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Service design in organisational change

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Abstract: This paper reports an empirical study analysing 80 projects delivered by two leading service design agencies to understand the relevance and breadth of service design to organisational change. The analysis revealed two clearly divided camps of service design practice, playing different roles in organisational change and representing two distinct definitions of service design. 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. This makes service design practice of this kind acutely relevant in addressing the challenges facing our society from the COVID-19 pandemic. This paper approaches the topic from two specific angles; one is taking a systemic approach and the other is focusing on service design practice and the sector. It provided much needed empirical evidence to understand how service design practice is used in and contributes to organisational change. Further, it contributes to the current discussion about the definition, boundary and context of service design practice.

Keywords: service design, organisational change, covid-19, transdisciplinary innovation.

1. Introduction

The Covid-19 pandemic will have a prolonged and fundamental impact on our life from many different aspects. It has challenged both the national healthcare system and how individuals manage their own health. Lockdowns, both national and international, have partially broken many economic foundations, from globalised supply chains and manufacturing infrastructures to everyday shopping habits and delivery methods. The resulting economic recession has affected a great deal of organisations around the world. As well as facing economic uncertainty, they have had to rapidly develop changes in response to the public-health environment, public policy, and customer behaviours (Finn, 2020) in order to be more resilient and sustainable. This leads to the exploration of new methods and ways of working that can lead to innovative responses to the crisis through ongoing and continuous change.



This presents challenges as well as opportunities for service design, a practice that applies design thinking and methods to service innovation and beyond. It facilitates a specific kind of design-driven innovation, which is oriented toward generating new service ideas and new or improved modes of experiencing the service on offer, using technology potentials or the interpretation and proposal of new models of behaviour (Maffei et al., 2005).

The changes on the horizon, such as the imminent Fourth Industrial Revolution, and the urgency for acting on the UN's Sustainable Development Goals, climate change and the Planet Boundary Framework, require change in various ways. The pandemic has certainly sped up this urgency. It is timely to discuss the relevance of service design's potential in delivering what is much needed in order to transform our thinking, our norms, and our systems in response to COVID-19 related challenges.

This paper particularly focuses on service design in organisational change based on an empirical study reviewing the outputs of service design practice.

2. Service design and organisational change

2.1 Service design

Design was traditionally associated with making visual artifacts and industrial products. In recent years, the boundaries of design have been expanded to include many new territories e.g., service, system, strategy, policy, and business model (Buchanan, 1992; Klaus, 2007). These have become the frontiers of design that have extended its meaning and practice.

Service design is an example of these frontiers of design. It has been a growing interest to both the business world and academia for a number of years. We can already see the flourish of research activities and rapid growth of educational programmes worldwide. In business, well-established design agencies have started to adopt service design and to establish internal practices of their own, such as Adaptive Path (UX), Frog (product design) and IDEO (design thinking). More recently, we see finance and management consultancies acquire entire service design agencies to rapidly expand their offerings, e.g., Fjord has been bought by Accenture in 2013 (Granstra, 2013), and Veryday by McKinsey in 2016 (consultancy.uk, 2016).

Service design has become a well-established field with its own relevance (Secomandi & Snelders, 2018). Two views about service design are distinct: 'designing services' (Secomandi, 2011) or 'designing for service' (Sangiorgi & Prendiville, 2017). 'Designing services' considers services as the objects of design activities, just like products are the objects of product design. This view seems to be shared by the majority of service design agencies as demonstrated in their taglines, for example: 'Livework designs better services' (Livework, 2019) and 'Designing remarkable services and customer experiences' (Engine Service Design, 2019). The 'designing for service' perspective is more prevalent in academia. Service is considered as a context and platform where design activities take place. As Manzini (2011) argues, the term 'designing for service', instead of 'designing services',

recognises that what is being designed is not an end result, but rather a platform for action, with which diverse actors will engage over time. Similarly, Kimbell (2011) considers the concept of 'design for service' as a particular kind of service design. This view points out the collaborative nature of service design and its limitations in the wider process of service innovation.

While service design is defining its scope and boundaries, it has also been applied to a wide spectrum of areas, including business model innovation (Prendeville & Bocken, 2017), healthcare (Patrício et al., 2018), organisational change (Iriarte et al., 2017), and public sector innovation (Trischler et al., 2019). Amongst these, there are service designers who find themselves engaged primarily in facilitating changes across boundaries of organisations, communities, and societies. This presents an emerging area of interest for research.

2.2 Service Design in Organisational Change

Service design, apart from being a set of methods and tools that help to improve service experiences and offerings, is recognised as both a new way of thinking and a practice that triggers change within organisations (Iriarte et al., 2017; Junginger & Sangiorgi, 2011; Lin et al., 2011).

Junginger and Sangiorgi (2011) suggested that in supporting organisational change, design inquiry can be used as a conversation with the organisation to unveil the deeper assumptions in framing the current situation. This can then develop into a long-term collaboration and can lead to seeking a stronger commitment from the organisation in order to form an agreed vision and an agenda for change.

Starting with investigating human-centred product development, Junginger (2005) suggested design be used as a strategy for change because *'it constitutes a systematic approach that links and unifies the four elements of the organisation, and therefore views product development as a relationship-building activity'* (p33). She then suggested that the use of user research, participatory design and iterative processes can potentially facilitate organisational learning.

This thinking leads further into the realm of service design that has the aim of building a bridge between the theories and practices of organisational change and service design. Junginger and Sangiorgi (2011) propose an orienting model suggesting that service design projects could have three levels of involvement with and a substantive impact on organisational change. (1) the design and redesign of service interactions; (2) service design intervention through questioning the norms and values of the organisation; and (3) organisational transformation when the service concept touches on the fundamental assumptions of the organisation.

Sangiorgi (2011) further elaborated on the transformative role of design practice, considering design as an engine for organisational transformation and behavioural change, instead of seeing services as the end outcomes of design. She suggests that this

transformative role of design could be extended into a social context for society transformation. Based on the assumption that the emphasis of transformation design is on participation and empowerment, she proposes action research as a methodological framework for the practice.

However, it is recognised that most cases using design for service innovation focus more on the outputs than the change that they potentially bring. The value of service design in organisational change is often overlooked. Although research has acknowledged that services relate to complex systems (Briscoe et al., 2012; Vargo et al., 2008) and transformative interventions (Sangiorgi, 2011), few reflect on how these relate to organisational change or links to existing organisational theories. The importance for service design to address deeper assumptions and social norms, rather than to change individual service interactions alone was recognised in Deserti and Rizzo (2014)'s study. Junginger (2015) considers this missed opportunity as 'design legacy': 'Too often, we think of our role as one of providing a solution, as coming up with an answer for the organisation we work with. ...We seem to be less prepared or equipped to enquire into design and its broader role in the organisation.' (P221)

2.3 Research Aim and Focus

This study aims to address the gap in our knowledge to continue the discussion of service design in organisational change. With the impact of COVID-19 pandemic, it is even more important to understand the value of service design in facilitating changes within and across organisations.

This study includes two specific intentions. First, it focuses on service design practice in contrast to academic research. Design literature has developed a range of propositions to rationalise the value of service design in organisational change as previously discussed. However, most of the discussion about the relevance of service design in organisational change is largely limited to theoretical exploration, apart from a number of case studies (Deserti & Rizzo, 2014; Hyde & Davies, 2004; Iriarte et al., 2017; Junginger & Sangiorgi, 2011). The coherence of the theoretical thinking on the practice has not yet been fully articulated. It is unclear the extent to which this thinking and practice is shared amongst the professional community of service designers. In addition, it is not clear whether organisational change is part of the service design practice in this sector.

Service design is an area where its practice is ahead of academic research. The practice of service design has more than 30 years of history in the UK. A number of well-known consultancies, including Livework, Engine, Fjord, and IDEO, practice service design, collaborating with a wide range of clients from the private, public and third sectors, including the BBC, Transport for London, Barclays, VW, Vodafone, Virgin, Jaguar, NHS, and Philips. Their practice is an area of interest for research. However, there is not a coherent understanding of whether these agencies work on projects supporting organisational change or of how.

Secondly, this study takes a more systematic approach in contrast to a singular case study. New areas of interest and new territories of intervention are emerging continuously in the service design area. These case studies are extremely important in understanding the nuance of emerging areas of practice. For example, Burns et al. (2006) reported on RED (a five-year project funded by the Design Council), one of the early pioneers, that clearly recognised that the project design 'left behind not only the shape of a new solution, but the tools, skills and organisational capacity for ongoing change' (p.21). They suggested the design process and the skills inherent in designing inform a new method of transformation. Another example is Deserti and Rizzo (2014)'s article that reported an empirical study and articulated the impact that design projects had on organisational change.

However, it is unclear how representative these case studies are and whether service design in organisational change is a shared practice. After analysing academic publications in service design over the past two decades, Sun (2020) suggests the gap in service design research is caused by a lack of systemic approaches to the subject matter. She calls for a new research agenda that goes beyond practice-based research in order to embrace more objective and systemic approaches. This is especially relevant to this research area: service design in organisational change. Therefore, this study takes a systematic approach to building an objective and holistic view on the scale of service design practice in organisational change.

This study aims to understand the relevance of service design practice in organisational change, through a systemic investigation into

- the types of projects that two leading service design agencies work on (Objective 1);
- how these projects are relevant to organisational change (Objective 2).

3. Research methods

3.1 Sample

An empirical study was developed to collect data in order to develop an understanding of what service design agencies worked on. Two leading service design agencies were selected, both being considered leaders in the field of service design, operating at the frontier of service design practice. Consultancy A has a history of more than 15 years and now employs more than 35 people. Similarly, consultancy B was established in 2001 and now has six studios worldwide.

As the focus was on the type of the projects and the outputs, rather than the design process, the study took the information that was used to showcase their practice from their own websites as the source of data. A total of 80 project descriptions were extracted from the agencies' websites. 31 of the projects were from Consultancy A and the remaining were from Consultancy B. As these project descriptions were produced by the service design

agencies and published on their own websites, they were self-reported data and represented first-hand interpretation of service design practice. Therefore, these datasets were selected for analysis as they provided accurate representation of the perception and understanding of service design practice of this sector.

The 80 projects were treated as one set of data, both for the similarity in the breadth of projects and in the level of information with which each project was described. Most projects contain information about (1) the design brief, (2) the processes and activities, and (3) the outputs, and include both texts and images.

3.2 Analysis methods

A combination of methods, including summative content analysis, were used to analyse the data. Firstly, summative content analysis was used to analyse the 80 project descriptions. A summative content analysis involves counting and comparisons, usually of keywords or content, followed by the interpretation of the underlying context (Hsieh & Shannon, 2005). This approach goes beyond mere word counts to include latent content analysis (Holsti, 1969) with the focus being on discovering underlying meanings of the words or the content. It is expected that patterns will appear to indicate different types of project descriptions of the sample cases, (Objective 1). Secondly, following the analysis, a workshop was conducted with two experienced designers and one design manager, to discuss the results from the content analysis, with the intention of validating the initial findings and to mitigate possible bias that might appear in the process of data analysis.

3.3 Analysis frameworks

To understand how these projects are relevant to organisational change (Objective 2), Kotter (2012)'s eight-step change process model was considered for data analysis. Kotter (2012)'s Eight-step change model is one of the most frequently referenced models in managing organisational change. It comes from the planned approaches to change in contrast to emergent change approaches, bearing in mind that that change involves a sequence of stages and focuses on developing phase models. This approach was, for many years, the dominant framework for understanding the process of organisational change (Burnes, 2004). Different emergent approaches, e.g. (Bamford & Forrester, 2003) and (Burnes, 1996), see rapid and unpredictable change which cannot be managed from the top down; instead, it should be seen as a process of learning, where the organisation responds to the internal and external environmental changes. In this approach, changes are an ongoing process, a stream of interactions and a flow of situated initiatives; therefore, change should be treated as a normal condition of organisational life (Tsoukas & Chia, 2002). This emergent view has gained increasing popularity in a complex, highly competitive and increasingly global environment (Graetz & Smith, 2009).

It is believed that the benefit of using standard phase designations lies in its ability to provide a foundation for knowledge accumulation across multiple organisational

developments, and for testing theories and hypotheses using rigorous statistical methodology (Bullock & Batten, 1985).

With these recognised limitations in the planned approaches to change, Kotter's framework is seen to provide fundamental conceptual inputs on implementing a change successfully and disseminating it into the culture of an organisation. It derives its popularity from its direct and usable format. Appelbaum et al. Kotter (2012)'s review found support for most of the steps, although no formal studies were found covering the entire spectrum and structure of the model. Taking advantage of its usable format and imperial evidence for the existence of these steps, this study adopted Kotter's framework (in Figure 3) to understand the existence of service design practice in these steps. The relevance of service design to both approaches was also discussed.

The eight steps of Kotter's model can be further summarised into three stages:

1. Creating climate for change (create a sense of urgency, build guiding conditions, form strategic vision and initiatives);
2. Engaging and enabling the organisation (enlist a volunteer army, enable action by removing barriers, generate short term wins);
3. Implementing and sustaining for change (sustain acceleration, institute change).

4. Findings and discussion

4.1 Client profiles

The study analysed the client bases in order to build a picture of the spectrum of industries that service design agencies worked for. The data showed that the design agencies worked with a wide range of client bases. The breakdown of the industries is shown in Figure 1, based on the standard industrial classification by UK SIC's (Companies House, 2007).

The top three industries are transportation and storage (20%), information and communication (16%), and public administration etc. (15%). The bottom ones are arts, entertainment & recreation and real estate activities (both at 1%).

It is interesting that 86% of these industries, including the top six, are in the wider classification of service sectors. This figure is consistent with the UK's economic structure where the service industries accounted for 80% of total UK economic output (Gross Value Added) and 82% of employment in April-June 2021 (Brien, 2021).

It is also interesting to note that 26% of the clients are from the third and public sector (including health and social work 11%, and public administration 15%). In comparison with manufacturers (9%), the third and public sector seemed to have significantly higher engagement with service design.

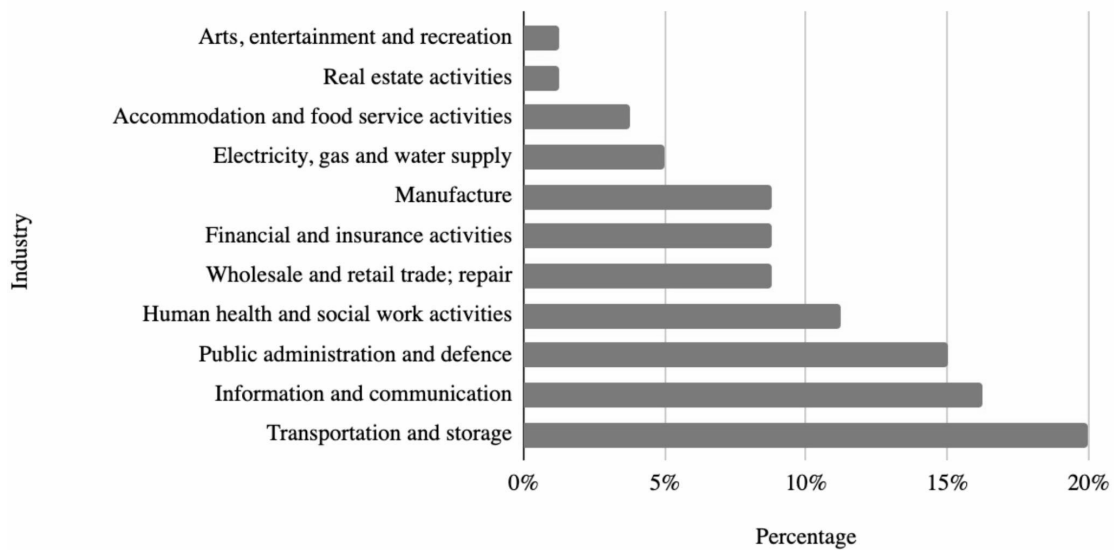


Figure 1. Industrial Classification

4.2 Grouping project outputs

To understand what kind of projects that service design agencies worked on, the study analysed the information describing the outputs of these 80 projects, including both text descriptions and images.

Firstly, it revealed that the 80 projects delivered a wide range of outputs from developing APPs and websites to supporting large-scale change programmes. The sale of the projects (in terms of e.g., project lengths and team sizes) and levels of engagements with the clients also varied significantly.

As shown in Table 1, these projects were categorised into 6 groups based on their outputs. The texts about the client's motivation (project briefs), design process, and impact were also considered in the process of categorisation.

Group A projects (15%) focused on the design of service touch-points, such as websites, APPs, UX/UI and front desks. This group of projects tends to be smaller in size and shorter in duration. In most cases (ten out of the twelve projects), the clients were specific about the deliverables, and service design was used to improve existing customer experience.

Group B projects (29%) delivered service concepts, visions or service propositions. This group of projects normally uses customer journey maps, scenarios (personas and stories), blueprints, and prototypes to illustrate the service concepts. In this group of projects, clients' intentions varied, including improving existing service experience, developing new services, developing a service-oriented culture, or more open-ended problem solving. However, most of the projects were used to explore possibilities and options.

Table 1. Project Categories

Type of projects	Count (%)	Deliverables
Group A. service touch-points	12 (15%)	websites, apps, front desks
Group B. service vision & concepts	23 (29%)	service concepts, uses customer journey maps, scenarios (personas and stories), blueprints, and prototypes
Group C. service strategies	20 (25%)	service strategies, business models, tool kits or implementation plans
Group D. pilots	14 (18%)	outcomes of small-scale projects to test ideas
Group E. capacity building and engagement	6 (8%)	training sessions, workshops, and seminars
Group F. scaling and implementation	5 (6%)	diverse outputs with deep engagement with the client organisations.

Group C projects (25%) delivered service strategies, business models, tool kits or implementation plans, with a stronger focus on service delivery and business plans. Similarly, to group B, this group of projects showed a stronger diversity in client intention in searching for options and possibilities.

Group D projects (18%) developed concepts and/or strategies into pilot projects. The projects in this group showed a certain level of engagement within the organisations in implementing the concepts through small-scaled pilots.

Group E projects (8%) delivered activities, such as training sessions, workshops, and seminars, with a clearly defined aim of capacity building. All of these projects aimed to develop a service-oriented culture within the client organisations.

Group F projects (6%) focused on scaling up small scale projects into services, initiatives and other institutionalised programmes. In most briefs, the service design agencies were contracted to help with on-going change programmes within the client organisations.

4.3 Service design projects in organisational change process

The data was further analysed to understand the presence of these projects in the process of organisational change by mapping the design projects onto Kotter (2012)'s model of change as shown in Figure 2. The Eight-step change process was listed on the right-hand side and the steps were further grouped into three wider categories: creating climate for change, engaging, and enabling and implementation and sustaining. The service design projects were mapped against these steps based on their perceived relevance to the change process. The

results were further validated in the workshop with the designers and design managers. The final finding is shown on the right-hand side of Figure 2.

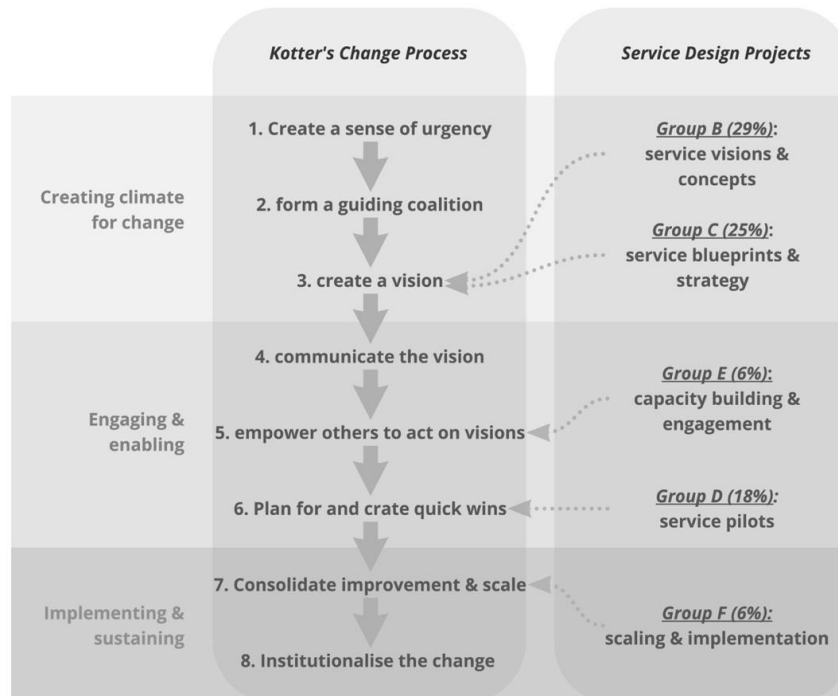


Figure 2. Service design on the process of organisational change

Firstly, Group A projects (15%) delivered specific service touchpoints and interactions mainly to improve customer experience of existing services. They operated at the outer sphere of the organisations. The relevance was perceived as low and was not included in this step of the analysis.

Figure 2 shows that a large proportion (64%, Group B and Group C) of service design projects were engaged at the early stage of creating a climate for change; and 22% (Group E & Group D) were in the 'engaging and enabling' stage. Only a small proportion (6% Group F) were in support of the last stage of change, namely, 'implementing and sustaining'.

Creating climate for change

The projects in Group B (29%) and Group C (25%) delivering concepts, visions, propositions, and strategies, were seen to be more associated with the first stage of change: 'creating climate for change', particularly 'step 3: create a vision'. In creating a vision for change, most of these projects engaged users to generate insights into their experience. The value of these projects was seen as the connector that brought in users' experience and views into the development of internal change strategy. They represent 64% of the total projects. They proposed change in the forms of service concepts, strategies or visions, and started to be

involved in questioning the norms and values of the organisations. However, most of these project outputs (these concepts and strategies) were passed to the organisations as the final outputs. The levels of impact that these projects could create depended largely on how these outputs were developed and implemented by the clients, if selected. There was limited engagement with the client organisations.

Engaging and enabling

Group D (18%) developed small scale pilots to test new ideas within the existing system and was used to 'create a quick win' (as step 6 in Kotter's change model). Group E (6%) delivered internal engagement and capacity building activities and contributed to 'step 5: empowering others to act on visions'. Both groups contributed to the 'engaging and enabling' stage of the change process. Instead of delivering conventional service outputs, these projects facilitated the organisation (a team or a group of employees) in developing the skills, norms, and culture that enabled them to act on the change. As most projects collaborated closely with the staff in these organisations to introduce new ways of working and new tools into the organisation, they enabled and empowered the staff to innovate and create a customer-experience-oriented culture within the organisation.

Implementation and sustaining

Group F (6%), scaling and implementation, was seen to be associated with 'step 7: consolidate improvement and scale' in the 'implementing and sustaining' stage. It is interesting to note that only a small proportion of projects operated at this stage of change, but the impact they created was impressive. The outputs of these projects included: a new service fully integrated with back-end systems in a start-up car manufacturer; a programme developed as a standard training for all new recruits in developing a customer-centric culture; a multidisciplinary team established to provide personalised service to patients; a shift of culture through over 30 projects over five years; and an internal customer service team built to oversee and rollout changes.

4.4 Two camps of service design practice

Although the projects operating at the last stage of change represented only a small proportion of the overall projects analysed (6% of the projects, five out of 80 projects in total), the study has confirmed the existence of this type of practice where service designers were involved in implementing large scale change programmes across departmental boundaries of the organisation. These projects seemed to share a number of characteristics including: an early involvement of design in the business development cycle, a long-term relationship with the client organisation, a higher sense of urgency for change from the organisation and a higher level of commitment and support from the top of the organisations.

Further analysis of the texts of the project descriptions shows that the projects involved in 'creating climate for change' and 'engaging and enabling' were significantly different in their approaches and values as shown in table 2, representing two camps of service design practice.

Table 2. Two camps of service design practice

	At 'creating climate for change' stage	At 'engaging and enabling' stage
Projects groups	Group B (29%): service visions & concepts Group C (25%): service blueprints & strategy	Group E (6%): capacity building & engagement Group D (18%): service pilots
Roles	scoping and exploring possibilities (supporting role)	delivering and doing (delivering role)
Value	- bringing customers/users' view into the change planning. - new ideas	- developing and testing user-centric culture to the organisation -engagement
Agent for change	Collaborate with external customers / users of the services and create change through delivering design outputs	collaborate with internal employees of the organisations and create change through the process, introducing new ways of working
Change process	planned change (top-down)	emergent change (organisational learning)
Epistemological stand	designing services	designing for services

Roles and Value

Groups B & C were used for scoping and exploring possibilities and for supporting the organisations to develop visions for change. The value was twofold. First, through these service concepts, blueprints and strategies, customers or final users' experience and views were brought into the future vision. Secondly, the creativity and divergent thinking in these outputs supported the organisations to explore a much wider range of otherwise overlooked possibilities.

In contrast, Groups E & D were used to deliver specific tasks at the stage of engaging and enabling. The value also includes two areas. Through capacity building and engagement activities such as training and seminars, these projects supported the organisation to develop user-centric culture and thinking. On the other side, delivering design pilots supported the organisation to test ideas, identify areas for improvement and reorientate efforts. They introduced new ways of working to the organisation on a controlled scale.

Agent for change

For all groups of projects, 'co-creation' and 'co-design' were considered fundamental in their approaches. However, for Groups B& C, it was the final users of the services that the designers primarily collaborated with to create service concepts, visions and strategies. They used user research tools, such as observation, interviewing, and workshops, to develop insights for service concepts. Essentially, these projects have translated users' perspectives into proposals and communicated these proposals to the organisation as project deliverables. These projects relied on these deliverables as agents for change. The limitations however, depended on how well they would be implemented by the organisations.

By contrast, Group D&E collaborated with internal employees of the organisations. Collaborating directly with the internal employees of the organisations, the 'designerly ways of knowing' (Cross, 1982) and human-centred ethos were introduced to the organisation. The process of collaboration delivered the value, whilst at the same, it became the agent for change. The usual service design tools e.g., blueprints, customer journey mapping, storyboards etc. were used as ways to facilitate learning, in contrast to being project deliveries in Group B&C. If considering these projects as learning, these tools were used to engage the organisations to learn collaboratively.

Change process

Although both camps of practice were relevant to Kotter's change process, projects in 'creating climate for change' and those in 'engaging and enabling' have different strengths in contributing to organisational change.

The planned approach, i. e. change can be proposed from top down through a planned and pre-structured process, is widely used in managing change. Group B&C developed visions for change, bringing external views to the process and expanding the possibilities. The Designer's creativity and user-centric ethos supported decision making to reduce the risk and open up possibilities.

In contrast, Group D& E in essence created bottom-up change within the organisation, starting with change of the organisational paradigm (propositions or underlying assumptions that include unnoticeable shape perceptions, procedures, and behaviours), then a change of organisational mission and purpose, culture, and core processes (Levy & Merry, 1986). The design approach in this sense shares the same principles with the emergent approaches (Burnes et al., 2003; Drejer, 2000) in organisational development, which considers change as learning, an ongoing process, a stream of interactions, and a flow of situated initiatives. They reinforced the importance of a deep understanding of the organisation, its structures, strategies, people and culture. In this context, service design becomes a practical

framework to achieve organisational learning for change, delivered through real engagement.

Service design practice is relevant to both approaches of change through these two different camps of practice.

Epistemological stands of service design

These two camps of practice also represent two epistemological stands of service design: 'designing for service' or 'designing services'. Group B&C projects were about designing services, whilst Group D&E were 'designing for service'. The former delivered conventional service design outputs and processes and the latter facilitated learning and created conditions for change. It is interesting to see that service design (as in Group D&E) had moved away from designing services to include activities that were not bound by the discipline. Instead, these projects facilitated collaboration within the organisations and across their boundaries to include external users and beyond, in search of solutions and improved ways of operating. This moves service design into the realm of transdisciplinary innovation, as a practice of bringing together knowledge from the physical and social sciences, from practitioners, from users and from the broader community to confront increasingly complex problems (Beckett & Vachhrajani, 2017; Nicolescu & Ertas, 2013; Rigolot, 2020; Stokols, 2006). The trans disciplinaryity in this kind of service design practice is evidential.

5. Conclusions

This paper reports an empirical study analysing 80 projects delivered by two leading service design agencies to understand the relevance and breadth of service design to organisational change. The analysis revealed that there was a small proportion of projects (6% of 80) involved in implementing large scale change programmes and another small proportion (15%) of projects delivering touch points for existing services. The remaining projects contributed to 'creating climate for change' and 'engaging and enabling' stages as in Kotter's change process model. However, they seem to form two different camps, representing two distinct definitions of service design: 'designing for service' and 'designing services'. In the 'designing services' camp, the projects (64%) delivered service concepts, visions and strategies to support the organisations to create visions for change. The 'designing for service' camp (24%) delivered activities to engage and enable people through capacity building and pilot projects. These two camps of service design practice created different values for the organisations via different agents for change: one via the design outputs and the other via the process. The differences in the practice led to the division of their relevance to organisational change. The 'Designing service' camp seemed to be more relevant to a planned change process whilst 'designing for services' was more relevant to emergent change where change is bottom-up through organisational learning. The latter could potentially move service design into the realm of transdisciplinary innovation and thus

facilitate collaboration across boundaries, engaging stakeholders in searching for solutions for complex problems. This makes service design practice of this kind extremely relevant in addressing the top challenges facing our society from the COVID-19 pandemic: economic recession, healthcare, education, national safety and security, climate change and trust (Burrowes & Shannon, 2021). More specifically, it highlights the relevance of service design in building resilience. This is a key organisational capability for sustainability in the current turbulent environment where organisations need to deliver innovative responses to the crisis through continuous change (Crick & Bentley, 2020; Lombardi et al., 2021; Melián-Alzola et al., 2020). Service design facilitates this bottom-up change management process through learning, which is considered fundamental to creating resilience (Ates & Bititci, 2011).

The paper takes a systemic approach to investigate service design practice and its relevance to organisational change. It provides empirical evidence to understand how service design practice is used in and contributes to organisational change. Further, it contributes to the current discussion about the definition, boundary and context of service design practice. As pointed out in the recent study by the (Madano Partnership, 2012) ‘the definition and boundaries of service design as a discipline are contested in both academia and professional practice, presenting significant opportunity for further research and exploration’. The findings of the study clearly evidenced different types of service design practice and suggest service design is moving towards the realm of transdisciplinary innovation. This makes service design relevant to the challenges we face following the COVID-19 pandemic.

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