An exploratory study on the agile mindset for scaling up service design within large organizations

Reflecting on the opportunities of agile project management in service design scale-up within large organizations.

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Content

Abstract

Over the past few years, service design has been receiving increasing attention from many organizations, as many large organizations have been willing to adopt and expand it within organizations. However, some challenges are associated with scaling up the service design in large organizations such as the complex structure of the large organization and the challenge of proving the impact of service design within a short time

Agile project management is a method that was developed in the software application development field. But today, it has changing also the landscape of project management. Its flexibility in addressing change, supporting cooperation, and creating value in small portions and at low cost is extended to a larger number of large organizations.

This thesis aims to explore how agile project management can facilitate the scaling up of service design within large organizations. This research will analyze the potential opportunities of agile project management in the scale-up of service design in large organizational contexts through a combination of literature review, design case studies, and expert interviews.

Keywords

service design & agile project management & scale-up

1. Introduction

1.1 Personal experience reflection

For the last 10 months, I have been working as a Jr. UX Specialist at Nestlé's Global IT Hub within the W360 department. W360 department is a department that is responsible for enhancing the employee experience for Nestlé employees all over the world. My role mainly focuses on UX and service design. In a project that focuses on enhancing employees' experience during meetings, I found that although my understanding of service design, including my skills, mindset, and tools I used were quite valuable in addressing project challenges, but I still had some challenges when integrating with some of the organisational stakeholders. They are still limited with the understanding of service design. For example, they do not know the exact value of service design and do not know how to implement the service design tools. This experience heightened my desire to know how service design can be scaled up within large organizations such as Nestlé.

1.2 Rise of service design within large organizations

In the last few years, more and more large companies formally acknowledged and started to look into the potential of service design, while many tried to incorporate service design thinking into their framework. For instance, the company I work for, Nestlé, set up a project team called DEX (Digital Employee Experience) in 2024. About half of the team members are service designers or have service design backgrounds to ensure that service design thinking is used in improving the employees' digital experiences.

Many private organizations are using service design practices. At the same time, a large number of public organizations have also started adopting the same approach. For example,

the UK government is one of the first public sectors that have used service design. It encourages this approach through the Government Digital Service (GDS) and it pioneered the transactions that include cross-government working, setting of service with other departments and training services. To enhance the uptake of best practice and of knowledge sharing GDS organises events such as the 'Services Week' for the aiming of achieving user needs in the delivery of public service (Government Digital Service, 2019).

1.3 Need for the scale-up

As I mentioned in my experience at Nestlé, there is a need for improvement when it comes to promoting the service design value since service design is relatively new in the company, it will take time for most of the employees to appreciate its value. It is also necessary in the context of the present and future endeavors for service design not to be limited strictly to the design team but to involve other departments in the organization as well. This needs to engage different teams, functions, and regions and aspire to bring service design principles, approaches, methods and mindset across the organization to fully realize its potential and impact.

1.4 The opportunity for Agile Project Management

Agile project management is a concept that I came across early in the year. It is rapidly implemented in large organizations because of its benefits such as the quick implementation of solutions, more customer orientation, frequent teamwork, quick identification of problems, and better adaptability to change. Since agile project management can be implemented in a large organization in many project structures, I would like to know if the integration of agile project management with service design could implement service design easier to scale across different teams and functions within organizations.

1.5 The opportunity of the research

This thesis aims to explore how agile project management can facilitate the scaling up of service design within large organizations. This research will analyze the potential opportunities of agile project management in the scale-up of service design in large organizational contexts through a combination of literature review, design case studies, and expert interviews.

2. Introduction to Agile Project Management

2.1 What is Agile

The simple dictionary meaning associated with the term “Agile” is the act of moving fast, effortlessly, and clearly. Now it is impossible to surprise anyone and introduce a method called Agile to them. It is worth mentioning that the concept of agility is one of the most employed methods in the field of software development and project management. Thus, because of its ability to be practical in different scenarios, as well as its focus on customer input, these methodologies are widely accepted in different sectors and by various teams.

According to the State of Agile Marketing Report by AgileSherpas (AgileSherpas, 2023), around 41% of global marketers have now adopted agile. Non-users of agile indicated that 51% of them are planning on using agile soon which means that 71% of marketers either use or plan on using agile. Moreover, 82% of marketers, who currently have plans to adopt agile, are likely to achieve this goal within the next year. This means that agility has started to show an increasing rate of adoption in a global manner, with the methodology reaching out to more organizations.

2.2 History of Agile

The use of the agile methodologies, since their formal beginning can be traced back to the publication of the Agile Manifesto (Beck et al., 2001). This manifesto provided the theme and direction for sgile methodologies in software development.

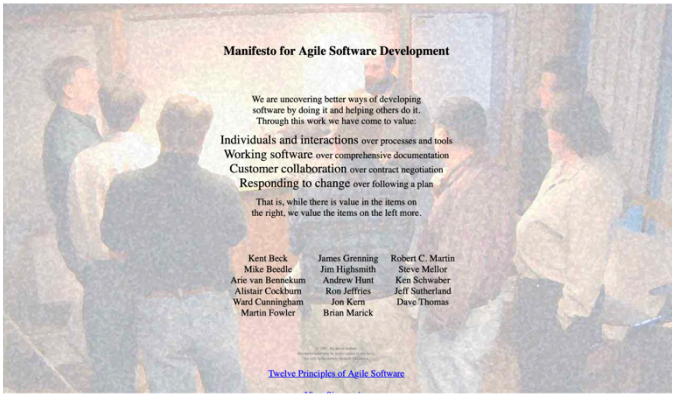

Figure 1. The official website of Agile Manifesto(source: Beck et al. 2001: page)

The manifesto presented a revolutionary approach through the “4 over” concepts. The Agile Manifesto simply states that they are uncovering better ways of developing software by doing it and helping others do it. Thus, they have come to value individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation, and responding to change over following a plan (Beck et al., 2001).

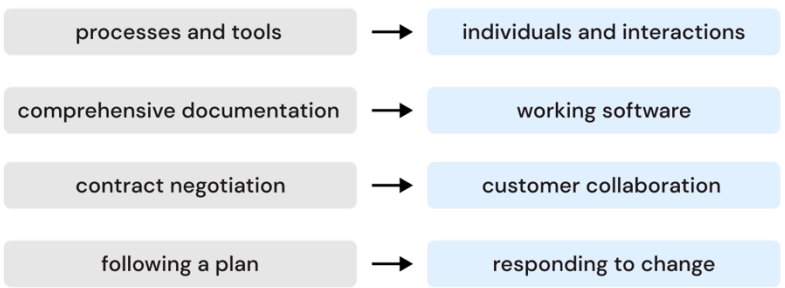

Figure 2. 4 Overs of Agile Manifesto

Besides the values, the Agile Manifesto also identified 12 principles that defined the agile approach. The principles suggest concentrating on the satisfaction of the customer by delivering software early and continuously, welcoming changing requirements, frequent delivery of working software, and daily collaboration between business and development teams. They also emphasize motivated individuals, face-to-face communication, working software as progress, sustainable development, technical excellence, simplicity, self-organizing teams, and reflection on regular intervals (Beck et al., 2001).

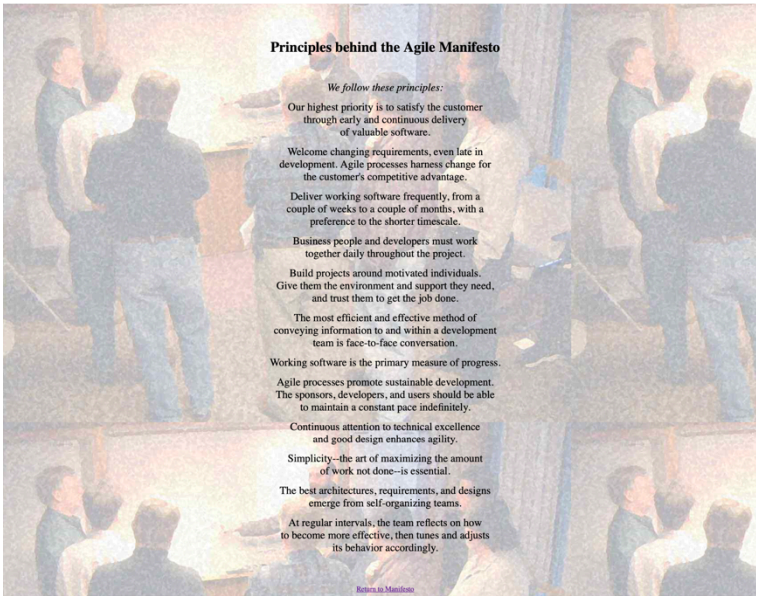

Figure 3. 12 principles of Agile Manifesto (source: Beck et al. 2001: page)

2.3 Agile Project Management

The use of agile methods has been on the rise in the software development industry. It has also changed how project management is done.

Originally applied in software development, agile approaches have expanded to include

project management in other sectors. This is mainly because agile is flexible, encourages team collaboration, and provides value and results in a steady and efficient manner (Vučeković & Avlijaš, 2020).

This can be seen when comparing with other more traditional models such as the Waterfall model. Traditional methods follow a rigid, linear sequence, beginning with requirement gathering, moving through design, development, and testing, and culminating in delivery (Ciric et al., 2019). Once a phase is set and agreed upon, it is almost impossible to make changes since every phase must be completed before the next one. Customer interaction is typically limited, so this approach is best suited for projects with a stable and well-defined scope.

On the other hand, Agile methodologies provide a more flexible and iterative approach. This is because agile frameworks focus on flexibility where projects are split into several segments with the possibility of altering them as the project progresses (Ciric et al., 2019). This iterative approach ensures that there is the constant engagement of the customers who provide feedback that is useful in the frequent updating and enhancement of the project.

For instance, Amazon has incorporated the agile project management as a key aspect of its business to it Day 1 mentality and two-pizza team. The core mindset of the “Day 1” strategy that was championed by Jeff Bezos is the idea that organizations must keep on innovating and adapting in order to avert the “Day 2” where organizations become stagnant, irrelevant, and eventually die. In his words “Day 2 is stasis. Followed by irrelevance. Followed by excruciating, painful decline. Followed by death. And that is why it is always Day 1.” This approach means that every team must be ready to change. To add to this, Amazon uses the

two-pizza team strategy which stipulates that a team should be small enough in size so that no more than two pizzas can feed everyone in the team (approximately six people). These are small multi-functional and cross functional teams composed of employees from different job families, technical and non-technical and their work involves solving problems that are usually compound and divided into sub-tasks. Each team develops solutions for their part of the system which is later combined with solutions developed by the other teams. This model enables Amazon to stay flexible and meet the huge needs it faces on a regular basis (Brozovich, 2023).

2.4 Agile Project Management Methods

For now, there have been developed many types of agile methods for project management. Scrum, Kanban and lean become the top 3 most common used agile methods.

- **Scrum**

  Scrum has a flexible approach that is based on a concept known as sprints which are time bounded iterations for team collaboration on specific tasks. Key roles include the Scrum Master, Product Owner, and Development Team all work in unison to create product increments. This characteristic is beneficial for projects with changing needs (Zasornova, et al., 2022).

- **Kanban**

  Kanban focuses on the delivery of work in small batches and the visualization of the workflow, which is beneficial to rapidly changing environments. (Zasornova, et al., 2022).

- **Lean**

Lean, which is a manufacturing concept, focuses on the elimination of waste and enhancement of value through the application of agile principles to enhance project management. (Ganebnykh, et al., 2019).

2.5 Relationship between agile project management and service design

Although they come from two different fields, Agile project management and service design are still closely interconnected in many ways. By making comparisons, we can identify some notable similarities between them.

	Agile project management	**Service design**	
Principle	Customer focus, adaptive collaboration, simplicity, sustainability, and continuous improvement	User-centered, value-driven, systematic, collaborative and sustainable	Similar
Process	Iterative by sprints	Constantly tested, validated, and improved through iteration	Similar
Stakeholder collaboration	Consistent and continuous	Co-creative and consistent	Similar
Project perspective	Holistic	Service Ecosystem	Similar
Value for Organizations	Leading organization transformation	Promoting the transformation of the organization model and mindset	Similar
Flexibility and Adaptability	Dynamic adaptability and iterative flexibility	Contextual adaptability or user-centric flexibility	Similar

Table 1. Comparison of agile project management and service design – part 1

Principle

To begin with their principles, agile project management aims to meet the customer's needs by providing frequent deliveries of working product increments. It promotes collaboration, encourages daily engagement between motivated and self-organizing teams. Additionally, Agile principles promote that the solution needs to be simple, maintainable, sustainable and technical excellent, together with constant and regular reflection and adaptation to make the process better.

However, Service Design is also user-centric because its primary goal is to address the needs of the customers. It goes through a systematic approach and centered on the creation of value and efficiency for the user and the customer. Service design also ensures the involvement of the users in the design and prototyping processes. This means that services can be tested and adjusted prior to their deployment. Stakeholder involvement is also important at each stage of the design and delivery process, as well as the consideration of service sustainability through cyclical and ongoing feedback.

Although the two frameworks are working in different settings, they are still similar because of their principles of user-centered approaches, involving collaboration and continuous improvement.

Process

From the process perspective, both of them follow an iterative process. Agile project management follows an iterative process, which employs iterative cycles (sprints) to develop and refine products incrementally. Similarly, service design often involves prototyping and testing service components iteratively to refine the service experience.

Stakeholder collaboration

From the stakeholder collaboration perspective, agile ensures consistent and continuous stakeholder collaboration by promoting cross-functional teams and stakeholder involvement throughout the entire project lifecycle. Similarly, service design also involves co-design with customers and other stakeholders to ensure the service meets their needs and expectations.

Project perspective

Considering the project perspective, agile project management aims to optimize the entire project flow and value delivery process. Service Design considers the entire service ecosystem, including all touchpoints and interactions between users and service providers, which is similar to agile project management.

Value for organization

From the point of view of the value for the organizations, agile methodologies are based on the continuous improvement, iterative approach and effective change management which can result in a radical change in the organizational culture and make it more adaptable and proactive. Service design as a co-creation and humanistic attitude and culture can facilitate change within the client organization's ways of working, service delivery and thinking. All of them are valuable for the organizations and have high potential value.

Flexibility and Adaptability

The last similarity is their high flexibility and adaptability. For the inherent flexibility of agile methodologies, the teams can easily respond to the changing requirements and priorities. Sprints and iterative cycles can also help to align with this flexibility so that it becomes quite easy to integrate changes into the project without necessarily affecting the flow of the project.

Similarly, service design can be adaptable to different scenarios and user needs. These characteristics give it the ability to improve services and modify them based on the changing needs from the users.

On the other hand, there are also some differences between them.

	Agile project management	Service design	
Customer Involvement	engages customers through feedback loops in iterative cycles like sprints and reviews.	involves thorough user research and stakeholder engagement from the beginning to the end of the design process	Partly different
Outcomes and Deliverables	delivers incremental improvements and functional software for regular customer testing, aiming for continuous delivery and rapid value realization.	creates service models and prototypes that depict the entire user experience, aiming for seamless, cohesive services that meet user expectations and business goals.	different
Measurement of Success	measured by the timely delivery of project milestones, customer satisfaction with each iteration, and the ability to adapt to changing requirements	measured by the overall service quality, user satisfaction, and the effectiveness of the service in meeting user needs	different

Table 2. Comparison of agile project management and service design – part 2

Customer Involvement

To begin with the customer involvement, through the feedback loops in its iterative cycles such as sprints and reviews, agile project management involves customers a lot. Customer feedback is also integrated regularly to refine and improve the product incrementally. On the other hand, service design involves deep user research and extensive stakeholder engagement

from the beginning to the end of the design process. Tools such as personas, journey maps and service blueprints can be used to deep dive into the user needs and also co-create solutions with the stakeholders. Although agile project management and service design both have high customer involvement, their timing for the involvement of customer are different.

Outcomes and deliverables

The outcomes and deliverables are also different, agile project management delivers incremental product improvements and functional software that can be used and tested by customers regularly. Its aim is continuous delivery and deployment, in order to ensure rapid value realization. Service design produces comprehensive service models and prototypes, which depict the entire user experience across all its touchpoints. It is intended to provide integrated and consistent services that meet the needs and preferences of the users as well as the business objectives.

Measurement of success

The last difference is their measurement of success. For agile project management, success is often measured by the timely delivery of project milestones, customer satisfaction with each iteration and also the ability to adapt to changing requirements. For agile project management, it uses metrics like velocity, burn-down charts and customer satisfaction scores to measure the success. On the other hand, Success of service design is measured by the overall service quality, user satisfaction and the effectiveness of the service in meeting user needs. Employs metrics such as Net Promoter Score (NPS), Customer Satisfaction (CSAT), and Service Quality (SERVQUAL) assessments are used for the measurement.

3. Service design scale-up within large organizations

3.1 Introduction to service design

Service design is an emerging discipline that integrates thedesign thinking with the creation and improvement of services. It focuses on the interactions between the service providers and users. Different from product design, service design is centered on optimizing processes, user experiences, and relationships.

As service design was introduced in the 1990s, it has gained more and more recognition in facilitating innovation across sectors such as healthcare and public services through emphasizing a co-creative approach. This method involves engaging stakeholders, including service users in the design process, to ensure services meet real needs and improve outcomes (Sangiorgi & Prendiville, 2014). As the service design field evolves, it continues its way to address challenges in scaling and embedding design practices within organizations, in order to create sustainable and impactful service innovations (Meroni & Sangiorgi, 2011).

3.2 What is service design scale-up

Scaling up service design means the intentional application of service design practices and concepts to larger contexts such as systems, organizations, or even industries. It means that service design is integrated to every level and can change not only particular projects but also the whole system.

Service design at scale often includes the integration of design thinking into traditional business operations, leading to holistic, user-centered solutions that can adapt to various contexts and stakeholders (Manzini et al., 2004, as cited in Meroni & Sangiorgi, 2011). This

expansion goes further than making small changes and entails changing the structural and cultural aspects of organizations.

Service design scale-up can be grouped into three different levels: scaling up a specific service offering to reach a larger audience, embedding the service design mindset within an organization's culture and systematically integrating service design methodologies into regular operations.

- **Scale Up the Service the Organization Provided**

Scaling up the service an organization designed and provided means increasing the size and scope of the service an organization developed and offered. This process involves improving the infrastructure, resources and processes that are needed to enable more people or a bigger market to access the service without having to sacrifice quality.

For instance, the Dote Lavoro project was built in collaboration with an Italian regional authority. This project intended to improve job services offered to the citizens by scaling the service to a much larger population. At first, the service was limited to specific job centers. But the goal of the project was to go further and to encompass other territories. The biggest problem was to continue to deliver the same quality of service as the project grew, and that included the expansion of the job centers, the enhancement of the physical facilities, and staffing more people to address the large numbers of target users. It also introduced new ways of communication in order to maintain standard and stability of the service as it extended to other areas.The service design team was able to ensure that the service is easily scalable without affecting the experience of the user; this was mainly achieved through user-oriented

design and feedback from both the service staff and the users (Pacenti, 1998, as cited in Sangiorgi et al., 2011).

- **Scale Up the Service Design Mindset Within the Organization**

In order to scale up the service design mindset across the organization, it is important to integrate the principles, methods and also ways of thinking into the DNA of the organization. This means creating a culture of innovation and problem solving that is user-focused and spans across all the departments in the organization. It involves ensuring that employees are well informed and ready to use service design thinking in their work, foster cooperation, and embrace change to address users' needs.

To give an example pf Livework's Implementation in the UK. Livework is an UK-based service design consultancy that worked with a variety of public and private organizations to introduce and scale the service design mindset within these organizations. In one notable case, Livework collaborated with a major healthcare provider to embed service design principles into its operations. This process involved training workshops for staff, fostering cross-departmental collaboration, and embedding a culture of empathy towards patients' needs. As a result of the implementation of service design approaches into the work of the organization, employees were enabled to utilize user focus in every aspect of service provision. The outcome was the change of the organizational culture and service design was recognized as a method of addressing challenges and coming up with new solutions in the health care services (Sangiorgi & Meroni, 2011)

- **Scale Up the Implementation of Service Design Within the Organization**

Expanding the use of service design within the organization means that the practices of service design should be incorporated on a routine and sustained manner in the organization's operations and strategies. This entails guaranteeing that there is the adherence of the service design processes, tools and methodologies across the different projects as well as departments. The intention is to have service design as a standard approach in creating and enhancing services to ensure that all projects incorporate a systematic and user-based approach to design and thus achieve better results in the organization.

Hence in the IT industry, Tata Consultancy Services (TCS) leveraged the "inside-out" approach in escalating the application of service design in the organization. TCS first deployed service design principles for enhancing its employees' services and developing it as the internal pilot to expand the use of service design. It was on the proper implementation of service design methods and techniques including service blueprint and customer journey mapping in their internal projects. This effort involved creating cross-functional teams and using design thinking methodologies to address both staff and client needs. After the internal service design efforts yielded the expected results, TCS extended these practices to client projects and made sure that service design is well implemented across the different departments and services. This systematic implementation has become a business practice in their organization so as to ensure that the user-centered approach is intact in all their service delivery (Mahamuni et al., 2022).

3.3 Need for the scale-up within organizations

In the contemporary and ever evolving global market, organizations are faced with the challenge of providing quality services to the customers and at the same time be flexible to adapt to the changes that are taking place in the environment. The scaling up of service

design within organizations is essential for fostering systemic innovation and promoting a more user-centric approach to both internal operations and external service delivery (Sangiorgi & Meroni, 2011). This process entails the incorporation of the service design concepts like co-creation, empathy and iterative design into the organization and ensuring that they are well adopted in all the departments of the organization.

The need for scaling service design is therefore premised on the complexity of service systems which require organizations to interact with multiple stakeholders, internal and external to the organization. In this way, integrating service design into strategy and operations would enhance organizations' ability to create and respond to change within the context of customer needs, technological advancements and competitive pressures (Junginger & Sangiorgi, 2009). Additionally, the COVID-19 pandemic has led to an increased focus on the need to build organisational resilience and flexibility in practice, and thus underlined the potential of service design to help organisations to respond effectively to disruptions and crises (Sun, 2022).

Expanding service design not only improves the quality of service but also helps organizational change by promoting the concept of improvement and solving user's problems. This shift is crucial for organizations aiming to foster sustainable growth, enhance their innovation capacity and remain competitive in an ever-evolving marketplace (Junginger & Sangiorgi, 2009).

3.4 Scale-up challenges within large organizations

Expanding service design within national and international large organizations with over 250 employees is a challenging process that faces numerous issues when an attempt is made to

apply service design concepts at different levels of the organization. One of the biggest hurdles is the culture of resistance to change, especially in organizations that have long-standing processes and structures in place. New service design methodologies may not easily be accepted by employees especially if they have not had an exposure to the principles of service design or if service design is considered as a discrete process rather than one that cuts across various functions (Sangiorgi & Prendiville, 2017).

Another major challenge is the coordination and alignment of different departments and stakeholders. Service design requires a collaborative, cross-functional effort, yet organizations often operate in silos, making it difficult to foster the level of cooperation necessary for successful scaling (Junginger & Sangiorgi, 2011). Moreover, achieving consistent application of service design tools and processes across diverse departments and projects can be problematic, as different teams may interpret and implement these practices differently.

Furthermore, resource constraints, including time, budget, and skilled personnel, can hinder the scaling of service design. Organizations may struggle to allocate sufficient resources to support comprehensive training and ongoing development of service design capabilities across the workforce (Sun, 2022). Additionally, measuring the impact and return on investment (ROI) of service design initiatives can be challenging, which can reduce leadership buy-in and further slow the scaling process.

4. Research Methodology

4.1 Methodology

To gain a deeper understanding of how service design is scaled within large organizations and explore the opportunities presented by agile project management from the perspective of service design professionals, I chose to conduct qualitative research. The study will focus on sampling practices related to scaling service design in large organizations, with interviews serving as the primary method. The interviews will mainly focus on the Europe region because of its leading innovation in service design and agile project management within both private and public organizations, as well as its position at the forefront of adopting and scaling service design practices. Furthermore, my European education background will make it easier for conducting recruitment of interviews within Europe. With a scope of Europe region, these interviews will assist in finding out service professionals' opinions, perceptions, practices and feelings towards scaling service design and incorporating agile project management.

The purpose of these interviews is to gain insights into the work and perceptions of professionals working in large organisations in the field of service design. In particular, the interview aims at identifying the barriers and enablers of scaling service design practices and mindset.

Additionally, the interviews will examine the role of agile project management in facilitating this scaling process, identifying both successful strategies and areas for improvement.

Data analysis will be done in three stages. First, individual interviews will be analyzed to determine the topics of discussion and to sort study cases according to the position of interviewees and the characteristics of their organizations. Subsequently, the topics will be grouped based on the structure taken in the interviews. Last, I will integrate my perspective, identify interconnections between the data, and synthesized insights.

The insights gathered will contribute to a broader understanding of the challenges and opportunities in scaling service design practices and mindset within large organizations, as well as how agile mindset could be applied to support the scaling up of service design practices and mindset in the large organizations.

4.2 Interview Plan

Interviewee criteria

Service professionals were identified based on the following criteria:

1. senior service designer or manager working within a public or private large organisation (national or international organizations with more than 250 employees)
2. professionals with at least 3 years of experience in their current role
3. professionals engaged in facilitating the scaling up of service design mindset/practices across the organisation
4. professionals operating within a large organisation with offices in Europe and/or North America

Interviewee list

	role	**sector**	**size of the organization**	**criteria list fit**
Interviewee 01	senior service designer	UK government public sector	1.6 million employees	1,2,3,4
Interviewee 02	senior service	European	1,400	1,2,3,4

	role	sector	size of the organization	criteria list fit
Interviewee 01	senior service designer	UK government public sector	1.6 million employees	1,2,3,4
	design consultant	education sector	employees	
Interviewee 03	service design lead	American technology company	280,000 employees	1,2,3,4
Interviewee 04	service designer	Swedish manufacturing corporation	102,000 employees	1,2,3,4
Interviewee 05	service designer	Italian design agency	100 employees	2,3,4
Interviewee 06	Service design lead	British telecommunic company	86,000 employees	1,2,3,4

Table 3. Interviewee list

Interview protocol

- Interview method

  The interview method will be 1 to 1 semi-structured interview, with a duration of approximately one hour. The semi-structured interview has a predefined set of questions which are to be asked in the interview, but also has the flexibility to follow the conversation and change.

- Sampling method

  Qualitative sampling. Qualitative sampling is the process of selecting a small, targeted group of participants in qualitative research to explore diverse perspectives on a topic.

Unlike quantitative sampling, it aims to gather deep insights from individuals with different experiences or viewpoints, rather than generalizing results (ReseachMethodToolkit, 2023).

- Interview target

  Professionals who met the mentioned criteria and who were available for an interview were selected. The studied aimed for 8 to 12 interviews, but the time frame allowed only to reach 6 interviews, which is a limitation of this work

- Language used during the interviews

  English, Chinese

- Information sheet and consent form (see Annex)

  The interviewees will sign the information sheet and consent form to ensure that all information they provide remains confidential, and that anonymized excerpts from the interviews can be quoted in this paper.

Interview track

- background introduction

Can you please give a brief introduction about your organization?

How long have you been working in the organization?

What is your job role in the organization?

For which department/function do you work?

What are your main responsibilities?

- Service Design Scaling

Can you explain your understanding of scaling up service design within the organisation from your perspective?

Do you have any projects related to scaling up service design within the organisation?

What is the project about, what is the goal, the relevant stakeholders and the current status? What is your role?

Are there any challenges or limitations that affect you in the projects?

How you address these challenges in your new initiative?

What do you think it could be done to improve the scale up?

- Agile Practices in Service Design

Are you aware of agile project management? [If not I willgive a brief introduction].

Can you explain your opinion towards agile project management?

Do your team implement agile project management?

Have you implemented the mindset of agile project management in the scaling up? If yes, explain.

If not, how would you see this approach in the scale up?

Would you be interested in receiving the outcomes of my research?

4.3 Data Analysis

After conducting all the interviews, different types of qualitative data including the interview recording and transcripts are collected.

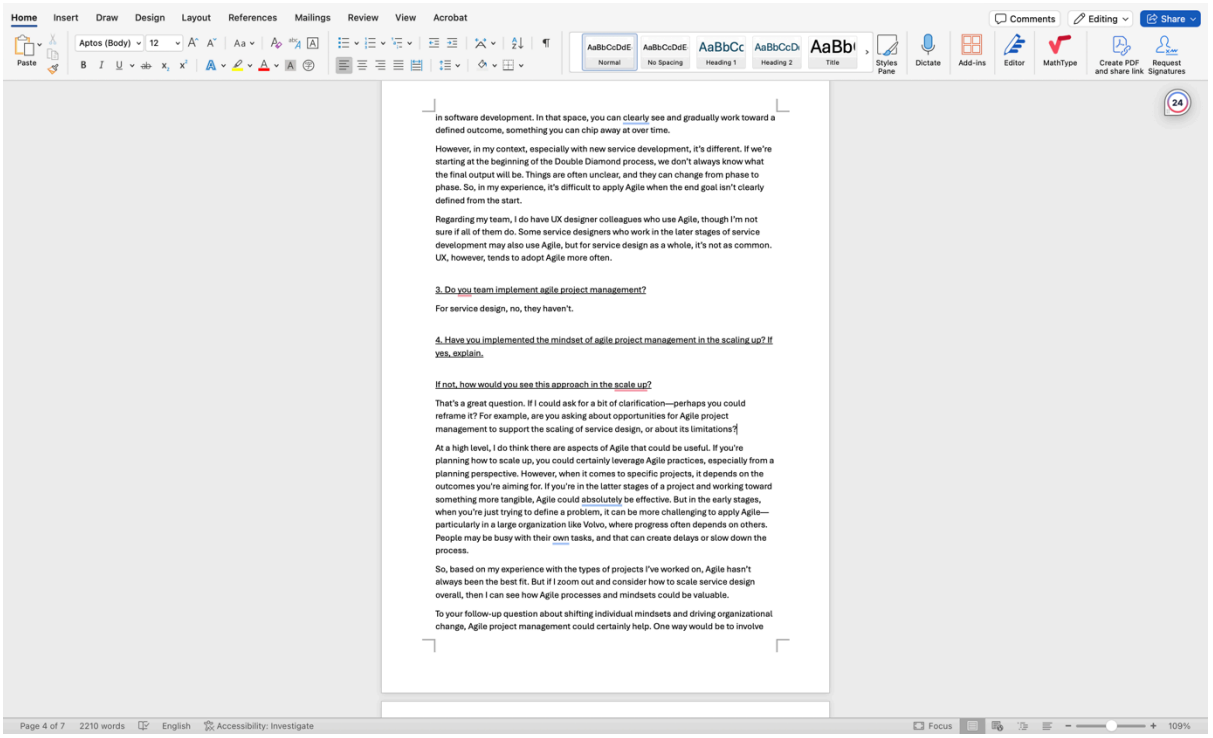

Figure 4. Analysis process - Transcripts from the interviews were collected and cleaned.

While analyzing my qualitative data, I followed three main steps:

1. I started by reading individual interviews, identifying major topics within each case and categorizing cases based on the job roles of interviewees and the characteristics of interviewees' organization.
2. Then I clustered the identified key topics using the interview structure. .
3. Finally, I integrated my perspective, identified interconnections between the data, and synthesized insights.

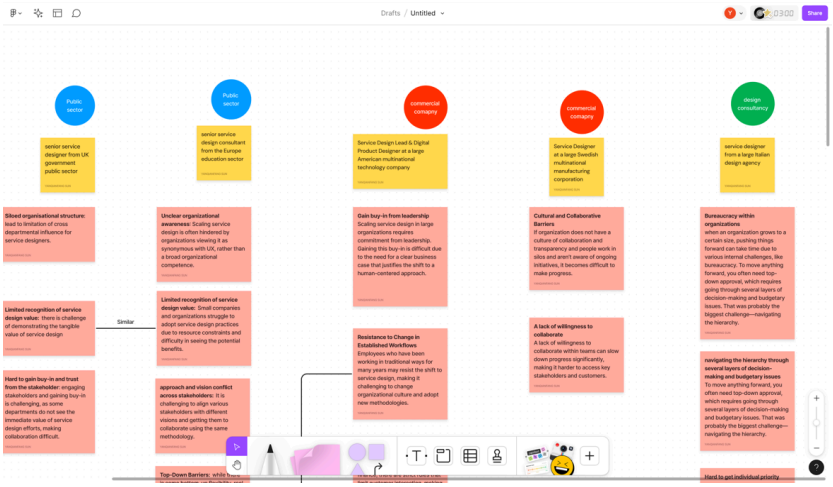

Figure 5. Analysis process - Cases were categorized based on the characteristics of interviewees' organizations

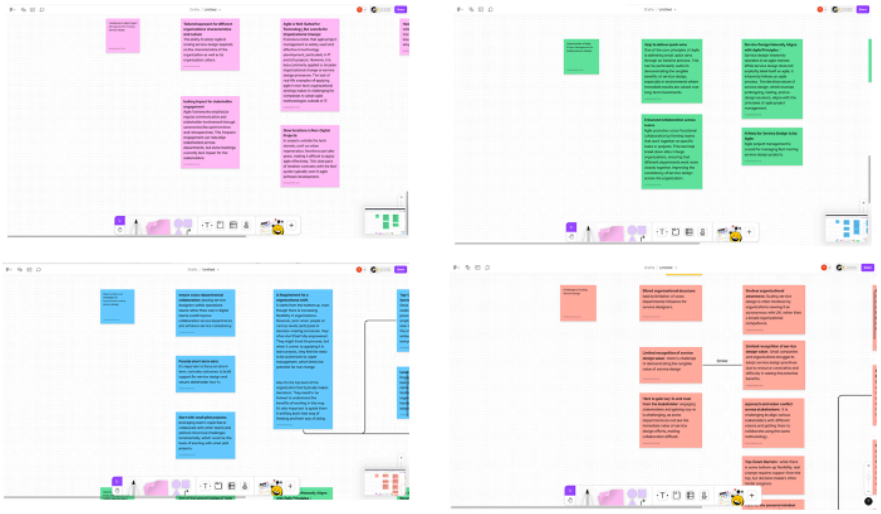

Figure 6. Analysis process - Key points were summarized based on the structure of the interview protocol

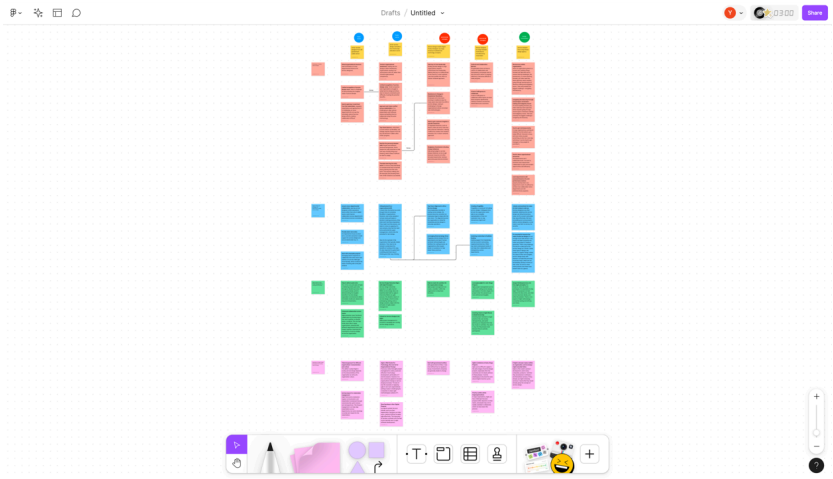

Figure 7. Analysis process - Key points were merged and connected

The insights gathered from the interviews highlight the current challenges of scaling service design within large organizations, as well as the opportunities for improvement. Given the present state of service design scale-up in these organizations, the opportunities and limitations of Agile project management are also explored in this context. This provides a comprehensive view of how Agile methodologies can empower and enhance service design practices within large organizations.

5 Research Outcome

The following section presents the research outcome, showing the opportunities and the challenges of agile project management based on to the current state of service design scale-up in the large organizations, as well as how agile methodologies can support and improve service design practices in big organizations.

Challenges in scaling service design

The first challenge that was raised by most of the participants is the complex organizational structure. This could bring various barriers. First barrier is the **siloed organisational structure**, which leads to the limitation of cross-departmental influence for service designers. Interviewee01, who works as senior service designer in a large UK government public sector organisation, mentioned that organizational structure leads to 'working in silos,' resulting in dispersed responsibility. He said, “Due to the structure of our organization, many tasks are spread across different departments. This kind of distribution is common in large companies and often leads to issues like working in silos". This siloed structure is also hard to break down. Interviewee05, as the service designer from a large Italian design agency, reported how this will lead to a lack of collaboration among departments and it is hard to

promote cross-department collaboration to gain more project opportunities and efficiency. As a result, people also prioritize their own department's work. It's difficult to achieve true collaboration when departments are still administratively separate. Another point mentioned by interviewee02 who works as a senior service design consultant in a European education sector is the challenge of aligning people with different visions and getting them to collaborate using the same methodology, which will make it harder to break down this siloed structure. Secondly, the organizational structure will also cause various top-down barriers. For example, interviewee02 mentioned, while there is some bottom-up flexibility, real change requires support from the top through several layers of decision-making and budgetary issues, but decision-makers often hinder progress. And interviewee05 also mentioned that when an organization grows to a certain size, bureaucracy within organizations is also one of these top-down barriers.

The second challenge is **limited measurement and recognition of service design value**. There is a challenge in demonstrating the tangible value of service design. As the interviewee01 from UK government public sector noted, "Sometimes even I'm unsure about the tangible benefits of certain actions, which makes it difficult to convincingly articulate the added value to others.". Organizations also struggle to adopt service design practices due to the difficulty in seeing the potential benefits, especially for the leadership and stakeholder levels. A lack of tangible value of service design will make it harder to gain buy-ins and trust from the leadership and stakeholders. Interviewee01 from the UK government public sector mentioned that engaging stakeholders and gaining buy-in is challenging, as some departments do not see the immediate value of service design efforts, making collaboration difficult. Another participant - interviewee xx - who works as the service design lead at a large American multinational technology company also mentioned that Scaling service design in

large organizations requires commitment from leadership. Gaining this buy-in is difficult due to the need for a clear business case that justifies the shift to a human-centered approach. Additionally, he also mentioned that this lack of tangible value will also lead to budgetary constraints in scaling design initiatives. Allocating budget to service design initiatives can be tough because resources are often directed toward other revenue-generating operational activities as the organization can not see the value of service design.

The third challenge is the **individual adoption barriers**. Interviewee02 from the European education sector mentioned challenges she encountered during her service design training experience within organizations. She highlighted how it was hard for the personal mindset shift toward the scale-up of service design as people have different personal backgrounds. She noted, "Some people are really attached to their own way of doing things and thinking, which makes it difficult for them to adapt.". This will also cause resistance to Change in established workflows. People who have been working in traditional ways for many years may resist the shift to service design, making it challenging to change organizational culture and adopt new methodologies, as mentioned by the interviewee03 from the American multinational technology company. It is also hard for individuals to translate what they've learned during training into their daily work. This requires making real-life examples and showing them how similar situations succeeded, which is also a side influence caused by the limited recognition of service design value.

The fourth challenge is the **lack of collaborative organizational culture**. Interviewee04 who works as a service Designer at a large Swedish multinational manufacturing corporation mentioned that if the organization does not have a culture of collaboration and transparency and people work in silos and aren't aware of ongoing initiatives, it becomes difficult to make

progress and make the first challenge even worse. This will also lead to a lack of willingness to collaborate within teams, which can slow down progress significantly, making it harder to access key stakeholders and customers.

Opportunities and strategies for improvement scaling service design

In regard to the opportunities and strategies for scaling service design for improvement. The first opportunity is to **make service design value tangible**. It is therefore important to determine the worth of service design in order to put a figure on it. In this regard, interviewee05 from the Italian design agency made a point to state that it is important to quantify the value since it is not enough to just discuss it. He noted, "In a business environment, everyone from investors to executives wants to see numbers. Numbers are a universal language—everyone understands what 0 and 100 mean.". It is important that one is able to measure the value or initiative that has been created. While such forms of design as product or graphic design are more concrete, the value of service design can only be seen in such intangible elements as personas or journey maps. It is a must to let people know the specific advantages they can get from these tools right away. Another principle is to provide short-term wins instead of long-term vision. As interviewee01 from the UK public sector mentioned, it's important to focus on the short-term because it will make it easier to concrete outcomes, to build support for service design and secure stakeholder buy-in.

The second opportunity is to **prioritize the top-down involvement during the whole process**. As interviewee02 from the European education sector mentioned, to scale up the service design within the organization, there is a need for an organizational shift. This change begins at the bottom, although there is the growing organizational flexibility. But, people at all levels of an organization may be involved in decision making and yet they do not feel they

are fully empowered. They may understand the process, but when it comes to using it in practical settings they want to have approval from the upper management which hinders the possibility of change. And so the focus here is the leadership in this change process. It is the highest level of the organization that usually comes up with the decisions. They have to be taught the importance of working in that manner. It is also important to help them change the mindset and approaches as well as the manner in which they work. Where top down endorsement is possible it can assist significantly in the management of collaboration and information sharing within different departments. When the leadership decides to scale service design, the process becomes easier because the workforce falls in place with the new direction. Interviewee03 from the American technology company noted, “Once executive management has adopted this vision, scaling the human-centered or service design approach within the organization becomes much easier”. Similar to the aforementioned organizations, this integration across the organization is crucial for establishing service design as an organisational practice.

Side opportunities such as **leveraging External design firms** are also mentioned. For example, interviewee03 noted, “Some companies often need support from external design firms to help them understand how design research, service design, or human-centered design can be applied to their specific industry. Engaging external design firms to lead projects and teach human-centered methodologies could facilitate the scaling process, as organizations often require hands-on assistance to fully adopt these practices.

Opportunities of Agile Project Management for Scaling Service Design

When it comes to the opportunities of agile project management for scaling service design, the first is the **connection between their natural characteristics**. This provides a fertile ground for the other opportunities. To step back to their natural characteristics, half of the participants mentioned that there is a tight connection between them. Interviewee02 from the education sector said that, “Service design naturally aligned with the agile principle from her perspective. Service design inherently operates in an agile manner.”. While service design does not explicitly label itself as agile, it inherently follows an agile process. The iterative nature of service design, which involves prototyping, testing, and co-design sessions, aligns with the principles of agile project management. Interviewee05 from the design consultancy also mentioned that design thinking, which is the base of service design, aligns with the agile principles. For instance, during the process of creating prototypes, it's essentially to stay agile. The purpose is to test whether the idea works, see what can be improved, iterate, and refine the solution. That’s a core aspect of Agile methodology—constantly testing and refining your ideas.

The second opportunity for agile project management is its **ability to deliver quick wins**. The other major concept of agile is the concept of delivering small successes in a short span of time through iteration. This can be very helpful in most cases, especially in areas where there is the need to show the actual outcome of the service design since service design is more of a long term investment. Interviewee03 from the technology company said that in one of his projects to scale up service design within a bank, agile project management could create a ‘sandbox’ within the organization to demonstrate the benefits and scale up step by step to support the transition.

The third opportunity for agile project management is that it can **enhance collaboration across teams and build relationships**. Agile encourages integration between teams and thus creates team that is assigned to a certain task or project. This can assist in facilitating collaboration in large organizations, which would result in different departments working in harmony, and the standardization of the service design throughout the organization. As noted by interviewee4 from the manufacturing corporation, "By integrating them into key rituals or activities, they start to buy into the process more because they've actively participated.". Getting team members involved in Agile practices for example user stories, retrospectives and sprint planning makes them become part of the process and will start to believe in the process since they are actively participating in the process.

Limitations of Agile Project Management for Scaling Service Design

But there are still some limitations raised. The first limitation comes from the **organization itself**. The ability to adopt Agile in scaling service design depends on the characteristics of the organization as well as its organizational culture. Interviewee03 from the tech company mentioned that it was hard to scale up service design within government entities compared with other organizations, it was more difficult due to regulatory issues. Government companies are generally harder to change. Interviewee01 from the UK government also said, "In a commercial company there might be more opportunities to try new approaches. But in our organization like the public sector, convincing key stakeholders to align on a direction is often more effective.".

The second limitation comes from the **characteristics of service design**. As agile is well-suited for Technology, but it is less so for the organizational change. Interviewee02 from the education sector mentioned that agile project management is widely used and effective in

technology development, particularly in IT and UX projects. However, it is less commonly applied to broader organizational change or service design processes. The lack of real-life examples of applying agile in non-tech organizational settings makes it challenging for companies to adopt agile methodologies outside of IT. Also most of the time the Iterations in non-digital projects are slow. In projects outside the tech domain, such as service design proejcts like urban regeneration, iterations can take years, making it difficult to apply agile effectively. Interviewee02 said, “It’s a long process, especially when it's not about developing a digital application or a new technology, but rather about changing an organizational process or developing a public service, which makes it more complex compared to a digital-focused project.”. This slow pace of iteration contrasts with the fast cycles typically seen in agile software development.

The third limitation is the **different stages of the service design project** for agile project management. Interviewee04 from the manufacturing corporation mentioned that agile project management can be useful for scaling service design, particularly in the later stages of a project when the outcomes are more defined and tangible. But on the other hand, agile can be difficult to apply in the early stages of service design projects, especially when the outcomes are not clearly defined. In these phases, it can be challenging to structure the work around Agile’s iterative cycles. As interviewee04 noted, "In my context, especially with new service development, tt’s difficult to apply Agile when the end goal isn’t clearly defined from the start.".

The fourth limit is that there is **no clear and observable effect on stakeholder engagement**. Agile approaches focus on frequent communication and engagement with the stakeholders by

using events such as sprint review and retrospective. This can be done more often to ensure that the stakeholders are in harmony with each other across different departments. However, interviewee01 mentioned that the stakeholders might not be aware of what they could get as an output of their work, and people might also have conflicting priorities that constrain the potential of their participation. He said, “For instance, when presenting a service blueprint to a department during the meeting, I can show them the blueprint itself, but I might struggle to convey how it can help them.”.

The last limitation is mentioned by interviewee05 from the design consultancy. He pointed out a key issue—**the causal relationship between Agile project management and scaling up service design** within an organization. He believes that if Agile is already implemented in an organization, service design might naturally follow. Agile is often used in product development, and in many companies, products—whether physical or software—are themselves services. If they already use Agile to develop these services, it seems logical that they would also understand the concept of service design. Therefore, if a company has Agile project management in place, scaling up service design becomes much simpler. Conversely, if Agile is not widely adopted within the company, scaling up service design would be more challenging. Hence, using Agile project management to scale up service design also requires the organization to have a well-established Agile structure.

In conclusion, the current challenges are mainly from 3 perspectives. The siloed organisational structure and lack of collaborative organizational culture from the organizational perspective, limited recognition of service design value from the top level perspective and the individual adaptation difficulty from the bottom level. In order to improve the scale up, strategies such as giving the tangibility of the service design value

through measurement and quantification, prioritizing the top-down involvement during the whole process and leveraging External design firms can be implemented. Given agile's connection between its natural aligned characteristics with those in service design, it can deliver quick wins through building a "sandbox" within the organization and also enhance collaboration across teams to build relationships for the service design scale up process. But its adoption is still limited by the characteristics of the organization and the organizational culture from the organizational perspective. Also the intangible and slow process of organizational change, limited timing for its involvement and unclear effect on stakeholder engagement can be challenging.

6. Discussion

Based on the research outcome, I started to summarize how and where agile project management can help with the service design scale up process.

Then I discovered the theoretical model of organizational logic change introduced by Kurtmollaiev, etc.(Kurtmollaiev et al., 2017).

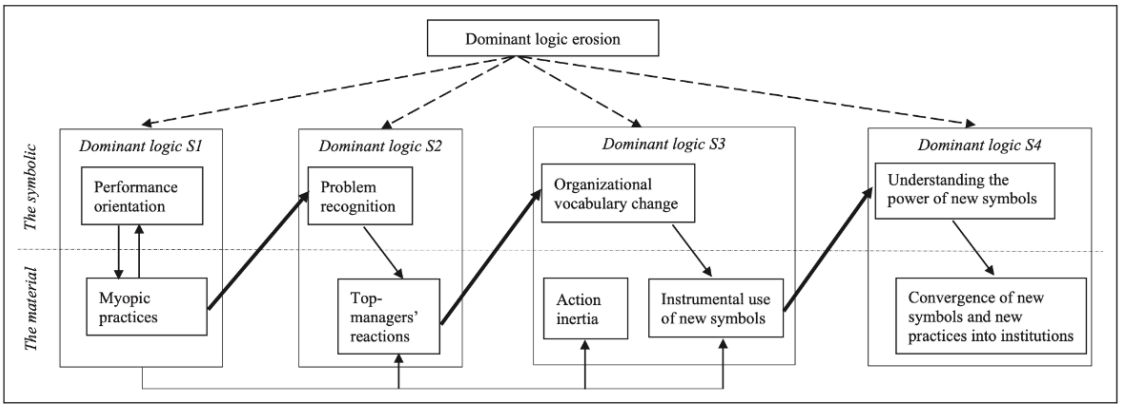

Figure 8. Theoretical model of organizational logic change (source: Kurtmollaiev et al., 2017: page 69)

The theoretical model of organizational logic change shows how organizations evolve through different states of logic, influenced by both top-down and bottom-up mechanisms. I

found due to the ability of delivering quick wins and enhancing collaboration across teams and build relationships, agile project management can play a crucial role from the instrumental use of new symbols to the understanding of new symbols. It can provide a more quick and efficient setting for the instrumental use, then through a collaborative framework, it can smoothen the process for the top level understanding through involving people and building relationships from a bottom-up approach.

Using this as an inspiration,. I introduced the organizational service design scale-up model, in order to give a end-to-end reference for the further adoption of agile project management for the service design scale-up within large organizations.

The service design scale-up model provides key initiatives for large organisations that can help to implement and develop service design practices with an agile project management approach. The model is divided into seven stages and each stage has advice and guidance that the organization can take as a reference to emphasizes initiatives to be prioritized for promoting a transformation process.

Stage	Aware	Introduce	Educate	Pilot	Involve	Scale	Shift
Goal	Leadership of the organization aware the tangible value of the service design	Individuals across the organization aware the concept of service design and secure the potential target for pilot	Individuals who are more adaptable toward service design gain the basic mindset and skills of service design	Create a sandbox within the organization to test the implementation of service design mindset and practices	Involve large scope to build relationship and secure trust and buy-in	Scale up the service design mindset and practices through more pilot projects.	Standarize the service design mindset and practices for the organization shift.
Advice and consideration	1.Service designer should **quantify and measure** the value of service design within the organisation to tangible **data-driven** outcome such as potential ROI or budget cut, in order to align with the business goal, which helps with the rise up of service design value to the leadership. 2. **Providing other service design practice examples** outside the similar organizations can also help to improve the tangibility of service design value. 3. Measuring the impact of service design **may not yield immediate results** and varies depending on the industry of the organization. It might take a **longer time for public sectors** compared to private organizations as there are more limitation from regulations, policies,alignment of stakeholders, political interests, and resources perspective.	1. Use i**nternal communication materials** to introduce service design concepts across all levels. 2.Quantitative research can be conducted(e.g., surveys) to **assess organizational profiles** and **individual attitudes** toward service design. 3. Ensure the selected individuals are from **diverse departments** and have **high willingness** to embrace change and collaborate.	1.Selected individuals can be trained in the service design thinking such as one week workshop. 2. Involving the support of **external design consultancies** can help to accelerate. 3. It is essential to show **how service design methods and techniques can be used in real-life examples** during the workshops, as well as other successful examples.	1. The individuals educated are assigned a cross-department service design pilot project. 2. Project members follow the **Scrum** agile project management method to finish the project. 3.. It's better to launch the pilot project with a group of **around 6 people**. 4.It needs to be concerned that for this type of pilot project, **designing improvements on the current service** is more suitable than designing a whole new service, since agile can be difficult to apply in the early stages of service design projects, especially when the outcomes are not clearly defined.	1. The pilot project aims to involves other individuals from departments and stakeholders to the sprints and retros to secure their buy-in. 2.It needs to be ensure the **clear and observable effect on stakeholders' engagement** through visualizing the outcome from their perspectives since they might not be aware of what they could get as an output of their work.	1.Introduce the other individuals with buy-in to the training and launch more pilot projects with them. 2.It's also need to be concerned that with government entities, it might be more difficult to increase the number of pilot project due to regulatory issues.	1.Introduce the service design pilot project process as a standard approach within the organization,
Approach direction	Bottom-up	Top-down	Top-down	Bottom-up	Bottom-up	Top-down	Bottom-up
Agile project management involvement	/	/	/	provide a quick setting for the pilot project	provide a framework for stakeholder involvement	/	/

Aware Stage: For this stage, it is therefore advisable that service designers should aim at quantifying and articulating the benefit of service design within an organization in terms of data-driven business goal such as ROI or reduced costs and relating this to the goals of the organization in order to gain credibility in the eyes of management. Also, other examples from other organizations, especially those that are in the same industry, helps to visualize the service design value. Nevertheless, it has to be understood that the evaluation of the impact of service design may not produce immediate results and is also very much dependent on the industry. For instance, in public sectors the process of change may be slower due to

constraints such as rules and regulation, stakeholder's involvement, political influence, and limited resources as compared to private organizations which may not have all these barriers.

Introduce Stage: In this stage the emphasis moves from the leadership to the people of the organization. The objective is to spread awareness on service design and the idea within the organization, which prepares for the cultivation of service design culture within the organization. Internal communication materials can be used to introduce the concept of service design across individuals. Then quantitative research such as surveys can be conducted in order to evaluate the organization profile and the individuals' attitude toward service design. It is necessary that this feedback can help to determine the main employees who can become candidates for further training. The selection can be made based on their way of working, willing for the changing and also the diversity of the department people come from, since the agile project management prioritizes a collaborative and cross functional environment. The approach used in this stage is the top-down approach although the organization structure is still a silo structure where different departments work independently of the other.

Training Stage: This stage entails proper sensitization and awareness campaigns for the people of interest identified in the previous stage. These people, who are more sensitive to the service design can trained in the service design thinking, sometimes with the support of external design consultancies. This is to ensure that they are well prepared to embrace service design mindset and skill set. It is essential to show how service design methods and techniques can be used in real-life examples during the workshops, as well as other successful examples. These sessions afford the participants the actual experience of applying the tools in solving real life problems.This training provides the basis for the reduction of

barriers as cross-functional groups are established for the next step, the 'silo' structure starts to be challenged. Here the strategy is quite opposite to top-down, as the employees from various departments start getting together and prepare for forming cross-functional teams, in order to fit them into the agile project framework.

Pilot Stage: For this stage, the purpose is to establish a "sandbox" (meaning a testing environment) and initiate a pilot project. For example, 6 of the selected individuals from different departments could get together to launch a service design project following a Scrum framework, where the organization would be able to test the implementation of service design with Agile methods. It is in this stage that people across different departments are grouped into cross-departmental teams. These teams therefore are using agile approaches including sprints and retrospectives in the pilot projects. But it needs to be concerned that for this type of pilot project, designing improvements on the current service are more suitable than designing a whole new service, since agile can be difficult to apply in the early stages of service design projects, especially when the outcomes are not clearly defined. This stage is vital for relationship development and trust between different departments as well as for service design practices' approval. It also helps to create a quick setting for the instrumental use of new symbols mentioned in the theoretical model of organizational logic change.

Involve Stage: This stage concerns extending the scope and including more people and departments in the implementation process with the help of the agile project management framework. The aim is to make the service design approach more widespread than the pilot project, involving more external departments and stakeholders to retrospectives for the increase of their interest and trust, as well as their buy-in. But it needs to be ensure the clear and observable effect on stakeholders' engagement through visualizing the outcome from

their perspectives since they might not be aware of what they could get as an output of their work.

Scale Stage: The scale stage is the stage to scale up service design with agile methodologies through more training and pilot projects. More people and units are exposed to the concepts and practices and thus service design becomes promoted across the organization. This phase seeks to extend the delivery of the initial pilot project to the next level so as to enhance the integrated and cross-silo model. This approach enlarge the influence of the instructional use of the new symbols, ensure the understanding from the top level in an incremental bottom-up way. It's also need to be concerned that with government entities, it might be more difficult to increase the number of pilot project due to regulatory issues.

Shift Stage: The last stage of the model is the service design and agile practices' standardization in the organization. Service design enters the organizational mainstream and is no longer implemented only in various projects. Consequently, the organization changes from a more hierarchical structure to a more horizontal one which is often referred to as the 'flatter' organizational structure. The organization completes the shift as service design is scaled up throughout the whole organization as a normal practice.

In conclusion, this model gives the organizations a guide to scale up service design practices within their organizations. The model focuses on the demobilization of the departmentalization, encouraging the integration between departments and incorporating the agile project management in order to guarantee a service design shift in the organization from the initial stage of raising the awareness on service design to the final stage where service design is fully integrated and institutionalized as a business process.

7. Conclusion

In summary, the scale up of service design within large organizations faces challenges from the perspectives of organization itself, top level and bottom level. Agile project management can empower the scale up process of service design within large organizations, especially for providing a quick setting for service design pilot project within the organization to gain quick wins and use that quick wins to gain more buy-in through sprints and retros. Its connection between its natural aligned characteristics with those in service design, the ability to deliver quick wins through building the sandbox within the organization and also enhancement of collaboration across teams to build relationships can tackle the current challenges of service design scale-up from different perspectives and align with the direction of the potential improvement strategy.

However, it is important to note the limitations of agile project management adoption in the scale up caused by the characteristics of the organization and the organizational culture. Also the intangible and slow process of organizational change, limited timing for its involvement and unclear effect on stakeholder engagement need to be considered for its adoption.

The organizational service design scale-up model gives a reference for the further adoption of agile project management for the service design scale-up within large organizations. Despite these outcomes, the research was limited by a small sample size for expert interviews and the focus on limited design examples. Future research could expand the sample size and example

scope. Also the way to quantify the service design value and increase the accessibility of service design mindset to make it more easier for people to adopt can be interesting topics to explore.

8. Appendix

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8.2 List of figures

8.3 List of tables

8.4 Annex

Informed Consent to take part in research

I..... voluntarily agree to participate in this research study.

- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that in any report on the results of this research my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.
- I understand that disguised extracts from my interview may be quoted in Yanqianfang Sun's final thesis paper.
- I understand that if I inform the researcher that myself or someone else is at risk of harm they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.
- I understand that signed consent forms and original audio recordings will be retained.
- I understand that a transcript of my interview in which all identifying information has been removed will be retained.
- I understand that under freedom of information legalisation I am entitled to access the information I have provided at any time while it is in storage as specified above.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Names, degrees, affiliations and contact details of researchers (and academic supervisors when relevant).

Signature of participant Date

Signature of participant Date

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