The transformative role of service design – a case study of a public library

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Abstract

Using a wider context of a growing role of service design (SD) in different change processes, the aim of this article is to explore the transformative role of service design on two levels: organizational and societal. We investigated a transformation process of a public sector organization – a public library, showing how service design can be a vehicle of organizational and societal changes. We were able to map 3 cycles of transition that have been gradually expanding the visions, theories of change, mindsets, and new ways of designing in the organization, helping to achieve more and more agency in transforming, first the organization, and then local community. The article contributes to the growing body of knowledge connecting design with change. It also creates a more in-depth understanding of how SD can become a vehicle for transformation in a public sector organization.

Keywords: service design, transition design, organizational change, public organization

Introduction

The connection between design and change has been widely investigated in the literature (Buchanan, 2008; Deserti & Rizzo, 2014; Junginger, 2015; Junginger & Sangiorgi, 2009). Different authors have explored how design interacts with artifacts, behaviours and norms, values and assumptions, when creating change (Junginger & Sangiorgi, 2009; Salmi & Mattelmäki, 2021) or how design can challenge institutional logics, highlighting that the adoption of design requires both micro and macro changes in the organization (Kurtmollaiev et al. 2018).

The relation between design and organizational change is reciprocal. On one hand, design, by changing/improving products and services, creates change in the
On the other hand, to be able to use and successfully embed design, certain aspects of the organization need to be changed (Malmberg, 2017). Design capabilities cannot be developed directly by adding resources in the organization; the process requires the development of structures, routines, or processes that enable the use of the design competence and the assimilation of the design practice (Malmberg, 2017). That reciprocal relation seems interesting and not yet fully explored in the literature.

This article focuses on broadening role of service design (SD). SD is well established discipline offering sets of methods and tools that help to improve service experiences and offerings, but recently being more and more recognised as both a new way of thinking and a practice that can trigger change within organisations (Iriarte et al., 2017; Junginger & Sangiorgi, 2011; Lin et al., 2011). Some researchers claim, however, that the value of service design in organisational change is often overlooked and that in most cases, while using design for service innovation, the focus is more on the outputs than the change that SD can potentially bring (Sun 2022). Kurtmollaiev et al. (2018) go even further highlighting that organizational attempts to use SD are predominantly descriptive or prescriptive and do not offer an in-depth analysis of the potential organizational consequences in the form of transitions and transformations, therefore losing a chance to create bigger impact.

At the same time transition design (TD) is a framework offering a broad perspective of transition, that potentially can be interesting to combine with SD. Transition design is based upon longer-term visioning and recognition of the need for solutions rooted in new, more sustainable socioeconomic and political paradigms (Irwin 2015). Irwin’s approach to TD refers to a number of theories of change, that focus on large paradigm shifts, in the ways in which such changes have been envisaged in living systems (Prigogine and Stengers 1984), in socio-technical systems (Kuhn 1962, Dosi 1982) in business (Freeman and Perez, 1988) and in the studies of socio-technical transitions to sustainability (Geels et al 2010). The common traits of such studies consist in analysing the links between change at different scales, from niches to socio-technical regimes and to socio-technical landscapes (Geels et al 2010). The approach proposed by TD aims at generating systemic changes that involve all the scales of such change, thus defining new paradigmatic vision of systemic change. This approach is therefore challenging the existing paradigms, by applying speculative, long-term visions of sustainable lifestyles, in the perspective of inspiring and informing the design of short- and mid-term solutions (Irwin 2015, 2018). We think that TD framework can inspire SD and offer long term perspective.

The aim of this article is therefore to explore the transformative role of service design within the context of public sector organization – a public library. By combining SD with TD, we investigated a transformation process of the organization, exploring how
service design, when combined with transitions design’s long-term thinking, can be a vehicle of broad organizational and societal changes.

Our contribution to the theory is twofold. First, we advance the work of researchers investigating the relation between design and organizational change, looking at how design can be a tool for wider organizational transformation. Second, we explore how service design can relate to the transition design and how it can become a vehicle for change and transformation in a broader societal context.

**Service design and organisational/institutional change**

Service design has become a well-established field with its own relevance (Secomandi & Snelders, 2018) and more and more authors are linking SD with change, mostly in organisational/institutional areas.

Kurtmollaiev et al. (2018) reported that recently instead of merely bringing new services, (service) design projects have far-reaching consequences for organizations, prompting significant changes in the organizational mindsets and routines. The authors, building on the institutional logics perspective and acknowledging the role of individuals’ institutional work, identified the macro-level and micro-level mechanisms of the organizational logic transformation that SD induces. Salmi & Mattelmäki (2021) bring on a different perspective, focusing on organizational change as a co-design challenge. The authors claim that organizational change can be addressed as a human process of building relations that takes place in various interactions, especially focusing on designers facilitating co-design for change. They focus on the in-between space revolving around the two organizations: the facilitator team and the company project team. Looking closer into the relationship between SD and organizational change, Iriarte et al. (2018) investigated how Service Design was applied to foster transformative strategy and processes in an insurance company. The experiment has shown that SD can help companies to identify new business opportunities, as well as assisting organisational transformations.

Together with growing interest in SD, two different views about service design have been developing in parallel in the literature: ‘designing services’ (Secomandi, 2011) and ‘designing for service’ (Sangiorgi & Prendiville, 2017). The first, ‘designing services’, considers services as the objects of design activities, just like products are the objects of product design. The second, ‘designing for service’ stream, recognises that what is being designed is not a result, but rather a platform for action, with which diverse actors will engage over time (Manzini 2011, Sangiorgi 2011, Morelli et al 2020). This approach is therefore broadening the role of SD, where service designers
can be engaged in facilitating changes across boundaries of organisations, communities, and societies. Sun (2022) highlights how some projects evidenced that service design had the potential to move into the realm of transdisciplinary innovation and facilitate collaboration across boundaries and to engage various stakeholders in searching for solutions to complex problems. The ‘designing service’ therefore seemed to be more relevant to a planned change process whilst ‘designing for services’ can be more relevant to emergent bottom-up change through organisational learning (Sun 2022).

Seravalli & Witmer (2021) take the relation between SD and change a bit further, proposing a framework to see organisational change as a matter of attempting to transform practices (i.e., the way people do things), structures (i.e., formal hierarchies, procedures, and documents that organise and legitimate practices); and assumptions (i.e., the values and beliefs that underpin practices and structures). The authors claim that Service Design projects can gain different levels of depths into the organisation and can have therefore different kinds of outcomes and impacts Seravalli & Witmer (2021): service interaction design; service design intervention; and finally organisational transformation. In the last case, SD requires deep transformations that touch the fundamental assumptions of the organisation.

Transition design framework - broadening the role of SD

The practice of transition management, proposed as an operative strategy to deal with systemic complexity (Loorbach & Rotmans, 2010), is increasingly influencing design studies, which are exploring ways to work between single, limited cases and wider systemic domains. Looking at a way to govern large changes, Kemp and Loorbach (2006, p.103) describe transition management as a “forward-looking, adaptive multi-actor governance aimed at long-term transformation processes that offer sustainability benefits”.

While designers have largely been working on specific cases of innovation, concerning products or services, their role in diffusing/replicating innovation or scaling it up to an institutional or systemic level is still being explored (Morelli, 2015, Manzini and Rizzo, 2011). In those cases, large transformation changes have been seen as a possible result of a bottom-up design action, from small and short-term actions to a broader and longer-term changes.

Inspired by Geels ontologies of socio-technical transitions (2010), Morelli et al (2020) explore change at different scales of intervention and interaction through SD. Their perspective identifies three levels: (1) the level of interaction, in which designers support the action of value co-creation, that generates change (the niche level in
Geels’ Ontology), (2) the level of infrastructuring, in which designers contribute to generating the technical, organisational or social conditions to support the value cocreation activity (corresponding to Geels’ socio-technical regime) and (3) the level of systemic institutions (corresponding to Geels’ socio-technical landscape), in which designer contributes to social, cultural and institutional conditions that support change.

While the above-mentioned contributions suggest a structure to frame design action at different levels, Terry Irwin (2015) proposes a strategic framework for provoking systemic change. According to Irwin, a linear cause-and-effect thinking has influenced the design and development of societal infrastructures and has contributed to many of the global wicked problems. Irwin draws upon the transdisciplinary body of knowledge related to the dynamics of change within complex systems to challenge these assumptions and proposes a new approach to design and problem solving.

Transition Designers see themselves as agents of change and are ambitious in their desire to transform systems. They also understand that transition calls for a commitment to work iteratively at multiple levels of scale, over longer horizons of time (Irwin 2018). Transition Designers look for “emergent possibilities” within problem contexts, as opposed to imposing pre-planned and resolved solutions upon a situation. This approach is highly transdisciplinary, collaborative, and rooted in the understanding of how change within complex systems manifests (Irwin 2015, p. 237).

Burns et al. (2006) highlight the need for constantly adopting, adjusting as a requirement of new, constantly changing environment:

> Because organisations now operate in an environment of constant change, the challenge is not how to design a response to a current issue, but how to design a means of continually responding, adapting and innovating. Transformation design seeks to leave behind not only the shape of a new solution, but the tools, skills and organisational capacity for ongoing change (p. 21).

In her publication Irwin (2015) proposed The Transition Design Framework with four mutually reinforcing areas: (1) **vision for transition** (the vision towards more sustainable future requires new knowledge about natural, societal and designs systems), (2) **theories of change** (ideas, theories and methodologies from different fields and disciplines and deep understanding of dynamics of change, that will influence mindset and postures), (3) **mindset and posture** (living in transitional time requires a mindset and posture of openness and willingness to collaborate), and (4) **new ways of designing** (the transition requires new ways of designing, that will help realise new visions for the future). The four areas in Irwin’s model are mutually reinforcing each other and co-evolving.
Combining SD with TR

The article aims to analyse the relation between the two frameworks presented above: Service Design and organizational change framework with Transition Design framework. The different theoretical models described above, served as an initial inspiration for our research study. In the following part of the article, we show results of our exploration, using an example of the public library we studied.

Methodology

Data

Given the limited empirical understanding of design in public organizations, we designed a study based on a qualitative and exploratory approach to data collection (Bryman & Bell, 2007). For the purpose of our study, 7 in-depth interviews were conducted.

The interviews were conducted from May to September 2022 and lasted from 40 up to 120 minutes. The interviews were recorded and transcribed. A brief interview manual was used comprising different areas of interest: approach towards design and service design in the organization; organisation of design competency in the municipality; roles of a (service) designer; challenges and benefits from design and service design; and other topics. The content of the specific topics varied from respondent to respondent. Details of respondents other than roles and institutional affiliations are omitted and anonymized due to confidentiality issues.

Data analysis

The first step in our analysis consisted of coding the material, identifying statements and other sources linked to descriptions of design facilitation and change. The research approach was iterative. We continuously compared theory and material, iterating towards a theory that closely fit the material (Eisenhardt, 1989; Edmondson & McManus, 2007). As we began to conduct interviews and code our data, we compiled a preliminary list of first-order codes. Using Miro software, we used short text fragments to summarize different aspects of the DT work and their different approaches to it. Our empirical work and insights from the literature helped us identify overlapping areas and fine-tune different approaches.
Transitional service design – empirical study

The following section presents the empirical part of the paper. The organization, by adopting SD framework, was able to start the transformation process, that became much wider than the organization's boundaries. The narrative is a synthetic report of a progression of actions and findings that have been mentioned in interviews with the library personnel. It is therefore the ex-post narrative of the progressive development of transformation of the library; however, the way this narrative is explored in this paper does not necessarily represent a specific time sequence, the events described in the sequence may have been overlapping, or the order of actions and findings may have not been exactly corresponding, timewise, to the sequence described here in which we distinguished 3 different phases.

The initial phase - SD for organizational transformation

The change process was initiated in 2005 with a decision of a new main public library to be placed in a new part of the city, in a big, modern building that was being developed. The building was meant to become an important part of the new urban area, containing the library, together with some other services for the city. That new vision for the city area also required a new vision for the library.

This possibility to relocate to a new, modern space, also helped to inspire the library management and personnel to look for a new social role, described as a brave vision to create “a library for people, not for books, now it’s not new, but back then it was a revolutionary thing”. Already back then the library management was convinced that the library needs to find a new role in the society, as the traditional role of lending books started losing its meaning and significance.

The new vision was manifested with ambitions to make an organizational change in many different areas in the organization (Table 1).

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
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<tr>
<td>Space for media</td>
<td>Space for people</td>
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<tr>
<td>Information</td>
<td>Meaning and significance</td>
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<tr>
<td>Well informed</td>
<td>Experimental</td>
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<tr>
<td>Serious</td>
<td>Playful</td>
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<tr>
<td>People as visitors</td>
<td>People as resource</td>
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Table 1. New vision in the library
In the new vision the library was aiming to become a space for people, being experimental and playful, instead of being space for media, serious, well informed and focused on providing information. The major shift was about the library users; instead of being passive visitors, the ambition was to consider them as a resource in creating the new library.

The new vision required a new approach. The library’s employees embraced SD approach, tested a lot of different ideas, and worked on several tools that could facilitate the change process and help to make the new vision more tangible and manifest in different concrete changes in the organization. One of the main shifts was to engage in co-creation and active citizen engagement in creating the vision of the new library.

“We needed to figure out how to involve the users and the rest of the city in this transformational process, we needed to know more about how to do co-creation and user involvement.”

The new mindset of co-creation was manifested by using a lot of different tools and generating new ways for library employees to implement new ideas:

"we wanted to create a library of the future, but we knew that in order to do that we also need to change our mindset, so the mindset back then was that the library was a space for media, but we wanted to go in a different direction, so we had to find a lot of tools back then that helped us to shape a new mindset for this new library”.

One of the new ways adopted by librarians was prototyping with citizens. The librarians, still operating in the old building, created a transformation lab – a physical space, where the co-creation of different ideas about the new library, were developed and tested with the users:

"We took different parts of the library and tested them there. (...) it was a place where we could try out new things, where it was ok to make mistakes, ok to do all the crazy stuff, and it was also a way to show the users that the library is changing, and showing the stuff members here that the way you work will change and we want you to be part of it”.

Service design’s tools and methods, together with design thinking tools, adapted in the process, became a basis of the organizational transformation, where the new vision could be realized.
The Second phase – networking and collaborating with externals, becoming a change agent for other libraries

The efforts of creating a new library vision became visible in the library world, also internationally. The dedication to redefine its role and new approach to change gave the library a wider perspective on the function libraries could have in the urban context.

"Slowly, we started helping other libraries to reflect “if you keep focusing on books, the libraries will not survive. So, what to do to stay relevant to their communities?”

In this way the new vision for the library was to become a change agent for other libraries to take on the new roles. After a few years of prototyping in the transformation lab, the library was offered a grant from the Gates Foundation to develop a toolkit for innovation to be used in other libraries. That led to a close cooperation with Chicago Public Library and IDEO consultancy and the new development cycle where the library started helping create change in other libraries.

"So they noticed that we were doing something important, and they asked us to help develop an innovation model that will be relevant for other libraries. (…) so after working for many years with prototyping, doing user involvement, workshops, and lots of different things, we got onto a totally new level: teaching others. That helped us to become clearer in our own description of our approach to innovation”.

The library took part in a process of developing a toolkit, that was aimed to help other libraries to innovate. IDEO led the process where the librarians, engaged in developing the toolkit, visited, and researched 10 different countries, and synthesized learnings from their initial design experiments into the toolkit. After the toolkit was developed, the library team started visiting different countries (examples given: “Iceland, Russia, China, Japan, Africa, EU, all over the world”), helping libraries to develop new roles and working in a human centered approach.

**New mindset.** The process of helping other libraries to shift the mindsets and develop new roles, has given the librarians a whole new role of becoming change agents and innovation consultants for other libraries.

"Now we go and teach others, who are paying us for the services. But now we know that the organization needs to do something even before the standard training (…) we can come and do workshops, but it’s not done through a short learning period. You need to have a lot of follow-ups and you need to have a focus from leadership in order to continue this in different ways".
New ways of designing. In this learning process, the library employees learned that in order to help the local libraries become successful they need to help them reach out to the local partners and activate the local networks:

"We are trying to make the libraries that we train to become more capable to reach out to different local partners so that then they can continue to work with these tools (...) we also created a global network of libraries that work with design thinking and innovations, so they can exchange the learning with each other".

To sum up, the second phase was a period of gathering cross-organizational experiences and working with global partners helped to gain expert level experience and become a role model for change for other libraries.

The third phase, Transition Design – planet centred approach tackling societal issues

The third phase started gradually as a response to the big societal movement towards sustainability, but also as a response to democracy challenges or the global pandemic from 2020.

Focusing mostly on sustainability and using expertise from the transformation lab, the library created Sustainable Development Goals lab (SDG lab). An unused area in the library building was transformed into an experimentation space, where different actors from the city could be engaged in practical experiments towards sustainability.

"We created the SDG lab, it’s for everyone in the city. We saw that we, as society, have those huge problems, but as a citizen, what can you do about it? So, we created a space where people can come together, you can borrow it and have workshops, different gatherings, reuse stuff, repair stuff. In this way the library can become part of solving societal challenges and become platforms for transition".

In this phase the library started to develop the idea of becoming a dream lab for the city, a space where more positive, desirable future can be envisioned. Creating a space for experimentation and empowering citizens to contribute to building more sustainable city became part of new vision. In words of one of the librarians, the current framing of many issues needs reframing – from a negative narrative to a more positive one. One of the ways to experiment around that reframing was an idea of a dream lab; a space where a positive dream about the future could be co-created by the local community.
"We are in the middle of many different crises: pandemic, war, energy crises, democracy crises. It’s all so negative and people are tired. We think that the library is almost one of the last places where everyone can come together across ages, backgrounds, etc, and maybe it can become some kind of dream lab for the people? We don’t know exactly how it should look, but we are trying different things now, we are trying to figure out what would that look like"

The librarians were talking that with all the challenges we see in the world, different communities must come together and co-create ideas for better future. In that case the library can become a part of the critical infrastructure in the society, where people feel empowered to make a change:

"We could be a critical infrastructure that supports public imagination and a sense of agency in the world".

Theory of change. In this new vision, the library started creating a critical infrastructure having an active role in promoting action towards emerging issues in a world of crisis.

"We are testing how a library can be a democratic space and give citizens confidence in democracy. (…) We are building a space and facilitating discussions of different groups of citizens around different topics."

New mindset. The mindset change can be seen in the shift of library from “a neutral space of knowledge” to an active facilitator that support action on crucial cultural and social issues like:

“Creating a space and empowering citizens to contribute to building more sustainable cities”

This consideration led the librarians no longer to think in terms of human centred design but rather to adopt the new perspective of planet/humanity centred design.

"Since we developed the toolkit in 2015, the world has changed a lot. Back then we believed in a human centred approach, we had people at the centre of the process. Now we’re talking that it’s not the people, but rather a planet, or humanity, so we need not to put ourselves in the middle, but the planet, nature, everything around us. That's a big shift".

New visions. The observation of the library as an operative support to transformation led to the idea of libraries as a platform for transition. The particular role is the new vision qualifying libraries as civic centres, where several activities can be co-developed by local community, addressing and initiating changes on more political level.
Summary and discussion

In summary, the empirical material helped us to distinguish the three different phases of the change process within the library. We distinguished 3 phases of transition that have been gradually expanding the visions, mindset, and new ways of designing in the organization, helping to achieve more and more agency in the local community.

In the first phase, adoption of the SD tools and methods, helped to redefine the new vision for the library. SD helped transformed behaviours and artefacts, impacting values and norms, as well as fundamental assumptions, mostly by using the transformation lab and prototyping as a new approach. SD became a framework for organizational change (Seravalli & Witmer, 2021), that was a basis for the latter two phases. In this way the bottom-up perspective to organizational change brought the results beyond the scope of the project, bringing change much wider than initially expected, requiring changes in the organizational system (Junginger & Sangiorgi 2011; Deserti & Rizzo, 2014; Kurtmollaiev et al. 2018).

The second phase was a period of gathering cross-organizational experiences. The close cooperation with IDEO - global design consultancy - helped to elevate the library into the expert level experience. The worldwide networking became the opportunity of gaining diverse experiences, helping the library to become a leading actor and a role model for other libraries. That period helped to identify and bridge different libraries in the process of co-creative envisioning futures of libraries (Irwin 2018).

In the third phase that role of developed even further, as the library has become a platform for transition on a broader, societal level, inspiring, energizing and leading other actors in the network. In this phase the library personnel have embraced more-than-human perspective, inspiring, energizing and giving agency to the local community in developing a dream vision for the city, working with sustainability and democracy. That reframing of the vision can be seen as a step towards transition design, where designers take on much multifaceted role of shifting the entire systems, while working on broad, societal problems (Irwin 2015, 2018). In this phase service designers have embraced the role of transition designers – extending the visions, reaching for new tools, methodologies, embracing new theories of change that affected not only the organization, but also other network in the local community.

Service designers becoming transition designers

Our case demonstrated how SD generated, implemented, and institutionalized changes within the organization, by implementing a human-centered approach that
involved people from within and from outside the organization in ‘reflection-in-action’ (Junginger 2008). Junginger & Sangiorgi (2011) suggest that successful and sustainable new services, which aim for lasting transformations, require reflective inquiries into organizational systems. That is what we observed in the organization; adopting SD tools and methods, has reflected in a big organizational transformation, which resulted in a change beyond organizational boundaries. Junginger & Sangiorgi (2011) notice that new products or services rarely can be developed in isolation from wider organizational systems, therefore design influences organizational norms, structures, and often even an organization’s vision. In the case considered in this paper, the change emerged from reconsidering the relation with citizens (in the first cycle), with the cross-organizational context (in the second cycle) and with society and wider context, the planet (in the third cycle).

To sum up, service design and transition design are two related, but distinct fields. Traditionally SD focused on creating and improving services, while some new, more broader views on SD has been developing. Transition design, on the other hand, takes a broader view, seeking to design more sustainable systems and processes that can address complex social and environmental challenges (Irwin 2015, 2018). Our case showed that service designers can embrace more broader role of transition designers, where developing systems thinking mindset, collaborative and co-creative relations with varied stakeholders, embracing visionary, more-than-human perspectives, are at the core of that transition.

Contributions

Our research contributes to the growing stream of literature on design and change. By showing more specifically how service design contributes to wider organizational change, we aim to give designers, as well as managers, a deeper understanding how service designers can take on more active roles in creating transformations, where design tools and methods can become a way to address current complex and wicked societal problems.

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