Desis Network strategies to advancing systemic social innovation through service design

Carla Cipolla – Federal University of Rio de Janeiro – UFRJ/ Coppe, DESIS Network
carla.cipolla@ufrj.br
UFRJ Cidade Universitária - Ilha do Fundão, Centro de Tecnologia, bloco G - sala G209
PO BOX 68507 21941-909 Rio de Janeiro - RJ Brasil  +55 21 994226748

Abstract

DESIS Network (Design for Social Innovation and Sustainability) is composed by more than 40 Labs, based in design schools all over the world. This study aims to present the service design approach adopted by DESIS Network and its impact in support of social innovation processes. Although not exhaustive (not covering theories and practices developed in all labs), the study covers two main aspects: (a) the service, developed by a DESIS Lab, that have attained the larger impact in terms of systemic change over time and (b) the service design theory that have been largely developed among network members. The study, based on social innovation theories, concludes that DESIS uses service design to scale out social innovations (by understanding social innovations as services and using design for services to promote their dissemination as new service models) and to scale deep social innovations through the services derived from them (services that work to change relationships and cultural values, as social innovations do). A challenge faced by DESIS is to frame how its service design practices could increasingly contribute to scale up social innovations and the transformative changes they carry out.

KEYWORDS: service design, design for service, design for social innovation, design education, design networks

Introduction: Desis Network and service design

DESIS is an acronym for “Design for Social Innovation and Sustainability”. This association describes itself as a network of design schools or design-oriented schools in universities, called DESIS Labs, which aims “to use design to trigger, enable and scale-up social innovation through design thinking and design knowledge.” (DESIS Network, 2014).
About social innovation, it means: to enhance its potential; to raise its visibility; to facilitate its transferability; to increase its synergy and to stimulate new initiatives. It means to co-create, with local, regional and global partners, socially relevant scenarios, solutions and communication programs related to social innovation that are equal to the enormous challenges of contemporary society (DESIS website, 2014).

In design schools, the network finds a significant driver for the development of the theory and practice of design for social innovation. DESIS members are committed to promoting design education towards this mission, i.e., to educate students to lead and support to social change by using design skills to develop new alternatives and new social practices with social groups. It includes support existing social innovation cases or developing new ones.

“DESIS intends to identify and empower diffused creativity in the society. This societal creativity is expressed for example in the grassroots innovations from below (social innovations) which anticipate possible and alternative futures, but it also includes other experiments and solutions developed collaboratively. Here, the design schools (DESIS Labs) have a role, being opened to the society, participating and empowering this diffused creativity and performing an actual role (developing projects that effectively promotes change, also at local level). These projects simultaneously promote change and divulge and consolidate new design knowledge and practices. Society is a large laboratory of creativity and change, which requires centres (labs, solutions) that enable this creativity to flourish and develop. Design schools (DESIS Labs) aims to participate and empower these processes, being one of these centres or by being connected with other existing centres. In this, DESIS Labs, being based in universities have the flexibility to explore and consolidate new frontiers, but at the same time stimulates universities to be open to society”. (Cipolla et al., 2015b, p.6).

The DESIS network promotes that based on four pillars: • Students - educate them to promote change; • Paradigmatic projects – projects that indicates that it is possible to operate the shift towards new ways of living and doing; a new design knowledge – able to help individuals, communities, institutions and companies to design feasible, solutions and take part in a complex social learning and creative process towards sustainable changes; International networking – to intensify the above-mentioned processes, to improve reputation at local level (DESIS Labs) and to enable joint initiatives between DESIS Labs (Cipolla et al., 2015b).

The contribution of the DESIS Labs activities to the service design theory and practices deserves a comprehensive analysis. Service design is an activity that has been defined as a confluence of design research activities and practices, such as interaction design, design for sustainability, strategic design and experience design (Meroni & Sangiorgi, 2011). This study concerns the developments in research on service design inherited from design for sustainability, or more specifically, in DESIS Network, which has been focusing on the identification, empowerment and development of social innovations, which are considered as working prototypes of sustainable ways of living, organized by people who have moved outside mainstream models of production and consumption (Manzini 2005) or organized by DESIS Labs themselves (Corubolo & Meroni, 2015).

This study presents an analysis on how service design is being practiced in DESIS Network in its relation to social innovations.
Theoretical framework

Social Innovation as service innovation

Social innovations were defined as ‘new ideas (products, services and models) that simultaneously meet social needs and create new social relationships or collaborations. In other words, they are innovations that are both good for society and enhance society's capacity to act’ (Murray et al. 2010: 3). Such innovations are developed by public, private, or third sectors, as well as by users and communities. However, ‘some innovation developed by these sectors does not qualify as social innovation because it does not directly address major social challenges’ (Harris & Albury 2009: 16). That is, as Djellal and Gallouj (2012) argue, social innovations change the way consumers’ needs (functions) are satisfied, in that they entail new services that have been developed by transitioning from formal (i.e. services provided by an external service provider) to what the author calls ‘informal’ modes of satisfaction’.

Djellal & Gallouj (2012) open a call to stimulate “a dialogue between social innovation studies and service innovation studies.” (p.129) to bridge the “mutual ignorance” between the scientific perspectives on “the economics and socio-economics of services” and to meet the challenge of “making ‘invisible innovation’ visible” (Franz et al. 2012, p. 9).

The focus on ‘invisible innovations’ has been one of the key aspects on design for social innovation theory and practices, and convergent with the “silent” type of design suggested by Gorb and Dumas (1987), which is practised by groups of people, i.e., non-expert designers (Manzini, 2015). The ‘design action on existing social innovations is to consider each case as a service, that may be designed by expert designers, but also by non-expert designers. When non-expert designers are involved, design activity is considered “a multifaceted cognitive skill, possessed in some degree by everyone” (Cross, 2009, p. 115).

The founder of DESIS Network stated a definition of design for social innovation as the basis for DESIS lab activities “everything that expert design can do to activate, sustain, and orient processes of social change towards sustainability.” (Manzini, 2015, p. 62).

This definition of (design for) social innovation is convergent with Cajaiba-Santana (2014, p. 44) who states that (a) social innovations are defined as “new ideas manifested in social actions leading to social change and proposing new alternatives and new social practices for social groups” (Cajaiba-Santana, 2014, p. 44); and (b) social innovations are non-material: their material outcomes are solely a supplementary result, and they focus not on needs but on asset building’ (Neumeier, 2012 p. 55).

The processual character of social innovation brings DESIS Network activities in services closer to the definition of designing for services, which, for Kimbell (2011) “is seen as an exploratory process that aims to create new kinds of value relation between diverse actors within a socio-material configuration” (p. 42). The author, echoing Manzini (2011), suggests that “what is being designed is not an end result but rather a platform for action with which diverse actors will engage over time” (Kimbell 2011 p. 45). This is the “enabling” solution definition (Manzini, 2015), extensively developed by the DESIS Network founder, which includes different features (an assemblage of different services, places, tools) and co-design tools and methodologies to conceive and develop these solutions in a collaborative way (Manzini, 2015, p.168).
A relational approach to social innovation is adopted by DESIS with the recognition of the interlinked dynamics between different elements: socio-material context, institutional dynamics, network formation, new social relations (Haxeltine et al. 2017, p.9) that are considered in the process of designing for services. It results that definitions used by DESIS members as “collaborative services” and “relational services” (Jegou & Manzini, 2008 and others) are, in fact, enabling solutions, designed to nurture and supports social innovation processes, with particular focus in the interpersonal relations between participants.

Social innovations: scaling processes and systemic change

Scalability is a key aspect of the practice of design for social innovation, and framed among the aims of DESIS Network itself, that uses “design to trigger, enable and scale up social innovation” (DESIS website, 2014), because “to effect large system change, ‘niche’ or local-level innovations must span spatial and institutional scales to achieve broader systemic impact” (Riddell, Moore & Vocisano, 2015, p. 67).

Literature defines three levels of scalability for social innovation: scale up, scale out and scale down (Westley et al. 2014, Riddell, Moore & Vocisano 2015) as presented in figure 1.

![Figure 1: Scaling out, scaling up and scaling deep for social innovation (from Riddell, Moore & Vocisano, 2015)](image)

Westley et al. (2014) described two kinds of scaling: ‘scaling out’ and ‘scale up’ as synthesized and complemented by the concept of ‘scaling deep’ by Riddell, Moore & Vocisano (2015). These authors state that the process of scaling social innovations to achieve systemic impacts involves these three different types of scaling and “large systems change (LSC) is likely to require a combination of these types” (p. 69). The table 1 below presents the types of scaling and their main strategies.
Table 1: Types of scaling and their main strategies
(Riddell, Moore & Vocisano, 2015, p. 67)

<table>
<thead>
<tr>
<th>Description</th>
<th>Main strategies</th>
</tr>
</thead>
</table>
| Scaling out:                       | Deliberate replication. Replicating or spreading programmes geographically and to greater numbers while protecting the fidelity and integrity of the innovation.  
| Impacting greater numbers. Based on the recognition that many good ideas or initiatives never spread or achieve widespread impact. |  
|                                   | Spreading principles. Disseminate principles, but with an adaptation to new contexts via co-generation of knowledge, leveraging social media and learning platforms: “open scaling”. |
| Scaling up:                        | Policy or legal change efforts. New policy development, partnering, advocacy.   |
| Impacting law and policy. Based on the recognition that the roots of social problems transcend particular places, and innovative approaches must be codified in law, policy and institutions. |  
| Scaling deep:                      | Spreading big cultural ideas and reframing stories to change beliefs and norms.  
| Impacting cultural roots. Based on the recognition that culture plays a powerful role in shifting problem-domains, and change must be deeply rooted in people, relationships, communities and cultures. | Intensively share knowledge and new practices via learning communities, distributed learning platforms and participatory approaches.  
|                                   | Invest in transformative learning, networks and communities of practice. |
| Cross-cutting                      | Seek alternative resources  
|                                   | Build networks and partnerships  
|                                   | Broaden the problem frame |

The use of these terms is under discussion. For example, the term ‘scaling up’ has been used extensively in the social innovation literature, but Haxeltine et al. (2015b) for example argue that it may be misleading: “Firstly it implies a solid hierarchical structure, when actually scale in the social context is co-produced and there are opportunities for social actors (e.g. strategist in social innovations) to resist or subvert or otherwise ‘play’ with the ways that ‘scale’ relationships are co-produced. Secondly, in processes of ‘scaling up’ the social innovation itself may be altered in significant ways. Indeed some social innovations may perceive this as a threat and resist ‘scaling up’ activities, while others may realise too late that they have lost something important in the process of scaling up. We can further hypothesise that some social innovations may realise the dangers of ‘scaling up’ processes but find ways to ‘subvert’ them” (p.77). Other terms have also been reframed or criticised. However, for this study, these definitions are useful to frame a preliminary analysis on how DESIS Network is relating design knowledge and practices to social innovation processes.
Methodological framework

This study was carried out within the framework of the TRANSIT Project (Transformative Social Innovation Theory – EC-FP7) project which aims to study how social innovation can bring about empowerment and societal transformation. It included an exploratory research and an embedded qualitative in-depth case study conducted over DESIS Network and four of its Labs between 2014-2016. Specifically, in this study, one of the DESIS Network projects was selected and constitute the main unit of analysis.

The data collection encompassed: semi-structured interviews with three members of 4 (four) DESIS Labs (Italy, Brazil (2) and Portugal); participant observation; document review: the main writings of the core team and secondary sources (until 2016). It also included a literature review about service design for social innovation practices in DESIS Network.

The data collected was interpreted in what regards its consequences in service design and in social innovation processes, through the theoretical framework adopted, in which three levels of scalability for social innovation were defined scale up, scale out and scale down (Riddell, Moore and Vocisano, 2015), as described in the table 1.

Results

This study frames the beginnings of DESIS Network on 2007, when the book “Creative communities” (Meroni, 2007) was published. It was followed by the book “Collaborative Services” (Jègou & Manzini, 2008), both results of the research EMUDE – Emerging User Demands for Sustainable Solutions, coordinated by Ezio Manzini at Politecnico di Milano. This project gathered a network of design schools to develop a design approach to social innovation and inspired the foundation of DESIS Network, which was informally established in 2009 (Cipolla et al., 2015a).

The study also considers the difference between the process dimension and the output dimension of social innovation. Hubert et al. (2010) propose that the process dimension “implies that new forms of interaction are established” and the output dimension “refers to the kind of value or output that innovation is expected to deliver: a value that is less concerned with mere profit, and including multiple dimensions of output measurement” (p.26). The analysis placed its focus in the output dimension, which is related to services in terms of what designers can observe (in existing social innovation processes) or enable (in new social innovation processes). The next lines present how members of DESIS Network are considering the new interaction patterns present in social innovation cases as services and embedding it in the service design field (as theories and practices).

DESIS theoretical approach to service design: scaling deep social innovations

Studies and projects on design for social innovation and sustainability were influences on the development and consolidation of service design research (Sangiorgi, 2011).

Social innovations are expressions of socially diffused creativity (Meroni, 2008) and a society in which “everybody designs” (Manzini, 2015) that gets expressed in services developed by grassroots communities. Therefore, service design research that focuses on services investigates their specific features. DESIS Lab members have identified in social innovations the constitution of new service models, with interactions based on local cultural values and social networks. This work pulled together research activities and projects that, for example, coined the terms collaborative (Meroni, 2007; Jegou & Manzini, 2008; Manzini &
The first notion came to light when research on design for social innovation (Manzini, 2007) identified types of service interactions that have been called collaborative services in social innovation cases (Manzini, 2008). The term ‘collaborative’ emerged from the fact that the qualities of interpersonal interactions were far removed from those of a delivery approach to services in which participants, including frontline employees (representing the organisation) and clients/users, have predefined roles (i.e., employees are active; clients are passive). These social innovations deconstructed the delivery approach to services, creating new collaborations and transforming all participants into active co-producers of commonly recognised benefits. They also gave rise to a special form of interpersonal interaction in services labelled as ‘relational’ services (Cipolla and Manzini, 2009), where participants needed not only to be operationally active and collaborative, but also intentioned and willing to relate to, and interact with, one another in an intensely interpersonal way. Based on Buber’s (1996; 2006) theoretical framework, these findings led to the definition of experiential versus relational services as polarities by which to identify the interpersonal qualities of services.

Meroni (2008) framed the ‘Community Centred Approach’, on which is proposed that the focus of attention shifts from the individual user to the community as the new subject of interest for design practices. Sangiorgi (2011) cites Meroni (2007) when observes that a “shift seems to be happening as services are no longer conceived of as an end in themselves, but are increasingly considered as an engine for wider societal transformations. Services are less discussed as a design object, but now more as means for supporting the emergence of a more collaborative, sustainable and creative society and economy. Particular emphasis has been given to collaborative service models and co-creation” (p. 30).

The analysis of the services produced by groups and communities in social innovation processes were not extensively covered by the service management and service marketing researcher activities. Scholars working in the “basis of the pyramid” (Gebauer & Reynoso, 2013) paved the way for studies on service innovations in emerging countries (Reynoso et al., 2015) and both began to consider the emerging social dynamics and new interactions patterns embedded in social innovations with focus on these countries.

DESIS Network members are highlighting emerging service architectures, developed by social innovators, and bringing them to the development of the service theories. They are also contributing to the development of service design, by embracing interactional patterns and dynamics from social innovation cases that are driving the development of specific approaches (e.g. Community Based Design) or the inclusion of unexpected theoretical frameworks (e.g. Martin Buber) in the effort to define what may be the specific design approach to services (Cipolla, 2004, Cipolla and Manzini, 2009).

These developments indicate how members of DESIS Network are contributing to scaling deep social innovations by bringing them to compose the design culture and by making ‘invisible innovation’ (social innovations) visible (Franz et al. 2012) to service theories. It is shifting problem-domains in the service sector and is recognizing in its service theories that change “must be deeply rooted in people, relationships, communities and cultures” (Riddell, Moore & Vocisano, 2015, p. 67).

DESIS is also investing in “transformative learning” (Riddell, Moore & Vocisano, 2015, p. 67): the network is composed by design schools that diffuse the knowledge produced, which is continuously embedded and reinterpreted in the DESIS Labs. The Labs are composed by teachers and students, that create new ideas inspired by new service theories and social innovation cases, which include the development of new service ideas (Manzini and Stazkowski, 2015), visions and storytelling (Bertollotti, et al., 2016).
Service Design practices in DESIS: scaling out social innovations

Perspectives on the design of collaborative services, with different levels of interpersonal relational qualities between participants, have been explored by the DESIS Labs, applied to issues such as migration, to foster new relations between migrants and local communities (Pillan & Suteu, 2015) to avoid exclusion (Hillgren, 2015); new housing solutions, based on new collaborations between residents (Ferri & Conditi, 2008; Staszkowski, Brown & Winter, 2015), urban planning, to promote a new identity of the neighbourhood and to strengthen the social fabric (Jégu et al., 2015), aging, to promote new relations between older people themselves and other actors to improve the quality of later life (Lee and Moore, 2015); food to foster direct relations between consumers and producers in new food chains (Meroni, Simeone & Trapani, 2008; Baek, Meroni & Simeone, 2014); and the development of new relationships between people themselves and the state (Manzini & Stazkowski, 2015).

All these different projects and activities have taken the form of experiments or effective services, that nurtured the service design theories developed by DESIS members themselves in a practical way. However, one project in particular, is running long enough to exemplify how a Lab operating under the DESIS approach can scaling out social innovations through service design and foster system change.

The example is the development of co-housing in Italy. Politecnico di Milano (a research group in a previous version of the Polimi DESIS Lab) identified cases in the housing sector, in the form of cohousing initiatives. The Project “Cohousing.it”, was set up in 2007. At that time, there were no diffused cohousing initiatives in Italy and the challenge was to design a service – inspired in the process and interpersonal interactions of existing co-housing initiatives - to promote the practice. Manzini (2015) described the process: “starting up and co-designing process have been enabled by creating a dedicated digital platform and a set of services (to support the meetings of the potential cohousers, the building of the community, and the co-designing of services to be shared)” (p. 57). The service enabled the first co-housing initiative in Italy (Milan) in a process started in 2007.

Seven years later it was possible to observe for this study (Cipolla et al., 2015a) and confirm that cohousing was widespread in Italy, with many different actors involved, including those from the industrial sector that recognised the emerging demand for products and appliances for shared services. The co-housing principles were being also used to solve challenges in the social housing sector in Italy. The role of the Italian DESIS Lab, as part of the international network, in diffusing co-housing initiatives was highlighted: “Certainly the fact that it is an international network gives the possibility of dissemination, the possibility to get to know other similar opportunities around the world, this is a great advantage. If you need to know who’s doing the same things, or similar things that can be integrated” (Promoter of co-housing initiatives in Italy, interview 7, quoted in Cipolla et al., 2015a). This same partner indicated that service design activities in this field would be increasingly needed; for example, there is significant work (and opportunities) at the local level, to set up a whole new set of services to reinforce the urban social fabric. The focus on the local level, specifically on the neighbourhood, was highlighted (Cipolla et al., 2015a).

These developments indicate how a member of DESIS Network contributed to scaling out a social innovation at a local level by recognizing the role of the importance of design thinking and practices “to spread social innovation initiatives and achieve widespread impact” by the co-design of a collaborative service that “disseminate the principles of the original idea but “with an adaptation to a new context via co-generation of knowledge”. This process included also the development the Cohousing.it as a “distributed learning platform” (Riddell, Moore & Vocisano, 2015, p. 67) that helped the communication of the cohousing idea in Italy.

An essential aspect in scaling out social innovations is a careful consideration on how to protect the “fidelity and integrity” (Riddell, Moore & Vocisano, 2015, p. 67) of the original idea, and this was the case in the replication process in Italy as fostered by the Italian DESIS...
A key aspect of the DESIS Network process is to learn about the interpersonal relational qualities from social innovations cases and develop solutions that spread these qualities. The DESIS Lab co-designed a process and tools for community building and co-design activities as a service to enable participants to define their co-housing condominiums and related shared services and to form a local community. It is not possible to affirm in this study if the interpersonal relational qualities have been effectively preserved, but it is acknowledged the importance given to this aspect in the design process.

Manzini (2015), DESIS Network founder, synthesizes the lessons learned in the co-housing case, as designed by the DESIS Lab, and the design role in the process: “to promote social innovation, design experts must use their design skills and competencies to recognize promising cases when and where they appear and to reinforce them. That is, to help them to be more accessible, effective, lasting, and replicable” (p. 58).

Conclusions

The DESIS Network members use design thinking to scale out social innovations by understanding social innovations as services and using design thinking to promote their dissemination as new service models, such as Cohousing.it, and to scale deep social innovations through the service theories derived from this process by proposing a service theoretical framework that works to change relationships and cultural values, as social innovations do. This includes:

- Rethink and explore new service interactions, by designing for services based on an active and collaborative role for participants to co-produce a commonly recognized result;
- Contribute to the development of service design by developing theoretical frameworks able to cope with the transformative values and interpersonal qualities of social innovations processes;
- Foster transformative learning, by embedding all this knowledge in the design practices and design education in the DESIS Labs.

DESIS therefore already have experiences in scaling out and deep social innovations through service design.

The activities of DESIS members in scaling deep social innovations through service design is testified by different publications and is more intensive, considering the characteristics of the network itself, composed by design schools involved in research and educational processes, as mentioned in the previous paragraphs.

Scaling out social innovation ideas happens through present and past experiences in the more than 40 DESIS Labs, but the impact is still to be analysed and verified. However, DESIS Network itself works to support this process by fostering the exchange of knowledge between the Labs and by providing international reputation (as members of a large international design network) to the local Labs.

A challenge for DESIS Network is to explore how its service design practices could increasingly interact and influence scale up processes and the transformative changes they carry out. An evidence was found in Manzini and Stazskowski (2015), who have explored the intersection between design, social innovation and public policies, including implications and recommendations for policymakers, derived from the service design practices described. This study traced some evidences of effective impact of the activities of a DESIS Lab in local policies, but this is still to be better investigated.
References


Cipolla, C, Afonso, R; Joly, M. P. (2015b) Transformative Social Innovation Narrative of the DESIS Network. TRANSIT: EU SSH.2013.3.2-1 Grant agreement no: 613169 | 31st of March 2015


