IN SEARCH OF THE AHA!
Creating a service experience visualisation tool for service design first-timers

Service user walks into the store
Service user doesn’t know where to go
Service user loses his nerves with a rude employee
“Forget it, I’m going home.”

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The service design as an industry has developed a set of service process visualisation tools already from the 1980’s. The tools have had a strong aim on mapping all the factors that affect on the service process. The companies working among service design have often also created own versions of the tools. These issues together have created a situation in which the service designers provide complicated service visualisations in various styles and their new clients have problems understanding them. Furthermore, as service design is becoming more popular it meets new people: service design first-timers, who are unfamiliar with these visualisations. This paper aims to find common practices, habits and elements from existing visualisations and as a result provide a tool that enables anyone to map a service process easily. The work was done by a request from service design agency Diagonal Mental Structure Oy, Helsinki.

This paper shows a review of the existing visualisations that map the process or the flow of the services.

The review aimed to find problems in different tools and similarities in the visual materials and layouts. Furthermore, the study covered also interviews with service design agency Diagonal Mental Structure’s designers and their clients. The results of the research were applied on the design process of the visualisation tool that was also tested with a group of 20 customer service employees from a public organisation.

The results show that creating a visualisation tool that could be eligible in all kinds of situations is nearly impossible but focusing on the service user’s journey provides the core value for service design first-timers. Mapping the service user’s journey opens the perspective how they look at their own service delivery, helps to find problems and inspires for service improvement. Additionally it benefits Diagonal’s service designers to ask their clients to map this process as one the first tasks in a service design project. It gets the clients on the right mood but also reveals hidden problems on an early stage of a service design project.

Keywords:
- service design
- service design visualisations
- service experience
- first-timer
- customer journey map
- toolkit
- Diagonal Mental Structure

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Service design / SD
Service design (SD) is a multidisciplinary area of study and practices that mixes methods and tools from different disciplines. In practice service design often ends up in designing systems and processes that aim to provide the service users a holistic and positive service experience. SD helps to innovate new or to develop existing solutions to be more efficient, useful and desirable from both the service user’s and service provider’s perspective. (Clatworthy 2013; Miettinen 2014; Segelström 2013; Stickdorn & Schneider 2010, 29–31.)

Customer journey map
A visual tool that maps out all the steps the service user goes through before, during and after the service usage. The tool is a linear, time-based visualisation that maps out the main steps the service user goes through in interaction with the service provider (Brugnoli 2009; Richardson 2010; Stickdorn & Schneider 2011).

Experience map
Similar to a customer journey map but enhances the emotions and thoughts the service user experiences during service usage. It is a strategic tool to capture and present key insights in relation to different stages during the service usage process (Adaptive Path 2013).

Service blueprint
A holistic visualisation of a service process that shows all the necessary steps and actions needed to run the service both from the user’s and service provider’s perspective (Shoestock 1984; Steijger 2008; Tassi 2009).

Touchpoint (touch-point)
All the physical or digital encounters where service users interact or are in contact with a service. Touchpoints can be for instance a website, emails, encounter desk, advertisements, forms or meetings with a staff member. In other words touchpoints are all the contact points between the service provider and service user. (Clatworthy 2011, 15)

Service user (or simply “user”)
Service user refers in this work to a person being the end-user who is experiencing and consuming a service. Most of the papers focusing on service design seem to use word “customer” as the common term. However, as this paper focuses on creating a flexible tool the term “service user” is chosen as it is more neutral. For instance some public services might have end-users who do not pay for the service and therefore are not direct customers. In addition to that public healthcare speaks about “patients” which is why a term “customer” might be misleading.

Service provider
Service provider means in this work the faculty - company or organisation that is offering, running and delivering the service.

Client
Client stands in this work for Diagona’s or other service designers’ customers.

First-timer
In this paper first-timer stands for a person having none or little experience on the tools and methods of service design.

Stakeholder
All the members, persons, groups or organisations that are involved or can have some effect on a specific project. Examples of stakeholders can be investors, communities, industry organisations, service providers or individual employees with different roles. (Tassi 2009; Bourne 2005, 30)

Service concept
Service concept is an idea of a service that is developed further than being just an idea. A service concept has already some features or characteristics defined that are being used as the backbone for future development. In other words it answers to questions what should be done and how is it going to be achieved. (Goldstein, Johnston, Duffy & Rao 2002, 123)

Service flow
Service flow stands for the step-by-step process of going through a service. In this paper it especially stands for the kinds of visualisations that present these actions. (Diana, Pacenti & Tassi 2010)

First steps of a service design process
This paper talks about the first steps of a service design process. These steps refer to the early stages in the holistic service design process such as sales, framing the project, research and research analyse. For more have a look at the chapter 2.1 – The holistic service design process – Diagona’s process.
Service design is still on 2014 relatively young industry but growing fast and producing better and better implemented cases and research results globally all the time. The tools among the industry are being developed all the time and new methods and tools appear almost every year. Due to the fact that the industry is still young, the service design as such causes situations where its vocabulary and methods are unfamiliar to people. In other words people might not understand its possibilities or ideology well enough. Service design processes are often quite complex and differ from the traditional service development processes by the angle of approach. This is why the core thought and terms have to be often taught to first-timers. The industry has developed a great set of tools and methods from the 1980’s (Shostack 1982) but most of them still require a service design professional with the know-how and facilitation capabilities. The tools that are commonly used can be very unfamiliar to service design first-timers and require quite some time for studying them. Furthermore, service design is also missing a clear common standard for how to visualize services and that has led to having various ways and styles to visualise a service process. All this causes frustration and misunderstanding among clients during the first steps of service design projects (see chapter 2.1). This is why there is a need for theoretical tools that are commonly accepted by both the service designers and their clients.

Helsinki-based service design agency Diagonal Mental Structure has been facing these issues and encouraged me to tackle this field of study for my master’s thesis. Diagonal explained to me that the first steps of their service design projects are sometimes inefficient and time-consuming, especially for new clients because Diagonal’s designers often have to teach them to look at their service processes from a bit different perspective. The work request was also related to Diagonal’s another project with Tekes that included an overview on the existing service design visualisations.

As companies also have to find new ways how to stand out from each other, they have started to utilize the creative methods that have traditionally been used mainly by designers. This is where the term “Design thinking” (thinking like a designer) comes out. It stands for instance for the thought that one does not need to be a designer to use design methods and can start using visualisation techniques to communicate his/her ideas better. In other words Design Thinking stands for user-centric angle of approach that means taking users’ needs in the focus in a way that aims for providing real value for the users. (Brown 2008)

The focus of this paper is to study existing service visualisation techniques and tools and as a result create a tool that enables anyone to map his/her process of service experience, whether being the service provider or the user experiencing it. The point of creating a tool like this is based on the author’s and Diagonal’s belief that customer journey mapping will become comparably important and common approach and method as the Business Model Canvas presented by Osterwalder and Pigneur (2009). Same as the Business Model Canvas there should be a should-be easy-to-use tool that gives anyone the skills and possibilities to visualise their service experience or the understanding from the service provider’s perspective. The visual language of the tool should be as self-evident as possible and require minimum amount of studying which is why this work aims also to find similarities from existing visualisation tools. In other words the research focuses on finding common habits and meanings of different elements in relation to customer journey maps.

1.1 PERSONAL THOUGHTS

I have been strongly convinced about the benefits of using methods from user-centric design. As Satu Miettinen sums it, “design thinking helps to find new ways to create value and different value networks” (Miettinen 2014, 13). In addition to that it helps to create products and services and their combinations that offer the users real value, as the results are more likely to meet their needs. In fact, I believe it is the core for creating successful products and services. People in 2014 are more and more concerned about good quality both in products and services. People have also understood that to have real value for their needs, the products and services they use have to answer to their real needs – or even needs they did not know they had. Those can be found or at least estimated really closely by the methods from user-centric design. (Miettinen 2014)

Service design however is still focusing on more holistic perspective since it takes into account also the factors that need to be done to make service running. In other words it aims to understand the user and user experience but also the service provider (Stickdorn & Schneider 2011, 29-31). That is why I strongly believe it will make a difference for creating better services but also better business.

However, as service design still is relatively unknown topic for many companies and organisations I want to bring my part in the game by making this work. The aim is to create a tool that helps Diagonal and their clients to find a common language between multiple stakeholders such as service user, provider, service managers or service designers. I believe that presenting services in a visual way will help both Diagonal and their clients in forming a better understanding of the project under development. Furthermore, I believe this kind of visual presentation will open the service providers understanding over their service processes and especially towards their service user’s experiences.
THE NEED FOR EASY-USE SERVICE DESIGN TOOLS

As good service experiences are becoming more and more common, the service quality expectations of an average consumer will also be more likely growing among with the change. This change must be recognised in companies and organisations in order to meet the rising expectations. Firstly, this chapter opens global research data about how consumers are experiencing services and how do companies relate to these expectations. Secondly, this chapter explains also the need for better communication among companies and organisations as misunderstandings and lack of common language can turn out being really costly.

1.2 Need for service experience development

It is not needed to question anymore whether companies should or should not invest in making their service offering better with an aim that focuses on making the service experiences better, Ban & Company (2005) showed almost 10 years ago that 80% of companies believed they offered "superior" service whereas only 8% of their customers agreed. That is a big difference but that was almost 10 years ago. Interestingly the latest customer experience index report by Forrester (2014) showed that only 11% of the companies have managed to offer excellent customer experience. The interviews with Diagonal’s clients have been talking about totally different parts of the holistic service process. The interviews with Diagonal’s clients (chapter 3.1) also showed that companies often tend to struggle with their internal communication during service development.

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Furthermore, according to report “Global Customer Service Barometer” prepared for American Express in 2011 (by Echo, involving 11 countries in surveys):
- More than half of consumers are willing to switch brands to get better customer experience
- More than half of consumers will spend more money with companies who provide excellent service
- On average about 24% of consumers are even willing to travel longer distance to get better service (American Express 2011)

In addition to this, good service leads to better business when consumers are willing to come back after good experiences, 3 in 5 or greater are most likely to tell others about their bad service experiences (more than about good service experiences) and majority of customers believe that small businesses offer better customer service (American Express 2011). Therefore, companies simply cannot afford neglecting the role and value of focusing on creating a better customer experience. Common sense tells that especially small companies have to find ways to stand out from their competitors in which superior customer service plays a major role.

Hence, it is easy to assume that the need for easy-use service visualisation and innovation methods is growing strongly when companies one by one start to realize they need to do something to enable better experiences from their services and to help communication within the organisation. As service design agencies are focusing on these aspects, this will most likely grow their workload in the future. If the trend rises towards this direction they will have more clients and unless they can hire more people they will have less time to spend on a single client. In addition to that, it seems that the role of the designer is also changing slowly from being a researcher or just a designer towards being a “facilitator” that provides people the tools and methods how to do co-design. According to Sanders and Stappers (2008) the designers in the future will be creating tools that allow the “non-designers to express themselves creatively”. Yet, this does not mean that service designers would not be needed anymore in the future but it is just their role that is changing. They still have highly unique skills that they have been learning during many years by following customer-centric design processes and keeping an eye on the existing and upcoming technologies (Sanders & Stappers 2008, 12).

All this is why creating a simple tool that will help both the service designers and their clients to work on the service innovation more efficiently is needed.

The efficiency in working here means also creating some “standards” of visualisations for the designers but also for their clients. Once the clients learn for instance how to map their existing customer journey they can provide it to the designers as “raw data” in the beginning of the project. The common visual style should help designers in creating the journey maps faster but also help the clients to know how to read them. In comparison, the technical drawings (traditional blueprints made by architects or product designers) follow a strict standard which needs some studying but will enable people to read any technical drawings globally. The point of this paper is not to create a new standard but a part of it is to make a suggestion of a visual style that would be as self-evident as possible and require as little studying as possible.

1.2.2 Misunderstandings and lack of communication

People involved with service development projects often come from very different backgrounds and speak different professional languages (for instance business engineering, human resources, design or marketing). This causes expensive and unnecessary extra working hours as people might try to discuss about a same topic but realize after a day that they have actually been talking about totally different parts of the holistic service process. The interviews with Diagonal’s clients (chapter 3.1) also showed that companies often tend to struggle with their internal communication during service development.

Furthermore, companies aim for superior customer service but they rarely reach their goal. Superior customer service does not happen if the company workers do not perform the way they are expected to do. According to William Schiemann (2009, 53) – a contributing author in a book focusing on performance management – only 14% of company workers understand their role in the organisation which tells about a rude fact that the managers fail to communicate the bigger
picture to their workers. Schiemann also suggests seven drivers for "high performance alignment" from which the points 3 and 4 stand out in relation to this paper:

"3. Acceptance, or passion for, the vision, strategy, goals among those who are implementing them
4. Clarity regarding individual roles and requirements in supporting the strategic goals — and the extent to which these have been effectively cascaded and interlinked across the organization" (Schiemann 2009, 52)

Hence, as the service providers often fail to communicate the holistic service process for their workers, people involved in the service development might not understand each other and service users might get lost during complicated service processes. Something needs to change. Visual presentation during the development process, in marketing materials or in service handbooks can do nothing but help. For instance Vaajakallio (2012, 176) explains that utilizing visual materials as supporting material in co-design sessions helps to form a "shared focus of attention". She also continues (p. 179) that using visual materials "leaves visual traces" that serve as documentation. In other words, using visual materials in the development process (such as a workshop) not only helps participants to share a same understanding of the specific steps but also to maintain the shared understanding. These points are well known among the service design field and are almost self-evident factors for designers. Nevertheless, they still have not been utilized well enough to create a simplistic and easy to use visualisation tool for people who have no or little experience in visual documentation.

1.3 OBJECTIVE AND RESEARCH QUESTIONS

The service design as a profession has gained a lot of attention within the last years since it has proven to be a very effective approach on improving customer experiences and more efficient service delivery. The people working among service design have developed, loaned and applied a great list of tools from various disciplines (Tassi 2009). Some organisations have even created free-of-charge toolsets that are open-source and are meant to help people to start adapting user-centric design methods in multiple industries. However, by my personal experience these toolsets are often rather complex, large and require quite some time to be fully understood. This may cause confusion among the first-timers who are trying to understand how to use them.

The objective of the paper is to find a method that performs as a communication tool and provides an eye-opening overview of the service under development. As this thesis has been conducted in collaboration with a service design agency Diagonal Mental Structure, the point is to make a tool that helps them and their clients to get over the first steps of holistic service design process (chapter 2.1) smoothly and efficiently. The outcome of this paper is a tool and a process that should encourage the service design first-timers to continue utilizing the possibilities of service design in a broader context.

Additionally, companies working among service design have created multiple different visual styles for the visualisations. The visualisations can be very descriptive and include a lot of data. However, most of them are aimed for professionals only. Some of them might be rather difficult and confusing to read for people who are seeing them for the first time and do not have experience about service development. Service design as a profession is missing a clear standard on how to make process visualisations and which visual elements to use in specific places. Different companies might also be using various visual elements on same purposes that cause overlapping and misunderstandings. Therefore an additional scope of this work is to find similarities among different service design visualisations and trying to find a suggestion towards a visual language to be used in service process visualisations. However, the goal is not to find or create a bulletproof standard of visual language but rather making a suggestion towards it. From Diagonal’s perspective this is in line with their aim to be consistent throughout their visual communication. The visual style of the tool and its symbols and pictograms created here is a proposal that they can start utilizing when making visual presentations.

Research questions:

1. What are the most important issues to take into consideration when visualizing a service process with the first-timers: people who are unfamiliar with service design methods?
2. Is it possible to find or create a visual language standard for visualising service processes?
THEORETICAL FRAMEWORK AND PROCESS

The main focus of this work is on the service design visualisations that map the process and flow of the services. From a theoretical perspective, the work has mainly a qualitative research approach that covers a review of the existing literature, existing visualisations and in-depth interviews with Diagonal Mental Structure’s service designers (3 persons) and clients (3 persons).

The literature review aims at finding the reasons and needs for using service design visualisations. Furthermore, it also covers an overview of the effects of using visualisations and their usability (readability). The review of the existing SD visualisations and toolkits focus on finding the similarities and common habits in terms of visual language, elements and the mapping process itself.

The interviews were open for free discussion and had a semi-structured process. The aim of the interviews was to discover the factors that affect on the experiences of visualising service processes—especially with people who were unfamiliar with the service design methods. Another goal was to find the role of the visualisations in relation with the service design projects.

The outcome of this paper, a tool for visualising service processes and experiences was designed parallel with the research but is presented as the last part of this paper. The tool combines the findings made from the review and presents a service visualising process that is targeted for people who have no or little experience on service design methods.

Quality research
- Review of the existing materials
- The need and effects of visualisations
- The existing visualisations and tools
- Interviews with Diagonal’s service designers
- Interviews with Diagonal’s clients

The process of the thesis
- Review of the literature and existing service design visualisations
- Finding similarities and common habits from the existing SD visualisations
- Interviews with Diagonal’s service designers and clients
- Designing a service process visualisation tool for SD first-timers
- Conclusions and suggestions for future actions
**REVIEW OF SERVICE DESIGN VISUALISATIONS**

Finding similarities and common habits

This chapter shows a review of the existing service process visualisations and how they are linked with the holistic service design process. The study involved also a general overview on what all kinds of visualisation tools exist among service design (appendix: Service design visualisation tools). This chapter focuses only on the visualisations that focus on the service process flow.

**2.1 THE HOLISTIC SERVICE DESIGN PROCESS**

To clearly understand the role of the visualisations and how they are used during different steps of the service design process let’s take a look at the general processes. This chapter shows examples of how different service design agencies describe the service design process. Understanding this is crucial for the outcome of the work (tool) as it could be utilized at different stages of the holistic service design process.

**Live|Work**

Multinational service design agency Live|Work has a set of tools presented in their website and they have grouped them under four main topics: understand, imagine, design and create. Many of the tools fit under multiple topics since the tools such as service blueprint or “experience view” can be utilized both at the early stages or later phases. (Livework 2014)

**EngineGroup UK**

UK based agency EngineGroup follows the “Double Diamond” model originally presented by the UK Design Council in 2005 as a visual way to describe the typical design process (Design Council 2007). The Double Diamond consists of Discover, Define, Develop and Deliver. Though, it is also worth mentioning that Engine also opens up their process a bit more by providing four main contents in their service design processes. First they gather insights to “inform innovation”. Secondly they simply design, by which they refer to development of strategies and solutions across different channels. Thirdly they claim to build new skills and capabilities. Finally as the fourth point they create systems in which they have defined the processes that sustain the created services – that is, keep them working. (EngineGroup UK 2014)

**Diagonal Mental Structure**

The Diagonal’s process has similarities with the Double Diamond (Design Council 2007) but with a slight modification. Diagonal’s model consists of five main parts: understanding, conceiving, designing, implementation and monitoring. All of this naturally starts from the sales phase where the project brief is formed and frames set. The sales phase is naturally a rather important phase especially when it comes to service design first-timers as clients. The client might not fully understand the capabilities of service design and it is therefore a matter of how well can the sales people communicate the possibilities to their new clients. Furthermore, according to the service designers at Diagonal (chapter 3.2) the implementation phase is one of the trickiest stages when all the nice ideas created during the design phase meet resource requirements such as money and workforce. This implementation phase is also something that is easily underestimated in the project planning.

I am also talking in this paper about the “first steps” of the service design process as a focus area. By this I mean the early steps that start from the sales sessions until analysing research results. In other words it is about understanding the current situation of the service process and its possible problems.

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![Diagram](https://via.placeholder.com/150)

**FIGURE 3 – Diagonal Mental Structure’s process overview**
What should these design processes then create as a result? According to Segelström and Holmlid (2009) the outcome criteria of service design projects can be usually split into two main themes. Firstly, the goal that most of service design projects should be aiming for: quality over price-centric approach. Secondly the outcome should be cross-channel solution that works in face-to-face interactions but also as self-service via mobile devices or web pages. In relation to this the visualisations of the service design outcomes should be enhancing these factors. Service designers are even expected to provide highly visual outcomes that communicate the new service concept or updated services as well as possible (Stickdorn & Frischhut 2012, 20-21). Therefore there are a lot of different visualisations that focus on certain parts of these processes. However some tools can be utilized almost throughout the project.

In general, the visualisations used in service design projects are mostly focusing on the research phase (53/57) and can be split into two main groups with different purposes (Segelström & Holmlid 2009, 6). Firstly, visualisations can act as tools for translating raw data into insights and secondly, visualisations can act as tools for communicating the insights. After all they are relying strictly on the data collected during the research phase and act therefore as a bridge between the research and actual design work. (Segelström & Holmlid 2009)

As Segelström and Holmlid (2009) presented, there are a rather big number of visualisation tools. This paper is however about the visualisations that focus mapping the process and the flow of a single service. The focus is especially on the customer journey and experience mapping methods presented on the chapter (2.4) because they can be applicable in multiple parts of the holistic service design process AND they act as one of the most important methods to do during the first steps (chapter 3.1). For instance both can be utilized during the research phase when trying to understand how do service users proceed in the process and feel throughout it. Furthermore the same tool can be utilized when ideating on a new service idea (asking oneself: “what if it would go like this?”) and eventually a customer journey map can be used as marketing and communication material when advertising a recently launched service. (Van Oosterom 2010)

2.2
THE EFFECTS OF USING VISUALISATIONS AND AESTHETIC DESIGN

According to PhD study on “Stakeholder Engagement for Service Design” made by Fabian Segelström (2013), the visualisations of services have a great value for the clients especially when they show the results of a service usage research in a nice and clear way. He even highlights that “service designers could sell the visualisations of the stakeholder research as a main deliverable, as they provide a unique image of a service from the customer’s perspective which most organizations miss” (Segelström 2013, 143). However, Segelström continues that it is crucial to be clear about the means and intention of the tool when communicating about it to the stakeholders. This helps the people involved to understand when do the tools work the best but also when they do not work as intended (Segelström 2013, 144).

When discussed why should companies start using service visualisations more it is easy to note that visualising the whole process of service experience from the service user’s perspective will help companies to find pain-points and opportunities for break-through developments. As Bettencourt and Ulwick describe it; “all jobs are processes” (2008). The word “job” stands here for person’s individual task that can be anything between having to clean a floor to buy a new car. Furthermore, the phrase “getting the job done” refers perfectly as it means having to go through at least some sort of a process. “Job mapping” – as they speak – differs from the traditional “process mapping” in a way that the main point is to identify what service users are trying to get done at every step of a longer process. Mapping out every step of these processes and specific goals companies can focus on creating new innovative solutions that differentiate their offering (Bettencourt & Ulwick, 2008).

To conclude, the visualisation tool created in this work should have as self-evident visual language as possible and it should focus on mapping all the steps the service user has to go through in the holistic service process. Even better, the mapping should take into consideration both the service providers and user’s emotions and motivations at a specific phase of the process.

“A good sketch is better than a long speech”
Claimed to be said by Napoléon Bonaparte.
USABILITY OF SERVICE VISUALISATIONS

As this paper is focusing on the visualisation of service processes and especially targeting people who are unfamiliar with the tools, it is worth taking a look on the principles of what makes a good visualisation. The style and visual appearance of whatever kind of objects or service touchpoints people are facing can have a big effect on the holistic user experience. As the point is to create a visual tool for first-timers, the usability (readability) of the tool has to be top-class. According to Butler, Holden and Lidwell (2003): “aesthetic designs look easier to use and have a higher probability of being used, whether or not they actually are easier to use”. Even though the usability of the designed object (product or service) is rather good but aesthetics are perceived less appealing, the object may be lacking acceptance among users (Butler et al. 2003). In other words, the visual style affects widely on both the use experience and acceptance especially during the first stages of assimilation. These are of course such factors that can be described as self-evident and natural but yet are easily forgotten during the design processes.

When it comes to designing icons and symbols for a customer journey tool, especially for first-timers, the visual language should be designed in a way that it is as self-explanatory as possible. In other words, the first-timers seeing a customer journey map should be able to understand different icons and symbols with ease or just little explanation. This affects on the relationship the user is creating with the tool. If the relationship becomes negative due to bad visual design the tool can be even reducing creativity and problem solving abilities. (Butler et al. 2003)

One way to enable easy adopting is to use visualizations that are somehow familiar to the user group. Huang, Shieh and Chi (2002, 213) present factors that affected on the development of computer icons. For instance the first visual (graphical) user interfaces in the 1980’s Apple’s and Microsoft’s computers had a lot in common with traditional traffic signs which helped users to guess where does a single button lead to. On the other hand product design and product engineering rely on a strict global standard called technical drawing and architects have their own visual language to draw buildings layer by layer. However, these traditional blueprints are not completely self-evident and need studying to be understood and red fluently. Yet, the good point for instance in the architects drawings is that people who can’t read all the details can still understand the main factors such as where is the living room, kitchen or a toilet. This kind of self-evident visual language would be beneficial for service design too.

Furthermore, as services are often very complicated systems when looked holistically both from service user’s and service provider’s perspective, a map containing all of the gathered information would get too confusing. Generally said, with any designed object the amount of features increases flexibility and complexity but decreases usability whereas limited functions constrain flexibility but increase usability (Butler et al. 2003, 86). In other words the outcome of a designed object is always some sort of a compromise between flexibility and usability. The same applies for the service visualisations for the first-timers. The compromise here will be between how easily can first-timers adapt to the service design method and how deep can the tool take them in looking at their services.

As speaking about service visualisations, a tangible service prototype can also be representing service visually. Including tangible objects during mapping the service either in early stages or later during creation process has several benefits: “Everything that is built hands-on is easier to understand, stays in the participants’ heads and participants identify themselves more with the created concept, because each participant can make an obvious contribution to it” (Stickdorn & Frischhut 2012, 126). This being said, it is easy to assume that a tool that is meant to support the process of mapping out service journeys could benefit of having also tangible objects in addition to just paper, sticky notes and pens. Furthermore the service mapping sessions should be also fun because the feeling of joy keeps up energy levels and boosts creativity (Stickdorn & Frischhut 2012, 126).
Service designers have already created a great set of different visualisation tools that help their work at different stages in their design process (Tassi 2009). According to Segelström (2009) service designers who he interviewed mentioned 57 different tools that they use in their work. There are also a number of tools that are called by different names but contain similarities and overlapping. However this paper focuses on the visualisation tools that map the process (flow) that the user goes through. Diana, Pacenti and Tassi (2010) speak of them as abstract “flows” that include a path how to read them. This chapter shows the most common tools that visualise the flow and nature of the service process. I took a look at 34 service visualisations found from several sources and 11 existing service design toolkits. The descriptions of the following tools are mainly based on my personal insights and findings from the review of those visualisations.

2.4.1 Customer journey maps

Customer journey maps, user journeys, paths and generally service visualisations all mean more or less the same. It is about mapping either existing service journey or new service concept especially from user’s perspective in a way that describes different touchpoints the service user goes through (Diana et al. 2010). It has to include all of the sequences that the user walks through and they usually also contain actions before the actual service usage and after it. These are often separated as pre-service stage, actual usage of the service and finally post-service actions after the actual usage has ended (Stickdorn & Schneider 2011). Customer journey maps can be used in various purposes as they can help during the research phase all the way until the implementation of a new service concept. They form sort of a backbone for service development that should be based on the findings from observing and studying users (chapter 3.2). In addition to that the customer journeys are usually also linked with a various number of personas to get a deeper understanding on how do different user groups perform and feel during the journey.

Customer journey maps can be utilized during different stages of a service design process (chapter 3.2). For instance a customer journey map can be made at the research phase when studying how do users walk through the service but also at the finalizing phase when communicating a new service idea to stakeholders. Furthermore it forms a backbone for a holistic service development process. For instance Design Thinkers Group created a process that focuses on creating an “ongoing conversation within the organisation” by utilizing customer journey mapping at different stages during a holistic service development process (Van Oosterom 2010).

As an example let’s take a closer look at the Customer Journey Canvas provided under CC licence by Stickdorn and Schneider (2011). The customer journey maps presented by service design agencies usually seem include the following factors:

**Pre-Service period Service concept**

- Service period
- Post-Service period

In addition to them they are also linked with Expectations (pre-service), Experiences (service itself) and Satisfaction/Dissatisfaction (post-service). On the Pre-Service period the person using the template is asked to write about how the service user heard about the service at first (advertisement / public relations), did he/she hear about the service in social media or word-of-mouth and what kind of past experiences does he/she have with the service provider or similar services. On the actual service usage period the person using the template is asked to map the "service journey" by mapping all the touchpoints the user goes through and to highlight especially good or bad experiences. Finally, on the post-service period the canvas user is being asked to write about customer relationship management (“How does to service provider follow-up with customers”), social media (“What do customers communicate about the service and/or service provider through social media?”) and word-of-mouth (“What do customers tell their friends, colleagues and family about the service and/or service provider?”). (Stickdorn & Schneider 2011)
2.4.2 Service blueprints

Traditionally services have been mapped out by the tool “Service Blueprint”, introduced originally already on the 1980’s (Shostack 1982). Service blueprints differ from the customer journey maps mainly by offering a more detailed and holistic visualization of all the necessary factors needed to deliver the service. Bitner, Morgan and Ostrom (2007, 15) present blueprinting as a platform that everyone, including customers, employees and managers can build on to. They highlight also that the blueprints work great as communication tools when employees can see their role in the bigger picture (Bitner et al. 2007, 14). Customer journey maps look at the service at a bit more from the user’s perspective whereas blueprints pay more attention also to the service provider’s actions. Steijger (2008) presents service blueprinting as a tool that offers a “detailed description of people, processes and systems involved in the delivery of a service”. To give more understanding of the purpose of the tool she explains that service blueprint offers a chance to find “bottlenecks” in the delivery process that should be seen as opportunities to deliver the service. (DesignThinking Network 2012). This means opening up the workload the service provider needs to go trough rather emotionless way of showing the holistic overview on how the service runs. They usually show different “layers” of the service such as customer’s (service user’s) actions but also all the actions and support processes that happen on the service provider’s side. Service blueprints are therefore also useful at the latter stage of service design process when new concepts or updated service processes need to be mapped in a rather detailed level. In other words, customer journey maps are useful when emphasizing the journey from user’s perspective whereas service blueprints seem to be more useful when mapping the service “inside-out” (DesignThinking Network 2012). This means opening up the workload the service provider needs to go trough to deliver the service.

As many other tools too, the service blueprint can be used either to map the current service path or the newer versions of the service. Usually, the first version of the blueprint is being made after the initial research phase that contains user and staff interviews, shadowing or even ethnographic studies. During the first stages of the service design process a paper version of the blueprint can work better as a quick visualisation tool to share and

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**Service Blueprint of Presby Neuro Clinic**

**IMAGE 2 - Service blueprint of the operations inside a neuro clinic.**

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**Other:**
- Indicators for good experience: bad experience
- personas, mapping the ways, importance meter, colour coding, managed / unmanaged touchpoints, information flows, material flows, financial flows, recommendations or ideas for improving, channels of interaction (digital tool, devices)

**Vertical levels:**
- Actions/activities, context, goal, need, thoughts, emotions, physical evidence or touchpoints, frontstage, backstage, answers, people involved, critical moments (moments of truth), quotes by users or workers.
communicate a common understanding of the current situation. More polished blueprints are done when the design process has gone further and smaller details and functions have been designed and reframed. These more polished and finalized visualisations may work better when communicating the new ideas to the client.

Case example:
Service Blueprint for Presby Neuro Clinic (image 2)

A student group from Carnegie Mellon School of Design tackled a project for a neuro clinic that had problems with their service users’ (patients) experiences on the service. The student group decided to try to create a fulfilling clinic experience by co-creating it together with patients, families, staff and physicians. They first studied and observed the current situation by ethnographic methods and interviewing both the staff members but also the patients and their families. After getting the understanding on the holistic overview they decided to show it in a form of a service blueprint that helped them to communicate the existing situation and its problems to their client. With the blueprint visualisation they could show how the backstage processes were chaotic, the system depended highly on one doctor and that no-one from the staff was actively engaging with the patients during their waiting time. (Cliver, Hegeman, Lee, Libert & Tennant 2009)

2.4.3 Experience maps

Nowadays one can notice more and more service flow visualisations that also have an embedded feature of indicating emotions at specific situations. It seems that usually the experience maps are very similar to customer journey maps but they are emphasizing the feelings and emotions of the service user. A design agency Adaptive Path is a strong advocate of the experience maps. They see them as “a strategic process of capturing and communicating complicated customer interactions” (Adaptive Path 2013). These emotion indicators are usually either curves in relation to the service usage process derived from the traditional diagrams, or emoticons (also known as smileys). Adding the emotion indicators help to highlight the crucial steps in the journey that are either positive experiences or negative pain points. Finding and understanding these moments the service provider can either turn the negative points into positive possibilities or strengthen the positive feelings even further.

The design director of Adaptive Path, Chris Risdon speaks about the experience map as “an artefact that serves to illuminate the complete experience a person may have with a product or service”. He continues that the experience map is not only about the service user’s journey (that being the customer journey map) neither is it a service blueprint that “shows how a system works in enough detail to verify, implement and maintain it”. He also points out that the experience maps should be based on some sort of research – either an online survey, field research or even better; both. Furthermore he believes that experience maps should be visualised clearly so that they stand on their own (can be shared within organizations without a need for explanation) and they should work as “means to something actionable” (something to design on). (Risdon 2011)

Case example:
Rail Europe Experience Map by Adaptive Path Risdon (2011 - image 3) showcases also an example where they applied experience maps for Rail Europe. He explained that Rail Europe had a rather good website and their customer service worked nicely but they wanted to understand their service users’ (travellers) journeys better to find chances for improvement. By making an experience map Adaptive Path could show to Rail Europe where are the steps and gaps where they could invest to improve the service experience. The map enabled a “shared empathic understanding over time and space” (Risdon 2011).

Joel Flom (image 4) presented another experience map example (although he is speaking about it as a customer journey) which clearly shows the point of the experience map. It maps horizontally the steps of a traditional customer journey map but additionally also shows the emotional curve in relation to the steps. The
curve shows clearly how the feelings and emotions of a customer can vary deeply during different steps. At time the customers might be happy about a clear website but then get frustrated when the purchase process turns out to be more complicated than expected. (Flom 2011)

2.4.4 Experience Cycle

Experience Cycle is a new tool that according to Dubberly and Evenson (2008) can be compared to the traditional sales cycle familiar from sales and marketing studies. As the name says, it is a circular tool instead of the traditional horizontal timeline. They believe that experience cycle should be introduced whenever sales cycle is on topic because it creates a stronger possibility in creating longer-lasting customer relationships. According to Dubberly and Evenson the experience cycle “is more likely to lead to an experience of lasting value for customers, and thus greater long-term value for producers” (Dubberly & Evenson 2008, 11). In practice the experience cycle helps to write down the steps service users go through when forming a relationship with the service.

The experience cycle looks at the service user’s and service provider’s interaction as a relationship and how it is being formed. It follows a general pattern of 5 different stages:
- “Connecting (first impressions)
- Becoming oriented (understanding what is possible)
- Interacting with the product (direct experience)
- Extending perception or skill and use (mastery)
- Telling others (Teaching or spreading activation)” (Dubberly & Evenson 2008, 14)

As the experience cycle encourages looking at the service from different levels, it can be a great help when going in details with the service offering. Additionally it also shows the overall view of the main process in the service but can be also scaled downwards to single encounters. It in a way proposes that each single encounter in the service has its own cycles.

The experience cycle is a very creative and descriptive visualisation tool for looking at service user’s experience at different levels and scales. However, the tool is targeted more for design professionals and might be challenging to comprehend by a “first-timer.”

2.4.5 Common features and benefits

Companies doing service design have often developed their own versions of these tools. Many of the tools include similarities and overlapping with each other even though they might have different names. Some speak about “experience maps” once they have added some indicators of the feelings the customers experience during their service usage while others might do the same but still speak about “customer journeys”. In addition some customer journey maps include features from blueprints such as showing different levels of the service delivery (user, company, partner etc.) In other words, a common standard for the tool naming or features does not exist and they are usually adjusted case by case.
In general, all of these tools aim to help service providers to look at their service offering from their service user’s perspective and understand the holistic overview of their existing service or service concept. The point is after all to improve the service users experience and that is what the service providers should aim for (Bain & Company 2005; Forrester 2014).

All of these tools presented above are linear (except the experience cycle), based on time or different user actions. All of them have different levels to look at things such as touchpoints, actions or associated thoughts during different stages. Most of them also categorise actions basically on three different stages: pre-service period, service period and post-service period. In other words they are all looking at the process of service in a rather broad perspective that starts from becoming aware of the service (hearing about it for the first time or even before that) and ends with maintenance or sharing the experience. Additionally all of them also show the service from a single user’s (persona) or user group’s perspective. In other words they rarely show the service from a generic overview but instead highlight the meaning of an individual experience. Service experiences can vary a lot depending on the person who is experiencing it. Using personas can help in making the service user’s needs more explicit which again helps the decision-making among the design teams aiming towards those needs (Long 2009, 8).

The visualisation tools help in internal communication in workshops when people can literally point at a certain moment in a service while talking about it. This minimizes misunderstandings and encourages people to participate in the discussion (Vaaajakallio 2012, 176). Furthermore, perhaps the biggest value of these tools is that they can be used in multiple ways and at different parts of the projects. For instance a customer journey map can be utilized even before starting any research actions by collecting a presumption of how does a service provider think their service users experience their service. The same tool can be later utilized to draw a new customer journey based on the research results. The comparison of the “presumption-based” and “research-based” journey maps can be a real eye-opener. Furthermore, the customer journey maps can be made by “customers, or management, employees and other stakeholders or, even better, in a mix” (Van Oosterom, 2010).

However, these visualisations are usually made by service design professionals only. The content has been created in collaboration with an experienced service designer who knows how the mapping process goes. The service design first-timers might not always know how to use the tool by themselves because the tools are not always provided together with clear step-by-step instructions. The mapping of the service steps can also be very challenging at first. The service providers might have multiple user groups that have totally different use experiences. The nature of the service experience is also heterogenic, meaning that the individual experience is always unique. Finding the crucial and most meaningful aspects to add on the visualisations can be a huge challenge. In other words it is all about focus and framing. The tools are not meant to include everything. That is perhaps also why these tools are usually utilized by service design professionals only. On the other hand, that is what these tools are meant for; communicating the different experiences of service usage.

Eventually all of the service users’ paths and experiences are unique.

From the visual perspective the tools have a lot in common. Most of them follow a journey of some sort that is visualized the same way as in many board games. The journey has a start, usually the “awareness” step when the service user hears about the service provider for the first time and continues all the way until ending the interaction with the provider. The visualisations are also often left open from the end as the service users can spread the positive or negative word of his/her experience which is impossible to know exactly how it goes. The chapter 2.6 “Visual elements on the service process visualisations” goes deeper into the visual similarities of different service visualisations.
A number of companies or organisations have already developed a set of service design tools that are supposed to introduce the methods of service design and help non-designers to design for better service use experiences. As the outcome of this project is also a tool I benchmarked the existing toolkits. I made a comparison chart of 6 analogic toolkits and five digital toolkits from which I chose for a closer look four analogic toolkits and three digital tools that are most in relation with my topic. (Appendix: Analog toolkits & Digital toolkits)

2.5.1 Analogic toolkits

IDEO’s HCD Toolkit (2nd edition)

Award-winning global design agency IDEO decided to make an open-source combination of tools that are based on the principles of human-centered design. They created the set of tools from IDEO’s human-centric values: human desirability, technical feasibility and technical viability. The toolkit, being more like a book, teaches step-by-step how to go through a human-centered design process that according to the book includes three main parts: hear, create and test. The toolkit provides templates that are supported by questions and tips. The instructions for the toolkit provides a set of tools but does not go deep in how to use the templates. In a way it provides a set of tools but does not go deep in how to get best out of the tools and methods.

The HDC Toolkit is easily available as a whole or in segments in PDFs (requires signing in to the HCD Connect community). Furthermore one can purchase a printed copy of the book by 22$. The toolkit showcases step by step how to tackle a rather holistic design process. In addition it shows use scenarios on how to use the tools which is very descriptive for people unfamiliar with design methodology. The book has a lot of images about people doing field research and using different co-creation tools especially from rural areas. This might be misleading for some people even though the toolkit highlights that the tools are very flexible and free for modification. The book has almost 190 pages that make it a rather time-consuming and complex to study.

Service Design Toolkit – www.sdt.fi

Service Design Toolkit is a result of a Finnish project by Jyväskylä’s University of Applied Sciences and service design agency Palmu Inc. in 2011 funded by Finnish research organization TEKES and five different organisations focusing on travel experiences. The main focus of the project was to open the possibilities of service design but also to study and test different methods with the companies working among travel services. Four out of five companies took concepts created during the project further and launched them into commercial markets. The tool is freely downloadable on their website as a PDF and it is under the Creative Commons licence although it is currently only available in Finnish. (SDT 2012)

The toolkit provides templates that are supported by questions and tips. The instructions for the toolkit emphasize that mechanical filling of the templates do not help as such. The users of the tools should instead spend quite some time with the tasks and really question their service offering. The tools have been split in 4 main sections that also define more the holistic service design process: frame, learn, solve and test. In total the toolkit includes 10 templates and 4 templates for collecting the key insights from each 4 sections. The kit borrows some tips such as Osterwalder and Pigneur’s (2009) “Business Model Canvas” and the “Customer journey canvas” by Stickdorn and Schneider (2011).

From the usability perspective the tool is rather easy to follow since it has clear indicators how to proceed and what specific tools are related to which section. However, the toolkit does not really provide step-by-step instructions on how to use the templates. In a way it provides a set of tools but does not go deep in how to get best out of the tools and methods.

Service Design Toolkit – www.servicedesigntoolkit.org

Another toolkit with a same name is an introduction to the methodology and tools of service design by service design agency Namahn and Design Flanders. It is a guide to simple “do-it-yourself” service design projects. On their website they suggest that the toolkit can be used as a guide for one-day training sessions about service design. It provides some workshop materials free to download on their website, posters, manuals and technique cards. Even though they highlight that one can do “do-it-yourself” service design by the help of these materials, they still recommend hiring a professional. They offer two toolboxes in total; one published in 2001 (60€) that contains more of the basic tools and second one on 2014 (65€) that contains more advanced tools. It is easy to assume that partly the point of the toolkit is to introduce the service design...
As this paper is focusing on the early steps of service design process, let’s open up the first 4 areas that include the process before the actual creation phase.

Framing has been split in two main areas: Context & Objective and Research Questions. For user insight phase they offer two templates that are meant to support interviews. First template is to help in interviewing the user experience. The other interview template helps to map at the different actors (mapping the people who were involved in the experience either closely or more distantly). The tools for creating personas are focusing different extreme user profiles and then secondly creating a more detailed persona. Finally, the tools for clarifying the design scopes are firstly for finding the design challenge and coming up with criteria for success. The second tool for design scoping is about design requirements. The point is to clarify the real requirements derived from the first tool.

The toolkit covers a large area of different methods used by service designers. The templates are designed with a funky colourful graphic identity that might scare some companies. Some templates are rather complicated to read but the manual provided with the toolkit helps the usability. One practical issue I noticed was that the templates are sized as A0 standard (841x1189mm) and they include small text. If someone prints the templates they include small text. If someone prints the templates in A3 or even A4 the supporting texts might scale down so small that it gets close to impossible to read them.

AT-ONE Book – How To Design Better Services

AT-ONE “book” is a combination of tools and instructions on how to get started with innovating new services and how to manage the process. It is aimed for project leaders or company executives who want to improve the experiences their customers get from their services. On the other hand the book can also help designers in improving their service design skills. The book is a result of AT-ONE project which involved multiple organisations and companies working around service industry (such as The Oslo School of Architecture and Design, LiveWork and Telenor). “Father” and the author of the book is Simon Clatworthy and a unit from the first limited edition of 200 units costs 800 Norwegian krones (about 98€). The “book” as they call it is more like a cardboard box that contains a poster of the AT-ONE process, individual booklets (instructional) for each letter from the name (ATONE) that present five lenses for innovation: Actor, Touchpoints, Offering, Need and Experience. Besides these the box also offers an evidencing chapter, a set of touch-point cards and a pack of post-it notes. Besides the book itself some of the tools, touchpoint cards and methods are downloadable from their website. The downloadable files are under the Creative Commons license so they are free to use even in commercial practices but not to be sold forward. (Clatworthy 2013)

As many other toolboxes or set of tools too, this book is focusing on helping “first-timers” (people willing to use innovative methods on service development) to get over the first steps easier. But it is not just about helping over the first steps but it is also about teaching people the benefits about service design and how to use it. As they say it, AT-ONE is a “structured innovation method for the first phases of service innovation projects”. (Clatworthy 2013) It is worth mentioning that with all the different booklets the box offers quite a lot to read which requires time from the person using it the first time. The booklets contain examples about different topics that help to understand why a certain step is worth to execute. Although the tool provides a deeper overview of the tools than other analogic toolkits it still works more or less just as a scratch on a surface as it tries to cover a large service design process. As a whole it might feel too complicated for a first-timer to start studying.

In addition to these toolkits above I also took a look at various smaller toolkits done by individual companies or service design bloggers. Also a master’s thesis from Aalto School of Arts, Design and Architecture, Helsinki by Jarkko Kurronen (2013) that provided a toolkit for public organisations worked as a good reference even though it had a different focus. “This Is Service Design Thinking” book by Stickdorn & Schneider (2011) can also be seen as some sort of a toolkit but its focus is also more on explaining the service design as such and does not concentrate on the tools. Therefore these references are not opened here further.
2.5.2 Digital tools

Smaply - Web-based tool for visualizing customer experiences

Smaply is a digital tool that helps in visualizing different customer experiences by utilizing personas, stakeholder maps and journey maps. The tool is developed partly by the same authors who combined the "This Is Service Design Thinking" (Stickdorn & Schneider 2011) book so its features and templates rely strongly on the same patterns seen in the book. As Smaply tool is web-based cloud service, it allows different stakeholders to modify same documents and therefore helps everyone stay updated on the project. Smaply is a subscription-based service and can be ordered in a price of 10€ per month (12€ incl. VAT). (Smaply 2014)

Smaply offers on its website rather clear instructions and step-by-step user manual on how to create new personas, stakeholder maps and customer journeys. Out of these three main tools, customer journeys allow the deepest level of detailing. In addition to the actual horizontal journey Smaply allows users to visualize storyboard by adding pictures on different stages. Furthermore, customer journeys allow also indicating emotions by "Emotional journey". Emotional journeys are shown by the typical way of having a graph that goes up or down depending on the experiences emotions at specific stages. (Smaply 2014)

Besides the fact that Smaply users can easily share the same data with every project stakeholders, maybe the best value of having journeys as a digital tool is the fact that Smaply users can easily compare different journeys experienced by up to three different personas. This helps people to see the different ways of using same service better and therefore broadens the perspective over the service under development. Smaply website also offers PDF template files for free download (Creative Commons licence). According to Smaply website the point of having printable templates is to help co-design sessions where paper and pen still are "an unbeatable combination." As the templates have more or less the same layout than the digital tool it is rather easy to update the data gathered in co-design sessions to the digital tool and therefore visible for all the stakeholders.

RealtimeBoard – Regular whiteboard reinvented for a better online experience

RealtimeBoard is basically an endless digital whiteboard that can be zoomed in and out and modified by multiple editors. As many others, RealtimeBoard is also cloud-based service so that users can reach data, add ideas and comment on others' ideas anytime and anywhere where they have internet connection. As any projects the traditional whiteboards have proved to be very useful but they often get too packed, complicated or hard to keep updated. That is why having the whiteboard in a digital format offers clear value for users. RealtimeBoard is free to use for up to three boards and 100mb space. Pro version costs 10€ per month and gives unlimited amount of boards and up to 3gb space. In addition a "team" version is also available by 10€ per month which enables 5gb of space and voice and video calls and gives all the team members access to Pro version features. (RealtimeBoard 2014)

A positive note from the RealtimeBoard is that it offers some templates and guidance videos for example on how to make a customer journey map. RealtimeBoard offers the ability to draw, write but also possibility to upload other documents such as images, pdfs, Word documents and so on. According to the case examples they show on their website RealtimeBoard works well for any kinds of typical diagrams and charts such as business model canvas, SWOT-analysis, Gantt chart but also any other useful service design tools such as blueprints or customer journeys. The website shows examples of some tools with a brief description what is it used for and how to make one. What is especially nice is that RealtimeBoard users can upload templates for free download to other users.

ExperienceFellow (former MyServiceFellow) – Capture and analyze customer experience of your brand, product or service

ExperienceFellow is a tool that utilizes mobile devices for ethnographic research. By the app (available for iOS and Android) end users can map their experiences easily while experiencing them. Furthermore, the company using the ExperienceFellow system can monitor the user's experiences in real-time and get analytics after the research has been finished. Good feature is that the end-users can also add images, sound or videos on a specific touchpoint experience. This will give deeper insights on the problems the users face in a service. For
the monitoring side the benefits are that the service
provider can view, sort and filter the results in easily
readable visual presentations that are ready for sharing
within the organisation right after the research has
been finished. (ExperienceFellow 2014)

In August of 2014 the tool was still on Beta version
period but already suggesting some plans for future
pricing. Their initial pricing plan suggests for 39€ per
a single project (with up to 10 participants) and 50€ for
a monthly subscription pay and full access (up to 100
participants).

The tool was called as MyServiceFellow during my
research phase but was named later on autumn 2014
as “ExperienceFellow”.

2.5.3 Conclusions from the toolkits benchmark

As it can be read from the more detailed descriptions
of each tool, they are giving what they are promising:
a set of most common tools needed in service design.
All of them explain what are the tools for and give a
hint of the service design or even design thinking
as the concepts behind the tools. None of them
is exactly focusing on one tool (except Smaply and
ExperienceFellow emphasize customer journeys) and
making the first try experience as easy as possible. This
may cause confusion, overwhelming and overloading
among the first-timers. As found during the interviews
of Diagonal’s clients and workers (chapters 3.1 & 3.2),
many of them prefer as easy as possible tool that does
not require much studying and time. As time is an issue
for every company the tool should focus on giving a
kind of a “teaser-like” experience of the service design
as an expertise. In addition to that the Diagonal’s clients
hope to get the results of these tools in digital format
at some point BUT however, they do not look forward
to having to learn new programs. The digital tools promise being an efficient way to
approach service design processes and are usually
focusing on utilizing mobile devices to gather user data.
There is no questioning whether this is good or not; it is
easy to assume that collecting user data “on-the-go” is a
very efficient way to do it. On the other hand they focus
mainly on the user research and neglect the company’s
inner development processes. They give data but they
do not always tell how to proceed and use this data.
Yet, as they give the results also in digital format it is
very easy to share them. This is a clear benefit of using
digital tools but as the interviews showed, people get
confused and frustrated if they are expected to learn
how to use new digital tools. This applies also on the
end-users’ experience but especially on the company
workers’ routines.

2.6 VISUAL ELEMENTS ON THE SERVICE
PROCESS VISUALISATIONS

Service designers are expected to be highly visual
in their communication and it has been proved that
visualisations help when a complex message needs
to be communicated shortly (chapter 2.2). Most of
the service process visualisations have some visual
notations such as icons and pictograms combined
with short text phrases or headlines. The profession
of service design as such is also still missing a clear
standard on how should certain parts of services be
presented. Some kind of a standard would help both
the service designers to have more coherency in their
presentations but also so that the people (clients)
reading the visualisation could easily understand what
does a certain pictogram stand for. Even though the
point of this work is not to create a standard for a visual
language this chapter will justify why the outcome of
this work has certain icons and pictograms included.

I took a look at 34 different visualisations presenting
some sort of a process flow of a service and 11 different
toolkits or template collections and could spot
similarities in the use of certain visualisations such as arrows, icons and pictograms. The style of the visualisations
usually follows a rather polished but simplistic style that is
usually achieved by vector images created by Adobe
Illustrator or similar. The graphic designers from the
Diagonal Mental Structure had also started to gather
a bank for pictograms that could be used while making
more polished visualisations. Hence, the visualisation
tool created during this project is also basing its visual
style on the similarities in common habits both from
available service visualisations from the web and books
and the pictogram bank from Diagonal.

2.6.1 Visual elements for interactions and “flows”

Only few visualisations found by web search explained
briefly how to read them. As an example design agency
Adaptive Path added explanations on the experience
map (image 11) to clarify what meanings do different
arrows lines stand for:

![Experience Map symbols by Adaptive Path](image11)
They mark ongoing processes as a circle with three arrowheads, linear process with a straight arrow and “non-linear, but time based” process by a curvy arrow.

Jegou & Joore (2004) presented a “system map” of product-service systems (PSS) with instructions how to read the map (image 12). They separate different interactions as material, information and financial “flows” and map them with different line styles. Material flow is mapped with a thick black line. Information flow is presented as a thin dashed line with a square at the end and financial flow as slightly thicker dashed line with a circle at the end.

Process maps (also known as process charts or flowcharts) are visual presentations of processes familiar among people from business background. They are usually used to map a complicated process that includes both user actions and company’s actions. Process maps follow an ISO standard (ISO 5807:1985) that is created for flowcharts in general and uses shapes that can be found readymade from MS Office programs such as PowerPoint and Word. There is a long list of different symbols to be used. However, most commonly used and in relation with this topic are box, box with rounded corners and arrowhead lines. Boxes stand for single activities, boxes with rounded corners mark the start and the end of a process and lines show the direction of the flow. One especially interesting symbol used here is a diamond that stands for making decisions with minimum of two options. Diamonds usually stand for steps where user or service provider confirms something that can be answered “yes” or “no”. (ISO 5807:1985)

When it comes to the outcome of this work...

I decided to adapt some elements from the existing tools and visualisation habits. I tried to pay attention to the visual elements that are widely used in different visualisations, as self-evident as possible and follow common sense in their meanings. As the outcome tool of this paper is focusing on the first-timers I tried also to limit the amount of the visual elements that would need to be studied before using the tool. All of the visualisations are based on the service user’s steps that define the backbone of the process visualisation.

From comparison of the toolkits and visualisations I could spot four types of transitions or step type characteristics (image 14). By these transitions and step types I mean the general types of actions the specific step could include. A straight arrow stands for a step that is straight-forwarded such as the process of walking to a bank, picking up a queuing number and waiting for your turn. A curved arrow however stands for process types that are explorative but time-based. As an example of an explorative process is the phase when an end-user is browsing the Internet for product alternatives. Some might use on the same task 30 minutes while some might stay in the same phase for weeks. A circular arrow describes processes that are ongoing such as the function of the workers at an information desk inside airports. Finally, a dividing line stands for a decision point when the service user makes some sort of a decision and proceeds in his/her service journey.

These line types help the service provider to understand the different natures that the service steps might have. These indicators of flow or interactions, however one wants to define it, are usually also supported by different icons or pictograms. This is naturally because lines and arrows cannot indicate everything. Pictograms can be indicating a specific person, object or touchpoint environment that is tied into a specific step during the service users’ journey. The next chapter focuses on these aspects.
2.6.2 Pictograms & Icons

Pictograms and icons are strengthening the visual message by providing additional visual material to link to when remembering certain parts of a process. For instance, an icon of a phone is an easy way to highlight a crucial step in the process of calling a customer support service. However, pictograms and icons cause often confusion as terms and the differences can be hard to distinguish.

To maintain clarity and coherence let's take a look at some definitions and how do people differentiate these. Gael Davidson from MSD, a company designing wayfinding and signage defines icons as an "image or statue of symbolic nature, sometimes with significant special or religious connotations." Additionally, he defines pictograms as "pictorial representation of an object, place or item." (Davidson)

A study about design, understanding and usage of pictograms (Tijus et al. 2007) presents pictogram as a "stylized and figurative drawing that is used to convey information of an analogical or figurative nature directly to indicate and object or to express an idea".

Furthermore, Jenny Gemmel from Centigrade (company working on user interface architecture) (2012) explains that icons can be split into two main groups: symbolic icon or iconic icon. Symbolic icons can present a concept with a relational or symbolic drawing that does not directly render the object it is made for but just "stands for" it. As an example of symbolic icon she presents UI icon of our planet that stands for Internet. Iconic icons are drawings that present directly the object or concept they are made for. She takes an example of iconic icon again from UI design in which an icon for an address book has actually been drawn so that it looks like an address book.

To conclude, there can hardly be found one clear definition for what differs icons, symbols or pictograms from each other. As the main focus of this project is elsewhere, I will speak in this work about "pictograms" in general being the visual representations of given objects, places, people or concepts. As found in the interviews of different service designers the service design projects can be very different from each other and the visuals needed for each project depend highly on the topic. This is why also same pictograms can be used for multiple meanings. All that matters in the use of pictograms is that the people who are involved in the projects understand what do they stand for in that specific project.

The image 15 presents examples of using different kind of pictograms that share similar meanings and points of usage. I made a review of 34 different service process visualisations and 11 toolkits. I tried to pay attention to the most common pictograms and the habits in their usage. For more info have a look at appendix (Similarities found from the comparison of 34 service process visualisations and 11 design toolkits).

According to the interviews with Diagonal's clients, all of them found some additional visual materials helpful which is why the outcome of this work: a visualisation tool should have a collection of these pictograms. These help to highlight for instance a switch from a channel to another such as from website browsing to calling or when does the service user start interaction...
with a company for the first time. However, in addition to these “basic” pictograms I decided to include special icons that would be used to highlight especially critical or especially positive moments. Indicating these help in finding chances for improvement. As an example let’s imagine a service user whose satisfaction with the service provider collapses dramatically when his/her ordered package does not include all the goods that were promised. If the company handles the reclamations in a surprisingly fast and positive way it can in some cases even recover the customer satisfaction level higher than it originally was (Michel & Meuter 2008). As Diagonal had also already created a pictogram collection of their own I decided to utilize that for the tool to emphasise the visual appearance and to stay in line with Diagonal’s graphic identity. Additionally I also created some pictograms that I saw missing from the collection. I tried to make them as self-evident as possible so that they would need none or only little explanation (image 16).

**IMAGE 16 – Combination of chosen pictograms for the tool. The set contains 24 general pictograms and 2 special for indicating the best and the worst moments during the service experience.**
INTERVIEWS WITH DIAGONAL’S
SERVICE DESIGNERS AND CLIENTS
Focus on the experiences on using service process visualisations

To get a deeper understanding on the issues that the “first-timer” clients face during their first sessions I interviewed three clients and three service designers from Diagonal. The interviews all lasted 30 mins to 1 hour and followed a list of questions but were open on other discussions too. This chapter sums up the main findings from the interviews from both perspectives. More detailed info available in the appendix.

3.1 INTERVIEWS WITH DIAGONAL’S CLIENTS

Discussions about using service visualisations for the first times

During the research phase three clients of Diagonal Mental Structure were interviewed about their experiences with visualising service processes for the first times. The interviews followed a list of questions but each included also open discussion around the topic. The open discussions were often the most fruitful and included topics and experiences that the questions were missing.

As the discussions were open and did not follow the same pattern they allowed the interviewed to talk about the issues they found important or memorable. The interviewed were all middle-aged of which two were men and one woman. The first man interviewed worked as a service development manager in a large multinational company providing power and automation solutions. The other man was starting a start-up and the woman was working as a service manager in a hospital for cancer patients.

Conclusions from the Diagonal’s clients’ interviews

All of the interviewed had become convinced of the possibilities and benefits of mapping a service visually. They had doubts about the tools and methods at first but after getting familiar with them they even described them as the “must-do-steps” when starting to develop a service. As they did have no or only some experience before and did not know about the possibilities, some even understood they needed the visualisations only once they were made. In other words they become so convinced about service design visualisation techniques that they see it as the best and only way of working on service development. The visualisations had helped them to:
- See the holistic overview of their service process
- Communicate inside the organisation but also with their customers
- Explain complicated systems better
- See the service from the service users’ perspective
- Create a frame for service development

However, the interviews also revealed some issues that they were lacking or missing. For instance once a draft or a rough version of a customer journey was done they were missing a clear and informative digital version to be shared within their organisation. They either had to use a graphic designer from service design agency or hire one inside their organisation. Additionally, if they had been working on their service development project on their own without a service designer, they had been lacking inspiration for new ideas. All of them also felt that the service development projects should also always have someone who is “in charge” and is familiar with the service design in general. On the other hand all of them either said they have utilized the method by themselves or could do it now after they had seen how it works.

In general they had realized the potential of the tool and some had even utilized it at different situations or stages of a service development process. However, when asked about the “do-it-yourself” toolkit all of the interviewed agreed that the toolkit should be as easy to use as possible and require minimum time to learn how to use it. The benefits and outcomes should be highlighted clearly so that the tool user could be sure why he/she should use it.

It is worth noting that this information is based only on interviews of three persons who had had experiences with service design methods about 1-5 times. To get more in depth results and insights more interviews would have been needed but the schedule of this work did not allow for more. For more detailed summaries of each interview have a look at the appendix.
INTERVIEWS WITH DIAGONAL’S SERVICE DESIGNERS

As service design as an ideology always requires the study of both the end users’ perspective and service facilitator’s perspective I interviewed the service designers from Diagonal about their actions and habits when working with clients with no or little experience on service visualisations. The questions focused mainly on how and which state do they use visualisation methods to support the process but the discussions were open for any other points to arise too. From the visualisation methods the discussions focused mainly on tools that map the process of the service in some way. Customer journey map was the most common tool to discuss.

Two of the interviewed were men and one woman. Two of them had a design background and were titled as service designers. One worked closely with the service designers but had a background of business and ethnographic studies. All of them worked with the clients all the way from the first steps until finishing the projects.

Conclusions from the service designers’ interviews

All of the interviewed agreed that in many cases the customer journey (or experience) map works as the framework throughout the project – all the way from research and understanding phase to implementation and maintenance. Usually it is being fulfilled together with the client but at times it might be used only internally within Diagonal’s service design team and not shown to the client at all. All of them also mentioned that one of the most important steps in the service design projects is the early phase when their clients explain their service journeys and flows out loud. That is, the discussions the clients go through reveal hidden points that they might not be able to draw or write on paper. Therefore the tool should be used as a “pre-task” but to get the best results the journeys must still be checked together with a service design professional. On the other hand, the customer journey map works great as a pre-task because it sets the client on the right mood and forces them to look at their service from their end-users’ perspective. It also helps the service designers to get a clue of how their client sees their own service. Furthermore, it is important to be clear on how the tool is being utilized. The customer journey maps can be used for many purposes and it is crucial that the client understands the difference of making a map based on assumptions of the service provider or making the map based on a user research.

It is also worth mentioning that all of the interviewed mentioned at some point that the projects are very different and the process of tackling them varies a lot. Therefore the tool and templates should be rather generic and flexible. In addition to this, the terminology of the tool must be as clear and easy to understand as possible so that clients can immediately see how a mapping is made. Sometimes they might use some images as support material and for example different “touchpoint cards” (chapter 2.5.1) help in brining new thoughts during ideation phase. Pictograms they use only when making the more polished versions of the visualisations but still surprisingly seldom. Normally Keynote or Powerpoint slides with text, lines and circles do the trick but if the client asks for more customised visual style the service designers make them or even ask Diagonal’s graphic designers for help.

All of the interviewed agreed that the purpose of the tool should focus on opening the clients’ eyes towards looking at their offering from the service users’ perspective. The tool should be as simple as possible and require only little time on studying and figuring out how to use it. The mapping of the user’s journey should first focus on the main points (main steps in the service) that help the client to form the bigger picture of the offering. After using the tool the client should be able to tell Diagonal at least some steps in their service that they think have problems from the user’s perspective. Eventually the tool should be fun and easy to use and encourage the clients to dive deeper in the possibilities of the service design as a profession. In other words it should work as a lightweight and simple teaser towards bigger service design projects.

Additionally, it is worth mentioning that the thesis process included also multiple quick meetings and talks with Diagonal’s workers that helped to form the bigger picture of the situation. All these small comments and chats gave me a better understanding on where the tool might have the biggest impact, who needs it the most and how might it help Diagonal in a larger scale. However, as these meetings were not documented in any way they are not opened more in this paper.
DESIGNING THE TOOL

Decisions made for creating a service process visualisation tool for service design first-timers

As the tool is meant for the people who are not familiar or have only little experience on service design and they have limited time especially for learning new things, the tool should be as simple to learn and use as possible. Yet the tool should enrich their vision and open their eyes towards better service use experience and especially encourage for continuing on service design processes. As the interviews with the Diagonal’s clients also showed, the tool should be presented in a way that its purpose becomes clear and what are the benefits of using it. This chapter shows the decisions made in this project.

4.1 TOOL FEATURES AND REQUIREMENTS

As proved in the first and second chapters, there is a need for a visual tool that helps companies who want to positively affect on their service users’ experiences. The tool should be as easy to use as possible so that it does not require hours of studying from a novice user and that it can be done either individually or in teams. Individual version should be done within 30 minutes to 1 hour whereas the team version would require 2-3 hours. The tool has two main goals: the main goal of using the tool is to provide its users a perspective that reveals chances for improvement. Secondly, it provides a platform for better communication between stakeholders. That is, the tool should be emphasizing the users’ (service end-users) journey and experiences so that the service provider can see their offering from a more empathic point of view. As learned from the interviews with Diagonal’s service designers many companies still focus too much on their internal actions and neglect the end-user’s perspective. As this tool is meant for service design first-timers and should encourage them using the abilities of service design more often it should actually give a very positive and inspiring experience on the service design itself.

The criteria of the tool set after the review:
- As easy to use as possible
- Requires minimum amount of studying
- Should have enough flexibility but still have a guided process
- Can be done individually or in teams
- Individual version should be done in 30 minutes to one hour
- Team version should require maximum 2 hours
- Should encourage and lead to next steps in a holistic service design process
- Sharing the results digitally should be as effortless as possible

What is it?
Therefore the outcome of this work is creating a “hands-on” tangible product that enables efficient teamwork by helping communication and interaction between the stakeholders. The tool is all about mapping the service users journey and trying to find the pain points and positive feelings to improve the experience.
Why to focus on the service user's journey as the first steps?

As proven on the first chapters of this paper and by the interviews, the service user's journey is one of main the keys - if not the most important - in understanding the users needs and desires. Even IDEO’s Human Centered Design toolkit is suggesting starting from understanding the desirability of the products or services and only after that proceeding to checking feasibility and viability (IDEO 2011, 6). Furthermore, understanding the user's journey and mapping it visually provides a backbone for the service development. In other words, to create, deliver and maintain excellent service quality and should have a good holistic understanding of the big picture. Additionally it can be used and utilized by all kinds of employees who are somehow related to the service delivery process. Therefore it is important to frame the focus of the tool and include features that most of the service providers MUST understand the use journeys of their service users.

Who should use it?

The main target group for the tool is the service managers who are responsible for improving their service quality and should have a good holistic understanding of the big picture. Additionally it can be used and utilized by all kinds of employees who are somehow related to the service delivery process. Therefore it is important to frame the focus of the tool and include features that most of the service providers MUST understand the use journeys of their service users.

To help and facilitate the first-timers going through the first mapping experiences I decided to make a template and instructions how to fulfill it. I made the first sketches of the tool on A3 paper by following rather familiar layout that was similar to the traditional service blueprint. The layout was a linear line of boxes that were equally sized. This turned out to look rather complicated and not appealing, as the result was just one paper full of boxes. As understood from Diagonal’s service designer’s interviews many people using service design tools for the first time even confuse the difference between frontstage and backstage. In other words they do not understand clearly what parts of their work is visible from the service users’ perspective and what parts are hidden.

Therefore I decided to emphasize the service user’s perspective on the tool and highlight the switch between user’s and provider’s perspectives. One way to improve this was to add colour-coding. Yet, the tool should look as simple as possible so there are no more colours than two. Pink colour stands for the service user’s side of the cake and cyan stands for provider’s side. I showed the templates to some people but most of them still thought it was rather complicated and hard to understand. I realized that it was better to differentiate the user’s and provider’s perspective even more. I decided to try taking another paper so that service user’s actions were on one paper and service provider’s actions on the other. This helped to focus on the service users’ actions as a first first task and allow proceeding only after they would be mapped. After all, as understood during the research phase the service users’ experience is perhaps the most important

**LAYOUT OF THE TOOL**

The interviews with Diagonal’s service designers and Diagonal’s clients showed that service design projects tend to be very unique and vary a lot. This sets rather big challenges on the visual layout of the tool, as it should be flexible and somehow adjust to the projects’ needs. Therefore it is important to frame the focus of the tool and include features that most of the service journey mapping sessions include. After going through multiple visualisations I could see similarities and find the most common levels and ingredients of the tools.

The visual style and other visual materials provided such as pictograms follow the similarities found in the research phase. Their style and the package design also goes hand-in-hand with Diagonal’s visual identity as the tool works as a touchpoint of their service offering.

These were:
- Service user’s steps
- Service user’s feelings, thoughts and emotions
- Touchpoints and physical objects related to steps
- Service provider’s reactions (visible & hidden) to service user’s actions
- People involved at specific steps

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factor to take into consideration when starting service development because positive experience brings the customers to return using the services more often.

Chapter: 1.2.1

4.2.1 DESIGNING THE MAIN LAYOUT

The second version now had two A3 templates; one for service user’s steps, goals and emotions and the other one for touchpoints, service provider’s reactions and people involved. The tool still needed a clear process to follow with flawless instructions. If the tool becomes a tradition at Diagonal, it will actually become one of their touchpoints with their clients so the whole use experience of the tool should be top class. In some level, the instructions are in fact Diagonal’s support and facilitation while not actually being with the client. The supporting questions and comments should help the tool users to walk through the process without problems.

Therefore, I decided to split the process in four parts. First part focused on creating the service user’s path. Second covered the user’s motivations & goals and thoughts & emotions. Third part changed the perspective towards the service provider’s reactions, touchpoints and people involved. Finally the fourth section focused on analysing the created customer journey and finding the chances for improvement. For the last phase I created a summary template that asked to fill the worst and the best experiences in the service both from the user’s and provider’s perspective.

Chips

Furthermore, as learned during the review of existing materials and toolkits tangible and visual materials help people to focus, communicate and get inspired. That is why I decided to create wooden chips out from the common pictograms utilizing Diagonal’s collection and some that I made. The point of these chips was to work as additional tangible material that can be used freely. In other words the process of the tool was not dependent of these chips but they were designed to work materials for inspiration, marking specific touchpoints with tangible objects and to highlight the best and the worst moments in the service experience.

Instructions

I first created a booklet that would take the tool user “hand-in-hand” throughout the mapping process. The booklet however ended up being a rather heavy document with about 20 pages. This did not go together with the initial guidelines of making the tool as simple as possible. This is why I decided to create sort of quick-look instructions that would briefly show the point of each feature in the tool and guide through the process quickly. This was simply a two-sided A3 paper that was folded in a smaller A4 booklet.

4.2.2 Did people really get it? - Testing the tool

To get a real understanding on how would people with little or no experience with service design manage to make their own customer journey maps the tool needed to be tested.

First try-out was done by Diagonal’s service designers in their workshop with a client. They could not utilize the whole tool as such but decided to utilize the service user’s steps, motivations & goals and the emotional curve. The participants were asked to imagine a holiday travellers different journeys to the location. The participants were mainly employees from different companies working for holiday services in a specific area. The designers told me after the session that especially the emotional curve both made the participants to step into the service user’s shoes but also it made them to really question some parts of the service. In other words, only the existence of the emotional curve feature got them to consider the feelings throughout the mapping. It boosted the participants’ level of empathy towards the service users.

Test session

The first real test session with the tool was done with a group of customer service employees of a public organisation in Helsinki, Finland, who wanted to improve their service experience and find new ways
to help their customers. The group had prepared beforehand 5 different service user profiles (personas) that are common and recognized service user types. The group included 20 persons in total and only 5 had some experience of making customer journey maps. It is worth mentioning that the group had employees from three different companies but with similar services. They were split in five teams in which they also had prepared the user profiles beforehand. They were asked to map a single service journey according to current understanding on how it goes.

It was rather clear that the tool seemed too complicated on the first look. The workers seemed frustrated and felt that the tool required a lot of work. It did not “stand on its own” and required quite a bit of explaining and guiding. However, when the teams understood the process the A templates (service user’s perspective) were utilized rather well. Especially drawing the emotional curve and the wooden pictogram chips seemed to do the trick as they inspired for new thoughts and helped to highlight some parts in the process. As the group had only little experience on service design it was easily recognizable that they had trouble knowing the exact path of some service user groups. In other words the tool worked in that sense that it forced the employees to imagine their service from the service user’s perspective. However, the B templates (service provider’s perspective) seemed too complicated at first. After filling the A template I also asked them to think about the touchpoints but it was not the most valuable point to think at this point. Also the terms “service provider’s visible / hidden reactions” caused confusion. The group also included some manager level employees who clearly had more interest towards the “back-office” perspective. Other than that, the B templates seemed to be too much for the first time.

The concluding template on the other hand worked well as a summary for the tool. At the end of the session I asked the teams to conclude their main findings from the tool on this paper. They found rather many negative and positive points from their service users’ perspective but only few had some notes on the service provider’s perspective. I also asked the teams to present their findings to other teams at the end. They clearly had found similar issues from each company. These were for instance the lack of good guidance signs throughout their complicated buildings.

As a conclusion it was a very eye-opening test. When talking about service design first-timers, understanding the service users’ perspective well is already a big task and encourages the employees to think about their service from a different perspective. The tool has already helped if it manages to boost awareness towards the users experiences and possibly find chances for improvement. Going deep into the service provider’s actions can be too confusing and make the whole experience of the mapping too complicated and tough work. Most importantly, the experience of using the tool becomes easily unpleasant if it is too complicated.

Even though the info in the mapping was based only on the service provider’s assumptions and “know-how” it was a rather difficult task. It is crucial to emphasize that the data is based only on the employees assumptions. This point should be made clear also for the participants. The same session should be done at some point together with the end-users to get a real understanding on how do they really feel. Nevertheless, the tool worked as an eye-opening task and provided results already on the first try.

As a conclusion it was a very eye-opening test.

However, as the tool should also be flexible and provide support for service managers and such, I still decided to include the service provider’s perspective template in the package. It would not be highlighted as such anymore but instead it could be done in addition to the service user’s template. In other words, the A templates should be filled in any case first and only if the people utilizing the tool would want to dig deeper the tool would support it by providing the B templates.
Nevertheless I decided to also include the service provider’s perspective template B in the tool. BUT it should be used only if the tool user has already some experience on mapping the service user’s journeys. Therefore the usage of the tool itself stays flexible and meets more needs. Furthermore, I decided also to keep the more in-depth instructions as a booklet that also contain instructions to use the B templates. This booklet contains more information about service design as such, tips on digging deeper into the service processes and tips for future actions with larger scopes.

The reasons of using A3 format for the tool are:
- A3 is an international standard paper size so they are rather easy to print when one runs out of templates
- Splitting the perspectives on different A3 papers opens up a possibility for scaling the tool: The tool could be upgraded with additional templates such as business, logistics or technical perspectives.

The following materials show the contents and crucial captions from the instructions:

Service user’s perspective template

- Service user’s steps
- Service user’s goals or motivations
- Feelings, thoughts or emotions
- Challenges or chances

To keep it simple I updated the quick instructions to focus only on the service user’s perspective. I also decided to change the format into two-sided A3 as the booklet seemed to have issues with not seeing everything at once. Now the first side opens up the idea of the tool, what is it meant for and what does it give as a result. The other side has the simple four steps instructions to fill the templates - this time all in one look.
SERVICE USER’S JOURNEY

WHAT IS THIS?

Service journey journey shows you how a user’s perception of your service is formed and by whom the service satisfaction meter is measured. The tool helps you to
- understand the emotional change
- find opportunities for improving the service experience
- understand the actual service experience
- communicate with your service users better
- lead discussions together with employees

WHAT IS THE TOOL FOR?

1. This tool helps you as a service provider to understand your single service process from your service user’s perspective better.
2. It helps you to understand your service processes visually and helps you to see the holistic overview of the service experience.
3. It helps you to find opportunities for improving the service experience by mapping your service process.
4. It helps you to find chances for improvement in your service delivery process.
5. It helps you to brainstorm for ideas on service improvements.

WHAT DO YOU NEED?

- about 10 to 30 service users
- a long table to place the templates on
- pens
- sticky notes

GAME CHIPS

There are four different types of chips.

1. Positive chips – especially positive moments
2. Negative chips – especially negative moments
3. Neutral chips
4. Action chips – problems that could be turned into new possibilities

THE POINT OF THE TOOL

It helps you to find chances for improving the experience that your service users (customers) have during the service process. This tool helps you to understand your service processes visually and helps you to see the holistic overview of the service experience. This tool also shows you how a user’s perception of your service is formed and by whom the service satisfaction meter is measured.

THE TOOL INCLUDES A5 templates that help to structure the journey.

TURN THE PAPER FOR STEP BY STEP INSTRUCTIONS

IMAGE 19 – The first page of the quick instructions – Introducing the tool and its features.

IMAGE 20 – The second page of the quick instructions – Instructing the tool by four steps and tips for analysing the results.
WHAT IS THIS TOOL FOR?
1. This tool helps you as a service provider to understand your single service process from your service user’s perspective better.
2. It opens up the service process visually and helps you to see the holistic overview of the service experience.
3. This tool works as a communication tool between your colleagues by minimizing misunderstandings and it also helps you to communicate with your service users better.
4. The tool forms a backbone for your service development or process.
5. This tool helps you to find chances for improvement in your service delivery process.

THE POINT OF THE TOOL
...is to find chances for improving the experience that your service users (customers) have during the service process. It works best with a team of 2-5 persons from different disciplines. It is also highly recommended to do this mapping at some point together with your service users (customers). They are the professionals telling you how using your service really feels like.

FIRST CHOOSE THE SERVICE USER / GROUP
Before using the tool, you must have some idea who your service end-users. You might even know that you have different kinds of service user groups. Choose a certain group whose service experience you would like to improve or try to affect to. Focus on a single service experience at a time. Keep it simple - do not try to map everything at once!

SERVICE USER’S STEPS DURING THE SERVICE
Write on sticky notes all the steps the service user goes through during the service process and place them on the circles in the templates. After mapping the journey it might be still worth asking what happens before the journey and after it. Those “before” and “after” steps usually affect on the holistic service experience too.

MOTIVATIONS AND GOALS
Continue by writing above the circles the goals or motivations the service user actually has at specific moments. These goals are the issues the user wants or has to solve in order to proceed. Note that same goals might continue over several steps. You may also utilize the game chips provided with the kit as visual elements to mark different goals.

FEELINGS, THOUGHTS AND EMOTIONS
Now focus on the service user’s feelings, thoughts and emotions throughout the process. Try to write or draw the emotions and feelings or use the “satisfaction meter” to draw a curve that indicates the emotional changes - whichever suits you best. Then place the lightning bolt symbols on the moments when the satisfaction level crashes and the heart symbols on the moments when the user is happiest or experiences positive surprises.

CHALLENGES AND CHANCES
After understanding the ups and downs of the service journey try to think about the reasons for the worst moments? Is there something that prohibits your employees to act better? Could some fails be turned into new possibilities with minor changes? Mark the main causes and ideas related to them on the lowest box on the templates. Think at least about the worst moments and how could you boost or utilize the best moments even further.
Draw or write the most crucial findings from the service user’s journey and possible suggestions for improvement.

**FROM THE SERVICE USER’S PERSPECTIVE**

- **THE MOMENTS OF JOY FOR THE SERVICE USER?**
  - How could we boost these feelings even further?

- **THE SMOOTHEST OPERATIONS OR MOMENTS IN THE SERVICE DELIVERY PROCESS?**
  - How could we utilize these steps or skills even better?

**FROM THE SERVICE PROVIDER’S PERSPECTIVE**

- **PAINPOINTS FOR THE SERVICE USER?**
  - What could we change to avoid or minimize them?
  - Could they be turned into new possibilities?

- **THE TRICKIEST OR MOST EXPENSIVE STEPS IN THE SERVICE DELIVERY PROCESS?**
  - How to make these steps more efficient?
  - How to turn these into new possibilities?

In addition to the analogic materials, I decided to make an MS PowerPoint template for sharing the results from the mapping session. The digital template does not include everything but focuses on sharing only the conclusions and the service user’s steps to see where the negative and positive points have arisen. As found during the interviews with Diagonal’s clients, at some point they most likely will want or need to share the findings inside their organization. The interviews also revealed that people get irritated when they are asked to learn new programs. That is the reason for using MS PowerPoint which is perhaps the most common tool in different companies and is therefore familiar to workers.

As a conclusion, the tool itself is an analogic kit that would be easy to sell and utilize over and over again in different purposes. However, as the templates will run out at some point, there should be a place to print more of them. That is why I am suggesting that Diagonal would open a section in their website for this tool, providing all the templates as PDF documents in addition to the PowerPoint template.
4.3.1 Tool package design

The tool now included tangible materials: A3 templates, wooden chips, a stack of sticky notes and instructions which is why a package solutions was needed. The package itself makes the whole tool as a nice set that is easy to carry and works as a temporary storage place for the filled templates after the sessions. The idea is that Diagonal could either give or sell these packages to their clients as warm-up tasks before bigger projects or just as a set for getting familiar with perhaps the most common method of service design.

I wanted to design the package as cheap as possible but yet as functional as possible. The package is a standard cardboard box that is measured by A3 size - only the inner part is custom-made. It provides the quick "how-to-use-instructions" under the cover so that it is easy to get the idea of the tool. Furthermore it has slots for the wooden chips set, sticky notes and the main instructions.

IMAGE 23 – The package concept for the tool and its accessories.

4.3.2 Connection to Diagonal’s business

The initial idea of the tool was to help Diagonal’s service designers to get over the first steps with clients who are unfamiliar with service design methods. The point was also to help the first-timer clients to try out service design methods with clear guidance.

One idea to utilize the tool even more is to make the templates free-of-charge downloads but ask email sign-in before being able to download the templates. As the tool would hopefully gain attention among the industry and social media, the webpage and email enrolment could work as a sales lead generator for Diagonal’s sales people. It might reveal positive clients showing interest towards service design and Diagonal could possibly contact them later on.

Anyhow, the sales people at Diagonal thought that the tool should have a price tag. They believed it has potential answering the rising demand from clients’ side to find solutions and methods for user-centric approach. Therefore the tool could be sold as a “try-it-yourself” kind of a package but it should work as a catch for larger projects. The ideal case would be that after using the tool clients could realise a need for a larger project. Of course, this is an utopic projection but is hard to imagine impossible.

Furthermore, the service designers at Diagonal could naturally utilize the toolkit in their regular workshops or even give the kits as giveaways for some important clients.
CONCLUSIONS
And suggestions for future actions

About the topic

The research questions were:

1. What are the most important issues to take into consideration when visualising a service process with the first-timers: people who are unfamiliar with service design methods?

2. Is it possible to find or create a visual language standard for visualising service processes?

The research revealed that the existing visualisations shared quite a few similar elements and finding the common practices and visual elements was rather encouraging. However, the research also revealed that creating a visualisation tool that would be eligible for all kinds of service projects is nearly impossible. The service projects vary a lot which sets a huge expectation for the adjustability of the tool. Therefore, as with many other issues too, framing and focusing became more and more important. The outcome as it is works best with service managers who have no or little experience on visualising the processes but for a slightly more experienced the tool might be not that useful. Additionally the fact that the tool needed some sort of a guided process that helps to facilitate the mapping also created restrictions and might have resulted in a too strict guided process.

On the other hand the test session proved that asking first-timers to map their own understanding of their service process from their service users’ perspective is an eye-opening task and provides the biggest value (1). Including also the service provider’s perspective on the first mapping sessions makes the tool too complicated and causes the session to lose enjoyability. The service user’s perspective brought already new ideas and revealed problems. Furthermore if the employees had trouble filling the templates, it showed that they actually did not know what is their service experience like. Realising this issue got them aware of the service experience as such. Using the tool also reveals hidden problems and chances for improving the experience.

From Diagonal’s perspective, using this kind of a tool should help the service designers to get over the first steps of the projects more efficiently as this helps their clients to get on the right mood faster. Although, again, it is worth mentioning that the tool does not fit for all possible projects and it might be worth questioning when the project is applicable and when not. On the other hand if Diagonal would set the tool a price tag and publish it on their website it has a good chance of gaining attention and possible new clients. As one sales person mentioned, companies are struggling to find affordable solutions for customer-centric approach and this kind of do-it-yourself toolkit provides an alternative.

Regarding the research question 2, I would say there is a possibility to create a visual standard for how to draw and map service experiences. The industry already shares similarities and common habits. However creating a standard like that is a huge work and would need to involve several stakeholders to agree on the visual language. Furthermore, as the service design agencies have created their own visual identities and languages finding a common standard that everyone can agree on might be very challenging. Some might also question the need for such thing. On the other hand there are already standards for making technical drawings of products and buildings that can be read both by professional and normal people. Similar approach might help service industry to also share key issues and problematics globally. For instance a service design manager could read from these kind of standardised visualisations technical issues such as need for different resources to maintain a certain delivery step in the process. Furthermore from the same drawing a customer service employee could see what is he/she actually expected to do in relation to the bigger picture. As a conclusion there is a possibility for creating a standard but it might be worth first researching the need and thoughts about it.

About the point of the toolkit

Some might question what is the point of making a DIY toolkit that removes the role of service designers from the picture. However, the point is NOT to neglect the role of service designers. They are still the people with various skills and ability to find the real problems and solutions. The point of the tool is to introduce one method; customer journey mapping to people who are unfamiliar with SD methodology. I also believe that as the customer journey mapping has proved to be very effective tool it would benefit the whole industry if it would become more popular and common habit. As the research showed, there is a need for it but it should just be marketed and shared even more.

All that matters is the service user’s personal experience.
Personal reflections on the process

The brief of this work was very open in the beginning. I was first asked to explore the existing visualisation and possibly find a suggestion for a standard for visualising services. Additionally, I was asked to design a toolkit that could be given to Diagonal’s clients and would help and facilitate them to make their own customer journey maps. Since the brief had two main focus areas and I spent quite some time on getting an overview of the service design visualisations, the scope of the thesis was perhaps too open for a long time.

From a professional perspective, I should have made a counter suggestion for an updated brief earlier which might have helped me to frame the work better.

From the learning point of view, this was a rewarding project. The complexity of creating a tool like this shocked me and I was surprised how difficult it was. However, I got a very good understanding of the current situation of service visualisations. I also became even more convinced about the need for service experience development and the need for easy-use SD tools. I do not believe that sharing the tools and “giving them away” from professional hands would harm the industry but instead boost attention towards it. However, I would also suggest that this kind of tools would be designed so that the actual use experience of them is top-notch. They act in a way as treats towards the profession which is why they should not feel unpleasant or complicated to use.

Suggestions for future actions

The tool as it is now still seems a bit complicated for a first-timer and since there was only one proper test session, the tool would need more testing and variative versions. The templates seemed to work fine but the tricky part is creating instructions that do not seem complicated but yet offer details and guidance. One suggestion for improving the communication of the tool itself would be to make a simple video that explains the tool and shows a clear example how it can be utilized. This might work better than simply reading instructions. Also, the role of this kind of tool from Diagonal’s perspective was left a bit open and only time shows how it works in different projects. All in all, this kind of tool is never finished and needs updating occasionally.

From a more academic point of view, I was surprised how little the topic of service visualisations was explored. I found only a few papers that focused directly or indirectly on these visualisation methods and elements. Especially, when it comes to the second research question about the standard, there is work to be done and a clear gap in the academic materials. Therefore, the idea of having a service visualisation standard might have potential but it needs more research.

Eventually, it is worth mentioning that during the last steps of this process, I discovered that some standards exist in the UK and also ISO standards offer some materials. Yet, these standards have not been globally accepted among service designers and the potential is there.

Conclusive words

All in all, the project was a very rewarding one and helped me to deepen my personal skills and knowledge. I also believe (or hope) that this tool might gain some attention among the industry.

I would like to take this chance to thank Mikko Koivisto for supervising and guiding the work and all the people who were interviewed. I am also thanking Diagonal for providing me the topic and guidance. I would also like to thank Eero Miettinen for tips & thoughts and finally my family and friends for the support!
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The other toolkits not analysed in the text:


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Service design toolbox by Engine. Available at http://www.slideshare.net/fred.zimny/engine-service-design-toolbox (15.7.2014)


The rest of the materials are available at: https://www.dropbox.com/sh/nmlcf62ru0a7120/AACoALLv5m9CbUjHf5CSKFja?dl=0

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All of the photographs taken by Jukka Isosaari.

Interviews & test session

Diagonal’s clients’ interviews Kosti Tauschi 23.6.2014
Marika Järvinen 30.6.2014
Mikko Forsström 02.07.2014

Diagonal’s service designers’ interviews were held during the July 2014. The interviewed were:
Paulina Tenho
Juha Kronqvist
Taneli Heinonen

Test session was held in 29.11.2014 in Helsinki, Finland.
APPENDIX

SIMILARITIES FOUND FROM THE COMPARISON OF 34 SERVICE PROCESS VISUALISATIONS AND 11 DESIGN TOOLKITS:

Popular (almost all visualisations included):

A pictogram of a phone is always standing for some sort of interaction between the service provider and the service user. Normally it indicates calls but it can also be used for text messages or accessing Internet by a mobile device.

A letter is usually standing for mail, e-mail, invoice or confirmation messages.

A computer/laptop pictogram stands for interaction via Internet with the service provider or to highlight the need of a computer as a device.

A single person stands for either the service user (persona) or if the service user is in a direct interaction with a worker from the service provider’s side.

A pictogram having three or more persons is often used for friends, user groups or other communities that the user can be in interaction with.

Speech bubbles represent online chat or direct face-to-face discussions.

Dollar or Euro symbols represent money (depending on the geographical location).

Other (few visualisations included)

- A spanner tool stands usually for installation, fixing or adjustment.
- Positive experiences are commonly shown as happy-face emoticons or a thumb up mark (familiar from the Facebook “like” button).
- Bad-face emoticons, skulls, crosses or a thumb down pictograms represent negative experiences.
- In addition to the emoticons some visualisations draw a curve that indicates users feelings between positive, neutral and negative.
- “f” as a letter stands for information, help or guidance.
- Shopping cart stands for online shopping.
- Magnifying glass stands for searching, analysing or studying.
- Document pictogram stands for either physical documents or email confirmations.
- “Moment of truth” is usually presented by a heart pictogram.
- A favourite moment can be shown as a star pictogram.
- A warning sign, triangle, lightning bolt or exclamation marks commonly indicate the pain points during the service process.

INTERVIEWS WITH DIAGONAL’S CLIENT

The questions asked were:

1. Tell openly about your experiences with service design visualisations
2. What should service visualisation include and why are they used?
3. What should they provide as a result?
4. How are the visualisations utilized after the first mapping? (e.g. does it work as guidance for future work or are they forgotten soon)
5. What was especially positive in your experience with service visualisations?
6. What was negative and was there something confusing?
7. Was it lacking something?
8. Who should be included in the service visualisation sessions?
9. With whom should the visualisation be shared once they are done? How are they shared?
10. What is the best format for sharing the visualisation?

Additional:
Do you feel after the first visualisation experience that you would know how to utilize the technique in your company without any help from service design professionals?

Questions about imaginary service design toolkit
1. What should it include?
2. What would you use it for? (gathering user data / analysis / ideation / implementation or all of these)
3. What would be the best format?
4. Would you want somebody to help and give guidance or would clear instructions be enough?

1. A man establishing a start-up – one experience with customer journey mapping

By the interview the man had had only one experience about using service visualisations. They had made together with a designer from Diagonal a visual sketch of the possible customer journey of his upcoming start-up. He explained that they had started it (traditionally) by writing all the steps they could imagine on sticky notes that they set on a long wall. Interestingly enough, he told that he had doubted the whole idea and did not understand why the service designer was asking him to do so – even the sticky notes felt unnecessary and rather childish. Eventually after having all the steps written on the notes and seeing the whole journey as a holistic visual layout he understood the idea and reasons for making it. He started seeing the customer journey as the most critical thing to do at the beginning and that it starts to work as the “backbone” for future development steps. After understanding the purpose of the method he sees customer journey mapping as the “one and only way to map the service from customers perspective”. He is now expecting the customer journey map have both the customers perspective but also the back-end of the provider company. This is more referring to the traditional blueprint tool even though he did not mention it by name. After all he sees the customer journey map as a “roadmap” or a backbone – the plan to follow for future work.

When asked about the positive experiences he highlighted the chance to see the whole customer journey as a holistic story. That helped him to understand the core of his service but also to broaden
his understanding on what kind of issues might his own service users face during the usage process. Together with the service designer they had even found possible pain-points and problems that need more planning – already on the first steps of their development process. On the other hand as negative experiences he explained that he did not understand his point of making it at first. That caused confusion and quite a lot of doubting. He was hoping for some sort of case example or reasoning before they started their work to understand why it needed to be done. Even though it is worth mentioning once more that he became very convinced about the tool once it was done. As he said it, he "realised the need for making a visualisation only after it was done". The man commented also on the lack of the customer journey map as it did not work for him at all. He mentioned that when making one, the teams should be sent to someone who can make a "reality-check" with knowledge on resources. Although he also mentioned that clear instructions and case examples might work as well. He also believes that the customer journey mapping session should not only be about drawing pictures but in the very beginning think about how to run the project and be in charge of the workshops. This facilitator should also be able to explain others why this needs to be done and what does it give as a result. The toolkit might also need still some small explanation about the whole service design ideology since it is still rather unclear or even totally new concept for first-timers. After almost couple of years the board is still in use and it has the typical journey of their service user (patient) with its typical pain-points and problems that need more planning – especially when used them as supporting purposes. The board helps them to explain the cure process for the patients when they first time enter the hospital. The other hand some patients visit their clinic only once per year and for them the game board works as a reminder what state of the process they are currently going through. In addition to the communication they also use the same game board with wooden chips and a character when they ask their patients to tell them about their experiences. For instance the patients could put a chip on a specific moment on the board and tell why that moment was positive or confusing. In other words it works for user data gathering, supporting their interviews and as a communication tool internally and externally to help both the staff and the patients to understand the holistic process. Eventually they even decided to visualise their cure process and show it on info screens in waiting lobbies. This helps patients to understand which part of the process they are currently going through and therefore reduces frustration.

When asked about the possible "do-it-yourself- toolkit" he felt now having the skills needed to make it by himself – after making it once. In other words he believes that having one session where an expert shows how to make customer journey mapping is the best way to teach first-timers. Later he also mentioned that clear instructions and case examples might work as well. He also believes that the customer journey mapping session should not only be about drawing pictures but in the very beginning think about how to run the project and be in charge of the workshops. This facilitator should also be able to explain others why this needs to be done and what does it give as a result. The toolkit might also need still some small explanation about the whole service design ideology since it is still rather unclear or even totally new concept for first-timers. After almost couple of years the board is still in use and it has the typical journey of their service user (patient) with its typical pain-points and problems that need more planning – especially when used them as supporting purposes. The board helps them to explain the cure process for the patients when they first time enter the hospital. The other hand some patients visit their clinic only once per year and for them the game board works as a reminder what state of the process they are currently going through. In addition to the communication they also use the same game board with wooden chips and a character when they ask their patients to tell them about their experiences. For instance the patients could put a chip on a specific moment on the board and tell why that moment was positive or confusing. In other words it works for user data gathering, supporting their interviews and as a communication tool internally and externally to help both the staff and the patients to understand the holistic process. Eventually they even decided to visualise their cure process and show it on info screens in waiting lobbies. This helps patients to understand which part of the process they are currently going through and therefore reduces frustration.

When asked about the possible toolkit and its ingredients she explained that the objects or materials they use depend much on the project they are working on. Some journeys are easy to "visualise" just with sticky notes whereas some projects need more polished journeys – especially when used them as supporting material for interviewing their patients. On the other hand when they are ideating something new she is sometimes missing new perspectives and inspirational objects. That is why she would expect the toolkit to have multiple tools that enable variations and new ideas in their workshops. She also prefers the "hands-on" feeling that using analogic materials have but adds that having a digital version of the journey visualisations works best for sharing it inside their organisation. She also believes that once the staff got an "idea" the journey visualisations are clever enough to make their own according to that. Although she mentioned that every ideation workshop should have some facilitator who follows the discussion and tries to keep
3. A man working for a large international company providing power and automation solutions – some experiences about service design beforehand

The man told that they had used the service visualisation especially to communicate a new ready-made service both inside the organisation but also outside for their clients. Before starting to communicate their services visually they had had their new services mapped out mainly in narrative format with simple steps. However they noticed that their new service did not interest their clients and the reason was that it was too hard to understand. That is why they decided to contact a service design agency to help them in communicating the new idea. They ended up showing the service in a short and simple customer journey with pictograms (such as phone and truck transit icons) to support the short sentences explaining the main steps. They felt that the man benefit of using the service visualisations and especially the customer journey map was to make the "long story short". In other words the visualisations worked as tools for communicating the idea in way that was as possible and require minimal time on learning and studying it. He believed that utilizing the visual tools more would help them in minimizing the misunderstandings that usually occur during meeting discussions. The misunderstandings often happen when workers from different backgrounds discuss about a topic but use different professional languages. He also believed that they could start using the toolkit if it was proved that it improves efficiency and reduces time spent on development projects. They could start using it on their own if the instructions were clear enough. When asked about the ingredients of the toolkit he noted that some visual material would be useful but it should be possible to add some text with them. The outcomes of the tool should also somehow be turned into digital format so that it is easy to share the results inside the organisation.

The visualisations clearly had helped the company but during the development process they faced some issues when the graphic designer from the service design agency had changed during the process. That caused confusion when the communication with the new person was very different but also the visual language and style changed quite dramatically. In this case a clear visual "standard" or fixed visual style would have helped also the new graphic designer to step in the process.

The comments about the possible toolkit focused mostly on the usability of the toolkit. The man clearly pointed out that the tool should be as easy to use as possible and require minimal time on learning and studying it. He believed that utilizing the visual tools more would help them in minimizing the misunderstandings that usually occur during meeting discussions. The misunderstandings often happen when workers from different backgrounds discuss about a topic but use different professional languages. He also believed that they could start using the toolkit if it was proved that it improves efficiency and reduces time spent on development projects. They could start using it on their own if the instructions were clear enough. When asked about the ingredients of the toolkit he noted that some visual material would be useful but it should be possible to add some text with them. The outcomes of the tool should also somehow be turned into digital format so that it is easy to share the results inside the organisation.
but in any case it will help Diagonal in their internal communication.

As a negative point she noted that the customer journey map often focuses too much on the client’s customers’ (end users) actions and experiences and neglects what the client needs to do at certain touchpoints. Traditional service blueprint would focus on these issues too but interestingly the service designer did not mention the tool at all.

When discussed about pictograms and other pre-made materials she mentioned that she used ready-made pictograms before but has slowly reduced using them. This is because it is often hard to find a proper one for a specific need and clear text works “just fine”. She sometimes even asks a graphic designer to draw some additional material to support the touchpoints if the client especially asks for them. Some clients don’t really care about the pictograms whereas some even ask Diagonal to make more unique or in line with their graphic identity. The service designer notes that many of the projects are very different according to the clients’ graphic style. In other words every project is very different and the details and angle of approach depends a lot on client’s needs and desires. When it is known that client will share the journey maps and more polished visualisations will be needed she usually creates them in Keynote, as they are easy to export in PDF, “good enough” in client’s perspective and are easily added in Keynote, as they are easy to export in PDF, “good enough” but the files are typically exported to PDF rather rough. He also likes to use Keynote as it is “good but if it's only for internal working the visuals can be used for larger groups the map will be visually more polished enough” but the files are typically exported to PDF beforehand better for some of their questions. Often the perspective that the client is having on their service is focused on a narrow part of the holistic process. Therefore it is important to open the client’s eyes by asking questions such as: “when does your customers hear about you the first time, what happens after your customer hears about you or how does your customers usually contact you?”

About the role of the customer journey map he also highlights that internally it works as a core material for Diagonal’s workers. For instance knowing a single step in a service process is crucial to help them understand the main purpose of the tools. Therefore, in any case it works as a “must-have” tool for Diagonal but is not always showed to their client if it is not necessary. On the other hand the tool becomes tricky to use if the service is very complex. Similarly, according to the interviewed, it is important to frame what is the customer journey map made for so that it will not even try to include everything.

When asked about visualisations he stresses again understanding the point of the tool in relation to the projects. If it is made as a communication tool for larger groups the map will be visually more polished but if it’s only for internal working the visuals can be rather rough. He also likes to use Keynote as it is “good enough” but the files are typically exported to PDF when sending them to clients. He also prefers that the polished versions are made by Diagonal because if the client makes them, they often fill them with too much information.

When commenting the “do-it-yourself” customer journey map kit he believes that it could work but it needs to be made very simple at first. If the toolkit contains templates he thinks that they should limit the amount of touchpoints when making the very first customer journey maps. This is because he believes the limitation will help the client to focus on the main parts of the journeys of their service users. More details should be included when making a “second version” of the map. In other words the same map can be locked through different “lenses”. For instance one step can be opened in many ways: who are involved, how long does it last, what objects and touchpoints does it have and so on. He mentions that there are already quite a few tools available as well as all of these tools might help people to understand the point of the tool in relation to the projects and therefore require a lot of time for studying. It is crucial that the people using service design methods for the first time feel like it was easy and fun but also understand the main purpose of the tools. Therefore he likes the idea of focusing only on the customer journey map.

From a practical perspective he believes it is obvious that the toolkit should have clear instructions. As an example he mentions the PACE tool, which is so easy to use even with the terms frontstage and backstage. The tool should also have a clear list of questions that check simple things such as “can this step be seen by the service user or not”, what does the service user do next or “is there anything happening between two steps”. He also encourages making the tool in a way that the journey can be laid on a table or a wall so that the whole team can participate in making it. The process should go in a way that first focus is on the holistic

Interestingly enough, she mentioned that clients rarely want to comment on the digital versions of the customer journey maps. They usually have some iteration when making the polished versions of the maps but usually all the data has been clarified already during the “analog post-it” phase. Sometimes they might only draw an arrow on a specific point in a PDF document to check it is correct but that is all.

She was first a bit doubtful about the need for the possible “do-it-yourself” customer journey toolkit for the new clients but then realized that it might be useful to be sent for the client as a pre-task even before the kick-off session. Sometimes some touchpoints require some study from the clients for instance how many workers are needed to make one touchpoint running. The service designer also mentions that Diagonal does not have a toolkit but will help them to consider these issues. Yet she commented that the templates shared with the clients might need to be somehow editable beforehand since all the projects are so different – or at least very flexible.

Service designer 2 (with design background)

Likewise the first service designer, the second also highlights that many of the projects are very different and therefore depending on the characteristics of the project. However he also highlighted that as the very first steps they often make some sort of a customer journey map, as it will work as a “backbone” for the project. It helps in understanding the current situation but will also work as a plan for new service development. He also stresses the point of working together in a team with the client as it reveals hidden points while the client talks about their services. This helps Diagonal to get a deeper understanding of the client already during the first steps. That is why they usually make the first version of the customer journey map together with the client but he also mentioned that quite often the client could have prepared beforehand better for some of their questions. Often the perspective that the client is having on their service is focused on a narrow part of the holistic process. Therefore it is important to open the client’s eyes by asking questions such as: “when does your customers hear about you the first time, what happens after your customer hears about you or how does your customers usually contact you?”

About the role of the customer journey map he also highlights that internally it works as a core material for Diagonal’s workers. For instance knowing a single step in a service process is crucial to help them understand the main purpose of the tools. Therefore, in any case it works as a “must-have” tool for Diagonal but is not always showed to their client if it is not necessary. On the other hand the tool becomes tricky to use if the service is very complex. Similarly, according to the interviewed, it is important to frame what is the customer journey map made for so that it will not even try to include everything.

When asked about visualisations he stresses again understanding the point of the tool in relation to the projects. If it is made as a communication tool for larger groups the map will be visually more polished but if it’s only for internal working the visuals can be rather rough. He also likes to use Keynote as it is “good enough” but the files are typically exported to PDF when sending them to clients. He also prefers that the polished versions are made by Diagonal because if the client makes them, they often fill them with too much information.

When commenting the “do-it-yourself” customer journey map kit he believes that it could work but it needs to be made very simple at first. If the toolkit contains templates he thinks that they should limit the amount of touchpoints when making the very first customer journey maps. This is because he believes the limitation will help the client to focus on the main parts of the journeys of their service users. More details should be included when making a “second version” of the map. In other words the same map can be locked through different “lenses”. For instance one step can be opened in many ways: who are involved, how long does it last, what objects and touchpoints does it have and so on. He mentions that there are already quite a few tools available as well as all of these tools might help people to understand the point of the tool in relation to the projects and therefore require a lot of time for studying. It is crucial that the people using service design methods for the first time feel like it was easy and fun but also understand the main purpose of the tools. Therefore he likes the idea of focusing only on the customer journey map.
overview of the service process. Once the main steps of the service have been mapped then more details can be added on it. He likes the idea that the tool could be provided to their clients before the first workshops as a “pre-task”. He believes it would already change their clients’ way of thinking before the first meeting. He believes it would inspire the clients and help them in saving time for the first meeting. Eventually the tool should aim for future actions and possible co-operation with their clients. The tool should give a hint about how much service design as such is more than just mapping the service user’s experience and that service design professionals have multiple methods to understand the holistic service overview better. The clients should feel it was worth it and even fun.

Service designer 3 (with business and ethnography background)
The third interviewed highlighted that within the last few years the “service design” as a field of study and an ideology has become a trendy word among Finland. This can be seen as many of the new clients are usually excited about it already before the project starts and know at least some basics about what is it used for. Usually the clients want to try something new and service design gives them the answer. Service design works very well in this way because all of the projects are very different and it is a flexible approach on different problems.

He confirms that customer journey map works very well in most of the cases because it enables an easy way to show different service user’s experiences from a same service. Secondly, for the additional benefits of the customer journey map he mentions the possibility to utilizing them both for existing services and new service ideas. It even enables a very rough and preliminary “test-run” of a service idea when all the steps are discussed together with the client. Furthermore, the tool provides a great chance to compare the customer journeys of different end-users and how the company believes their journeys go. This can be very eyes-opening step for the client.

He does not usually make more polished versions of the tool than combining text, lines and circles in PowerPoint because “that usually does the trick”. When discussing with the client for the first time he normally simply writes the main steps as notes for himself and does not prefer using post-its. “Sometimes post-its do not even stick on the wall, they drop and then people get confused about from which step did a single sticky note fall.” As additional material he sometimes uses images or company logos from a specific industry. He stresses that for him it is very crucial to find the real motives behind the client and find out if the client understand their position on the market. According to him, clients often “want to sell Porsches even though they are selling Opels”. This is yet another example where customer journey maps that are based on end-user research are great tools on proving whether the client has the real image of their users or not.

When asked about the possible “do-it-yourself kit” he believes that it could help both their clients and Diagonals’ service designers. It would boost the clients to get on the right mood and way of thinking at the early steps but also help Diagonals’ service designers to start their working with the client more efficiently. But this applies only if the tool is so easy and simple enough that the client does not need to use much time to study it.

As a reference he thought two hours is too much unless the client works on it as a team. As a task done by a single worker it should not take more than 30mins. The goals for the first-time use experience should neither be too high so the client does not get confused but gets it done rather easily and understands its purpose.

According to the interviewed, if the focus of the first experiment of the tool is on mapping the existing service, the client should be able to tell the problems in their current service flow after using the tool. If the tool would be used for mapping a new service idea, it should focus on getting the right understanding of the service users and in what kind of situation would they need the service. After all, the tool should aim for a more holistic service design process and suggest next steps after the first session. As a conclusion he said that the best outcome of the tool would be if it helped a client to find and tell about their problem as early as possible.
### Service Design Visualisation Tools
Common usage in relation with Diagonal's service process

<table>
<thead>
<tr>
<th>Toolkit name</th>
<th>Company / Author</th>
<th>Includes</th>
<th>Process / Stages</th>
<th>Price</th>
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<td>HCD Toolkit</td>
<td>Frog Design Limited</td>
<td>People organisations, 200+ on project</td>
<td>Make tools with</td>
<td>Fee</td>
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<td>The HCD Toolkit is only a user guide on how to use the toolkit and not an actual service design kit. The book contains 200+ pages of service design tools and resources.</td>
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<td>Service Design Toolbox</td>
<td>Loughborough University</td>
<td>Make tools with</td>
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<td>PDF file</td>
<td>Downloadable</td>
<td>The Service Design Toolbox is available for free download from <a href="http://www.servicedesigntoolkit.org">www.servicedesigntoolkit.org</a>. It contains 36 tools, including templates, guide, and tips for facilitators.</td>
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<td>PDA Collective Arts Toolkit</td>
<td>Parkway Centre</td>
<td>Make tools with</td>
<td>Fee</td>
<td>PDF file</td>
<td>Printout</td>
<td>The PDA Collective Arts Toolkit is available for free download from their website. It contains tools, guidance, and tips for facilitators in the area of design and innovation.</td>
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### Analogic Toolkits

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<td>Digital app for mobile ethnography</td>
<td>- Forms and surveys</td>
<td>Monthly pay €50/month + €8/assignment</td>
<td>Subscriptions based on number of users, Pro version</td>
<td>Subscription-based usage</td>
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<td>Free app on iOS and Android</td>
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<td>Digital toolkits for mobile ethnography</td>
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<td>Single project £39</td>
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**Price Process Includes Format Delivery Comments**

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