the perceived efficiency was based on the evaluation of time-savings, expense savings, collaborations with other projects, paper and patents developed. The methodology and the reports developed by the ERINA+ project was relatively simple if compared with the IA4SI one.

Starting from the activities developed within the ERINA+ project, MAXICULTURE has considerably improved both the methodology and the toolkit from the point of view of completeness and

usability. The MAXICULTURE Support Action aimed to maximise the impact of EC funded ICT projects in the cultural domain. The toolkit was composed of two online tools for supporting projects' representatives and projects' users to provide the necessary data.

With reference to the tool developed by ERINA+, the MAXICULTURE tool is more articulated and this is mainly due to the fact that the methodology takes into account more potential impacts, relevant for the Digital Cultural Heritage field. Consequently, the assessment provided by MAXICULTURE included 4 different areas of impact: on Society, on technology, on DigiCult, and on economy. The evaluation is constituted by specific questions aimed at assessing the impact of the outputs developed by the project and more general questions relevant for the evaluation of the complex indices. The following figure provides a visualization of the first page of the toolkit. The Toolkit is divided in 7 main sections: Project Information, Start your assessment, Impact on Technology, Impact on DigiCult, Economic impact, Social impact, Other impacts, Assessment and Reports.

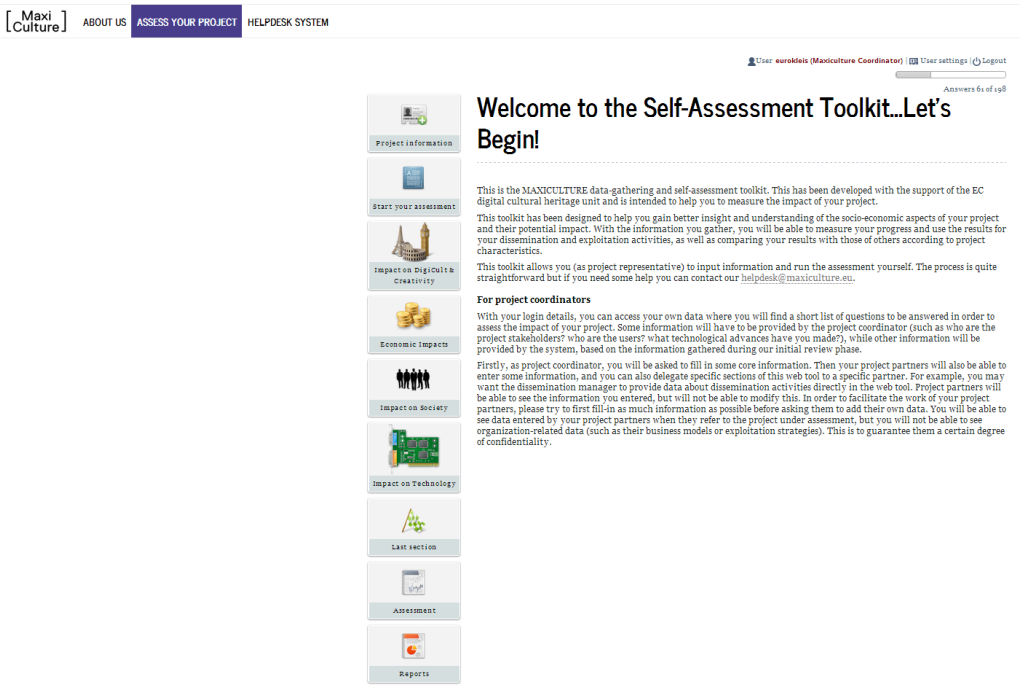

Fig. 13 - MAXICULTURE toolkit - entry page

The tool dedicated to project representatives allowed them to access an automatically generated assessment report, since from the first phase of the MAXICULTURE project, differently from ERINA+. The reports were presented as a dashboard and provides three different reports:

1. a report that compared each projects total result with the others who have run the assessment
2. a report showing the details of the assessment and providing information regarding each index included in the methodology for the evaluation of socio-economic impacts
3. a report allowing the projects to build a personalized comparison according to each project main features (such as instrument typology, total cost, project development stage, direct users and technological tools developed).

The following figure represents the first report.

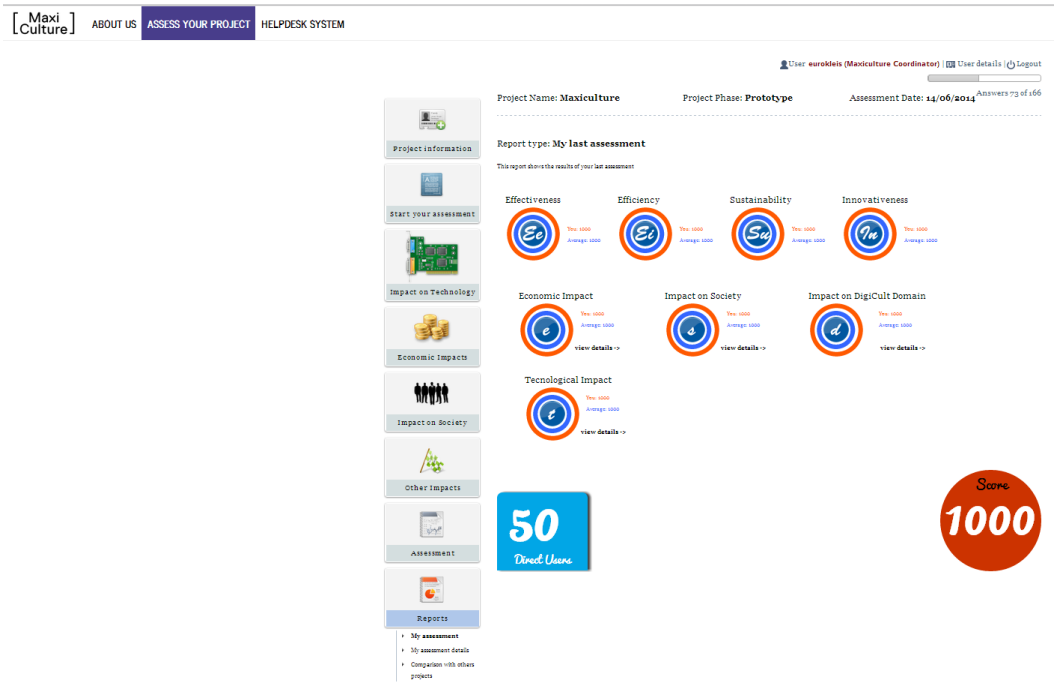

Fig. 14 - MAXICULTURE toolkit - assessment main page

Within the MAXICULTURE toolkit was included also the questionnaire for projects users.

Considering the achievements of the MAXICULTURE toolkit and methodology, the IA4SI team has developed an even more complex methodology in order to assess the impacts of the CAPS projects. The Toolkit has also been reconsidered in all its parts from the technical and graphic point of view. The structure of the Toolkit was conceived horizontally (an not vertical as in the MAXICULTURE one) in order to improve usability for CAPS projects. The tool make more evident and clear the input-output-outcome-impact approach, offering to projects a process-based navigation. At the same time, it offers also a clearer representation of the four areas of impacts included in the IA4SI methodology: Social Impact, Economic Impact, Political Impact and Environmental Impact. Within these 4 sections are included different complex indices and a specific report will be provided to the projects, according to the benchmarking system chosen by the IA4SI team.

5.2 Outputs of IA4SI analysis

This paragraph describes how the data gathered will be used in generating specific research reports.

Besides the assessment made automatically through the SAT that CAPS project will be able to access as many time as they wants and to evaluate autonomously, the IA4SI team will provide a more in-depth analysis to projects, to the EC and to the general public. In particular, three outcomes are expected by the project:

- a report regarding the assessment of CAPS projects realised by applying the IA4SI methodology in all its components to all CAPS projects and possibly to the project financed by CHEST (this output will be reported in D4.1 “Project assessment and aggregated domain analysis” which is described in the next paragraph),
- an assessment of the CAPS domain as a whole (also contained in D4.1 “Project assessment and aggregated domain analysis” and described later on in this paragraph)
- a Best Practice Report (D4.2, “Best practice report” described in the next paragraph).

All the reports will be written by making the best use of the qualitative and of the quantitative information gathered. In fact, it is important for the IA4SI team, and it was also requested by CAPS projects in the first brainstorming session about the methodology, to keep together the necessity to provide synthetic information about the projects and, at the same time, create a narration about the project, “tell a story” about the activities developed, the innovation introduced and the lesson learned. The qualitative analysis of the data gathered cannot be delegated to the SAT, so that this is the value added of the report that will be produced by the IA4SI project at months 22 and 24.

The next two paragraphs briefly describe the aim and the structure of these reports.

Project based analysis

Deliverable D4.1 “Project assessment and aggregated domain analysis” will offer, for each CAPS project, having collaborated with IA4SI and having inserted their data in the toolkit, an analysis complementary to the assessment results visible in the SAT. The objective is to explain to the projects the result obtained, to offer a more in-depth description of the assessment results and to give suggestions on how to improve the projects’ impact.

D4.1 will contain a collection of short reports, one for each collaborating project, all following the same structure.

The first general part of each report will shortly present the project, its general objectives and the results and outcomes obtained up to date or expected. It will contain also a presentation of its stakeholders and final users and information about the outputs developed during the project. Other information will regard the start and end date, the overall budget and the website of the project.

The second part will present the main impacts of the project for the 8 indices identified by the methodology:

– Economic impact – Social impact – Environmental impact – Political impact	Vertical indices
– Efficiency – Effectiveness – Sustainability – Fairness	Transversal indices

For each indicator, IA4SI team will analyse the results obtained for the subcategories and main indicators. The analysis will be carried out both from a qualitative and quantitative point of view.

Finally, the third part of the report will present the impact of the project compared to the other projects, by using the different comparison means identified in the methodology (paragraph 5.6).

The Best Practices Report will present three to five participating projects, which, according to the assessment carried out, have shown the most positive impacts. The report will be dedicated to the projects that will score higher in terms of socio-economic, political and environmental impacts and that will show the capability to be taken up at social level. Each case study will describe those characteristics (technical, scientific, etc.) that make the single project particularly promising in terms of impacts, sustainability and transferability of results.

The Best Practice Report will be written in a descriptive manner so that CAPS project elected as best practices can use it for dissemination and exploitation purposes.

As both deliverable are public, IA4SI team will provide project with a draft and ask their feedback before finalising the reports and pas them to the European Commission. In fact, from previous experience, the IA4SI team have learn that – even if the SAT is self-explicatory – there are some aspects of the methodology that become more clear when the data are available and processed. Once the analysis is ready, it is easier for collaborating project to understand if their entered the correct information or if they forgot to mention something that can influence the assessment. For these reason the IA4SI will have a constant exchange of information with the CAPS projects and will present them their preliminary assessment for a final check. It is important to stress, in fact, that the SAT and the IA4SI methodology in general is meant to be an instrument that can be used by CAPS projects and by their partners also in the future and that an important outputs of the self-assessment exercise is to spread the culture of the assessment and reduce the perception of this instrument as an external tool for judgement.

Aggregated analysis

This activity will use the knowledge base created from the IA4SI data collection, in order describe and quantify as much as possible the performance of CAPS domain at the aggregate level. The assessment will be, as mentioned earlier, qualitative as well as quantitative.

With the data gathered through the IA4SI toolkit the team will, first of all, describe the eight IA4SI synthetic indices at aggregated level; i.e. the economic impact, the impact on society, the environmental impact and the political impacts will be discussed. Similarly it will be describes the domain in term of efficiency, effectiveness, sustainability and fairness. A special attention will be dedicated to the take up potential of projects and of the CAPS approach as a whole. Then the subcategories will be analysed at aggregated level so that it will be possible to analyse how CAPS

project influenced users opinions and behaviours, how they improved their engagement in civic and political activities, how they fostered social inclusion and so forth.

Beside this, it is possible to run some other analysis based on these indicators:

- ENPV, ENPV*, B/C at domain level and at cluster level
- N. of spin-offs
- Scientific outputs (papers in journal with impact factor, average impact factor for researcher compared to the average at European level, Patent and IPRs, etc.)
- Employment
- CAPS social capital

The data will be analysed at domain level and, then, they will analysed by grouping project accordingly to their:

- Instrument typology (IP, STREP; CSA, etc.)
- Total cost projects
- Number of direct users

In particular:

a) Economic Net Present Value

The Economic Net Present Value achieved by projects represents the projects economic impact in the real economy. These results can be correlated to other macro variables. While an econometric approach needs a large sample of data to discover correlations and causalities, at this stage the projects economic results will be compared in a descriptive way.

b) Scientific outputs

This indicator describes the scientific outcome of CAPS projects in the form of publications, which is usually regarded as a measure for newly created scientific and technical knowledge. Publication in high-impact journals and high citation counts indicate a significant impact on the scientific community.

c) Intellectual Property Rights (IPR)

This indicator describes Intellectual Property Rights created by the CAPS projects. The number of IPRs shows potential for innovations that can be developed and commercialised either by the facility itself or by potential industrial licensees.

d) Employment

This indicator reports the number of people who worked on the project, with a special attention to the number of woman and to the number of young researchers employed. A particular attention will be dedicated to new working positions created by the project and by its outputs.

e) Spin-offs and Start-ups

This indicator describes the spin-offs or start-ups already created as well as the opportunities for creating further spin-offs or start-ups resulting from the facility's activities.

The analysis is performed through the identification and report of the spin-offs and start-ups have already been created (directly or indirectly) thanks to the activities in the CAPS projects.

f) Social Capital

Thanks to the data gathered at project level with reference to collaborations among projects, previous experience of collaboration with project partners and previous projects carried out in the IST domain, it will be possible to apply the Social Network Analysis (SNA). This method will be used for:

- Visualise and analyse the relationship among CAPS projects
- Visualise and analyse the relationship between CAPS projects and other social actors
- Visualize and analyse the relationship among projects and stakeholders
- The relationship between project partners across projects and historically
- The relationship between CAPS projects and previous EU-funded projects

The figure below shows a possible visualisation of the relationship among projects. The visualisation offered by SNA allow the qualitative analysis of the centrality of projects and/or project partners at the present stage and historically (looking at those relationships that started in previous projects somehow connected to project under assessment). The possibility to use the access data gathered through the Impact4You platform and analyse the number and characteristics of citizens expressing their opinions about different CAPS outputs will be evaluated.

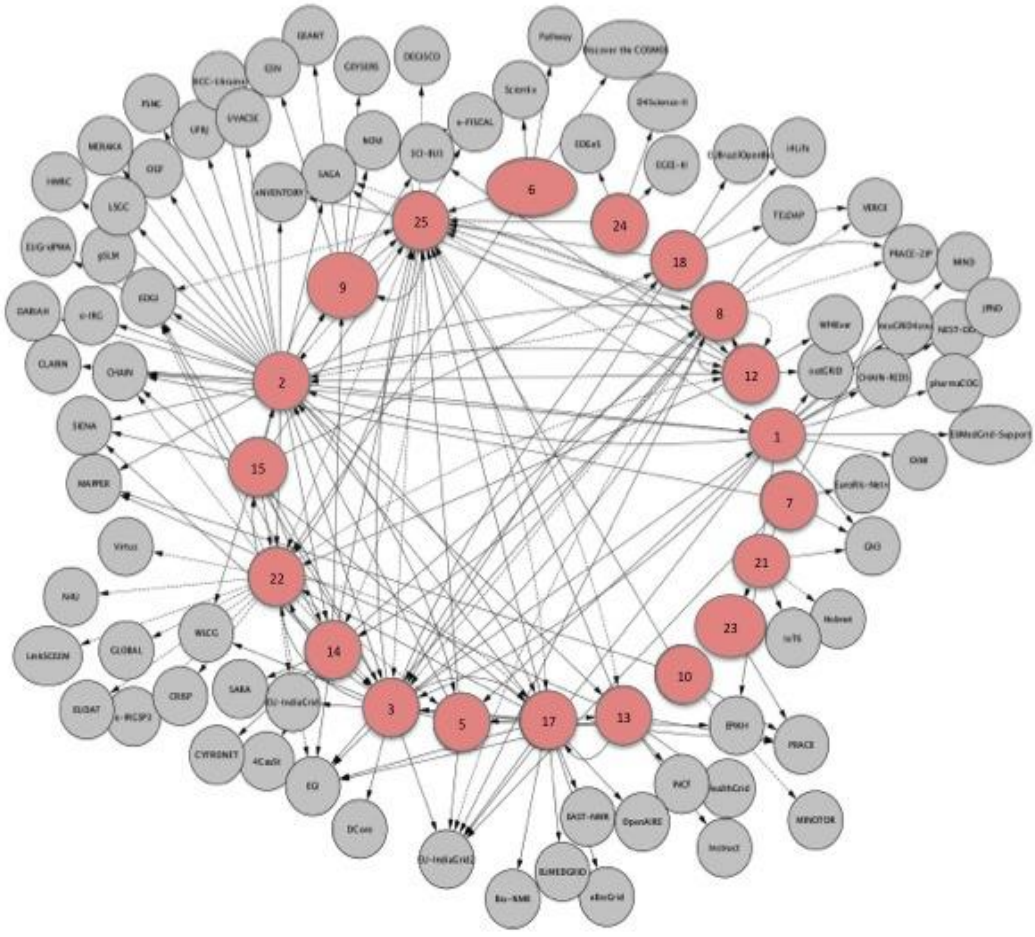

Fig. 15 - Examples of Social Network Analysis visualisation (source: ERINA+ project, D.3.5)

SNA allow also the quantification of the network characteristics. The following indices will be used for analysing the DigiCult domain' relationships:

- **Network density** – it measure the grade of cohesion of the network. This allows understanding to what extent each node of the network is connected to the others. By applying this approach, for example, to the network of the collaboration between running projects, we will see how intense is the collaboration among them on an average base.
- **Distance** – it calculates the length of the shortest path connecting every couple of nodes. It is another measure of the network density, and it describes the average distance between the nodes. It can be used in order to understand which is the degree of separation between projects and to locate gate-keepers (i.e. actors or projects that are crucial in the diffusion of knowledge and of information).
- **Closeness centrality index** – it measures the position of one node inside its network in relational terms. Among the various measure for measuring the centrally we select for our purposes the closeness centrality index that can tell us the node that is close to the higher number of nodes. In other terms we can use this index for recognise the leader of a network; for example the institution that is connected the most to the others thanks to the participation to several DigiCult projects. This index, will also allow us understanding if the network is balanced or not; in fact if many nodes are central it means that - for example - information can flow freely inside the network and there is not a predominant gatekeeper (Salvini, 2005).

The software used for performing the analysis and for the visualisation of the networks will be UCINET 6 and Cytoscape[29].

[29] http://www.cytoscape.org/

NEXT STEPS

The methodology presented in this document constitutes a first draft that will be discussed online with CAPS projects in the next months and that will be tested by them using the SAT and the UDGI. The data gathering phase will start in September due to the upcoming vocation period. As mentioned, the data gathering will constitute also a test for the methodology and for the IA4SI toolkit. The lessons learned will be integrated in the toolkit constantly and will then be reported in the final version of this methodology that will be released at month 26.

During the data gathering process CAPS project will be supported by the IA4SI team: they will be able to report bugs and ask questions using a dedicated ticketing system and the IA4SI team will organise online conference call and webinars on a regular base. Moreover, the IA4SI How-to-guide, in the form of video tutorial, will provide CAPS projects with useful information for using the SAT and UDGI since the beginning of the data gathering phase.

The preliminary results of the assessment will be sent to CAPS projects in order to gather their feedback and will be presented in a dedicated workshop. The results obtained by the assessment will also inform the development of IA4SI research roadmap and the policy recommendations that will be released at the end of the project.

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LINKS

Civic Society Index (http://www.civicus.org/csi/)

CIVICUS Civil Society Index Summary of conceptual framework and research methodology http://www.civicus.org/new/media/CSI_Methodology_and_conceptual_framework.pdf

Collective Awareness Platforms for Sustainability and social Innovation - Euroeapn commission page https://ec.europa.eu/digital-agenda/en/collective-awareness-platforms-sustainability-and-social-innovation

Digital Social Innovation project www.digitalsocial.eu

EC, Horizon2020 workprogramme 2014-2015 - Leadership in enabling and industrial technologies, Information and Communication Technologies. http://ec.europa.eu/research/participants/portal/doc/call/h2020/common/1587758-05i._ict_wp_2014-2015_en.pdf

EC, FP7 – ICT workprogramme 2013 http://cordis.europa.eu/fp7/ict/docs/ict-wp2013-10-7-2013-with-cover-issn.pdf

ERINA+ project http://www.erinaplus.eu/

Eurostat – quality of life index (http://epp.eurostat.ec.europa.eu/portal/page/portal/gdp_and_beyond/quality_of_life/data/governance_basic_rights)

FreedomHouse: http://freedomhouse.org

Istat – BES index (http://www.misuredelbenessere.it/index.php?id=35).

MAXICULTURE project www.maxiculture.eu

OECD - Better life index (http://www.oecdbetterlifeindex.org/topics/civic-engagement/).

Social Protection Committee Indicators Sub-group EU social indicators - Europe 2020 poverty and social exclusion target ***ec****.europa.****eu****/****social****/BlobServlet?docId=10421&langId=en*

Tools and Resources for Assessing Social Impact (TRASI) http://trasi.foundationcenter.org/browse.php)

ANNEX 1

Project info

Dimensions	Number of question	Indicators	Variable	Questions	Type of answer
GENERAL INFORMATION	1	Name of the project	Name of the project	Name of the project	Short text
	2	Acronym	Acronym	Acronym	Short text
	3	Problem solved by the project	Problem solved by the project	What is/are the problem/s your project will address/contribute to solve?	Long text
	4	Instrument of funding	Instrument of funding	Instrument of funding	Short text
	5	Total budget	Total budget	Total budget	Money
	6	EU funding	EU funding	EU funding	Money
	7	Budget percentage for Training	Budget percentage for Training	Percentage of budget dedicated to training activities	Percentage
	8	Budget percentage for Dissemination	Budget percentage for Dissemination	Percentage of budget dedicated to dissemination	Percentage
	9	Budget percentage for Development	Budget percentage for Development	Percentage of budget dedicated to development	Percentage
	10	Budget percentage for Training	Budget percentage for Training	Did your project attract other funds different from European Commission funding? Yes/No	Radio button

	11	Budget percentage for Dissemination	Budget percentage for Dissemination	If yes to the previous question please provide the total funding attracted and specify	Money + Long text
DURATION AND MATURITY	12	Budget percentage for Development	Budget percentage for Development	Project start date	Date
	13	Project end date	Project end date	Project end date	Date
CONSORTIUM	14	Consortium definition	Name of the partner organisation	Indicate information the name of your partners. Note: a third party can be also considered a partner	Add row
	15		Typology of partner(university, SMEs, etc.)	For each of them, indicate the typology of institution they represent (SMEs, research centers, etc.)	Add row
	16		Country of the partner	For each partner, indicate the country of origin	Add row
COLLABORATIONS WITH OTHER PROJECTS	17	Project Relationships with other projects	Project Relationships with other projects	Project name and type of relation	Add row + List menu
PREVIOUS DIGICULT ENGAGEMENT	19	Previous EU project engagement	Previous EU project engagement	Did you participate in previous EU projects? Yes/No	Radio button
	20			Please indicate the title of the project	
	21			Please indicate the programme financing it	
	22	Previous intra-consortium	Previous intra-consortium engagement	Considering your actual project partners, did you work with some of them before?	Radio button

	23	engagement		If yes please indicate their name and or PIC number	Add row
STAKEHOLDERS	24	Stakeholders	Stakeholders	Indicate your stakeholders by selecting from thelist: RESEARCH • Universities • Research centers • Academic researchers • Independent researchers • Graduate students • Other EU projects • Any other research-related organisation/professional BUSINESS • ICT large companies • Non-ICT large companies • ICT-SMEs • Non-ICT SMEs • Cooperatives and social entrepreneurs • Consultants and self-employed workers • Utilities (water, energy, etc.) CIVIL SOCIETY • NGO, Associations and charities • Umbrella organisations • Trade unions and parties • School, Teachers, educators	Add row + List menu

				• Activists and social movements • P2P producers • Bloggers or content producers • Citizens at large • Other civic society organisation POLICY-making • Local policy-makers • National policy-makers • EU policy-makers • Global policy-makers • Local governmental bodies and officials • National governmental bodies and officials • EU governmental bodies and officials Global governmental bodies and officials • Interest groups	
USERS	25	Users	Users	Indicate the typologies of users of your project: • Social innovation organisations and networks • Social movements and activists • Researchers • Large companies • SMEs • NGOs, associations and charities • Software developers • CAPS projects • Citizens	Add row + List menu

ACTIVITIES DEVELOPED BY THE USERS OF THE PROJECT	26	Users activities on the project platform	Users activities on the project platform	Which are the activities developed by your users on your project platform? Please select them from the following list: • information exchange • collaboration for: • money transactions services • exchanges product • exchanges ideas • collaborative consumption	List menu
MANAGEMENT AND MONITORING	27	Internal monitoring/evaluation system adoption	Presence of an internal monitoring/evaluation system adoption	Do you foresee a regular (yearly) internal monitoring/evaluation system beside the reviews performed by the EC? Yes/No	Radio button
	28	Internal risk assessment system	Presence of an internal risk assessment system	Do you have an internal risk assessment system? Yes/No	Radio button
ZERO SCENARIO	29	Zero scenario	Zero scenario	The base-case is the scenario before the project starts. It is not just the state-of-the-art, but rather the good(s) -- i.e. software -- or service(s), similar or alternative, on the basis of which improvements brought by the results of the project' output(s) can be demonstrated. Of course, each project is the sum of several parts/components. Please, in answering this questions, consider only the main outputs of your project. Please describe the zero scenario of you project	long text

Social impacts

Community building and empowerment					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of question**
ONLINE COMMUNITY BUILDING	1	Change in number of users signed in	Link between the CAPS initiative and pre-existing online platforms/communities	Does your project build on pre-existing online platforms or online communities of users?	Short text
	2		Description of pre-existing platforms/online communities	Please describe them	Long text
	3		Number of platform users at the beginning (day one) of the project	Please indicate the number of users of pre-existing online platforms or online communities of users	Number
	4		Number of platform users at the time of the assessment	Please indicate the number of users of your platform at the present stage.	Number
	5		Number of users that left the network since the beginning of the project until the time of the assessment	Please indicate the number of users that left the platform since the beginning of the project up to now.	Number or "I don't know" option
	6	Change in time spent on the	Time spent by the users, on average	Please indicate the average time spent on the platform by one of your user	Number

	7	platform by users	Change in time spent on the platform by users	Since the beginning of your project, the time spent by your users on the platform increase, decreased or remained stable? Please consider the average of your users	Short text
	8	Main feature of the platform	Main features offered by the platforms	Please indicate which features are available on your platform selecting from the list below: • Identity – a way of uniquely identifying people in the system • Presence – a way of knowing who is online, available or otherwise nearby • Relationships – a way of describing how two users in the system are related • Conversations – a way of talking to other people through the system • Groups – a way of forming communities of interest • Reputation – a way of knowing the status of other people in the system • Sharing – a way of sharing things that are meaningful to participants	List Menu
	9	Features used by the users	Features used by the users	For each of the features selected, please indicate the percentage of your users actually using it	percentage
	10	Communication on the platform	Communication on the platform	Considering the “conversation” dimension of your platform, please indicate the percentage of posts that get a reply on the total number of post	Percentage or "I don't know" option

	11	Network density	Network density	Please indicate the network density index of your platform using a value from 0 to 1. Where 1 is “every user is connected with all other users” and 0 is “each user is isolated from the other”. *Network density can also be called Cluster coefficient in some online analytic tools.*	Number
	12	List of other analytics collected by CAPS projects	List of other analytics collected by CAPS projects	Do you collect analytics other than the ones mentioned in this section? Yes/No	Radio button
	13			Please list them and add a short definition	Long text
ONLINE COMMUNITY EMPOWERMENT	14	Number of groups spontaneously created by the users	Number of groups spontaneously created by the users	Please indicate the number of groups, clusters, circles and similar, created by users on your platform/s	Number
	15	Project capability to influence trust among users	Self-assessment on project capability to influence trust among users	To what extent do you agree with the following sentence: “Our project positively influence the trust among platform users”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	16		Sharing of personal data among users	To you best knowledge, which is the percentage of your users that interact with other users using their personal emails or that share with others personal information such as name, addresses, age and similar?	percentage

	17	Number and description of tools/instruments provided by the project in order to reduce power asymmetries on their platform	Project attention to power asymmetries in online interactions	With reference to your platform, does you project tackle the issue of power asymmetries? Yes/no	Radio button
	18		Number of tools/instruments provided by the project in order to reduce power asymmetries	Please indicate the number of tools/instruments provided by your project with the aim of reducing power asymmetries on your platform	Number
	19		Description of tools/instruments provided by the project in order to reduce power asymmetries	Please describe those tools/instruments	Long text
	20	Project capacity of empowering users by providing features/tools for data management/privacy management	Presence of features/tools allowing data management/privacy management	Do you provide any features/tools supporting users in effectively manage their data and privacy? Yes/No	Radio button
	21		Description of the features/tools provided	If yes, please describe the features/tools you provide	Long text
	22	Network diversity	Ratio between men and women on the platform	Considering all your users, please indicate the percentage of woman	Percentage or "we do not gather demographic

					information about users"
	23		Number of project activities dedicated to fostering gender equality success rate	Number of activities dedicated to foster Gender Equality within the consortium and outside	Number
	24			Average success rate of the activities dedicated to foster gender equality	Percentage
	25		Ratio between young, adult and old people	Considering all your users, please indicate the percentage of young users	Percentage or "we do not gather demographic information about users"
	26		Self-assessment of user belonging to categories at risk of social exclusion	To what extent do you agree with the following sentence: “Our project and its outputs are used by people belonging to categories at risk of social exclusion Number” Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	27			Please specify the categories at risk of social exclusion represented and their number if available	Long text

	28		Ratio between highly educated users and not highly educated ones	User survey	
	29		Cultural background composition of the users group	User survey	
LOCAL COMMUNITY BUILDING	30	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	To what extent do you agree with the following sentence: “Our project fosters the creation and enlargement of local communities/groups”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	31	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 themself	To what extent do you agree with the following sentence: “Our project provides to local communities/groups instruments for better organise themself ”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	32		Instruments provided to users for self-organise themself local	Please indicate the number of instruments provided to users for self-organise themselves online and for improving the organisation of local communities/groups	Number

	33	Number and description of tools/instruments provided by the project in order to reduce power asymmetries in local communities/groups	Project attention to power asymmetries in local interactions	Does you project tackle the issue of power asymmetries in local interactions? Yes/no	Long text
	34		Number of tools/instruments provided by the project in order to reduce power asymmetries in local communities/groups	Please indicate the number of tools/instruments provided by your project with the aim of reducing power asymmetries on the platform.	Radio button
LOCAL COMMUNITY EMPOWERMENT	35		Description of tools/instruments provided by the project in order to reduce power asymmetries	Please describe them	Number
	36	Number of events organised by the the project addressing local communities	Number of participants to events organised by the project addressing local communities	Please indicate the number of events organised by the project addressing local communities	Long text
	37	Number of participants to events organised by the project addressing local communities	Number of participants to events organised by the project addressing local communities	Considering all the events organised so far by your project for local communities, please indicate the overall number of participants	Number

	38	Project capability to influence frequency of social contacts	Project capability to influence frequency of social contacts	User survey	
	39	Project capability to influence the quality of social relations	Project capability to influence the quality of social relations	User survey	
	40	Project capability to influence trust among local communities members	Project capability to influence trust among local communities members	To what extent do you agree with the following sentence: “Our project positively influence the trust among local communities members ”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	41	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	To what extent do you agree with the following sentence: “Our project and its outputs will contribute to make local communities more inclusive”	Likert
	42		Number of project activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities	Please indicate the number of project activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities	Number

	43		Success rate of project activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities	Please rate the average success rate of them	Percentage
	44		Description of main activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities	Please describe the most important and successful activities/outputs dedicated to fostering social inclusion and non-discrimination in local communities	Long text
	45		Number of project activities dedicated to fostering gender equality in local communities	Please indicate the number of activities carried out with the aim of fostering gender equality in local communities	Number
	46		Average success rate of activities dedicated to fostering gender equality in local communities	Please sate the average success of the activities carried out	Percentage
	47	Creation of new civic-society organisations and spontaneous local groups thanks to project activities	Number of new civic society organisation and/or informal groups created at local level thanks to project activities	Are you aware of new civic society organisation and/or informal groups created at local level thanks to your project activities? Yes/no	Radio button
	48			Please provide the number of new civic society organisation and/or informal groups created at local level thanks to your project activities	Number

IMPACT ON SI AND CAPS COMMUNITY	49	Formal and informal collaborations with other CAPS projects	Number of formal and informal collaborations with other CAPS projects	Please select from the list the CAPS projects you collaborate with	List Menu
	50		Description of collaborations with CAPS projects	Please describe the goal and the topic covered by the collaboration	Long text
	51	Number of new partners (partners not collaborating before the project writing)	Number of new partners (partners not collaborating before the project writing)	Please select from the list project partners who represent for you a new collaboration (partners that were not collaborating with you in previous projects)	List Menu
	52	Number of partners which are new to UE-funded ICT projects	Number of partners which are new to EU-funded ICT projects	Is this project your first European funded project?	Radio button
	53			Is this project the first one funded in the ICT research field?	Radio button
	54	Formal and informal collaborations with SI initiatives outside the CAPS domain	Number of formal and informal collaborations with SI initiatives outside CAPS domain	Please indicate the number of formal or informal collaboration established with Social Innovation initiatives outside the CAPS domain	Number
	55		Description of collaborations with SI initiatives outside the CAPS domain	Please describe the SI initiatives you collaborate with, the goal and the topic covered by the collaboration	Long text
	56	Formal and informal collaborations with	Number of formal and informal collaborations with actors outside the SI and	Please indicate the number of formal or informal collaboration established with actors	Number

		actors outside the SI and CAPS domain	CAPS domain	outside the SI and CAPS domain	
	57		Description of collaborations with actors outside the SI and CAPS domain	Please describe the actors your are collaborating with, the goal and the topic covered by the collaboration	Long text
	58	Number of instruments/activities provided for CAPS networking and success rate	Number of instruments/activities provided to CAPS project for networking	Please indicate the number of instruments/activities provided to CAPS project for networking	Number
	59		Description of instruments/activities provided to CAPS project for networking	Please list these instruments/activities	Long text
	60		Number of CAPS project participating	Please indicate the number of CAPS projects actually benefiting from the instruments/activities provided	Number

	61	Activities developed by the project to bring together public administrations, foundations, social investors and social finance intermediaries with civil society and the third sector	Number of activities developed by the project to bring together innovative public administrations, foundations, social investors and social finance intermediaries with social innovation initiatives, civil society and the third sector	Please indicate the number of activities developed by the project to bring together innovative public administrations, foundations, social investors and social finance intermediaries with social innovation initiatives, civil society and the third sector	Number
	62		Average success rate of the activities organised	Please value the overall success of these initiatives by attributing a value from 1 to 6 were one is “totally unsuccessful” and 6 is “totally successful”	Likert
	63	Project self-assessment of its capability to spread SI model	Project self-assessment of its capability to spread SI model	To what extent do you agree with the following sentence: “Our project is successfully spreading the social innovation model”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert

Impact on Information					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of answer**
ACCESS TO INFORMATION AND SHARING OF INFORMATION	1	Typology of information- data available on the platform	Typology of information- data available on the platform (selection from a list)	We are interested in learning what shape does information takes on your platform. Please select from the list: Articles/long post/structured content Short post/status updated Forum discussions Forum entries Images Videos Other contents (please specify…..)	List Menu
	2	Change in the number of available information	Number of information for each typology selected in the previous question at the beginning of the project	Number of articles/long post/structured content available on the platform at the beginning of the project Number of short post/status updated available on the platform at the beginning of the project Etc.….	Number
	3		Number of information for each typology selected in the previous question at the time of the assessment	Number of articles/long post/structured content available on the platform now Number of short post/status updated available on the platform now Etc.….	Number

	4	Project self-assessment of its capability to improve users access to a range of local and international news sources of information	Project self-assessment of its capability to improve users access to a range of local and international news sources of information	To what extent do you agree with the following sentence: “Our project improves users access to a range of local and international news sources of information”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	5	Project self-assessment of its capability to improve users access to media outlets or websites that express independent, balanced views	Project self-assessment of its capability to improve users access to media outlets or websites that express independent, balanced views	To what extent do you agree with the following sentence: “Our project improves users access to media outlets or websites that express independent, balanced views”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	6	Project self-assessment of its capability to improve user access to sources of information that represent a range of political and social viewpoints	Project self-assessment of its capability to improve user access to sources of information that represent a range of political and social viewpoints	To what extent do you agree with the following sentence: “Our project to improves user access to sources of information that represent a range of political and social viewpoints”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert

	7	Project self-evaluation of its capability to influence information asymmetries	Project self-evaluation of its capability to influence information asymmetries	To what extent do you agree with the following sentence: “Our project reduce information asymmetries experienced by the users”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	8	Number of tools/activities developed by the project for influencing information asymmetries	Number of tools/activities developed by the project for influencing information asymmetries	Please indicate the number of tools/activities developed by the project for influencing information asymmetries	Number
	9		Description of tools/actions developed by the project for influencing information asymmetries	Please describe your tools/activates	Long text
QUALITY OF INFORMATION	10	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	Number of instruments provided allowing users to verify the quality of the information he/she access to	Number
	11		Description of the Instruments provided by the project allowing users to verify the quality of the information he/she access	Please describe them	Long text
	12	Users evaluation of the quality of information provided by the	Users evaluation of the quality of information provided by the project platform	(users survey)	

		project platform			
DATA MANAGEMENT POLICIES	13	Project policy in terms of data management	Personal and sensitive data policy	Please describe your policy in terms of personal and sensible data	Long text
	14		Data management/governance	Please describe you policy in terms of non-personal/sensible data	Long text
	15	Project policy in terms of standardisation	Project compliance with state-of-the art standards	To what extent do you agree with the following sentence: our project will build on top of the current state of knowledge and in compliance with (applicable) standards.	Likert
	16	Project policy in term of content licences	Project supports to open standardizes licences	To what extent do you agree with the following sentence: our project will encourage publishing under compatible open standardized licenses (such as Creative Commons)	Likert

Impact on way of thinking, values and behaviours					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of answer**
CHANGES IN OPINIONS/WAYS OF THINKING	1	Topics were opinion change is expected to happen	Topics were opinion change is expected to happen	Please selected from the list below the topic were you expect to see a change in opining: • Energy and environment • Social inclusion and human rights • Participation and democracy • Economy: production and consumption • Finance • Education, science and information • Culture and art • Health and wellbeing • Community creation, renewal and reinforcement • Work and employment Other (please specify)	List Menu
	2		Detailed description of topic and subtopics	For each of the topic selected, please add details (ex. “energy and environment, but more precisely water consumption and mobility policies”	Long text
	3	Awareness raising and campaigning activities organised	Number of awareness raising and campaigning activities organised by the project on	Please indicate the number of awareness raising and campaigning activities organised by the project on the selected topic	Number

		by the project on the selected topic	the selected topic		
	4		Number of people participating in awareness raising and campaigning activities	Number of people participating in awareness raising and campaigning activities	Number
	5	Change in opinions	(users survey)	(users survey)	
CHANGE IN BEHAVIOURS	6	Topics were changes in behaviours are expected to happen	Topics were changes in behaviours are expected to happen	Please selected from the list below the topic were you expect to see a change in behaviours: • Energy and environment • Social inclusion and human rights • Participation and democracy • Economy: production and consumption • Finance • Education, science and information • Culture and art • Health and wellbeing • Community creation, renewal and reinforcement • Work and employment Other (please specify)	List Menu
	7		Detailed description of topic and subtopics	For each of the topic selected, please add details (ex. “energy and environment, but more precisely greenhouse emissions and mobility	Long text

				policies”	
	8	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	Please indicate the number of activities/instruments developed with the aim of promoting a change in users opinions, values and behaviours	Number
	9	Number of people participating in the activities	Number of people participating in the activities		Number
	10	User changes in behaviours	(users survey)	(users survey)	
	11	Other activities performed with the aim of changing users opinion, values and behaviours	Other activities performed with the aim of changing users opinion, values and behaviours	Please indicate and describe any other activities performed with the aim of changing users opinion, values and behaviours.	Long text

Impact on education and human capital					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of answer**
TRAINING PROVIDED BY THE PROJECT	1	Training efficiency	Hours of training provided by the project	Please indicate the number of hours of training provided by your project	Number
	2		Number of persons trained	Please indicate the total number of people trained	Number
	3		Budget allocated to training	Please indicate the budget dedicate to training activities	Money
	4	Topic covered by the training activities	Description of topics covered by the training activities	Please indicate the topics covered by your training activities	Short text
	5	Tools for education/training developed by the project	Number of tools for education/training developed by the project	Please indicate the number of tools for education/training developed by the project	Number
	6		Description of the tools developed	Please describe them	Long text
IMPACT ON HUMAN CAPITAL	7	Impact on users eSkills	Number of activities supporting the acquisition of digital competences, digital	Please indicate the Number of activities supporting the acquisition of digital competences, digital literacies competences,	Number

			literacies competences, eSkills and the reduction of digital divide	eSkills and the reduction of digital divide	
	8		Number of participants to activities supporting the acquisition of digital competences, digital literacies competences, eSkills and the reduction of digital divide	Please indicate the number of people participating in such activities	Number
	9	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	To what extent do you agree with the following sentence: “our project supports the personal development of users, i. e. character development, critical thinking and creative problem-solving”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	10		Description of how the project support the personal development of its users	Please describe how you project support the personal development of its users	Long text
	11	Project self-evaluation of its capability to improve the skills of people employed within the consortium	Project self-evaluation of its capability to improve the skills of people employed within the consortium	To what extent do you agree with the following sentence: “Our project improves the skills of people employed within the consortium”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert

	12		Description of how the project support the improvement of skills of people employed within the consortium	Please describe how your project support the improvement of skills of people employed within the consortium	Long text
CHANGE IN TRAINING CURRICULA, EDUCATIONAL POLICIES AND PERSONAL INVESTMENTS IN EDUCATION	13	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	To what extent do you agree with the following sentence: “Our project influence changes in the training curricula of secondary and higher education”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	14		Description of the results achieved in the area and of the action undertaken	Please described the results achieved and the action undertaken	Long text
	15	Project self-evaluation of its capability to influence changes in educational policies	Project self-evaluation of its capability to influence changes in educational policies	To what extent do you agree with the following sentence: “Our project influence educational polices”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	16		Description of the results achieved in the area and of the actions undertaken	Please described the results achieved and the action undertaken	Long text
	17	Project self-evaluation of its capability to influence its users investment in	Project self-evaluation of its capability to influence its users investment in education	To what extent do your agree with the following sentence: “Our project will have a positive impact on users investment in education (i.e. Number of hours per week spent on self study or homework and instruction time per year)”. Please attribute a value from 1 to 6 where 1 is	Likert

		education		“totally disagree” and 6 is “totally agree”	
Impact on science and academia					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of question**
KNOWLEDGE PRODUCTION	1	Scientific impact	Number of peer reviewed articles with impact factor	Please list the peer-reviewed articles **with impact factor** published by the project	List of articles
	2		Number of peer reviewed articles without impact factor	Please list the peer-reviewed articles **without impact factor** published by the project	
	3		Number of researches	Please indicate the total number of researchers working in your project	Number
	4		Number of non-self citation of the works published	Indicate the number of non-self citation of the works published	Number
	5		Number of non-peer review articles, books, book's chapters, conference proceedings and other electronically published of printed scientific outputs (excluding deliverables)	Indicate the number of non-peer review articles, books, book's chapters, conference proceedings and other electronically published of printed scientific outputs (excluding deliverables)	Number

	6		Topics covered by the publications	List the main topics covered by your publications. Please specify how many papers contribute in better define and understand (Digital) Social Innovation	Long text
	7	Number of patent and patent application developed by the project	Number of patent and patent application developed by the project	Please indicate the number of patent and patent application developed by the project	Number
	8	Number of IPRs developed by the project	Number of IPRs developed by the project	Please indicate the number of IPRs developed by the project	Number
	9	Project level of interdisciplinarity	Number of disciplines represented	List the disciplines represented in your consortium	Long text
	10		Project self evaluation of the relevance of interdisciplinary activities	How would you rate the relevance of interdisciplinary activities in your project? Please attribute a value from 1 to 6 where 1 I “no relevant” and 6 is “absolutely relevant”	Likert
	11		Description of interdisciplinary work	Describe your interdisciplinary work	Long text
KNOWLEDGE SHARING	12	Use of open access	Use of open access	Does you project follow an Open access policy	Radio Button
	13	Sharing through social media	Use of social media for sharing its research outputs	Do you use social media for sharing project research results?	Radio Button

	14		Number of twitter followers	Please indicate the number of twitter followers	Number
	15		Number of “friends” on Facebook or equivalent in other social platforms (i.e. Research gate, Academia, LinkedIn, etc.)	Please indicate the number of “friends” on Facebook or equivalent in other social platforms (i.e. Research gate, Academia, LinkedIn, etc.)	Number
	16	Dissemination through project website	Use of project website for sharing project research results	Do you use your project website for sharing project research results?	Radio Button
	17		Number of deliverable downloads	Please indicate the number of deliverable downloads up to now	Number
	18		Number of articles downloads	Please indicate the number of articles downloads up to now	Number
	19	Sharing through events	Number of events in which your research results have been presented	Please indicate the number of events in which your research results have been presented	Number
	20		Number of average participant for each event	Please indicate the average number of people participating in such events	Number
	21	Other channel for sharing research results	Other channel for sharing research results	If any, please describe other channels used by your project for sharing research results and their audiences in quantitative terms (if possible)	Long text

	22	Number of non-scientific dissemination outputs/activities	Number of articles published on non-specialised magazines, newspapers and online magazines/blogs, etc.	Please indicate the number of articles published in non-specialised magazines and on newspapers	Number
	23		Number of TV (including WebTV) appearances	Please indicate the number of TV appearances	Number
	24		Number of events organised addressing a non-academic audience	Please indicate the number of events organised addressing a non-academic audience	Number
	25		Average number of participants	Please indicate the average number of people participating in such events	Number
	26	Project self-evaluation of its capability to support knowledge transfer between universities/research centres and social innovation domain	Project self-evaluation of its capability to support knowledge transfer between universities/research centres and social innovation domain	To what extent do you agree with the following sentence: “Our project supports the knowledge transfer between universities/research centres and social innovation domain”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	27		Description of how the project supports knowledge transfer between universities/research centres and social innovation domain	Please describe how your project supports knowledge transfer between universities/research centres and social innovation domain	Long text

CHANGE IN TRAINING CURRICULUM AND EDUCATIONAL POLICIES	28	Project self-evaluation on its capability to improve research processes	Project self-evaluation on its capability to improve research processes	To what extent do you agree with the following sentence: "Our project will improve research processes within and outside out consortium". Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	
	29		Description of how the project improve research processes	How will the project improve research processes?	Long text
	30	Project self-evaluation on if and how it allows its partners and users to perform research activities that would otherwise have been impossible	Project self-evaluation on if and how it allows its partners and users to perform research activities that would otherwise have been impossible	To what extent do you agree with the following sentence: "Our project allows us to perform research activities that would otherwise have been impossible". Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	31	Project self-evaluation of its capability to influence changes in the everyday life of academia institutions	Project self-evaluation of its capability to influence changes in the everyday life of academia institutions	To what extent do you agree with the following sentence: “Our project influence the everyday life of academia institutions”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	32		Description of the results achieved in the area and of the actions undertaken	How will the project influence the academia everyday life and with which results?	Long text
Impact on employment					
IMPACT ON JOB CREATION	1	New job places	Number of persons recruited	How many persons have been recruited specifically for the project under assessment?	Number

(DIRECTLY DEVELOPED BY THE PROJECT)		generated	specifically for the project	Please indicate them in FTE	
	2	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	Out of this number, how many people will be still working after the end of the project?	Number
	3	Impact on researchers employment	Number of researchers working in the project	How many researchers in your organization work on the project? Please calculate the number of researchers using FTE	Number
	4		Number of young researcher employment	How many young researchers work on your project? Please calculate the number of young researchers using FTE	Number
	5	Impact on woman employment	Rate of woman in the project	Indicate the percentage of woman in the consortium in FTE	Number
	6	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	Please indicate the number of new job places generated (or expected to be generated) by the project outputs (including those related to the creation of start-ups and spin-offs). Please consider a job place as a full-time position for on year-time.	Number
	7	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	Please indicate the number of spin-off/start-ups developed by the project and its partners as a result of project activities	

IMPACT ON EUROPEAN EMPLOYMENT AND WITHIN THE SOCIAL INNOVATION SECTOR	8	Project self-evaluation of its impact on employment	Project self-evaluation of its impact on employment	To what extent do you agree with the following sentence: "The project will have an impact on employment"	Likert
	9	Project self-evaluation of its capability to have an influence on the percentage of people employed in the third sector and in the SI sector	Project self-evaluation of its capability to have an influence on the percentage of people employed in the third sector and in the SI sector	To what extent do you agree with the following sentence: "The project will have an influence on the percentage of people employed in the third sector and, specifically, in the SI sector"	Likert
IMPACT ON WORKING PRACTICES AND ROUTINES	10	Project self-evaluation of its capability to contribute to improving the working practices of the third sector and of people/organisations working in SI	Project self-evaluation of its capability to contribute to improving the working practices of the third sector and of people/organisations working in SI	To what extent do you agree with the following sentence: "Our project will contribute to improve the working practices of the third rector and of people/organisations working in the field of SI"	Likert

Economic impact

Impact on Users Economic empowerment					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of question**
IMPACT ON ACCESS TO FINANCE: THE ABILITY OF PROJECTS USERS TO ATTRACT MORE INVESTMENTS/FUNDING THROUGH THE PROJECT ACTIVITIES	1	Project self-evaluation of its capability to increase the access to finance for its users	Project self-evaluation of its capability to increase the access to finance for its users	To what extent do you agree with the following sentence: our project will increase the access to finance of our users. If the project replies = or >4 How much in Euros? and the following question will appear	Likert
	2	Number, type, description of instruments for increasing access to finance	Number, type, description of instruments for increasing access to finance	Number of instruments, type (selection list: Microfinance instruments, seed-funding, crowdfunding initiatives, community currency, digital currency) and description	Number + type + long text
	3	Project self-evaluation to reduce the need of its users to access emergency finance	Project self-evaluation to reduce the need of its users to access emergency finance	If they reply community currency the following questions will appear. "To what extent do you agree with the following sentence: Our project reduces the need of our users to access emergency finance"	Likert

	4	Money attracted by the project through crowdfunding	Money attracted by the project through crowdfunding	Is the project developing crowdfunding initiatives? Yes/No	Radio button
	5			If the project is developing crowdfunding initiatives the following questions will appear: - How much money did your project attract through crowdfunding initiatives?	Money
	6	Number of crowdfunding activities/initiatives funded by the project for its users	Number of crowdfunding activities/initiatives funded by the project for its users	If the project is developing crowdfunding initiatives the following question will appear: - How many projects have your project funded through crowdfunding?	Number
	7	Project self-evaluation of improving investment risk diversification opportunities for the users of the project through crowdfunding	Project self-evaluation of improving investment risk diversification opportunities for the users of the project through crowdfunding	If the project is developing crowdfunding initiatives the following question will appear: - To what extent do you agree with the following sentence: our project will improve investment risk diversification opportunities of our users through crowdfunding. If the project replies = or >4 please describe how	Likert + long text if 4 or more

IMPACT ON ENTREPRENEURSHIP AND INCOME GENERATION FOR THE USERS: THE IMPACT ON ENCOURAGING THE DEVELOPMENT OF NEW BUSINESS ACTIVITIES	8	Project self-evaluation of its capability to support the creation of entrepreneurial initiatives of its users	Project self-evaluation of its capability to support the creation of entrepreneurial initiatives of its users	To what extent do you agree with the following sentence: our project will support the creation of entrepreneurial initiatives. If the project replies = or >4 please describe how	Likert + long text if more than 4
	9	Number of enterprises or business ideas developed by the project users	Number of enterprises or business ideas developed by the project users	Number of enterprises or business ideas developed by your project users. Please provide also descriptions about these ideas. Types: start-ups, spin-offs, new business agreements	Number + Long text
	10	Instruments developed to stimulate entrepreneurial activities and networking	Instruments developed to stimulate entrepreneurial activities and networking	Does your project create instruments to stimulate entrepreneurial activities and networking? Please provide a description	Radio button + Long text
	11	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	Number of test beds provided by the project supporting the users for testing business ideas	Number

	12	Project self-evaluation of its capability of improving the support to users for diversifying income resources	Project self-evaluation of its capability of improving the support to users for diversifying income resources	To what extent do you agree with the following sentence: our project will help our users to diversify income resources. If the project replies =4 or >4 please describe how	Likert + long text if 4 or more
	13	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	To what extent do you agree with the following sentence: our project will increase the income of our users. If the project replies =4 or >4 please describe how	Likert + long text if 4 or more
	14	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	To what extent do you agree with the following sentence: our project will increase the resilience of our users to cope with crises. If the project replies =4 or >4 please describe how.	Likert + long text if 4 or more

Economic value generated by the project					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of question**
ECONOMIC RESULTS	1	Project self-evaluation of increasing the resource pooling of the users	Project self-evaluation of increasing the resource pooling of the users	To what extent do you agree with the following sentence: our project will increase the resource pooling for our users. If the project replies = or >4 please describe how	Likert + long text if 4 or more
	2	Cost saving related to resource pooling	Cost saving related to resource pooling	If the project replies = 4 or > 4 to the previous question, Is your project providing cost savings thanks to the resource pooling developed? If yes please provide the percentage of cost savings	Radio button + long text
	4	ENPV; B/C; DPBP; B/C*; ENPV*, DPBP*	Output cost of development	Cost of development or percentage of Budget	Money or Percentage
	5		Output cost for updating/maintaining after the end of the project	Please indicate the overall cost for updating/maintaining each output after the end of the project	Money

	6		Output end/users	How many end users are there for each output?	Number
	7		Willingness to pay	Please provide the willingness to pay. Please consider the benefit for a single users for one year of usage	Euro/year
	8		Willingness to donate	Please provide the willingness to donate of your users. Please consider the benefit for a single users for one year of usage	Euro/year
	9		Timing of the benefit	When do you expect each output to produce a benefit for your users? (1st year, 2 year, 3rd year after the end of the project)	Year
	10	Digital Social Innovation ROI	Reputation of the project	N. of project mentions	Number
	11			N. of competitors mentions	Number
	12		Marketing optimisation	N. of re-tweets, likes, fans	Number
	13			Total budget for dissemination	Money
	14		Revenue generation	Total n. of platform visitors returned within past 30 days	Number
	15			Total n. of platform visitors within past 30 days	Number
	16		User experience	N. of service issues on the platform noted within 24 hours	Number

	17			Total number of the service issues noted on the platform	Number
	18		Innovation	N. of project outputs mentions in other media during the project life time or at the end of the project	Number
	19			N. of project outputs mentions in other media at the beginning of the project	Number
	20	Altruistic use	Altruistic use	To what extent do you think the users of your project will pay the price range you decided in the WTP as altruistic use?	Likert
	21	Price range for using the platform after the end of the project	Price range for using the platform after the end of the project	What is the price range the users will pay to use the project platform after the end of the project?	Money
	22	N. of pilots developed by the project	N. of pilots developed by the project	N. of pilots developed by the project	Number

Impact on ICT driven innovation					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of question**
IMPACT ON PRODUCT INNOVATION	1	Impact on existing technologies efficiency	Impact on existing technologies efficiency	To what extent do you agree with the following sentence: our project is increasing or is expecting to increase the efficiency of pre-existing technologies. If the project replies = or >4 please describe how	Likert + long text if 4 or more
	2		Description of the nature of innovation of each output	Please select the nature of innovation for each output of the project: - application of a scientific breakthrough - substantial technical innovation - technical improvement or change - transfer of a technique to another sector - adjustment of an existing product to a new market	List menu
	3		Description of the type of innovation of each output	Select the type of the innovation for each output: - new to the firm - new to the industry - new to the market	List menu

	4	Project self-evaluation of increasing the quality of pre-existing products	Project self-evaluation of increasing the quality of pre-existing products	To what extent do you agree with the following sentence: our project willl increase the quality of pre-existing products. If the project replies = or >4 please describe how	Likert + long text if 4 or more
	5		Description of technological readiness level of the outputs	Please for each output indicate the technology area it relates to and the technology readiness level, accordingly to the table reported below from 1 to 9	Areas+ TRL table
IMPACT ON PROCESS INNOVATION	6	Project self-evaluation of having an impact on process innovation	Project self-evaluation of having an impact on process innovation	To what extent do you agree with the following sentence: our project will have an impact on process innovation. If the project replies = 4 or > 4 the following question will appear	Likert
	7		Description of typologies of process innovation	Which kind of processes will your project improve?	Long text
	8	Project self-evaluation of routinized processes for capturing and using new ideas for new	Project self-evaluation of routinized processes for capturing and using new ideas for new or improved service offerings	To what extent do you agree with the following sentence: Our project has routinized processes for capturing and using new ideas that employees may have for developing new or improved service offerings?	Likert

	9	or improved service offerings	Description of routinized processes for capturing and using new ideas/services	If the project replies = 4 or > 4 please specify how	Long text
	10	Project self-evaluation of management strategies or business practices for new or improved service offerings	Project self-evaluation of management strategies or business practices for new or improved service offerings	To what extent do you agree with the following sentence: Our project works with specific management strategies or business practices in developing new or improved service offerings	Likert
	11	Description of management strategies or business practices in place for new or improved service offerings	Description of management strategies or business practices in place for new or improved service offerings	If the project replies = 4 or > 4 please specify how	Long text

	12	Project self-evaluation of reduction in delivery time of new service offerings	Project self-evaluation of reduction in delivery time of new service offerings	To what extent do you agree with the following sentence: Our project introduces a new or significantly improved service offering that will reduce the actual delivery time	Likert
	13		Description of how the project reduced delivery time of new service offerings	If the project replies = 4 or > 4 please specify how	Long text
IMPACT ON ORGANISATIONAL INNOVATION	14	Project self-evaluation of implementing a new organisational method for users	Project self-evaluation of implementing a new organisational method for users	To what extent do you agree with the following sentence: our project will implement a new organisational method for our users .	Likert
	15	Percentage of performance improvement by reducing administrative or transactions costs	Percentage of performance improvement by reducing administrative or transactions costs	If the project replies = or >4 Please provide the percentage of performance improvement by reducing administrative or transactions costs	Percentage

	16	Project self-evaluation of implementing new concepts for the structuring of users activities	Project self-evaluation of implementing new concepts for the structuring of users activities	To what extent do you agree with the following sentence: our project will implement new concepts for the structuring of activities for our users If the project replies = or >4 please describe how	Likert+ long text
	17	Project self-evaluation of its capability to contribute to improving the working practices of CAPS users	Project self-evaluation of its capability to contribute to improving the working practices of CAPS users	To what extent do you agree with the following sentence: "Our project will contribute to improve the working practices of CAPS users" If the project replies =4 or >4 Please describe how	Likert+ long text
	18	Project self-evaluation of its capability to increase the access to spaces for its users	Project self-evaluation of its capability to increase the access to spaces for its users	To what extent do you agree with the following sentence: our project will increase the access to spaces for allowing our users to work together. If the project replyes = or >4 please describe how	Likert+ long text
	19	Project self-evaluation of its capability to contribute to improving the working practices of CAPS users	Project self-evaluation of its capability to contribute to improving the working practices of CAPS users	To what extent do you agree with the following sentence: "Our project will contribute to improve the working practices of CAPS users" If the project replies =4 or >4 Please describe how	Likert+ long text

	20	Project self-evaluation of its capability to increase the access to spaces for its users	Project self-evaluation of its capability to increase the access to spaces for its users	To what extent do you agree with the following sentence: our project will increase the access to spaces for allowing our users to work together. If the project replies = or >4 please describe how	Likert+ long text
IMPACT ON USER DRIVEN & OPEN INNOVATION	21	Project self-evaluation of developing a user-driven innovation project	Project self-evaluation of developing a user-driven innovation project	To what extent do you agree with the following sentence: Our project is a user-driven innovation project. If the project replies = 4 or > 4 please describe how	Likert+ long text
	22	Project self-evaluation of implementing new methods for identifying users needs	Project self-evaluation of implementing new methods for identifying users needs	To what extent do you agree with the following sentence: our project will implement new methods for identifying user needs. If the project replies = or >4 please describe how	Likert+ long text
	23	Project self-evaluation of cost saving developed thanks to the users engagement in the technological outputs development	Project self-evaluation of cost saving developed thanks to the users engagement in the technological outputs development	To what extent do you agree with the following sentence: the collaboration of the users in the development of the technological outputs of our project produces a cost saving	Likert

	24	Cost saving due to the user engagement in the development of the technological outputs	Cost saving due to the user engagement in the development of the technological outputs	If the project replies = 4 or > 4 please provide the cost saving (€/y) including the total number of users of the project	Euro/year
	25	Project self-evaluation of improvements in the quality of the technological outputs thanks to the users collaboration	Project self-evaluation of improvements in the quality of the technological outputs thanks to the users collaboration	To what extent do you agree with the following sentence: the collaboration of the users of the project improves the quality of the technological outputs .If the project replies = or >4 please describe how	Likert+ long text
	26	Gathering feedback mechanism	Gathering feedback mechanism	Do you have a feedback mechanism for gathering the opinion of the users? If yes please describe it	Radio button
	27		Description of the gathering feedback mechanism	If yes to the previous question please describe it	Long text
	28	Research on users demand	Research on users demand	Did you carry out research on users demand and on the potential uses of your technologies? Yes/No	Radio button

	29		Description of research on users demand	If yes please describe how	Long text
	30	Project self-evaluation of developing an open innovation project	Project self-evaluation of developing an open innovation project	To what extent do you agree with the following sentence: Our project is an open innovation project. If the project replies = 4 or > 4 please describe how	Likert+ long text
	31	Project self-evaluation of increasing transparency for the users	Project self-evaluation of increasing transparency for the users	To what extent do you agree with the following sentence: our project will increase transparency process for our users. If the project replies = 4 or > 4 please describe how	Likert+ long text
	32	Implementation of open standards	Implementation of open standards	Do your project outputs use open (or commonly agreed) standards in the specific domain of application? Yes/No	Radio Button
	33		Description of open standards used	If yes to previous question, describe briefly the open standards being used	Long text
	34	Implementation of open source	Implementation of open source	Is your project making its outputs available as open source? Yes/No	Radio button

	35	Number of core developers contributing to open source	Number of core developers contributing to open source	Indicate the number of core developers who contribute to this open source	Number
	36	Number of external developers contributing to open source	Number of external developers contributing to open source	Indicate the number of external developers who contribute to this open source	Number
	37	Number of downloads of project open source outputs	Number of downloads of project open source outputs	Indicate the number of downloads of this open source outputs	Number
	38	Existence of API	Existence of API	Can digital resources you make available be accessed by external actors through programmatic means ? Yes/No	Radio button
	39	Access through API	Access through API	If yes, how would you rate the API access/use by external to the project actors till now?	Likert

Environmental impact

Greenhouse Gases emissions (including energy efficiency and production of energy from renewable sources)					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of answer**
PROJECT ENVIRONMENTAL IMPACT CONCERNING GREENHOUSE GASES EMISSIONS	1	Greenhouse gases production	Travels by flight within Europe and the Mediterranean region	Indicate the number of travels by flight within Europe and the Mediterranean region over the last 12 months of activity	Number
	2		Travels by train within Europe and the Mediterranean region	Indicate the number of travels by train within Europe and the Mediterranean region over the last 12 months of activity	Number
	3		Travels by flight outside Europe and the Mediterranean region	Indicate the number of travels by flight outside Europe and the Mediterranean region over the last 12 months of activity	Number
	4	CO2 compensation	Tons of CO2 compensated	Indicate how much CO2 you compensated (in tons) and specify through which activities you achieve the result	Number

	5	Energy consumption	kWh of energy consumption	Indicate your energy consumption concerning publications, staff and technological assets in kWh	Number
	6	Renewable /efficient energy purchasing in kWh or percentage	kWh or percentage of purchased renewable/efficient energy	Indicate how much renewable/efficient energy you purchase in kWh or percentage	Number/percentage
PROJECT IMPACT ON ENVIRONMENTAL BEHAVIOURS RELATED TO THE GREENHOUSE GASES ISSUE	7	Project self assessment of its capability to provide easier access to low carbon technologies	Project self assessment of its capability to provide easier access to low carbon technologies	To what extent do you agree with the following sentence: "The project contributes to provide easier access to low carbon technologies". On a scale from 1 to 6, where 1 indicates total disagreement and 6 total agreement. If more than 4, please specify which kind of contribution the project provides (development of applications, tools, networking platforms).	Likert + long text if more than 4
	8	Number of compensation activities performed by the users since their engagement with the project (perception of the project vs. users	Number of compensation activities performed by the users since their engagement with the project according to the project	Indicate the number of compensation activities performed by your users since their engagement with the project	Number

	questionnaire)			
9	Number of users who changed energy provider from carbon based to green sources or performed other actions oriented to greenhouse gases reduction	Number of users	Indicate the number of users who changed energy provider from carbon based to green sources or performed other actions oriented to greenhouse gases reduction	Number
10	Number of more queries about energy sources (old provider)	Number of more queries about energy sources (old provider)	Indicate the number of queries about energy sources	Number

	11	Project self assessment of its capability to contribute to the change in users participation to environmental-related actions (earth hour, earth day, local car free days, critical mass, etc.)	Project self assessment of its capability to contribute to the change in users participation to environmental-related actions (earth hour, earth day, local car free days, critical mass, etc.)	To what extent do you agree with the following sentence: “Participating to the project enhance users willingness to participate to environmental-related actions (earth hour, earth day, local car free days, critical mass, etc.)” On a scale from 1 to 6, where 1 indicates total disagreement and 6 total agreement If more than 4, please specify to which kind of action project users participate	Likert + long text if more than 4

Air pollution related to transport					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of answer**
PROJECT ENVIRONMENTAL IMPACT CONCERNING AIR POLLUTION RELATED TO TRANSPORT	1	Project self evaluation of internal sensitivity towards the air pollution related to transport issue	Project self evaluation of internal sensitivity towards the air pollution related to transport issue	To what extent do you agree with the following sentence: “Participants to the project are encouraged to demonstrate their sensitivity towards the air pollution related to transport issue”. On a scale from 1 to 6, where 1 indicates total disagreement and 6 total agreement. If more than 4, please specify to which kind of actions projects participants perform (e.g. taking the public transport or bike instead of taking the car).	Likert + long text if more than 4
	2	Reduction of air pollution due to sustainable transport choices in tons or in percentage	Reduction of air pollution due to sustainable transport choices in tons or in percentage	Indicate the reduction of air pollution due to sustainable transport choices in tons or in percentage	Number or percentage

PROJECT IMPACT ON ENVIRONMENTAL BEHAVIOURS RELATED TO THE AIR POLLUTION RELATED TO TRANSPORT ISSUE	3	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	To what extent do you agree with the following sentence: "The project contributes to provide easier access to innovative solutions for sustainable transport choices". On ascale from 1 to 6, where 1 indicates total disagreement and 6 total agreement. If more than 4, please provide examples (development of applications, tools, networking platforms).	Likert + long text if more than 4
	4	Project self evaluation of the increase in users' sensitivity towards the air pollution related to transport issue (e.g. public transport/cycling instead of taking the car, etc.)	Project self evaluation of the increase in users' sensitivity towards the air pollution related to transport issue (e.g. public transport/cycling instead of taking the car, etc.)	To what extent do you agree with the following sentence: "Users of the project are encouraged to demonstrate their sensitivity towards the air pollution related to transport issue". On a scale from 1 to 6, where 1 indicates total disagreement and 6 total agreement. If more then 4, please explain how.	Likert + long text if more than 4

Solid waste					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of answer**
PROJECT ENVIRONMENTAL IMPACT CONCERNING WASTE	1	Production of waste in kg or in percentage	Number of brochure printed	Indicate the number of brochure you printed	Number
	2		Number of publications printed	Indicate the number of publications you printed	Number
	3		Number of books printed	Indicate the number of books you printed	Number
	4		Number of gadget produced	Indicate the number of gadget you produced	Number
	5		Number of WEEE (Waste Electrical and Electronic Equipment) produced	Indicate the number of WEEE you produced	Number
	6	N. of different sorted waste	N. of different sorted waste	Indicate the number of different sorted waste	Number
	7	Level (in %) of recycled / reused waste in relation to total waste production	Percentage ofbrochure recycled / reused	Indicate the percentage of brochure recycled / reused	Percentage
	8		Percentage publications recycled / reused	Indicate the percentage of publications recycled / reused	Percentage
	9		Percentage of books	Indicate the percentage of books recycled /	Percentag

			recycled / reused	reused	e
	10		Percentage of gadget recycled / reused	Indicate the percentage of gadget recycled / reused	Percentage
	11		Percentage of WEEE recycled / reused	Indicate the percentage of WEEE recycled / reused	Percentage
PROJECT IMOACT IN ENVIRONMENTAL BEHAVIOURS RELATED TO THE WASTE ISSUE	12	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	To what extent do you agree with the following sentence: "The project contributes to provide easier access to waste management technologies". On a scale from 1 to 6, where 1 indicates total disagreement and 6 total agreement. If more than 4, please specify through which kind of contribution (development of applications, tools, networking platforms).	Likert + long text if more than 4
	13	Reduction of waste in kg or in percentage of waste produced by users	Kg or percentage of users' waste reduction	Indicate the reduction of users' waste in kg or percentage	Number or percentage
	14	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	Indicate the number of waste reduction activities performed by your users since their engagement with the project	Number
	15	Project self evaluation of the	Project self evaluation of the increase in users'	To what extent do you agree with the following sentence: "Users of the project are encouraged	Likert + long text if

		increase in users' sensitivity towards the waste issue (e.g. participation to community-based reusing/recycling initiatives, etc.)	sensitivity towards the waste issue (e.g. participation to community-based reusing/recycling initiatives, etc.)	to demonstrate their sensitivity towards the waste issue". On a scale from 1 to 6, where 1 indicates total disagreement and 6 total agreement. If more than 4, please specify to which kind of actions projects participants perform (e.g. participation to community-based reusing/recycling initiatives, etc.).	more than 4
Sustainable consumption					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of answer**
PROJECR ENVIRONMENTAL IMPACT CONCERNING SUSTAINABLE CONSUMPTION OF GOODS AND SERVICES	1	Number of green / local / ethical products used by the project compared to the total number of products used - in percentage	Number of green / local / ethical products (i.e. project equipment, publications, gadgets) used by the project compared to the total number of products used - in percentage	Indicate the number of green / local / ethical products (i.e. project equipment, publications, gadgets) used by the project compared to the total number of products used in percentage	Percentage

	2		Number of green / local / ethical green events (i.e. green menu, green location) organized by project compared to the total number events - in percentage	Indicate the number of green / local / ethical green events (i.e. green menu, green location) organized by the project compared to the total number of events in percentage	Percentage
	4		Number of green / local / ethical services (i.e. car for rental, hotels) chosen by the project compared to the total number of services used - in percentage	Indicate the of green / local / ethical services (i.e. car for rental, hotels) chosen by the project compared to the total number of services used - in percentage	Percentage
PROJECT IMPACT ON ENVIRONMENTAL BEHABIOURS RELATED TO THE SUSTAINABLE CONSUMPTION OF GOODS AND	6	Increase of green / local / ethical products purchased by users in relation to start of the project- in percentage	Increase of green / local / ethical products purchased by users in relation to start of the project- in percentage	Indicate the increase of green / local / ethical products purchased by users in relation to start of the project in percentage	Percentage

SERVICES	7	Number of promotion of sustainable consumption activities performed by the users since their engagement with the project (perception of the project vs. users questionnaire)	Number of promotion of sustainable consumption activities performed by the users since their engagement with the project according to the project	Indicate the number of promotion of sustainable consumption activities performed by your users since their engagement with your project	Number
	8	Number of organization/companies/products intending to introduce eco labels as a result of the project	Number of organization /companies/products intending to introduce eco labels as a result of the project	Indicate the number of organization/companies/products looking into having their activities eco-certified as a result of the project	Number
	9	Number of green labels or certifications for products or services promoted by the initiative	Number of green labels or certifications for products or services promoted by the initiative	Indicate the number of green labels or certifications for products or services promoted by the initiative	Number

Biodiversity					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of answer**
PROJECT ENVIRONMENTAL IMPACT CONCERNING BIODIVERSITY	1	N. of biodiversity conservation initiatives supported by the project	N. of biodiversity conservation initiatives supported by the project	Indicate the number of biodiversity conservation initiatives supported by the project	Number
PROJECT ENVIRONMENTAL BEHAVIOUR RELATED TO THE BIODIVERSITY ISSUE	2	N. of biodiversity conservation initiatives supported by the users	N. of biodiversity conservation initiatives supported by the users	N. of biodiversity conservation initiatives supported by your users	Number
	3	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	To what extent do you agree with the following sentence: "The project contributes to provide easier access to biodiversity conservation technologies / methodologies". On scale from 1 to 6, where 1 indicates total disagreement and 6 total agreement. If more than 4, please provide examples (development of applications, tools, networking platforms).	Likert + long text if more than 4

Political impact

Impact on civic and political participation					
Dimensions	**Number of question**	**Indicators**	**Variables**	**Questions**	**Type of answer**
IMPACT ON CITIZENS/USERS POLITICAL AWARENESS	1	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	To what extent do you agree with the following sentence: “Our project increases the time spent by users in getting informed about local, national and international political issues”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	2	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	To what extent do you agree with the following sentence: “Our project increases the time spent by users in persuading friends, relatives or fellow workers about social/political issues”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	3	Main social/political topics discussed by users	Main social/political topics discussed by users	Please select from the list below the main social/political issues discussed by your users and add a more detailed description. • Energy and environment • Social inclusion and human rights • Participation and democracy • Economy: production and consumption	List Menu

				• Finance • Education, science and information • Culture and art • Health and wellbeing • Community creation, renewal and reinforcement • Work and employment • Other (please specify)	
	4	Changes in the social/political topics addressed by users	Changes in the social/political topics addressed by users	Did you register a change in the topic discussed by users? If yes, please described those changes	Radio Button + long text if Y
IMPACT ON CITIZENS/USERS CIVIC PARTICIPATION	5	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	N. of instruments developed by the project offering new channels/way for civic participation	Number
	6		Description of instruments developed by the project offering new channels/way for civic participation	Please describe them	Long text
	7	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	To what extent do you agree with the following sentence: “Our project improves the civic participation of citizens belonging to group at risk of discrimination”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert

	8	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	To what extent do you agree with the following sentence: “Our project produce an increment in the time spent by citizens in participating to civic-society organisation”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	9	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	To what extent do you agree with the following sentence: “Our project produce and increment in the number of bottom-up/grassroots actions”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	10	Project capability to improve civic participation of citizens belonging to group at risk of discrimination	Project self-evaluation of its capability to improve civic participation of citizens belonging to group at risk of discrimination	To what extent do you agree with the following sentence: “Our project improves the civic participation of citizens belonging to group at risk of discrimination”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	11		Please describe how do you reach this objective	Please describe how do you reach this objective	Long text
IMPACT ON CITIZENS/USERS POLITICAL PARTICIPATION	12	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	Number of instruments developed by the project offering new channels/way of political participation	Number
	13		Description of	Please describe them	Long text

			instruments developed by the project offering new channels/way of political participation		
	14	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	To what extent do you agree with the following sentence: “Our project increase citizens/users participation to national and local election”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	15	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	To what extent do you agree with the following sentence: “Our project increase citizens/users participation in in the following forms of political idea manifestations: signature campaigns, boycotts, manifestations, other”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	16	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	To what extent do you agree with the following sentence: “Our project improves political participation of citizens belonging to group at risk of discrimination r”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	17		Description of action undertaken for reaching this result	Please describe how do you reach this result	Long text

Impact on policies and institutions					
PROJECT CAPABILITY TO INFLUENCE POLICIES AND INSTITUTIONS	1	Number of policy recommendations produced by the project	Number of policy recommendations produced by the project	Number of policy recommendations developed by the project	Number
	2	Policy level engaged: international national or local	Policy level engaged: international national or local	The policy recommendations the project developed addressed international, national or local policy-makers and institutions? Please select from the list below: -international -national - local	List menu
	3		Description of the institutions addressed	Please describe the specific institution addressed is possible. Ex. Ministry of environment, Department of public security, etc..	Long text

	4	Theme covered by the policy recommendations	Theme covered by the policy recommendations	Please selected from the list below the theme covered by the policy recommendation and specify as much as possible: • Energy and environment • Social inclusion and human rights • Participation and democracy • Economy: production and consumption • Finance • Education, science and information • Culture and art • Health and wellbeing • Community creation, renewal and reinforcement • Work and employment Other (please specify)	List menu
	5	Number of policy makers and institutions representatives aware of the policy recommendations	Number of policy makers and institutions representatives aware of the policy recommendations	Please indicate the number of policy makers and institutions representatives aware of the policy recommendations	Number
	6	Meetings/conferences organised/attended for influencing policy-makers	Number of meetings/conferences organised/attended for influencing policy-makers	Number of meetings/conferences organised/participated for influencing policy-makers	Number

	7		Number of policy makers/institutions represented in the meeting	Number of policy makers/institutions represented in the meeting	Number
	8	Policy level engaged: international national or local	Policy level engaged: international national or local	The meeting organised addressed international, national or local policy-makers and institutions? Please select from the list below. Please select from the list below: - international - national - local	List menu
	9	Theme covered by the meeting/conference	Theme covered by the meeting/conference	Please selected from the list below the theme covered by the policy recommendation and specify as much as possible: • Energy and environment • Social inclusion and human rights • Participation and democracy • Economy: production and consumption • Finance • Education, science and information • Culture and art • Health and wellbeing • Community creation, renewal and reinforcement • Work and employment Other (please specify)	List menu

	10	Project self-evaluation of its capability to influence institutions/governments transparency	Project self-evaluation of its capability to influence institutions/government s transparency	To what extent do you agree with the following sentence: “Our project positive influences institutions/governments transparency”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”. Please describe how.	Likert
	11	Project capability to influence parties/democratic processes transparency	Project capability to influence parties/democratic processes transparency	To what extent do you agree with the following sentence: “Our project positive influences parties/democratic processes transparency”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”. Please describe how.	Likert
	12	Other actions undertaken by the project for influencing policy makers	Description of other actions undertaken by the project for influencing policy makers	Please describe any other action undertaken by the project in order to influence policy and decision-makers. Including the networking with large and influential organisation, which may lobby on you behalf.	Long text
	13	Number of policies/regulations/laws changed or updated by the project	Number of policies/regulations/law s changed or updated by the project	Number of policies/regulations/laws changed or updated by the project	Number
	14	Description of the policies/regulations/laws changed or updated by the project	Description of the policies/regulations/law s changed or updated by the project	Please describe the policies/regulations/laws changed or updated by the project	Long text
	15	Number of institutions created or changed by	Number of institutions created or changed by	Number of institutions created or changed by	Number

		the project	the project	the project	
	16	Description of institutions created or changed by the project and the process followed for achieving this goal	Description of institutions created or changed by the project and the process followed for achieving this goal	Please describe institutions created or changed by the project and the process followed for achieving this goal	Long text
CAPS USERS IMPACT ON POLICIES AND INSTITUTIONS	17	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	To what extent do you agree with the following sentence: “Our project positive influences the capability of citizens/users and civic society organisations of influencing policies”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	18	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	Number of policy recommendations/documents/petitions produced by users thanks to the use of the project outputs	Number

	19	Policy level engaged: international, national or local	Policy level engaged: international, national or local	The policy recommendations/documents/petitions produced by your users address the local, national or international policy level? Please select rom the list Please select from the list below: -international -national - local	List menu
	20	Project evaluation of users capability to influence institutions/governments transparency	Project evaluation of users capability to influence institutions/government s transparency	To what extent do you agree with the following sentence: “Thanks to our project, citizens/users are more capable to influence institutions/governments transparency”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	21	Project evaluation of users capability to influence parties/democratic processes transparency	Project evaluation of users capability to influence parties/democratic processes transparency	To what extent do you agree with the following sentence: “Thanks to our project, citizens/users are more capable to influence partiers/democratic processes”. Please attribute a value from 1 to 6 where 1 is “totally disagree” and 6 is “totally agree”	Likert
	22	Other actions undertaken by users for influencing policy makers	Other actions undertaken by users for influencing policy makers	Are you aware of any other action undertaken by your users for influencing policy makers? Please describe them	Radio button + long text if Y

	23	Number of policies/regulations/laws changed or updated by project users	Number of policies/regulations/laws changed or updated by project users	Number of policies/regulations/laws changed or updated by your users	Number
	24	Description of the policies changed	Description of the policies changed	Please describe the policies/regulations/laws changed or updated by your users	Long text
	25	Number of institutions created or changed by project users	Number of institutions created or changed by project users	Number of institutions created or changed by your users	Number
	26	Description of institutions created or changed by project users	Description of institutions created or changed by project users	Please describe institutions created or changed by your users and the process followed for achieving this goal	Long text

Other Impact

Dimensions	Number of question	Indicators	Variables	Questions	Type of answer
OTHER IMPACTS	**1**	Additional impact	Additional impact	Can you indicate any impact that your project will have, that is not addressed by this questionnaire?	Long text
	2	Unexpected impact	Unexpected impact	Can you indicate any impact that your project had and that was unexpected?	Long text