

# Design for Social Innovation. Building a framework of connection between Design and Social Innovation.

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## Abstract

The paper discusses the connections between social innovation and design practice/research outlining possible challenges for innovating in the service field. Social Innovation is one of the most promising frameworks for delivering service innovation that is receiving increasing attention from governments, academy, and businesses alike. Design is described as a privileged path to innovation, because it can establish a link with creativity and outline more efficient processes. The paper aims to provide a platform for discussion and learning that can ground a connection between the two topics. Moreover, it offers a critique of what has been achieved while highlighting the main questions for future development.

**KEYWORDS:** social innovation, service innovation, collaborating, participating, networking

## Social Innovation: definitions and descriptions

The international debate on innovation demonstrates that the technology-oriented paradigm characterizing the industrial society does not include the wider range of innovations depicting the transition from an industrial to a knowledge and service-based society (EU, 2010). This means that innovation requires also societal changes and the inclusion of key social concerns in the wealth of innovation approaches. Further, it implies opening up and revising the innovative process to connect differently needs and resources, and to re-assign roles and responsibilities to companies, institutions, universities and citizens. This is argued by scholars (Franz et al., 2011) as well as governmental institutions (Nesta, 2010) to strengthen the emergent debate and connect design and social innovation further on a theoretical level. In line with these perspectives, the present paper considers innovation beyond the social aspects recognized in the Oslo Manual (OECD, 2005). To recognize social innovation as a field of investigation in its own right, it argues that diverse perspectives need to be acknowledged resembling the variety of innovation fields – from product and

marketing innovation to psychological innovation (Mortati, 2013). Social innovations are driven by a social mission, and create value that is at once social and economical. BEPA differentiates them in *social*, *societal* and *systemic*, according to the scope. Social is defined as “social demands that are traditionally not addressed by the market or existing institutions and are directed towards vulnerable groups in society” (BEPA, 2011, p. 43); societal is defined as “societal challenges in which the boundary between ‘social’ and ‘economic’ blurs, and which are directed towards society as a whole” (ibid., p. 43); systemic is described as “reshaping society” (ibid., p. 42) “in the direction of a more participative arena where empowerment and learning are sources and outcomes of well-being” (ibid., p. 43).

Social innovation thus refers to the capacity of improving social outcomes and creating value for people, places and organizations. In particular, it focuses on new ideas aimed at provoking a positive transformation for the society and its infrastructures (people, relationships, collaborations) thus improving society’s capacity to act (BEPA, 2011). A widely shared definition describes it as new, more effective and/or more efficient social practices with social ends and social means (Franz et al., 2011) open to the territorial, cultural, and historical variations it might take. The social side is both in the how - the process of innovation - and in the why - the social and societal goals to be reached. Institutions, universities, researchers and companies are exploring these issues to find new solutions to pressing social needs, in response to current challenges like sustainability, health, wellbeing, education, training, urban development, energy consumption, jobs and quality of life. For example an interesting approach refers to kick-starting collective and collaborative actions to enhance places and create value for people (Manzini, 2014; Villari, 2013). Social innovation solutions are centred on: citizens and communities devising and promoting different ways to answer to social and local needs (services like heyneighbor.com, connectaid.com, sharesomesugar.com, etc.); municipalities and governments activating participatory processes to involve the public in urban planning and public services improvement (initiatives such as Collaborative London, and Creative cities); organisations and networks that leverage on local capacities to create new jobs and to promote new ways of producing and distributing (initiatives like sfmade.org, and innovetionvalley.com).

Social innovation is particularly relevant to service innovation, where a more systemic attention is given to changes. As the world and the economy move increasingly out of an industrial mind-set, products need to be understood and designed as parts of larger service networks. These encompass people, technology, places, time, objects, and organisations that together create the service ecology (Polaine, 2013). The idea of devising interacting and interconnected parts of a system rather than single elements, and the focus on intangible things as well as tangible ones, is at the centre of the connection between social innovation and service innovation. We argue that this represents one of the most interesting contributions design can make to current challenges, that is by participating to reshaping big issues like the transformation of transport systems, sustainability, governments, finance, communication, healthcare, and so on. The growing number of current experimentations on these topics witnesses the value of this connection. However, not all initiatives and projects bare a real value for transformation. Moreover some of them are pilot projects that struggle to find a proper viability plan to move forward. The shared intent is to raise awareness around social concerns and the value of participation/collaboration to awake the spirit of citizens, and lead them to step forward for renewing places and practices bottom up, and to suggest new ways to put local resources at the core of the reconstruction. Initiatives like San Francisco Made (SFMade - [www.sfmade.org](http://www.sfmade.org)) signal the importance of giving citizens tools and platforms to participate in the development of their city as well as in the creation of a thriving local community through the values of manufacturing and the support of local

companies. This includes encouraging entrepreneurship and innovation, creating new job opportunities for the local workforce, contributing to establishing a sustainable local economic system, offering diverse educational opportunities, and raising public awareness on the importance of local craft practice and of the role of craftspeople in the local community.

The connection between design and social innovation is becoming relevant to describe both an alternative practice-based model for new prosperity and growth, and a theoretical framework to orienteer and envision the societal challenges for 2020 (EC, Horizon 2020). The description of this connection is the main topic of the paper, to start a discussion on how design could contribute to social innovation not only on a phenomenological level, but also from a theoretical perspective.

## Connecting social innovation and design

Traditionally, design has been linked to industry to devise objects as mass produced goods. This attention has included services as less tangible objects enlarging design concerns also to interactions. Service Design and Design for Services have initially contributed understanding of technological interfaces and their relationship with final users to then move further toward non-technological and community oriented approaches and topics. The duality between technological and non-technological is still unresolved within the discipline, and raises a very interesting debate useful to understanding both the roots and the future of service design as well as the connection between design and innovation in general. Although the intention of this paper is not to provide an overview of the evolution of service design and design for services, it is interesting to notice how design practices linked to the service field have recently paid increasing attention to social issues and human-centred concerns, to the importance of devising relationships, to the development of practices to aid citizen participation, and to systemic interventions. Design seems to be moving closer to social innovation linking with its key characteristics at multiple levels. In particular, shared interests encompass systemic solutions that integrate products, services and interactions/relationships to respond to social needs, and multidisciplinary as a key approach to make sense of social challenges while supporting competitiveness and growth. Further, direct connections between design and social innovation can be found in:

- » The focus on humans/people as the main beneficiaries of solutions – typical in design since Rittel (1987) and currently updated in design thinking, human-centred design, community centred design, etc.;
- » The goal of improving life conditions and societal situations into preferred ones – acknowledged within the seminal definition given by Simon;
- » The importance of prototyping/piloting solutions within iterative cycles in order to achieve the best outcome possible – again a traditional concern for design;
- » The attention to the interplay/relationships to create an empowering solution that remains beyond physical manifestations – a more recent attention born within product-service system design, service design, systems design.

In light of these connections, design is considering social innovation as one of the privileged topics and crucial approach to contribute to the positive transformation of society out of the socio-economical and civic/political crisis that has now long destabilised Europe and the world. Here, social innovation seems to signal the viability of an approach that involves citizens in co-imaging and co-producing a social change, thus enhancing society's capacity to act.

In particular, authors have recognized three main topics explored to envision future challenges for social innovation and design:

- » Citizen empowerment, spanning from the design of appropriate tools and platforms for citizens engagement (i.e. CriticalCity.org, prestiamoci.it, couchsurfing phenomena) up to methods to contribute to civic life improvement and support policies transformation (i.e. services as partecipa.gov.it);
- » New socio-productive processes, centred on envisioning a re-direction of production back to urban contexts and toward more sustainable practices (i.e. crowdfunding activities);
- » New systems, providing viable examples of innovations and understanding how they could be replicated at larger scales for wider systemic change (edgeryders.eu).

The connection between design and social innovation is *deepening* the practices and tools for citizen empowerment and engagement, *upscaling* the solutions for re-thinking the traditional relationship with industry, *outreaching* to examine the impact, replicability, and viability of solutions on a larger systemic scale. Challenges are enlarging requiring a multi-expert approach where designers are no longer the main source of creativity and innovation, but rather cultural provokers that stimulate critical thinking in people and on how they could act to change their surroundings (Margolin, 1989; Mortati, 2013). The following paragraphs will explore further these topics to frame the discussion around the connection between design and social innovation as a way to contribute to service innovation. Moreover, the remainder of the paper will identify discussion points for furthering this field of research, and detailing a starting framework useful to read design interventions/possibilities for social innovation.

## Deepen: practices and tools for citizen empowerment and engagement

Citizen engagement and empowerment are some of the keys to read the connection between design and social innovation. Solutions and tools are proposed to enhance citizens' capacity to act on the place they inhabit. This is a privileged means to generate social change, and it is the core to transformative practices lead by design. People are engaged directly in the design process with an active role in design, production, and distribution of goods (Cottam & Leadbeter, 2004; Botsman & Rogers, 2010). Moreover, public administrations are increasingly interested in experimenting user-centric processes that consider citizens as active agents of change (Bovaird, 2007; Lukensmeyer, 2007). Traditionally, design has paid much attention to user involvement using and developing participative and collaborative approaches (e.g. user centred design, participatory design, co-design, emancipatory design, community centred design, human centred design) that support collective creativity and collaboration with every-day people (Sanders, 2006). These explore the importance of involving users in the design process with different roles (e.g. to give feedback or to become co-decision makers) and with slight differences in the stages and techniques for engagement (Holmlid, 2009; Bradwell & Marr, 2008; Sanders, 2008). However, participation and citizen

involvement have been developed through various methods, and experimented in many forms. For example governments have always looked for the appropriate ways to involve/consult people on their opinions and needs (Holmes, 2011). In particular, citizen engagement identifies a family of concepts that span from public participation and public involvement, to participatory democracy, deliberative democracy, and collaborative governance (Lukensmeyer & Torres, 2006). These embrace government support, mutual help, information sharing, and involvement in policymaking. Examples are blogs and forums, online tools that enable a partnership and dialogue between public and decision-makers. This field of application is recently inquired looking at more systemic approaches like Transformation Design (Burns et al., 2006; Sangiorgi, 2011), whose focus considers both the engagement of users, the impact of the intervention and the importance of empowerment. Moreover, these practices are often linked to a specific context, with its specific knowledge and culture, thus calling for specific skills.

Three issues characterize the idea of *deepening* practice and tools for social innovation:

- » The *geographical embeddedness* of collaborative approaches;
- » The creation of value rather than its delivery, because ideas are not superimposed but generated together;
- » The importance of local characteristics as crucial resources, for example underpinning the idea of *social embeddedness* proposed by Granovetter (2005).

## Upscale: solutions for re-thinking the traditional relationship with industry

Building on the importance of designing processes rather than finished results, design is upscaling its concerns to re-think its traditional relationship with industry. This is incorporating both the idea that industry is changing form and aim, and the role/relationship designers can have in its transformation. Design is traditionally focused on manufacturing, industrial goods produced in large scale, consumer taste, function, price, and so on. This is close to a tradition that has positioned it as an alternative to stalling technological innovation, as it happened for Walter Rathenau and the beginning of his collaboration with AEG. In this paradigm, design mainly looked at giving shape to things (products or services), and this defined also its main contribution to innovation. Although the aim of giving shape to things is still the primary concern of this discipline, in the current scenario the *things* design is concerned with are shifting. Firms and manufacturing plants are changing form, function, location, and meaning, as much as all societal actors are looking differently at their contribution to civic, economic, and social life. Wider challenges are pushing design to revise the ways in which it produces and proposes product/service solutions, and to create a different relationship with citizens also covering a cultural role. For example, designers are experimenting around the idea of creating distributed factories highly linked to the know-how of local excellent small producers to create sustainable productive networks. Here they are acting not only as experimenters, but also as thought provokers and cultural stimuli for social innovators. 'SlowD' for example ([www.slowd.it](http://www.slowd.it)) connects designers, artisans, and people to define and experiment a new manufacturing culture based on a *zeromiles* community (geographically embedded) that generates an adaptive and flexible network for manufacturing. 'InternoItaliano' ([www.internoitaliano.com](http://www.internoitaliano.com)) is centred on the idea of a distributed factory that joins small local producers, geographically distributed. These are linked by creativity and ideas where designers are the *connectors*. Further, designers are becoming producers inventing simplified manufacturing machines. Dirk Vander Koji ([www.dirkvanderkooij.nl](http://www.dirkvanderkooij.nl)), for

example, has transformed an old robotic arm in a machine for producing plastic chairs; Open Source Ecology ([www.opensourceecology.org](http://www.opensourceecology.org)) is reinventing - open source - all the basic machines to start a civilisation from farming. Adam Friedman (2011) connects this phenomenon to urban contexts, and calls it *Small Urban Manufacturers*. These are small companies that produce very high value, design-oriented products. They are located within cities and are directly linked to final users to respond to market demands. This type of *micro* firms contains no internal assets (i.e. no productive plant) but focus on the social exchange and the relationships to achieve innovation.

Three issues characterize the idea of *upscaling* the traditional relationship between design and industry:

- » The minimum design unit that provokes larger scale transformations is bigger than the single user typical of more traditional design projects; communities or networks are becoming design subjects;
- » The focus is no longer only on the outputs, but on the process itself; depending on evolving situations, the tools left help adapt design solutions;
- » The final result can only be decided by the group involved, and varies depending on the context, the people, and competences involved.

## Outreach: impact, replicability, and viability of solutions on a larger systemic scale

Finally the relationship between design and social innovation is outreaching to identify methods and tools to measure the impact, the replicability, and the viability of the solutions proposed. As mentioned in previous paragraphs, social innovators are changing the way governments work, the way civil society achieves impact, and the way business is transacted. The economic crisis has forced Europe to rapidly face the public sector debt and companies to severely reduce the use and waste of resources; services need to be designed and delivered in more efficient ways; long term effects of demographic and climate change represent a crucial issue for public and private economic and social actors. The urgency to think about radical solutions is on the agenda of policy makers and opinion leaders all over the world. On this topic, Nesta (2010) has recently proposed the *radical efficiency* model as a new framework to support sustainable growth based on heavy cuts in public spending. This discusses and supports new customers' needs as active parts in solving new challenges, new suppliers that include users in this role, new way of using available resources including knowledge and data. In the framework, problems are approached in systemic ways, to consider all the elements useful to designing an impactful solution. Systemic social innovation occurs when a number of complementary and interconnected innovations happen in parallel to impact a social issue. For example a systemic approach could be important to devise social services for the elderly at many different scales: to help aging people be autonomous for longer (for example the HealthConnect service developed by Engine, aimed at developing proposals to improve access to health and social care services in Buckinghamshire - UK), to provide more efficient support at home rather than in public structures (Ambulatory Emergency Care designed by Thinkpublic for NHS Institute is an example of this), to enable local administrations and policy makers to manage policies for active ageing more effectively and with reduced budgets (the European project DAA – Design-led innovation for active ageing - <http://daaproject.eu> - is working on this direction involving network of cities that drastically need to find economic and innovative solutions for senior care). Accordingly, Greenhalgh et al. define innovation in service delivery and

organization as a “novel set of behaviours, routines, and ways of working that are directed at improving health outcomes, administrative efficiency, cost effectiveness, or users’ experience and that are implemented by planned and coordinated actions” (2004, p. 1). The health care field is exemplar for the complex and networked nature of systemic change. This makes systemic social innovation slower and more difficult to be achieved, as constraints are higher in number. Moreover, combinations involve changes in technologies and behaviours, structures, and processes, which are more difficult to be shifted, as they tend to organise around current interests to maintain a status quo. Despite constraints, larger scale systemic changes are crucial to reach the radical efficiency currently required, thus deserving further attention for development, test, and evaluation. Appropriate measures of the impact of such change are still missing, and are now scoring high in the agenda of governments across Europe to define the qualitative indicators that could prove the efficacy of systemic social innovation. There is no simple solution to better assessment. The call is for tools that can capture the qualitative sides and effects of innovation and social impact to shift understanding of where money investment is really valuable. Some of these barriers are cultural, some are financial, and some relate to the sheer complexity of organising knowledge at many scales, using evaluators with different competences, defining and applying new measurements for the impact of innovations both in the short and long terms.

## Implications and open discussions

Although the number of projects and practitioners working within social innovation is starting to grow steadily, this field still bares a lack of theory and structured reflection on the pilot actions delivered. The link between design and social innovation is currently mainly dependent on the hands-on experiments and tools that practitioners devise on field. However, the growth of awareness and recognition needed for social innovation would greatly benefit from further discussion coming from a theoretical perspective. Interesting debates should encompass the description of the topics that characterise social innovation, the elements that help make a distinction from more classical innovation concepts, and the issues that need further investigation from both a practical and a theoretical point of view. In particular, we propose three assets for social innovation research that need to be further framed in the disciplinary community and discourse:

- » **Participation**, as the ability to empower local stakeholders, and support knowledge sharing through opening up solutions and engaging citizens directly and recognizing them as co-producers of value;
- » **Collaboration**, as the need and the ability to use creativity for connecting different actors/stakeholders, and to provoke social innovation through negotiating processes;
- » **Networking**, as the importance to think systemically through understanding and maximising relationships and resources and connecting all material and immaterial elements (people, places, infrastructures, history, tradition, knowledge, know-how) in a context to allow social innovations to happen.

Each of these assets entails a set of skills that should be further understood for a proper debate in the design education discourse, and in its current experimentations (Mortati & Villari, 2013). Namely:

- » Participation is the capacity to enable co-created solutions, and achieving the emancipation of users through giving them ownership of the solution. This means triggering engagement, and developing social sharing platforms. Designers give

particular attention to user involvement, and actively look for new ways to support collective creativity and collaboration with citizens (Sanders, 2006);

- » Collaboration translates in the capacity of leveraging collective creativity for addressing social needs – designers already use tools and methods to stimulate shared creativity and to foster co-production of meaning and solutions, they consistently care about people, and their interactions from the beginning of the design process;
- » Networking becomes the capacity to rearrange organizational processes to regenerate/adapt solutions, and to build effective relationships (between all elements of the system) for resilience. Designers create systemic and holistic visions thanks to which they consider problems more broadly. Owen (2007) for example considers designers as practitioners capable of treating problems as systemic challenges that involve a mix of hardware, software, procedures, policies, organizational concepts and whatever else is necessary for a holistic solution.

Design for social innovation aims at empowering people in *designerly ways*, thus enabling them to have an active role in promoting change by themselves. People and their needs are at the centre of solutions where collaboration, participation and networking are *designed with and for* – they are the main topics/object of this type of design.

## Conclusions

This paper has briefly outlined some of the main challenges that design is considering when investigating social innovation. The relationship between social innovation and design is often described through methodologies and projects that practitioners experiment. The paper has provided an overview and initial framework to reflect on these experiments also from a theoretical perspective, which is currently looking for further debate. This is useful to start proving both an impact of social innovations and their systemic nature, and a clearer role for design in an emergent field where everyone is called forward to contribute creativity, ideas, knowledge, and resources. Considering social innovation a key area for service innovation, the authors have described three main topics in which design can support social innovation and develop research directions. These can be summarised as:

- » Citizen empowerment which encompasses the involvement of civic society in supporting social innovation through active participation;
- » New socio-productive processes as the arena of the new ways of producing and distributing goods that is characterizing the ‘third industrial revolution’;
- » New systems as the way of considering social innovation the actions that can be replicated at larger scales to provoke systemic change.

Further, these topics have been explored through systematising the wide number of existing experimentations and projects in an interpretative framework. This has read design for social innovation as deepening, upscaling, and outreaching its practices. Finally, three assets for social innovation research have been put forward to call for an advancement of the field also from a theoretical perspective. In particular, **participation** has been discussed as the importance to deepen practices and tools for citizen empowerment and engagement; **collaboration** has been linked to upscaling solutions for re-thinking the traditional relationship between design and industry; **networking** has been investigated as the outreach to analyse the impact, replicability, and viability of larger scale systemic solutions. The debate on Design for Social innovation is on-going. Its development offers - on the one side - the opportunity to further investigate the areas that define a theoretical framework - on the other - it develops and enriches service innovation. However, the design approach to social



innovation deserves further exploration to reflect on how to design new services, how they are socially and economically sustainable, how service enterprises can foster innovation in the current society.

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