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# From product centricity to services: Design workshops and maps as tools in strategy articulation

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#### **Abstract**

This paper explores how an IT company wants to change from product-centricity to servitization. A cross-functional customer journey workshop mapped the current state from the customer's point of view, and by identifying opportunities, it identifies gaps in becoming a service organization. Activities in the workshop focused on mapping a current customer journey and a proposition of a customer journey. The case explores how a service design workshop and tools can be used in strategic work, to support and facilitate a discussion on changes needed to be customer-centric, going beyond technology and features. The workshop and maps proved useful in facilitating and visualizing the current organizational state and identifying opportunities for what it takes to shift to servitization. This case contributes to practical aspects of how service design tools can support organizational transformation towards servitization.

Keywords: service design, design workshop, customer journey mapping, servitization, organizational change

### Introduction

Shifting strategy from delivering a feature-rich software product to providing a customer-centric service requires a significant organizational transformation. This case study sets out with a new strategic initiative which envisages changing to a customer-centric service organization. This paper is concerned with applying the customer journey mapping technique to support early strategy work. Within service design, the literature draws on different fields. 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 (Blomkvist et al., 2010). Within information systems, the focus on the service presents a shift away from traditional system thinking (Orlikowski & Scott, 2015). The shift from focusing on tangible products to intangible service offerings has gotten researchers to ask what then constitutes the object of study in services. In the following, we review literature focusing on service design as a field and servitization within business model innovation.

#### Service design as a field

As a field, the design of services is interdisciplinary. It integrates multiple contributions on theory, insights, and techniques from the design discipline as well as marketing, information systems, management and business administration (Teixeira et al., 2017). Design is the practices involved when making material and immaterial products (Clarke, 2011). Service design focuses on enabling a seamless experience for customers (Teixeira et al., 2017). This experience is a crucial competitive advantage in the service sector (Følstad & Kvale, 2018). Maps can help visualize and translate service material from immaterial to tangible representations (Blomkvist et al., 2016). Methods for representing services can be done through maps but familiar analytical tools, such as spreadsheets, cannot support relational complexities (Boyer et al., 2011). Maps help explicate business models and can encompass complexity as they support multiperspectives and relational aspects (Simeone, 2019). Integrated crossdisciplinary models have been suggested and include the MINDS method (Teixeira et al., 2017) and Gigamaps (Sevaldson, 2011; 2015). Customer journey maps focus on depicting a customer's journey through a service with a focus on experience (Blomkvist et al., 2016) and are a visualization technique that represents the unfolding of the service process across abstract time (Følstad & Kvale, 2018). Customer experience is understood as being shaped during the interactions between the customer and the

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service provider (Berry et al., 2002) and is, in nature, holistically constructed (Verhoef et al., 2009).

#### Servitization and transformation

Servitization is a trend that has challenged how companies are doing business with customers as well as how products are developed (Frank et al., 2019). It refers to a transformational process from product-centric to service-oriented business models, centring on customer value and originating from the management research field (Frank et al., 2019). A servitization strategy shifts the focus to not only focus on product development itself but broadens the capacity to offer services that follow customer needs (Fabian Ayala et al., 2019). The journey to services has been explored in whitepapers foregrounding the benefits of servitization, such as an increase in customer retention and revenue growth (Livework, 2016) as well as higher profit margins, income & revenue and a stronger differentiation from competitors (Fabian Ayala et al., 2019)

The transformation of shifting to servitization implies both structural changes and an internal business transformation of the company's value architecture (Fabian Ayala et al., 2019; Frank et al., 2019). One challenge is to manage the transition to services, which from a change perspective is emergent and evolutionary (Martinez et al., 2017). Changes do not only affect organizational processes but also have implications for the roles of the actors in the service system (Overkamp & Holmlid, 2018). It affects a change in divisions of labour among service providers and recipients (Blomberg & Stucky, 2017). Overkamp & Holmlid (2017) argue that the implementation of new services should be part of the service design processes. Servitization as a business model is in itself insufficient in helping with the organizational processes that need to change and does not offer guidance in experimentation (Chesbrough, 2010). Design methods propose iterative approaches to articulating strategy in design, going beyond the idea that strategy can be pre-planned and controlled through frameworks (Simeone, 2019).

# Research question

Servitization as strategy entails a comprehensive transformation for product companies. Service design offers an array of methods for studying and representing the immateriality of service. Customer journey mapping can be a useful tool to get valuable insight into how a service is

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experienced (Følstad & Kvale, 2018). It is a tool that can help bring together individual parts of the organization into a singular vision capturing the whole customer experience (Polaine, Løvlie & Reason, 2013). However, we know little of how existing methods and tools from service design can support and facilitate the discussions of pursuing a servitization strategy. This paper explores how design methods can support the initial steps of formulating a strategy within the transformational process of shifting from product centricity to achieve the benefits of servitization. The research question is, how can design workshops, using the customer journey map tool, support an initial discussion on the challenges of shifting to a service organization?

## Case description

The case company A is a globally-operating financial technology company that successfully delivers an enterprise software solution to its clients. The system was developed over a 40 year period. The company employs 1500 people globally and has 200 clients. The product runs on-premise and supports financial professionals in their daily business operations and decision processes in a regulated and changing environment.

To remain adaptive to fast-paced changes in clients' needs, as well as in the business environment, the company has initiated an ambitious transformational strategy. The transition includes an increasingly holistic approach with a strong focus on clients' business outcomes. The new strategy has implications for the company's technology. It extends the delivery of a software product towards hosting and operating service offerings to continue empowering and enabling their clients' success. The company is new to the discipline of service design.

## Workshop approach

A cross-functional workshop to map the customer journey was part of the early stages of the strategy creation process. The goal was to map how a customer experiences company A end-to-end and to identify opportunities for improving the service experience. The workshop took one full day (program in Appendix A). The workshop followed the narrative structure of a holistic customer journey (see Appendix B, figure 2) (Blomkvist et al., 2016). The workshop was facilitated by a newly-established design team

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from R&D with the support of newly-hired strategy employees. One of the authors acted both as facilitator and notetaker<sup>1</sup>. Among the 13 participants, 11 were physically present, and two were present via videocall. Nine participants represented the organization, all drawn from senior management. Due to the dynamic nature of the activities and some participants being online, the workshop was not recorded.

The first part focused on mapping the customer's worst and best experiences from a current perspective, and the second part focused on a proposed customer journey through generative activities towards a possible service "to be" (Følsted & Kvale, 2018). The company had no consolidated set of personas. Through comparative document analysis of existing personas, the design team and Strategy Office created two abstract roles to represent the company's customers (Appendix B, Figure 1).

### Coding and analysis of maps

The objects of study in this paper are the customer journey maps, generated during the workshop, consisting of colour-coded post-its, as well as the dialogue among participants captured in notes by one of the authors. Appendix C shows a timeline of interactions between the design team and representatives from the Strategy Office who collaboratively compared and combined the maps. The maps were inductively coded, and summarized in seven categories. The maps were introduced at a Strategy Session with around 25 people who had not participated in the workshop. One of the authors helped present the maps and observed the following discussion. The authors analyzed the seven categories along with the maps and observational notes following a grounded research strategy (Strauss & Corbin, 1990). The categories were reduced to five after the maps had been transcribed through condensation of meaning (Kvale & Brinkmann, 2009).

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<sup>1</sup>One of the authors is a researcher taking part in an action research study in the organization. The case study is part of an externally funded industrial PhD project with the company

## **Analysis**

The analysis will focus on what insights the customer journey mapping technique can bring to participants from a company that has a desire to change from being product-centred to being a service organization. In the following, we introduce the five categories. The source of statements in *italics* is from the transcribed maps unless indicated otherwise in parenthesis.

#### Personas as a shared tool

Applying personas as a shared tool was new to the organization. The workshop began with a discussion on who of the personas should be the protagonist of the journey. The participants selected a buyer persona different from the persona introduced by the facilitators. The stages were discussed with a point of departure in the participants' knowledge, and the persona was seldom mentioned. The discussion during the Strategy Session pointed to insecurity in working with personas expressed through questions such as, *Who do we start with? Who should we build? What differentiates them?* (Notes, Strategy Session). During the discussion, the participants gained the insight that to sell a service, the skills of internal work roles would be affected. Selling a service should be driven by a *future sales profile* which understands customers' *outcome needs* (Notes, Strategy Session).

#### Understanding a customer's business

The lack of a 'unified' understanding of their customers and business was the largest category. The participants noted that when new customers approach the company, there is a *lack of evidence to substantiate business benefits*. Participants stated that *clients want the company to understand their business challenges and not technical challenges better in the first stage of the customer journey*. The company is good at identifying trends and sharing their roadmap but *poor at executing against the roadmap*. Moreover, there is a *low discovery of functionality* with the customers. The experience of the company's sales department is that customers perceive the solution as complex and as a system aimed at experts. Customers experience unfamiliar terminology that is internal and company-specific.

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#### **Solutions**

Discussions about solutions evolved around a better understanding of how customers interact with the company's solution through a *business intelligence discipline for data-driven dialogues with clients*. On the proposed state map, the participants imagined positive quotes from a future customer, stating:

It is great to feel as a customer that you both get the benefits of a standardized system while still feeling your specific business needs are met:

It has been such a great experience feeling how engaged the company has been in training and competences to develop my organization for optimal use of the solution.

The quotes express the expected benefits of shifting to a service organization. Furthermore, it was discussed that understanding best practice would lead to positive quotes from a future customer such as: I always follow the recommendations of the company, because I trust they know about the process- optimization much better than I do.

#### Overcoming complexity

A recurring theme across the entire customer journey was discussions of complexity. Standardization and configuration versus customization were brought up to address the challenge of a complex and configurable system (Notes, Strategy Session). An 'all-inclusive' pricing model was suggested as a solution to address the complexity of the current pricing model. It was discussed how a 'sell it right' bundle of software services could be created as a solution package across the organization to help ensure lifetime client value and expand global clients to [address] new local areas. This holistic understanding as a premise for being a service provider was new to the participants.

Flexibility was discussed from both a positive and negative perspective. When the company sells and negotiates with customers, they *never say 'no' to a customer*. The company is known as a trusted partner that is flexible, it always fixes first and settle later, and offers committed support. The flexibility comes with a downside when it comes to configuring the product, which can be done in many different ways.

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#### **Product adoption**

With the company operating as a service organization, there was a need to discuss how expanding and renewing services with existing customers is challenged by not knowing what functionality of the system they use. There is a lack of shared insight into patterns of workflows after the product is bought and implemented. Furthermore, *onboarding endusers* was perceived as painful, and implementation projects as agonizingly long. Upgrades were seen as a negative experience, that can take between 3-6 months, and the word *stickiness* was repeated.

Solutions discussed to address the challenges included:

- To make a dedicated effort for co-adoption of the solution with clients.
- Implement client success teams.
- The company should go cloud to better update experience and data-driven insights.
- Switching to service means flipping to renew-retain (Notes, Strategy Session).

## Silo-based organization

Participants in projects discussed how customers, during implementation, experience the organization's internal silos, as their point of contact is fragmented – they experience that they *shop in shops*. During the discussions in the Strategy Session, it was emphasized that a holistic reorganization was needed to *end 'silo' experience for clients*. Additionally, the *product-centred R&D development* should have an *outcome focus* as well (Notes, Strategy Session). Shifting to a service organization requires that the company needs to better *understand client business models* from their perspective and focus on the *development of a new delivery model* (Notes, Strategy Session).

#### **Findings**

Exploring this method inspired discussions of what it requires to be a service organization. In summary, the conclusions of the analysis show that:

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- Mapping the customer journey creates an understanding of the current complexity of onboarding, terminology, pricing models and organizational design - from the customers' point of view.
- Mapping the customer journey helps to identify potential solutions to negative experiences in the current state.
- The map helps to take a holistic approach to understand how the company's product and delivery model affects the customer's experience.
- Discussions of the change needed have implications for the skills required internally and for organizational design.

#### **Discussion**

The strategy of organizationally changing from focusing on tangible products to intangible service offerings was materialized and discussed through two customer journey maps. We argue that this tool can offer a strategic starting point to support discussions on topics of the servitization needed, and in determining the new value proposition where the last is a significant challenge reported by the literature (Frank et al., 2019). The insights show the potential of design workshops to support the initial steps of articulating a strategy. The mapping of processes provided valuable insights into service provisions for both designers and managers (Følstad & Kvale, 2018). Imagining the proposed state, the participants realized they were far from delivering a service. The process revealed the implications of change at an organizational level.

How to reconfigure a business model and achieve the benefits of servitization is challenging (Frank et al., 2019) and the servitization strategy can have many orientations (Fabian Ayala et al., 2019). The maps offer a tangible frame for discussing the benefits and enablers, within and beyond the capabilities of the company in its current state. The discussion of the shift towards servitization, from a strategic level, confirms that its main focus is adding value to the customer (Frank et al., 2019). The workshop facilitated discussions on where and how there was a lack of understanding customers, e.g. during usage of the product. The topics in the discussion point to essential areas of the internal business transformation that the literature on servitization reports, e.g. its implications for the internal workforce (Overkamp & Holmlid, 2018;

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Bordoloi et al., 2018). Other important topics that should inform the service strategy include discussions on the product design (e.g. standardization), revenue models (e.g. pricing model) and technological benefits such as cloud computing (Frank et al., 2019). Moreover, the tool supports the servitization focus of adding value to customers through the proposed solutions of extending and supporting product usage, to retain customers (Fabian Ayala et al., 2019).

Although the paper does not explore the subsequent phases of the strategy, these will have implications for how the service strategy is implemented. In this regard, the approach to strategy articulation becomes important. Integrating service design processes will require that strategy is an iterative process where strategy articulation is evaluated continuously, as Simeone (2019) found. When implementing the new strategy and integrating initiatives with design processes, it must be acknowledged that the nature of strategy is emergent (Simeone, 2019), as well as the service journey transition (Martinez et al., 2017). A way to integrate design in the following phases could be to explore the proposed customer journey with specific scenarios which can support, "articulating value (co-)creation process, actor roles and responsibilities" (Overkamp & Holmlid, 2017, p. S4418). The generative activities of creating a proposed customer journey map includes participants discussing what is required to be a service organization, and offers a tangible starting point for exploring future scenarios and possible reconfigurations of servitization as business model innovation.

#### Conclusion

The expected benefits of servitization depend on determining the value proposition of the servitization business model. The business transformation to servitization is challenging, and as companies explore ways to diversify their portfolio through service strategies, this case shows how service design tools through the customer journey map can support discussions on the shift from product centricity to servitization. The findings conclude that customer journey mappings are useful to visualize a tangible starting point in the initial steps of discussing expectations of shifting to servitization. The topics discussed can support ongoing strategy articulation and point to areas of reconfiguration evolving in the current state of the organization. This paper contributes to the field through a

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practical case of how a service design technique can support strategic work in organizational transformation.

#### References

- Berry, L. L., Carbone, L. P. & Haeckel S. H. (2002). Managing the Total Customer Experience. Sloan Management Review, 43(3). Pp. 85-89.
- Blomberg, J. & Stucky, S. (2017). Service design and the emergence of a second economy. In Sangiorgi, D. & Prendiville, A. (Eds.). Designing for Service: Key Issues and New Directions. London; New York, NY: Bloomsbury Academic. Pp. 213-222.
- Blomkvist, J., Clatworthy, S. & Holmlid, S. (2016). Ways of seeing the design material of service. In N. Morelli, A. de Götzen & F. Grani (Eds.). Service Design Geographies. Proceedings of the ServDes.2016 Conference. 24-26 May 2016. Copenhagen. Linköping University Electronic Press. Pp. 1-13.
- Blomkvist, J., & Holmlid, S. & Segelström, F. (2010). Service Design Research: Yesterday, Today and Tomorrow. In Schneider, J. & Stickdorn, M. (Eds.). This is Service Design Thinking: Basics-Tools-Cases. Pp. 298-313. The Netherlands: BIS Publishers.
- Bordoloi, S., Fitzsimmons, J. & Fitzsimmons, M. (2018). Service Management: Operations, Strategy, Information Technology (9th edition). New York, NY: McGraw-Hill Education Ltd.
- Boyer, B., Cook, J.W. & Steinberg, M. (2011). Recipes for Systemic Change. Helsinki, Finland: Sitra/Helsinki Design Lab.
- Chesbrough, H. (2010). Business Model Innovation: Opportunities and Barriers. Long Range Planning, 43(2–3). Pp. 354–363. https://doi.org/10.1016/j.lrp.2009.07.010
- Clarke, Alison J. (2011). Design Anthropology: Object Culture in the 21st Century. Austria: Springer.
- Fabian Ayala, N., Gerstlberger, W. & German Frank, A. (2019). Managing servitization in product companies: the moderating role of service suppliers. International Journal of Operations and Production

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- Management, 39(1). Pp. 43-74. https://doi.org/10.1108/IJOPM-08-2017-0484
- Følstad, A. & Kvale, K. (2018). Customer journeys: a systematic literature review. Journal of Service Theory and Practice, 28(2). Pp. 196-227. https://doi.org/10.1108/JSTP-11-2014-0261
- Frank, A., Mendes, G., Ayala, N. & Ghezzi, A. (2019). Servitization and Industry 4.0 convergence in the digital transformation of product firms: A business model innovation perspective. Technological Forecasting and Social Change, Vol. 141, April 2019. Pp. 341-351. https://doi.org/10.1016/j.techfore.2019.01.014
- Kvale, S. & Brinkmann, S. (2009). InterView Introduktion til et håndværk. 2nd edn. København: Hans Reitzels Forlag.
- Livework (2016). Servitization: Shifting from Products, to product service bundles in B2B. Whitepaper. December 2016. Retrieved from: https://assets.liveworkstudio.com/app/assets/servitization-part-i.pdf
- Martinez V., Neely A., Velu C, Leinster-Evans S. & Bisessar D. (2017). Exploring the journey to services. International Journal of Production Economics, Vol. 192. Pp. 66-80. https://doi.org/10.1016/j.ijpe.2016.12.030
- Orlikowski, W. & Scott, S. (2015). The algorithm and the crowd: considering the materiality of service innovation. MIS Q. 39(1) (March 2015). Pp. 201-216. https://doi.org/10.25300/MISQ/2015/39.1.09
- Ostrom, L. A., Parasuraman, A., Bowen, D. E., Patrício, L., Voss, C. A. & Lemon, K. (2015). Service Research Priorities in a Rapidly Changing Context. Journal of Service Research, 18(2). Pp. 127-159. https://doi.org/10.1177/1094670515576315
- Overkamp, T. & Holmlid, S. (2017). Implementation during design Developing understanding about service realisation before implementation. The Design Journal, 20:sup1. Pp. S4409-S4421. https://doi.org/10.1080/14606925.2017.1352937
- Overkamp, T. & Holmlid, S., (2018). Towards a structured way to represent future service roles. Proceedings of the 5th Participatory Innovation Conference (PIN-C). 11-13 January. Eskilstuna, Sweden: University of Southern Denmark (SDU). Pp. 345-348.

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- Polaine, A., Løvlie, L. & Reason, B. (2013). Service Design: From Insight to Implementation. Brooklyn, New York: Rosenfeld Media.
- Sevaldson, B. (2011). Giga-mapping: visualisation for complexity and systems thinking in design. Nordic Design Research Conference. 29-31 May 2011. Helsinki, Finland: NORDES. Pp 1-21.
- Sevaldson, B. (2015). Gigamaps: Their role as bridging artefacts and a new Sense Sharing Mode. Relating Systems Thinking and Design (RSD4) 2015 Symposium. 1-3 Sep 2015. Banff, Canada: OCAD University Open Research Repository. Retrieved from: https://core.ac.uk/download/pdf/132316620.pdf
- Simeone, L. (2019). An introductory review of methods for the articulation of strategy in design. Proceedings of the 22nd International Conference on Engineering Design (ICED2019). 5-8 August. Delft, the Netherlands: Cambridge University Press. Pp. 1065-1074. https://doi.org/10.1017/dsi.2019.112
- Strauss, A. L. & Corbin, J. M. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, Calif: Sage Publications.
- 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). Pp. 240–258. https://doi.org/10.1177/1094670516680033
- Verhoef, P., Lemon, K., Parasuraman, P. A., Roggeveen, A., Tsiros, M. & Schlesinger, L. (2009). Customer Experience Creation:

  Determinants, Dynamics and Management Strategies. Journal of Retailing, Vol. 85. Pp. 31-41. https://doi: 10.1016/j.jretai.2008.11.001

# Appendix A

Table 1. Workshop overview of activities

Introduction	Plenary
Selection of persona, plenary	Plenary
Current State: Activity 1: Customer's worst experience	Individual
Current State: Activity 2: Customer's worst experience	Groups
Current State: Activity 3: Customer's best experience	Individual
Current State: Activity 4: Customer's best experience	Groups
Presentation of Current State map	Plenary
Iteration of maps	Groups
Proposed State: Activity 5: Opportunities – individual view	Individual
Proposed State: Activity 6: Opportunities – collective view	Groups
Presentation of the Proposed State map	Plenary
Iteration of maps	Groups
Proposed State: Activity 7: Selecting and building scenarios	Groups
Presentation of scenarios	Plenary
Wrap up and feedback	Plenary

# Appendix B

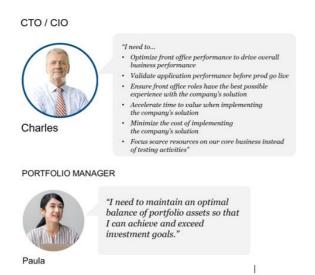


Figure 1 pre-selected personas: buyer and end-user

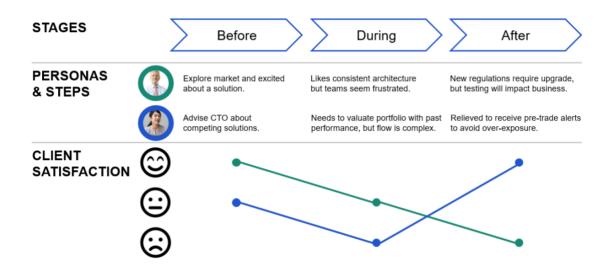


Figure 2 Customer journey map template

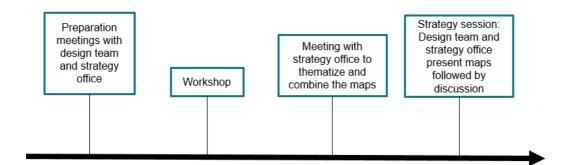
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# **Appendix C**

Timeline of activities and interactions between the design team and representatives from the strategy office



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