

# Fragile liaison - Opportunities and challenges in cross-organisational service networks

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## Abstract

The aim of this paper is to identify what kind of needs and challenges exist in cross-organisational and cross-sector collaboration in service networks and how service design can contribute to tackle the challenges. The paper interrogates a project called ‘Customer-centred service networks in L area’, initiated by the City. The project aimed to build more holistic service networks, involving private and third sector organisations, and to embed customer-centeredness in the networks. This experimental project revealed various kinds of tensions from the participating organisations and the employees in building such networks. We conducted 16 interviews with participants of the project to interrogate challenges and opportunities. The findings point out that in addition to focusing on customer centeredness, a shift to emphasize collaboration between different actors is crucial in service design.

**KEYWORDS:** Service network, organisational change, design for services, collaboration, senior services

## Introduction

Public organisations have recognized that isolated structure for developing and operating public services is no longer viable in a current society. They seek alternative approaches that can respond more effectively to the changing needs of society, and improve service qualities and cost-efficiency. One of the approaches is to collaborate more with other organisations from private and third sector, such as companies and NGOs. In other words, public organisations aim to build cross-sector service networks and collaborative models. Public organisations are more reliant on outsourcing, contracting out service elements, and there is a growing fragmentation of service delivery (Ostrom et al., 2010). Customers thus encounter multiple providers when trying to achieve their service goals. The networks in which these various service providers and actors interact with each other are very complex and

heterogeneous. In a case of social and healthcare customers, the service network would include not only physical care providers but also cultural services or transportation services.

In this landscape, many of current literatures on service networks from service marketing and service design draw an attention on customers' role in building their own networks (e.g. Lusch & Vargo, 2006; Ostrom et al., 2010; Heinonen et al., 2013; Tax et al., 2013; Manzini, 2011; Junginger & Sangiorgi, 2009). For example, Lusch & Vargo (2006) emphasize to see a customer as a resource integrator, assembling and coordinating interrelated services to achieve a given objective. Tax et al. (2013) stressed that customers are no longer considered as isolated entities but are increasingly viewed in the context of their own personal networks. They introduce a concept of the *customer-designated service delivery network*, defined as two or more organisations that, in the eyes of the customer, are responsible for the provision of a connected, overall service (e.g. Tax et al., 2013). Similarly, Heinonen et al. (2013) suggest the shift of focus from the organisation's service processes involving the customer, to the customer's multi-contextual value formation, involving the organisation.

Having a shared understanding among various organisations and service providers is thus more crucial than ever. It is increasingly important to understand what roles different actors play in customer-defined service networks and based on that understanding, build a collaborative model that supports them. Defining the roles and relationships of different actors in advance is, however, very challenging. The multiple actors in service networks have different perspectives and tensions. In addition, their relationships change over time. Our aim in this paper is to reveal these challenges when building customer-centred networks through cross-organisational and cross-sector collaboration. We do this by analysing a project called 'Customer-centred service network in L area,' where service design approaches were applied. Making sense of the complexity of this service network was far from simple and tensions were identified across people and organisations. In this paper, we aim to highlight these challenges based on interviews of the project participants and discuss what it means for a new role of design in service networks.

## Emerging Roles of Design in Service Networks

Design has been increasingly recognized as a potential discipline to achieve customer-centricity of service. The design tools for integrating customers' experiences have helped the service development to be more relevant to customers' life and organisations' needs. Recently the considerations of design for services expand from end-users' experiences towards networks and systems, envisioning new relationships of multiple actors and creating a collaborative platform (e.g. Kimbell, 2010; Junginger & Sangiorgi, 2009; Manzini, 2011). This paradigm shift has come with increasing potentials of co-design for transformative effects on organisations and communities (Bate & Robert, 2007; Sangiorgi, 2011; Meroni, 2007; Thackara, 2007). Recently Kimbell (2010, p. 51) pointed out that "understanding value and the nature of relations between people and other people, between people and things, between people and organisations, and between organisations of different kinds, are now understood to be central to designing services."

As a response to these emerging needs, design tools have been modified and applied for the network context, for tangibilizing complexities in networks, identifying multiple actors' relationships and facilitating their collaboration. For example, empathic design tools were originally to support designers' understanding of user experiences, but recently they have been applied to facilitate a mutual understanding of multiple actors in the network

(Mattelmäki et al., 2014). Tools for service visualisation, such as service blueprints, stakeholder maps or customer journeys are used in co-design workshops where multiple actors from different organisations gather, to help them express their perspectives and gain a mutual understanding of each other (see e.g. Kronqvist et al., 2012; Hakio & Mattelmäki, 2011). This kind of collaborative activities of tangible mapping of service networks has been influenced by generative tools and co-design (see e.g. Sanders & Stappers, 2012; Vaajakallio, 2012; Eriksen, 2012; Buur et al., 2013; Halse et al., 2010). Different from research tools in human research science or marketing, co-design tools and activities are built on designers' genuine practices that are visual, empathic and generative (Hanington, 2003; Lee, 2013).

Despite these potentials, challenges have been also reported when applying design for public organizations and networks. Public organisations are not used to experimental, generative approaches of design, and isolated and hierarchical culture of the organisations hinders collaborative activities (e.g. Bason, 2010; Vaajakallio et al., 2013).

## Case: Cross-Organisational Service Networks with a Municipality

The 'Customer-Centred Service Network at L area' project (L project: 2011– 2013) aimed at creating service networks of public, private and third sector actors in one neighbourhood in Helsinki, in order to support local elderly customers living at home. The development had also other goals, namely searching for new kinds of practices that would allow personalizing services based on customers' own interests and needs, and piloting new practices for service management and personal budgeting.

Developing and piloting the network and the new practices was done through multiple methods. The project plan emphasized applications of service design in different stages of the project with the support of consultancy companies and university design researchers. Design tools were applied to visualize the complexity (e.g. customer journeys), support empathic understanding of customers' experiences (e.g. design probes, storytelling, and personas), generate ideas together, and prototype new practices (e.g. co-design tools).

In Spring 2012 when L project proceeded its halfway, interviews on the project participants were conducted to interrogate what changes the project had brought by then. One of the design researchers from the project conducted the semi-structured interviews on 16 participants from different organisations: twelve employees from public sector (e.g. social services department, health care department, City's central administration), two persons from private sector, and two persons from the third sector, such as local church or NGO. The selection of the interviewees was based on snowball sampling.

The first part of the interview questions concerned with different phases of the on-going project; for example, what had been successful elements so far, what could have been done

differently and so on. The second part of the questions was about interviewees' perceptions on service design; for example, how they described it, what was its role, and what had been experienced valuable about it. The interview data was transcribed and the analysis was done following the analytic induction approach (Seale, 1999). In the interviews, the participants often addressed tensions and complex relationships between people, organisations and sub-organisational teams. Thus the main foci of analysis were on the needs for networking perceived by the participants and the barriers in the creation and development of cross-organisational service networks. The interview quotes presented in this paper were translated in English by the authors. In addition to the interview data, we also used other materials from L project to support the analysis, such as earlier publications and reports produced during the project (e.g. Hakio, 2012; Elo, 2012; Nykänen, 2013; City of Helsinki Department of Social Services and Health Care, 2013).

In following sections, we will first illustrate complexities of 'service jungle', as one of the interviewees characterized the service network. How individual actors, including end-users and professionals, struggle to navigate this jungle and try to form their own networks can highlight the needs of cross-organisational collaboration in service networks. We will then discuss barriers that hinder the collaboration. Finally we discuss what could be fruitful opportunities for design in achieving balanced collaboration in the service network.

## Needs and Barriers of Networking and Collaboration

*Limitations of organisation-driven, siloed way of working:* The interview findings revealed that the public sector organisations do realize that their organisation-driven, siloed way of providing services results in these complex service ensembles. Especially elderly customers often lack resources to assemble and coordinate interrelated services by themselves.

*"... the care families, when the services are customised to them, it is cheaper than the municipal service that is so fragmented. Care families are in quite a service jungle to cope with....perhaps the most applied is a kind of a mindmap picture in which all the connections are depicted to what are all the instances the care family should be messing with, or they should be in contact with. It is such an impossible network that only few can tackle with...." (an employee from the public sector)*

Not only the customers, but the public sector employees also dealt with the similar complexity and unclearness. Each unit within the public sector has its own care plan for customers and it is common that employees from one unit do not have knowledge of what other services are provided for a specific customer from other units. Not only within the public sector, but there is also lack of information about what kinds of services are offered, and can be offered, to the customers by other organizations, besides the public ones. The public sector is in the critical needs of gaining such information and providing it for the customers. In fact, existing legislation and regulations hinder them from possibilities of recommending services from the private sector or sharing the information about their customers to other network actors. For example, if the public sector employee recommends some particular service providers for customers, they need to mention all other alternatives.

For healthcare and social services for the elderly people, identifying individual customer's needs and providing the personalized support is increasingly important. The interviewees explained that the customers are changing and this requires the service to change as well. Helping elderly people to cope with the complex service network and personalising their service would reduce the costs and result in more effective service (e.g. see Eloniemi-Sulkava

et al., 2006). The personalized support can also prolong the time that the elderly people can live in their homes. A third sector representative shared stories of elderly people who decided to stay at home after getting right kind of support at their home;

*“...when safety and enough of services for a care family, or a lonely senior, they can stay at home. This is why it is extremely important to build the network starting from the needs to of the care family.” (an employee from the third sector)*

Despite these needs, the public sector employees explained in the interviews that they now lack tools for identifying individual customers' needs and sharing such information with other related organizations in the networks.

*Hierarchical structure and tensions in the cross-sector network:* The cross-sector collaboration was one of the driving factors in building the project strategies. The interviews, however, revealed that the project development was seen as municipality-, and single organization-driven by other organisations. According to interviews, for example, the entrepreneurs were not included in the project group or in the project steering group. In addition, the interviewees said that there were only few meetings or workshops, if any, where people from all different sectors were present. These findings imply that even in this L project aiming for cross-organisational collaboration, the network actors were working separately to achieve goals that have been identified for them. This finding is also supported by Nykänen & Jyrämä's report on the project (2013).

One reason for this was probably the way the project was prepared and organised. The preparation was led by one of the public organisations and the same organisation was coordinating the funding and the participant involvement. Some of the stakeholders stated that the roles and responsibilities during the project were not clear and that the schedule was too tight and predefined. In their opinion there was too little freedom that is necessary for the creative development process and the network to evolve.

The private and third sector organisations' interviewees also pointed that the public sector is in need of new mindsets and tools for understanding other collaborators and exploring future possibilities together with them. The traditional hierarchical structure was experienced for example in the ways people were invited to the meetings according to the hierarchical top-down procedures. This lead for example to situations where people who were in position to make decisions didn't always have understanding or interest on the subject matter or time to participate and the employees enthusiastic on the subject matter (whose work the development would have influenced most) didn't have authorisation to participate or make needed decisions. When the project particularly aimed at collaboration between the partners, people posed questions why this collaboration was not really enabled as pointed out by one of the interviewees.

*“However, you can observe people having a lot of ideas and willingness to be involved, or that it is just the right person to be part of this project, just the right person from the neighbourhood to do this thing.”*

*The question is why this kind of a project was started, why is it expected that the departments collaborate if it is not enabled?" (an employee from the public sector)*

In the interviews, the private sector representatives believed that the public sector viewed the private sector as only profit-driven. This could be identified also in the public sector employees' interviews that dealt with prejudices about the motives of the private sector. In their opinion, the competition affected the objectives of private organisations and sometimes hindered the collaboration. On the other hand, private sector representatives had doubts on the current system of public sectors' procurement process. They didn't see meaningful to be compared only by the price per hour and even suggested that public sector's way of calculating the costs of their own services can be misleading. The interviewed private and third sector organisations were small and medium sized and they had only scarce resources for development purposes. For them it was especially important to be able to see and evaluate the potential benefits of the participation to the development project and the network in advance.

The private organisations pointed out that there is a need for a huge cultural change that would enable cross-sector collaboration. However, the momentum for change was very slow. It was observed that especially public sector employees tended to cling to their accustomed ways of working in everyday practices, although they realized the need of change. They sometimes even hide themselves behind '*self-created, imaginary rules*'.

*"I have felt that people would like to do more but they face some self-created guideline or regulation that prohibits doing it. People would like to be involved but then you face that we cannot do this or this is not our basic objective. Or, that there are no resources." (an employee from the public sector)*

*Lack of support for situated network building and management.* The individual employees, whether from the public sector, private companies or third sector organisations, needed to build their own networks for alternative service offerings, based on their personal connections. The interview findings showed contradicting views to this kind of formation of service networks based on person-to-person interactions, rather than the administrative process. One example is related to an experimental sub-project as part of the L project. The sub-project aimed to pilot a care management system that provided alternative solutions for customers to choose services. A care manager was hired for the pilot and during the project she created a network that encompassed various actors from different sectors. However, after the project, it appeared that this network built by the care manager was at the end the main body of the service network in the L neighbourhood. After the pilot period had ended and the care manager had left from the project, the network she had built was then in risk of vanishing; there was no mature system or collaborative model, which can support this network to sustain and evolve (see also Nykänen, 2013; Nykänen & Jyrämä, 2013).

In addition, from the private sector perspectives, the care management involved an issue of 'fairness'.

*"Care manager... She is in charge of a lot of things... It influences.. one cannot claim that the situation was completely objective...the client selects from what she is told about. ...this is my impression, that she would do quite objectively and I hope that it succeeds." (an employee from the private sector)*

Not surprisingly, the entrepreneurs wanted to build their own personal networks with the public sector employees working at the neighbourhood. The entrepreneurs suspected that the public sector employees sometimes recommended particular private service providers based on their personal networks, although it was against the regulations.

The L project envisioned the potentials of service networks based on human relationships, although there were issues of fairness and legislation to be solved. Building the service network and operation processes through human relationships can make the service customer-centred, humane and effective. The important question was then how to support the formation of personal networks so that it can give equal opportunities to different actors and be developed sustainably.

## Opportunities of Design for Balanced, Customer-Centred Service Network

As the interview findings show, the challenges that the participants encountered during the project included 1) how to find out what the customers really need and 2) how to enhance the network development to fulfil those personal needs and 3) how to support the network and collaboration to evolve. The service design approaches were applied in the L project to deal with these challenges, which was an experiment for both the service organizations and the design researchers. In followings, we will describe our observations on what the design tools have enabled for the L project and what still remains as challenges.

*Finding out and sharing what the customers really need:* Frontline employees working with the customers face the everyday life of the elderly customers' daily. Because of the hierarchical structure of the public sector organisations, it required substantial efforts to share these insights with people in a managerial level. In the beginning of the L project this understanding was brought all the way to the management level by various means. In the beginning of the project videos based on customer interviews were used as a tool to 'wake up' the decision makers.

*"...service designer who went to customers' homes and created the video, it was terribly revealing and important for the whole project. It woke you up that even it was known in theory in what kind of service jungle clients are trying to cope, it really woke up to." (an employee from the public sector)*

Later in the project design probes were also used to enable customers to reflect their everyday life and service needs. The probes kit was designed and prototyped by a design student (Elo, 2012) in collaboration with other network actors and customers. It provided a tool for dialogues between the family and service providers and brought new kind of understanding even from customers familiar to frontline employees.

*"In these probes kits there has been issues from familiar customers that I did not know before, even though I have worked with them. It supports to understand better the customers' situation. During a home visit the background of the customer might be promptly touched upon and the time before the family care, but they are not really gone into. When social department offers services that the customer does not want to have, a device like the probes can help in understanding the reasons why. More customer understanding." (an employee from the public sector)*

The interviewees saw the probes not only as an excellent tool to inform the design process but also as a feasible way to build actual service ensembles for specific customers. In addition, it was recognised that the probes sifted the focus from the traditional approach of concentrating on the problems of the customers' everyday life to positive things that could be supported by the services provided by the network. The senior citizens' needs often support to assemble and coordinate the interrelated services. Thus, probes were seen as a tool to empower customers to be part of the service personalisation.

*Enhancing the network development through co-design and visualisation:* Interviewees' comments on the role of service design suggest that co-design workshops and visualisations have been valuable in bringing people together to discuss, map and rethink, producing synergies in the networks. Designers' ability to visualise the user perspective and complex ensembles was seen important for changing the perspective. In the beginning of the project, customers' personal service networks were mapped and visualised through customer interviews. It is noteworthy that from customers' perspective, the service networks were not limited to the social and health care services but the service needs expand to other areas of the everyday life, such as transportation and culture services. Thus the design tools helped to identify who are the key people or organisations for the service network from customers' perspective. Visualisations of service journeys were appreciated especially for bringing a new humane perspective, compared to written documents and flock charts used traditionally. They open up entities and their connections and create a shared platform for discussions on the future possibilities. They can be applied as open-ended tools that allow negotiations between different parties (Mattelmäki et al., 2011).

Workshops were also seen as an informal platform for understanding each other's perspective, realizing conflicts and similarities. Design's role was to enable the stakeholders to find the common language and objectives through a human-centred lens, as well as enable the challenges and solutions to co-evolve.

*"The workshop, what was talked about, I feel that the right things were discussed and quite special was that in group work the same setting that this whole project is about was, displayed in a miniature size. People talk different languages, they depict the context and the field in different ways... But terribly interesting because it represents co-creation that takes place in borders of different practices."*  
(an employee from the private sector)

*Supporting the evolution of the network and collaboration through experiments:* The L project was a pilot in itself as it was one of the first projects aiming at creating a cross-sector service network in the municipality. During the project two service concepts were piloted; the care management system that aimed to help customers navigate through the service jungle and personal budgeting that provided a new kind of financial assistance to enable more personalised service through cross-sector collaboration.

This kind of pilot projects was seen as an important platform for prototyping new perspectives and new ways of working as well as designing across organisational boundaries, building trust and creating prerequisites for the future collaboration. According to the interviewees these models had been piloted successfully before for example in UK. In the L project, however, the pilots revealed the limitations of Finnish legislation and the immature and fragile service networks. This kind of experiments is needed for fragile liaison to be nurtured. This project was just a start for the local service network development, which cannot be done in a short period of time. It is important to understand that a main role of design is to provide a platform and tools for the collaboration to emerge and evolve even after the project.

## Discussion and Conclusions

The preliminary analysis of the needs and barriers for the networking indicates that in addition to customer-centeredness, inter-organisational collaboration between different service network actors is crucial in service design. In general, the project was appreciated that it was able to strengthen customers' perspective in the service development, enhancing their awareness of freedom of choice and control of their own life. The weakness was the fact that the approaches of 'service design' and 'cross-organizational collaboration' were also considered as event-like experiments, rather than as practices to be implemented to everyday operations of the organisations. The organizations need supportive tools and resources for nurturing the new approaches. In addition, the decision-making has to change from top-down to more volunteer direction driven by real excitement of developing something meaningful. It is also important to understand who are involved in the network development and what kind of attitude is needed. The collaboration should involve all levels at the hierarchy from customer interface employees to the middle management and the upper management as well as the people actually implementing the designed touchpoints from web designers to interior architects. The change requires time and space, resources to be implemented.

The study discussed in this paper is part of an attempt to study how design approaches can be embedded and support the complex setting of cross-organisational networks. This paper presented a preliminary analysis of experiences gathered during the two-year development project aiming at formation of local cross-organisational service networks. The development project led the participating organisations and design researchers to realize their different viewpoints and structural challenges. As promoted in co-design practices, especially for organisational changes, making conflicts explicit within collaboration units is the springboard for achieving a shared understanding and framing solutions (e.g. see Buur & Larsen 2010). The development project was just a start for the processes of networking and collaboration. In the future, the questions we aim to study include how to foster human centred perspective and empathy in complex network and how to enable organisations to design co-creation processes to better serve the customers, as well as themselves.

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