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Proposing organisational usability as an enabler of organisational service design maturity

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Abstract

This reflective paper proposes a research agenda that investigates and questions how and if we need to assess the service design tools and their usability in the context of organisations' design maturity. Maps and tool in the service design toolbox are perceived as straightforward by some organisations, however for organisations with low service design maturity such tools can pose challenges in how to utilise and leverage their potential. As a direction for future studies, this research agenda sheds light on how common service design tools are affected by organisational usability and maturity.

Keywords: Service Design, tools, usability, organisational design maturity

Introduction

Service design (SD) addresses the context of the service encounters, co-creates visions, proposes new services and business models, and engages stakeholders (Morelli et al., 2021) and SD focuses on enabling a holistic experience for customers (Grenha Teixeira et al., 2017). To design an intangible service experience maps offer tangible representations (Blomkvist et al., 2016). Different visualisations, such as eco-system maps, customer journey maps, and service blueprints help explicate business models and provide an overview of complexities (Elliott & Kling, 1997; Simeone et al., 2019). The two main approaches to research within SD focus on 1) integrating the scope of non-design fields such as marketing, leadership, and

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engineering and 2) exploring and challenging methods from other disciplines (Harre & Nielsen, 2020; Stickdown & Schneider, 2012).

The organisation that is to implement the service and the organisation that surrounds the design of the service have relatively recently been considered. Alves and Nunes (2013) extracted a list of 164 tools and methods used in SD, and found that to designers these are perceived as straightforward tools to address customer facing problems. SD has a focus on methods and tools for designing a service, but there is very little know-how of addressing typical challenges and opportunities when implementing SD projects in large organisations, such as embracing a new vocabulary or logic (Kurtmollaiev et al., 2018; Harre & Nielsen, 2020). In line with (Sangiorgi & Prendiville, 2017) we propose to look at the organisational design pretext, where the history of design reflects the SD maturity. We propose to adopt a lens of the utilisation of SD tools and to address the organisational usability of the tools. Yu & Sangiorgi, (2018) writes: "user-centered approaches and methods can help organisational staff build long-term capability for supporting users' value creation" (p.40), we suggest looking at the usability of tools, such as customer journeys and service blueprints, but also to discuss if we need to consider different stages of maturity when assessing the usability of the tools.

This proposal of a research agenda focus on the challenges and opportunities from an organisational usability perspective (Bloomer et al., 1998; Elliott & Kling, 1997) in trying to improve how an organisation can "use" SD tools and speculates how it might offer nuances to how organisations can raise their design maturity (Corsten & Prick, 2019). We define organisational usability as the organisation's ability to "use" SD tools in effective, efficient, and satisfactory ways when designing or implementing a service. According to Elliott & Kling (1997) organisational usability encompasses three levels: the user-system fit, the organisation-system fit, and the environment system fit. The use of organisational usability in other design contexts such as pilot implementations, technological change, and design-in-use has already been explored and conclude that including the organisational context in the evaluation process is much more insightful than studying the interaction between an individual and a tool or system (Hertzum, 2018). In this paper, we focus on the level of organizational usability called the organisation-system fit where "system" refers to SD tools. We focus on the effectiveness, efficiency, and satisfaction dimensions of the organisation-system fit. We argue that assessing organisations maturity, in the respect of SD tool use, might allow us to have a useful organisational usability assessment of these tools and how they can be adjusted or re-designed to thrive and be leveraged in the organisation. Furthermore, this will allow for an understanding of the usability of the tools at different stages of a maturity model, such as the service

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design maturity model (Corsten & Prick, 2019), and add nuance to practitioners who struggle to measure design outcomes corresponding to the various steps on the design ladder maturity model (Björklund et al., 2018).

We raise the key questions to develop a future research agenda of organisational usability of SD tools:

1. How can we assess organisational usability of service design tools?
2. Are there relations between service design tools' usability and service design maturity?
3. Do we have to adjust the "service design tools" or the organisational spaces and practices in which they fit, or both?

An example of poor organisation-system fit

A tax office department was looking to improve its customer-facing services and image by implementing a SD approach. One of the authors involved in the project found that after completing a first customer journey map some managers in the office back-end could not see the value of designing ´friendly' touchpoints as they were seen as detrimental to the main business goal, i.e., collecting debt. The customer journey map revealed disagreement in the overall goal of improving services.

Figure 1: Poor organisation-system fit

Maturity models

Maturity models are both descriptive and prescriptive, they function both as indicators of a given maturity and provides an understanding of how to achieve a greater maturity within a given area (Pöppelbuß & Röglinger, 2011). They are thus both a measurement and a direction for future improvements. Thus, the maturity model is not a ladder, rather an assessment tool.

An example of a maturity model is the Service Design Maturity Model (Corsten & Prick, 2019) that looks at the maturity from the perspective of people and resources, tools and capabilities, organisational structure, and metrics and deliverables. These are assessed in five stages, the most immature being Explore, then follows Prove, Scale, Integrate and Thrive (Ibid.).

Weaving organisational usability into the maturity model, we suggest a fifth dimension "Actions"(see Figure 2). This provides a process perspective on how to

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move forward. The perspective includes pilot implementation (in the Service Design Maturity Model it encompasses Explore and Prove), Technological change (Scale and Integrate), and Design-in-use (Thrive). Looking at how usable the tools are in SD in the sense of efficiency, effectiveness, and satisfaction, let us take them one by one using two common tools as examples: the customer journey and the service blueprint.

	People and Resources	Tools and Capabilities	Organisational structure	Metrics and Deliverables	Actions
1 Explore	Individual service design enthusiasts are scattered across the organisation, in which no budget, time and facilities are dedicated to service design	Service design knowledge and expertise is self-retrieved (through books / articles / trainings), but scattered across the organisation.	Traditional siloed structure, with no assigned responsibilities on service design or customer experience.	Customer-centric metrics and deliverables are non-existent.	Pilot implementation
2 Prove	First project team is formed by enthusiasts and / or design agency. There is missing budget and management buy-in for service design initiatives.	Existing (adjacent) capabilities are brought together from different people. Organisations tend to buy capabilities through hiring a design agency.	The first multidisciplinary team is being formed and the first service design initiatives are taking place regardless of structure	Deliverables of first project being created, like a customer journey map. First measurable results are often lacking.	
3 Scale	More people get involved and incidental budgets are created for service design projects. Rooms and facilities are getting hijacked for service design.	Capabilities are spreading outside of the initial team. First employees start to specialise and CX / SD departments are being formed.	Interference with the existing way of working is felt. Silos starts to suffer under the demands of multidisciplinary teams.	Project results are becoming increasingly apparent. First customer-centric KPIs are set specifically for the CX department.	Technology change
4 Integrate	The majority of people is engaged with service design. Dedicated service design budgets are now in place.	Unified capabilities, methodology and language around service design, as capabilities are being decentralised within each team.	The siloed structure is broken down and design-led foundation is being laid. New roles emerge and being assigned in each team.	C-suite is committed to CX and SD and may even assign a Chief Design Officer. Customer-centric KPIs go company wide.	
5 Thrive	The entire organisation is involved in service design. Everyone is aware that all decisions may impact customer experience.	Strict methodology is let loose and experimentation is stimulated, as the design mindset is ingrained in the company culture.	Organisational structure allows for close co-creation of service experiences in multidisciplinary teams.	Each initiative is tied to customer-centric metrics and deliverables. Customer centricity has become an important KPI for the entire C-suite.	Design-in-use

Figure 2: The Service design maturity model mapped to actions of using service design tools.

The customer journey

A customer journey consists of a definition of the customer, the touch points, actions and activities, the user experience, and user emotions. It is visually presented as an

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abstract timeline and process that shows the customers moving from one touch point to the next.

The advantage of using the customer journey is that it provides a holistic and accesible overview, the disadvantage is that the content is weakly defined. Looking at the usability perspective of effectiveness, efficiency, and satisfaction in connection with the customer journey, we find:

Efficiency: Customer journey maps are relatively fast to produce and the effect in design decisions is considered high. The key question here is whether the team and the organisation understand the different touchpoints and their value. Furthermore, organisations might not produce more than one customer journey to cater for all customer segments.

Effective: The map is very effective as it provides a quick overview of the different stages in the service journey from the customer's point of view. The problem lies in the lack of detail when it comes to the different touchpoints and the different stakeholders connected to the different touchpoints. The question raised is "what is a satisfactory service encounter? It might lie, not only at the tangible factors, but also the intangible, such as atmosphere, look and feel etc.

Satisfactory: The perceived value in an organisation of the customer journey(s) are high as it might provide an aligned and holistic understanding of all the different stages, including those that may exist outside the organisation.

An organisational usability assessment of the satisfaction could include questions about the understanding of the touchpoints, actions, and experiences in connection to the different user types/personas to reveal if the understanding is indeed aligned across the organisation. This assessment necessarily requires looking at the tangible and intangible aspects of the organisational context that mediate its effectiveness, efficiency, and satisfaction. And it requires looking at the organisation's capabilities to understand the customer journey map.

The service blueprint

Service blueprints are first and foremost customer-focused, allowing firms to visualize the service processes, points of customer contact, and the physical evidence associated with their services from their customers' perspective. Blueprints also illuminate and connect the underlying support processes throughout the organisation that drive and support customer-focused service execution.

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Effectiveness: Blueprints are useful in as much as they allow its users to differentiate "onstage" from "backstage" activities in designing a customer journey and the connected touchpoints. However, an organisational usability assessment of this dimension should identify whether, for instance, there is common understanding across stakeholders of the line dividing both types of activities. Other issues could be related to assessing if the blueprint of the service being designed is dominated by a "backstage" or "frontstage" mentality. A quick usability evaluation question to assess these would explore if there were enough elements in a blueprint to represent tensions or misalignments within the organisational culture. These in turn can be explored by assessing the maturity level of the organisation.

Efficiency: The speed at which blueprints can be produced and their effect made visible in design decisions is another important consideration. The key question here is whether organisation structures and division of labour and know-how facilitate an efficient turn around in the deployment of blueprints in project teams and design sprints. This is not just about assessing if the medium and elements of the blueprint could be quickly escalated and realised, but also about how the organisational context facilitates this. Again, organisational maturity towards SD tools will be an important moderating factor.

Satisfaction: The perceived value of the use of blueprints can be assessed by probing its users in an organisation through different user experience goals such as helpfulness or motivating. These questions can reveal tacit tensions between the organisational culture, its members, the values embedded in blueprints, and the type of design work relations they define. Assessing this dimension will clearly show if the motivations of blueprint users in an organisation are intrinsic or extrinsic. If intrinsic, the use of such tools is more guaranteed in the organisational context; maturity in these contexts should usually be high.

The issue with blueprints is that they require organisations to be at "integrate" or "thrive" level (Corsten & Prick, 2019) to be able to capture the more nuanced social and emotional aspects of the service that are not represented in this design tool. It is the interactions that happen around the use of these blueprints, the ones that will give insights into service contexts, that leads to quality design decisions. Once more, organisational usability therefore is a good approach to assess the interaction between the organisation, its members, and the tools such as service blueprints.

A case of customer journey implementation

An organisation embarking on a service-centered transformation, serves as case for demonstrating the customer journey map as a tool to support strategy articulation in a design workshop (see Harre & Nielsen (2020) for more on the workshop). Participants from across the organisation were guided through activities that followed a customer's journey showcasing that the tool served not only to provide structure and as a visual output, but as a process in which implications of changing the business model of the company were discussed. In the following, we revisit and evaluate the design workshop to assess how the organisational context mediates the effectiveness, efficiency, and satisfaction of the customer journey tool.

Effectiveness: As it is typically, the customer journey was divided into phases which provided structure for the conversation and helped to facilitate the multiple perspectives that were represented in the workshop. This extended the use of the customer journey not just as a design tool, but as also offering a tangible starting point for discussing important factors of transforming the organisation's business model, for example, implications for the internal workforce or the adoption of new technology (Harre & Nielsen, 2020).

Efficiency: Design workshops are easily operationalised and guides exist on the time and scope of a customer journey mapping workshop (Stickdown & Schneider, 2012). However, before the workshop, efforts were put into planning the workshop, for example by analysing and consolidating sets of personas gathered from across the organisation. In the beginning of the workshop, participants discussed which persona should be the protagonist for the customer journey mapping. Lastly, while participants were positive about the workshop, points were raised on where to start concretely (Harre & Nielsen, 2020).

Satisfaction: By probing participants to take the perspective of a customer, participants were asked to imagine how the company was experienced from the perspective of someone else. In terms of the satisfaction of the tool, it provided a starting point for multiple perspectives to unite and discuss how to align the organisation towards a customer-centred perspective.

Combining design maturity and organisational usability

The investigation of especially the user-tool fit at different levels of maturity, might provide directions for designers and organisations to incorporate the tools and method to their specific maturity level. It might be able to prevent the obstacles that

service designers meet, such as lack of understanding, resistance to the organisational changes that SD requires and the rethinking of established processes and structures (Kurtmollaiev et al., 2018). Finally, it makes room for an understanding of how many purposes a specific tool or method can serve - from creating an awareness that the company serves the user to innovations of the user journeys.

Conclusion

We have in this research proposal raised the question: do we need to assess the SD tools and their usability? Building on the work by Elliott & Kling (1997), we take the question a bit further. In including the organisational context, we also need to understand the maturity of the organisation to address the usability of the SD tools. The research program we propose will also shed light on how other types of design tools are affected by organisational usability and maturity.

References

Alves, R., & Jardim Nunes, N. (2013). Towards a Taxonomy of Service Design Methods and Tools. In J. Falcão e Cunha, M. Snene, & H. Nóvoa (Eds.), *Exploring Services Science* (Vol. 143, pp. 215–229). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-36356-6_16

Björklund, T., Hannukainen, P., & Manninen, T. (2018). Measuring the impact of design, service design and design thinking in organizations on different maturity levels. *The ServDes2018 Conference*, 500–511.

Blomkvist, J.., Clatworthy, S., & Holmlid, S. (2016). Ways of seeing the design material of service. In N. Morelli, A. de Götze, & F. Grani (Eds.), *Service Design Geographies. Proceedings of the ServDes.2016 Conference* (pp. 1–13). Linköping University Electronic Press.

Bloomer, S., Croft, R., & Wolfe, S. (1998). Selling usability to organisations: Strategies for convincing people of the value of usability. *CHI 98 Conference Summary on Human Factors in Computing Systems*, 153–154.

Corsten, N., & Prick, J. (2019). The Service Design Maturity Model. *Touchpoint*, *10*(3).

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Elliott, M., & Kling, R. (1997). Organizational usability of digital libraries: Case study of legal research in civil and criminal courts. *Journal of the American Society for Information Science*, *48*(11).

Grenha Teixeira, J., Patrício, L., Huang, K. H., Fisk, R. P., Nóbrega, L., & Constantine, L. (2017). The MINDS Method: Integrating Management and Interaction Design Perspectives for Service Design. *Journal of Service Research*, *20*(3). https://doi.org/10.1177/1094670516680033

Harre, O., & Nielsen, L. (2020). From product centricity to services: Design workshops and maps as tools in strategy articulation. In Y. Akama, L. Fennessy, S. Harrington, & A. Farrago (Eds.), *ServDes.2020 – Tensions, Paradoxes, Plurality*. Linköping University Electronic Press.

Hertzum, M. (2018). Three contexts for evaluating organizational usability. *Journal of Usability Studies*, *11*(1).

Kurtmollaiev, S., Fjuk, A., Pedersen, P. E., Clatworthy, S., & Kvale, K. (2018). Organizational Transformation Through Service Design: The Institutional Logics Perspective. *Journal of Service Research*, *21*(1), 59–74. https://doi.org/10.1177/1094670517738371

Morelli, N., de Götzen, A., & Simeone, L. (2021). *Service Design Capabilities* (Vol. 10). Springer International Publishing. https://doi.org/10.1007/978-3-030-56282-3

Pöppelbuß, Jens & Röglinger, Maximilian. (2011). What Makes a Useful Maturity Model? A framework of general design principles for maturity models and its demonstration in business process management. *ECIS 2011*, 28. https://aisel.aisnet.org/ecis2011/28

Sangiorgi, D., & Prendiville, A. (2017). *Designing for Service: Key issues and new directions*. Bloomsbury Publishing.

Simeone, L., Drabble, D., Iacopini, G., Van Dam, K., Morelli, N., & De Götzen, A. (2019). Articulating a strategic approach to face complexity in design projects. *Conference Proceedings of the Academy for Design Innovation Management*, *2*(1). https://doi.org/10.33114/adim.2019.01.188

Stickdown, M., & Schneider, J. (2012). *This Is Service Design Thinking: Basics, Tools, Cases.* John Wiley.

Yu, E., & Sangiorgi, D. (2018). Service Design as an Approach to Implement the Value Cocreation Perspective in New Service Development. *Journal of Service Research, 21*(1), 40–58. https://doi.org/10.1177/1094670517709356