# The Future of Service Design Tools

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How can the concept of organisational usability enable organisational development?

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We raise the question: do we need to assess the service design tools and their usability? We suggest including the organisational context and we also need to understand the maturity of the organisation in order to address the usability of the service design tools. The research program we propose will also shed light on how other type of design tools are affected by organisational usability and maturity models.

CCS CONCEPTS • Human-centered computing • Human computer interaction (HCI) • Empirical studies in HCI

Additional Keywords and Phrases: Service Design, tools, usability, organizational maturity

### **ACM Reference Format:**

Jose Abdelnour Nocera, Lene Nielsen. Christina Li. 2022. The Future of Service Design Tools: How can the concept of organisational usability enable organisational development. In Proceedings of the InContext: Futuring User-Experience Design Tools Workshop at CHI Conference on Human Factors in Computing Systems (CHI '22), May 1, 2022, New Orleans, LA, USA. ACM, New York, NY, USA,

## 1 INTRODUCTION

Service design (SD) addresses the context of the service encounters, creates visions, propose new services and business models, and engage stakeholders [9]. Service design focuses on enabling a holistic experience for customers [5]. To design this experience different maps can create tangible representations [1]. The different visualization, such as customer journey maps and service blueprints help explicate business models and provide an overview of the complexity [4,10]. The customer journey map visualizes the experience that is being shaped during the interactions between the customer and the service provider. The service blueprint illustrates the services journey and connects the underlying support processes.

The two main approaches to research within service design focus on 1) integrating the scope of non-design fields such as marketing, leadership, and engineering and 2) exploring and challenging methods from other disciplines [6]. Thus, service design has a focus on methods and tools of designing a service, but there is very little know-how of addressing typical challenges and opportunities when implementing SD projects in large organisations.

Several tools in the service design toolbox, such as service blueprints, service ecosystems, and stakeholder mapping has a focus that is larger than the service as it is experienced by the customer, they include different stakeholders and the backstage processes. But the organisation that is to implement the service and the organisation that surrounds the design of the service have just recently been taken into account.

We focus on the challenges and opportunities from an organisational usability [2,4] perspective in trying to improve how an organisation can "use" SD tools. In this case organisational usability (OU) is defined as the organisation's ability to "use" SD tools in effective, efficient and satisfactory ways when implementing the service or designing the service. According to [4], OU encompasses three levels: the user-system fit, the organisation-system fit and the environment system fit. The use of OU in other design contexts such as pilot implementations, technological change and design-in-use has already been explored by [7] concluding 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. In our case, "the system" refers to SD tools and we are focusing on the effectives, efficiency and satisfaction dimensions of the organisation-system fit. We argue that assessing organisation maturity in the respect of SD tool use will allow us to have a useful OU assessment of these tools and how they can be adjusted or re-designed so they can thrive 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 design maturity model [3].

As all maturity model the organisation is supposed to move from one level to another, but there is little on how to move. [11] writes: "user-centered approaches and methods can help organisational staff build long-term capability for supporting users' value creation", but what are these methods? We suggest looking at the usability of tools of 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.

We raise the key questions to develop a research agenda of OU of SD tools:

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

Looking at how usable the tools are in service design in the sense of effectiveness, efficiency and satisfaction, let us take them one by one.

# 2 THE CUSTOMER JOURNEY

A customer journey consists of a definition of the customer, the touch points, actions/activities, the user experience, and user emotions. It is presented as a visual process that shows the customers moving from one touch point to the next.

The advantage of using the customer journey is that it provides an easy 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:

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 OU assessment of the satisfaction could include questions about the understanding of the touchpoints, actions, 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 non-tangible aspects of the organisational context that mediate its effectiveness, efficiency, and satisfaction. For instance, one of the authors was involved in a project where a tax office department chasing debtors was willing to improve its customer-facing services and image by implementing a SD approach. However, in completing a first customer journey some managers in the office back-end could not see the value of designing 'friendly' touchpoints as they were seen in detriment of the main business goal of that unit, i.e., collecting debt.

#### 3 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.

Effectiveness: Blueprints are useful in as much as they allow its users to differentiate "onstage" from "backstage" activities in designing a customer journey and its touchpoints. However, an OU assessment of this dimension should identify whether, for instance, there is common understanding across stakeholders of the line dividing both type 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. So, this is not just about assessing if the medium and elements of the blueprint could be quickly escalated and realized, but also about how the organisational context facilitates this. Again, organisational maturity towards SD tool 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 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, OU therefore is a good approach to assess the interaction between the organisation, its members and tools such as service blueprints

		People and Resources	Tools and Capabilities	Organisational structure	Metrics and Deliverables
6	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.
	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.
	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.
(i) (i)	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.
	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.

Figure 1: The service design maturity model

# 4 ORGANISATIONAL USABILITY ACCORDING TO BUSINESS SIZE AND SECTOR

Generally speaking, organisations which emerged in the recent years are more human-centred and better aware of service design or design thinking. Those include start-up unicorn companies, challenger banks, etc. especially if they are consumer facing. Some companies like Airbnb were set up by designers themselves therefore have a high degree of understanding of design discipline and the kind of phenomena OU tries to capture. However, there are still great challenges in maintaining

the culture and agile ways of working when the organisation grows bigger and internationally. It is fair to say the bigger the organisation is, the less mature their OU level is.

Historically it was always easier to realise the value of human-centred design for consumer facing businesses in a crowded market as they face the pressing wish from demanding consumers to be more customer friendly. Telecoms, retail, high street banks are the businesses that adopted service design quicker than other places in the UK. On the contrary, mega international organisations that play a more dominant role in the market tend to be slower to adopt service design and design thinking methodology e.g., health care or energy. This can also be explained by OU assessments. However, this is changing in recent years as well with the changing attitude from their customers and the challenges from new smaller unicorn start-ups in the same industry.

There has been a lot of focus shifts on employee experience and system usability which demonstrate the need for businesses to emphasize more on their own organisational experience.

## 5 CONCLUSION

We have in this research proposal raised the question: do we need to assess the service design tools and their usability? Building on the work by [7] 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 service design tools. The research program we propose will also shed light on how other type of design tools are affected by organisational usability and maturity.

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