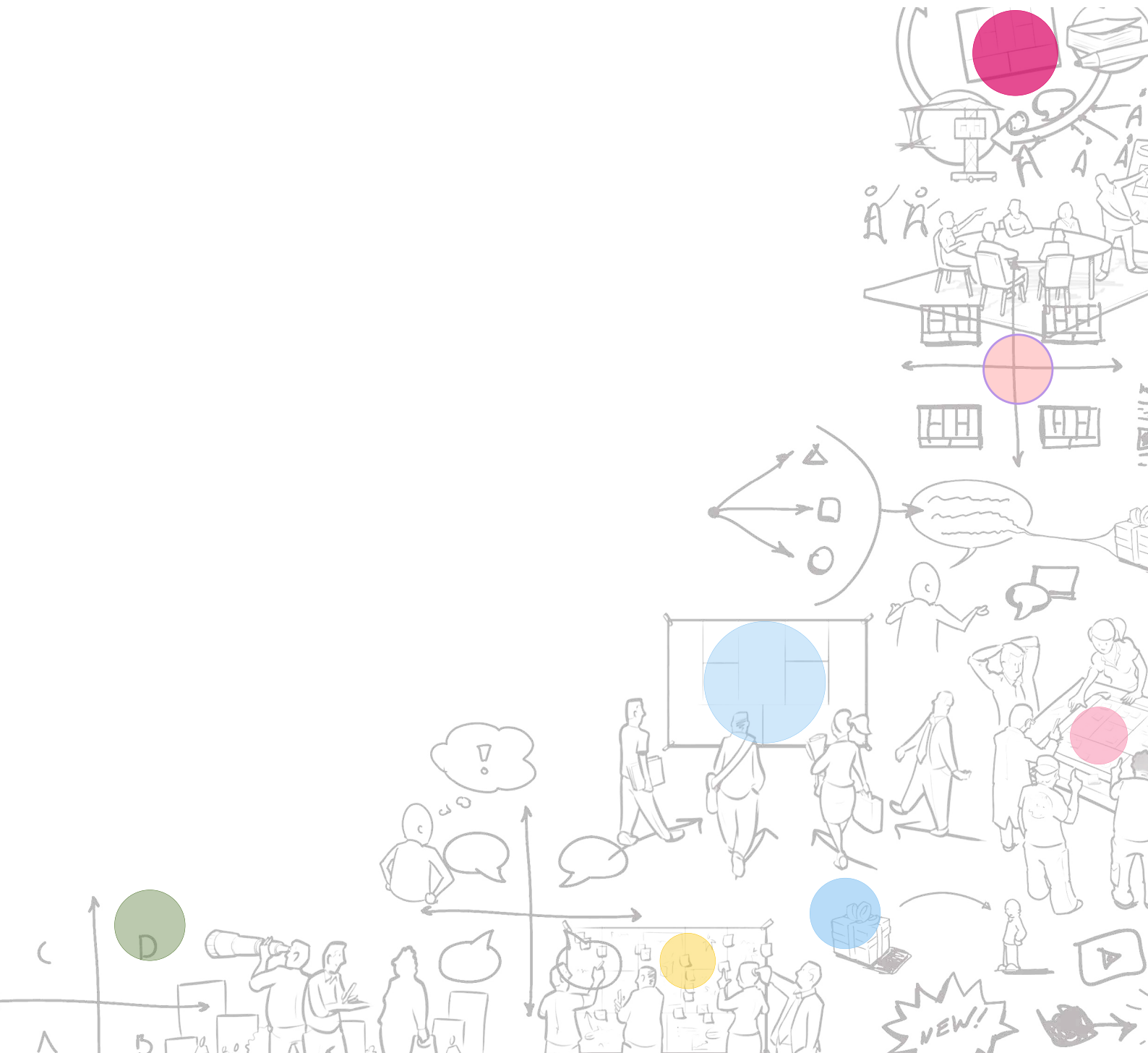# "Exploring how Service Design can be used to support the Business Model Canvas"

Master thesis by
Stine Christensen & Marcelina Kopecka
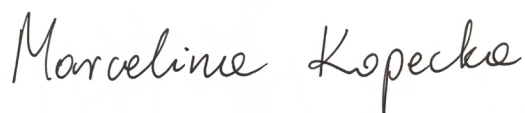
Thesis Information

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Incubator Supervisors:	Jacob Lundberg & Rasmus Kastrup Brorly
Academic Supervisor:	Luca Simeone
Submission date:	28/05/2020
Authors:	Stine Christensen // Study no. 20180517

Marcelina Kopecka // Study no. 20180573

Abstract

This thesis explores how Service Design can support entrepreneurs when developing a business model.

The research was done in the context of a workshop design within Aalborg University Copenhagen and its Incubator Startup Program. A case study on the Incubators Business Model Canvas workshop was the foundation of the research. The study resulted in recommendations on how Service Design (tools, methods, and the way of thinking) can be used to support the Business Model Canvas for both Business Developers at Incubators, entrepreneurs, and service designers.

Throughout the process, Service Design tools such as the Persona, Actors Map, and Customer Journey were examined in relation to the Business Model Canvas. Both the workshop and interview settings were explored to test different contexts and challenges the entrepreneurs might have while using these tools and methods. Iterations and several tests helped to understand the advantages, disadvantages, possible biases, and what to be aware of when using Service Design within a business context.

The study reveals that Service Design at some levels can support the development of the Business Model Canvas and increase entrepreneurs' confidence in the model. It also showed that Service Design helped the entrepreneurs have a holistic view of their business and gain new ideas or direction. The visual aspect of Service Design had a specific influence on the way the entrepreneurs would think and helped them to be more creative. Another conclusion is that the development of a business model with implementation of Service Design tools seems to work better as a team or in individual sessions with a Business Developer or a Service Designer. As a result of the collaborative approach, sessions were co-creative and personalized towards one business, instead of the general perspective that would persist in a workshop setting.

Keywords: Service Design, Business Model Canvas, Business Model Development, Entrepreneurship

Acknowledgments

Throughout the writing of this Master Thesis, we have received support from many people. We would like them to know how much we appreciated their involvement in our project by providing professional sparring, knowledge, and experience within the different fields.

Firstly, we would like to express our deepest gratitude to our supervisor Luca Simeone, for his patient guidance, enthusiastic encouragement at every meeting, and useful critiques throughout the entire journey of working on our master thesis. Our process would not have been as straightforward and good without his valuable advice and assistance in keeping our progress on schedule.

Secondly, we would like to extend our thanks to our collaborative stakeholders at Aalborg University Incubator in Copenhagen for their help. A special thanks to Jacob Lundberg and Rasmus Brorly, for sharing their time, knowledge, and experiences of the Startup Program.

Our grateful thanks are also extended to the Business Developer at SEA, Ivan Butler, for his time and help in understanding the Business Model Canvas.

Thirdly, we would like to express our very great appreciation to all of the participants who joined our interviews, workshops, and user tests during the whole design process, for contributing with their valuable opinions and time. Their personal experience helped us to understand the user's needs and we would not have been able to make this research without them.

Finally, we wish to thank our families and friends for their support and encouragement throughout our studies. Their supportive patience and love are truly meaningful for us.
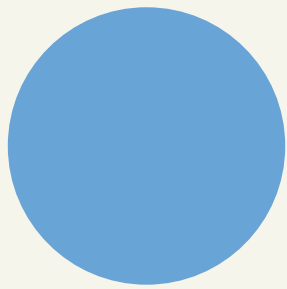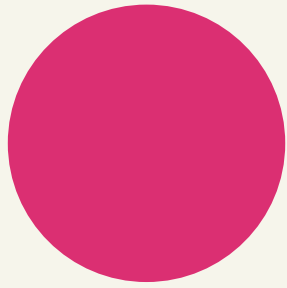
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1. Introduction

In this chapter, the topic of the thesis will be introduced. This will start by outlining the learning objectives and then explore the project context. The chapter will end with an explanation of how the focus area was chosen, including the initial problem statement.

The following sections will be presented in this chapter:

1.1 Learning objectives

1.2 Project context

1.3 Focus area

1.4 Reading guide

This paper is written by Marcelina Kopecka and Stine Christensen for the Master program of Service Systems Design, at Aalborg University Copenhagen, during the spring semester, January - May 2020. The project was supervised by Luca Simeone, assistant professor at Aalborg University, and made in collaboration with the Incubator of Aalborg University Copenhagen. Our inspiration for the project emerged during the previous fall semester when one of the authors participated in the Startup in Practise program at the Incubator Copenhagen.

Our common interest in the startup and business world led to the motivation of trying to incorporate Service Design into the Startup Program, to demonstrate our Service Design competences and the value of Service Design in this context.

The thesis aims to focus on the area of Business Model Canvas workshops for startups and how to include the value of Service Design into these. As Service Designers, the startup environment and workshops interest us since we both aim to gain skills that can be used after graduating. One of the authors works as a Service Designer facilitating workshops for the company. This role requires developing new skills all the time. The other author has her own startup and wants to gain a deeper understanding of how these skills can further be used in work done by businesses. We aim to gain enough understanding of the subject to further educate relevant stakeholders, such as the Incubator, other Service Designers as well as use our knowledge in future professional endeavours.
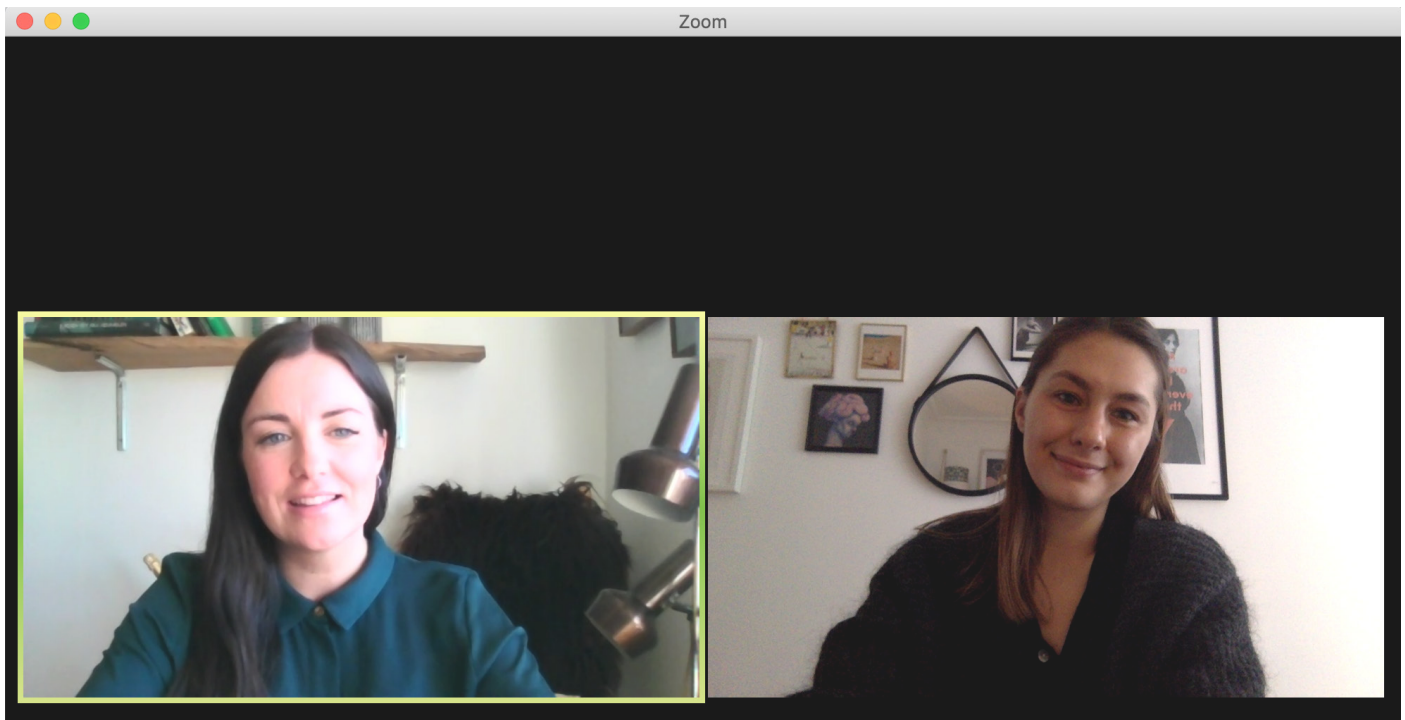
STINE   **MARCELINA**

1.1 Learning objectives

The learning objectives for this thesis are presented both as the official given objectives from the Service System Design department from Aalborg University, followed by our Personal learning goals for this project.

The official objectives (Aalborg University, 2017):

Knowledge

- Must have knowledge about the possibilities to apply appropriate methodological approaches to specific study areas
- Must have knowledge about design theories and methods that focus on the design of advanced and complex product-service systems

Skills

- Must be able to work independently, to identify major problem areas (analysis) and adequately address problems and opportunities (synthesis)
- Must demonstrate the capability of analyzing, designing and representing innovative solutions
- Must demonstrate the ability to evaluate and address (synthesis) major organizational and business issues emerging in the design of a product-service system

Competences

- Must be able to master design and development work in situations that are complex, unpredictable and require new solutions (synthesis)
- Must be able to independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility (synthesis)
- Must have the capability to independently take responsibility for own professional development and specialization (synthesis)

In the thesis, we will try to demonstrate the acquisition of these competencies, skills, and knowledge to master the profession of Service Design. Furthermore, we will add our Personal learning goals, that were outlined according to our individual motivation:

- To investigate how the implementation of Service Design might help to develop Business Model Canvas in real life.
- Aim to be more aware of the flexibility of Service Design which in the future might help us to implement this knowledge into the set of skills used at work.
- To find a way to describe and use Service Design in an easy, convincing, and beneficial way for entrepreneurs.
- Facilitating online workshops and acquiring a bigger knowledge of so.

1.2 Project context

The focus of this paper is on the business model development within startups. The paper will examine how Service Design can be applied to support the Business Model Canvas (BMC) used in the Aalborg University Copenhagen Incubator (AAU INC). All of the fields, Service Design, business model development, and the BMC will be described and discussed in the literature review. Accordingly, this section will focus on the AAU INC.

The AAU INC is a startup environment for students at Aalborg University (AAU) in Copenhagen (Inkubator, nd.). It is a workstation where you can develop your ideas and collaborate and gain advice from developers that are hired by AAU (ibid.). It is not only a meeting place but an environment with entrepreneurial spirit and activities such as workshops and social events (ibid.). This environment allows for startup entrepreneurs to gain knowledge, experience and the necessary skills to turn their ideas into businesses (ibid.). As a student or researcher, you can also join one of their start-up programs which they call The Startup Program (SUP), Innovativ Vækst (In Aalborg only), and Startup in Practice (SiP) (ibid.).

The business developers connected to the AAU INC in Copenhagen are Jacob Lundberg and Rasmus Brorly. Jacob was the only business developer at CPH for the last three years, Rasmus started at the beginning of 2020. At the beginning of 2020, around 30 startups were connected to the AAU INC in Copenhagen (Lundberg, Personal communication, February 20, 2020). The AAU INC launches their programs twice a year. As a result of the global pandemic COVID-19, the new enrollment of the startup programmes SUP and SiP did not go ahead as they were scheduled to start this spring semester in April 2020.

This made it more difficult for us to collaborate with the students. We would have liked to have followed the startups and observed them during the workshop of the BMC and made some follow up testing of the new startups to see the effect of the Service Design tools in this context. The already existing startups at the AAU INC program were on a more advanced stage of development of their idea and had already participated in the BMC workshop facilitated by the AAU INC. As a result of this and the limitations of the global pandemic, are the participants in this project not the startups of the AAU INC program. However, we chose participants that could potentially be future participants in the program.

1.3 Focus area

Throughout our own participation in the SiP and SUP program of the AAU INC, we learned that the whole program could benefit from the use of Service Design. The program was not well designed and hard to understand for the students.

From our experience with the workshops, one specific workshop piqued our interest - the Business Model Canvas Workshop. This workshop was in the middle stage of the program and was told to be the step before creating a business model and a tool that could help you to contact partners. A few questions that we had were: Would any business ever show a canvas when contacting a partner? Why is it that you need a canvas to create a business model? What should it help to place things in boxes instead of just writing a business plan or place the headings and add notes? When asked about the workshop, the business developer indicated that the model would probably not be used in real life as one would probably know the outcome. At the same time when questioning the workshop, it was indicated that the BMC have to be used within the program but agreed that it could be better and include some other tools. The BMC did not give any new insights to its own business, only a multitude of new questions to the model which was useful for our thesis and Personal reflection. Considering the workshop and our interest in Service Design, we designed the problem statement together with our supervisor.

Problem statement

How can Service Design be used to support the work on the Business Model Canvas workshop for the startups within the Aalborg University Incubator?

1.4 Reading guide

The following chapters within the thesis are as follows.

Chapter 2: Literature review

This chapter covers the theoretical foundation of the thesis. The two main components of the problem statement are Service Design, business models and the Business Model Canvas. This will be the main focus of this chapter and will conclude with our research question. The research question was made from missing gaps surrounding these topics as well as within literature. In addition to the problem statement, it will focus on the AAU INC, and a more generalized understanding of how Service Design can be used to support the BMC.

Chapter 3: Methodology

This chapter covers our methodology. Since our process was more linear, we did not see a need to make it iterative. The aim was not to ideate on any new things, but to test and explore existing tools and methods. Therefore, we felt that it was only appropriate to design our own methodology to support our research. Through this process the design phases will go from first Understand (the BMC), to Define (the workshop design and Service Design tools), to Explore (how the tools and methods work in real life) and finally, to Deliver (an overview of the outcome). As the thesis will focus on exploring how Service Design is applicable in professional settings,the majority of the focus will be on the Explore phase.

Chapter 4: Analysis & Results

This chapter will go through the four design phases. Additionally, it will analyse and reflect upon the research question and the outcome. During the first phase (Understand), several methods will be used to gain a deeper understanding of the BMC as a model. Including specifications of the strengths and limitations and reflections of the model. Using this understanding, the Define phase will focus on the design of the workshop and the Service Design tools that could be used in the sessions. In the Explore phase, two workshops were made along with four individual sessions, where the tools Persona, Actors Map and Customer Journey will be explored in collaboration with the BMC. Here the results will also be analysed and reflected upon. The last phase of Deliver will target the final outcome of the process, our suggestion on how it can be used in additional work of the AAU INC, as well as use by Service Designers and others who may find it useful.

Chapter 5: Discussion

This chapter will include a discussion on the process and the key findings in relation to the research question and the problem statement. It will contain reflections on several parts of the design process, including a general reflection upon discovering the outcome, the learning objectives and Personal goals, the limitations and suggestions for further research.

Chapter 6: Conclusion

This chapter includes the key findings of the design process. It also examines the limitations of so and present possible future research.

2. Literature review

This chapter is the theoretical foundation of the thesis, exploring the business model development and Service Design. This helped us to gain a better understanding of the fields within our problem statement and form the research focus for the thesis.

The chapter concludes with a gap within literature around business modelling and Service Design which formed our research question. The research question will be used to form the following analysis and discussion of the thesis.

The following subchapters will be presented in this chapter:

2.1 Business Model Development

2.2 Service Design

2.3 Research Question

2.1 Business Model Development

Studied literature exposed many different definitions and understandings of the business model. Following Seidenstricker, Scheuerle and Linder's (2014) paper we learned that the origin itself is rather hard to identify, yet difficult to unify due to the possibility that different disciplines took sole credit for the creation of the term for their own use. Prendeville and Bocken (2017, p. 293) describe business model as a:

"conceptual tool to describe the interconnected activities that determine business transactions between customers, partners, and vendors which can convey how successfully a business creates, captures and delivers value".

Another definition proposed by Shafer, Smith & Linder (2005, p.202) says that:

"a business model is a representation of a firm's underlying core logic and strategic choices for creating and capturing value within a value network".

Setting ourselves in the value mindset which business model captures and emphasize for the organization we should not ignore the definition written by Osterwalder (2010, p.14):

"A business model describes the rationale of how an organization creates, delivers and captures value".

Despite the lack of origin for a business model definition, we noticed a pattern among all definitions, wherein the word "value" was utilized. The business model should answer questions such as "who your customers are?", "what customers do value in your organization?" or "how the organization can deliver value to customers with an efficient cost structure?" (Osterwalder, 2010). The business model has to be considered as a holistic structure created from different business model elements. Each of the elements should raise the previously asked questions, suitable for the particular area of business (Magretta, 2002). The literature provides several examples of business model elements presented as a framework. Chesbrough & Rosenbloom (2002, p.356) suggest that a business model should fulfill the seven following functions:

- Articulates the **value proposition,**
- Classify a **market segment** as well as specify the revenue generation,
- Characterize the structure of the **value chain,**
- Specify the **revenue mechanism(s),**
- Estimates the **cost structure** and profit potential,
- Identifies the position of the organization within the **value network,**
- Formulates the **competitive strategy.**

Osterwalder (2010), well known from the development of the Business Model Canvas, uses the elements which he terms as 'blocks'. He describes the nine blocks as: Key Partners, Key Activities, Value Proposition, Customer Relationship, Customer Segment, Key Resource, Distribution Channels, Cost Structures, and Revenue Stream (See Figure 1). Seidenstricker et. al. (2014) also emphasizes six business elements and named them essential: "value proposition", "technologies, competencies and key resources", "channels and customer relations", "value chains and processes", "network and partner" and "revenues".

Despite the differences in names or the number of components within one model, it is important to note that the common goal is to capture the organizational components within the business model framework which as a whole, creates a coherent structure where all the processes and elements are clearly mapped out. Nevertheless, even specifically framed models seemed to be not efficient enough for researchers as the literature seems to still look for further solutions or alternatives when it comes to framing a business model for the organization. Subsequently, we cannot write about a business model without mentioning Business Model Innovation (BMI).

The Business Model Canvas

Key Partners

// What are our Key Partners?
// What are our Key Suppliers?
// Which Key Resources are we
    acquiring from partners?
// Which Key Activities do partners perfom?

Key Activities

// What Key Activities do our Value
    Proposition require?
// Our Distribution Channels?
// Customer Relationship?
// Revenue streams?

Key Resources

// What Key Resources do our Value
    Propositions require?
    - Customer Relationships?
    - Revenue Streams?

Value Propositions

// What value do we deliver to
    the customer?
// Which one of our customer's problems
    are we helping to solve?
// What bundles of products and services
    are we offering to each Customer
    Segment?
// Which customer needs are we
    satisfying?

Customer Relationships

// What type of relationship does
    each of our Customer Segments
    expect us to establish and maintain
    with them?
// Which ones have we established?
// How are they integrated with the rest
    of our business model?
// How costly are they?

Channels

// Through which Channels do our
    Customer Segments want to be reached?
// How are we reaching them now?
// How are our Channels integrated?
// Which ones work best?
// Which ones are the most cost- efficient?
// How are we integrating them with
    customer routines?

Customer Segments

//For whom are we creating value?
// Who are our most important customers?

Cost Structure

// What are the most important costs inherent in our business models?
// Which Key Resources are the most expensive?
// Which Key Activities are the most expensive?

Revenue Streams

// For what value are our customers really willing to pay?
// For what do they currently pay?
// How are they currently paying?
// How would they prefer to pay?
// How much does each Revenue Stream contribute to overall revenues?

Strategyzer

DESIGNED BY: Strategyzer AG

Figure 1: Business Model Canvas (Osterwalder, 2010, p.18)

This broad subject has been covered by many authors conducting research in the business field. BMI is a temporal, systematic and iterative process of innovation where external and internal dimensions of a firm rationalize each other for both radical innovations (Bonakdar & Gassmann, 2016). Established organizations or startups entering the market have to be conscious of a constantly changing environment as well as components of their business models. BMI has a chance to examine new ideas and analyze if their implementation will end with success (McGrath, R.G, 2010). However, companies tend to stick to their current business models and miss opportunities, and in some cases due to this failure, the company will cease to exist (Chesbrough, 2010). Due to that fact, it is extremely important that companies or organizations keep experimenting and measuring their business models constantly, even if the unknowns seem like a substantial barrier (ibid.).

Some of the authors argue whether the business model should be a part of strategy development. A good strategy is one that coordinates and focuses on the resources within the entire organization (Rumlet, 2011), and has an integrative perspective on it (Hill, 2012). Since the business model is supposed to be constantly measured and controlled, the experimental ideas can be tried out anytime when deemed necessary for business model improvements or for a long-term perspective of the company. Chesbrough (2010) named the strategy implementation to the business model as discovery-driven planning. Nevertheless, some of the authors claim that the business model should not be considered as a part of the strategy. Casadesus-Masanell & Ricart (2011) point out that business models refer to the logic of the company - how it operates and creates and captures value for stakeholders in a competitive marketplace - strategy is the plan to create a unique and valuable position involving a distinctive set of activities. However, as Kindstrøm (2010, p. 481) explains: "The business model concept also highlights the importance of consistency between a company's strategy and all its structural elements, meaning that an intended strategic realignment to services must be mirrored in changes throughout the business model". Therefore, a successful change of one element will create the need for a change in another as well as between strategies and business models. It is crucial that companies focus on all areas of the business model in a holistic manner, and not as separate elements without any connection between each other.

2.1.1 Business Model Tools

In order to develop, redesign or simply map out a business model, organizations can support their work with tools proposed in the literature. One of the most recognizable in the business world is the Business Model Canvas (BMC), proposed by Alexander Osterwalder. The template outlines nine blocks mentioned above (see Figure 1).

The BMC aims to give a holistic picture of a business and in the same way pushes us to reflect on its values, information flow, and partners. Each block asks questions that are used to start a brainstorming session. The questions such as "who are your key partners?", "what key activities does your value proposition require?" (Osterwalder, 2010, p. 39) are simple but effective as they force the user to a specific answer. The tool has been transformed into a graphic template which can be used as a starting point of any brainstorming workshops or business meetings. Additionally, it can be filled out as many times as needed in order to capture the business from different angles or improve previously developed canvas.

The Business Model Framework based on the EFQM management model is another scheme proposed by Seidenstricker et al. (2014). The framework captures six business model elements: "value proposition", "technologies, competencies and key resources", "channels and customer relations", "value chains and processes", "network and partner", and "revenues" (see Figure 2). Seidenstricker et al. (2014) argue that the framework should contrast and compare different business model ideas as well as design business models. The established model distinguishes system elements, describes diverse relations among them, maps out system structure and recognizes the condition of each system element.
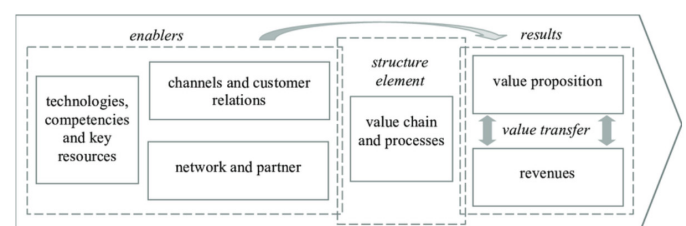
Figure 2: Business Model Framework (Seidenstricker et al., 2014, p.104

Another business mapping approach is proposed in Chesbrough's paper about Business Model Innovation from 2010. Chesbrough mentions the "component business modeling" concept and IBM as an early leader in this area, which published a visual depiction of IBM's view of component business model (ibid.). In addition to the clear visualization of the business model, this modeling approach encourages us to experiment with alternative business models by empowering companies to try different configurations before implementing the business model in real life.
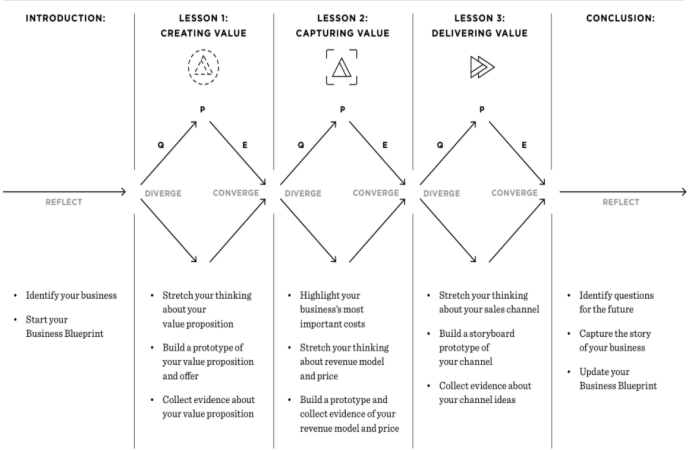
Figure 4: IDEO's Business Design Framework (IDEO, 2018, p.2)

Figure 3: IBM's Component Business Model (Chesbrough, 2010, p.360)
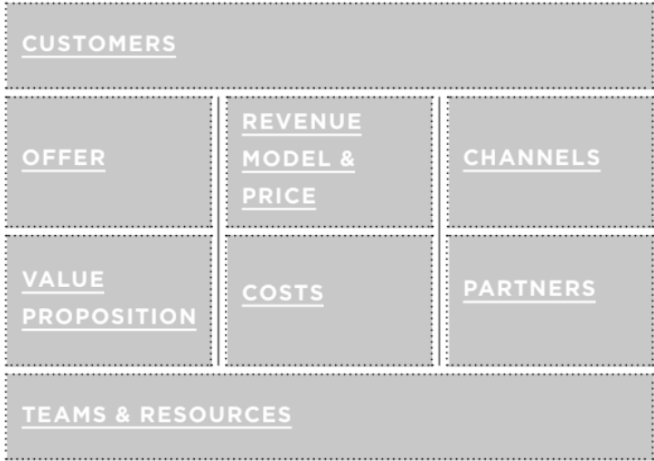
Figure 5: IDEO's Business Blueprint (IDEO, 2018, p.4)

The newest business model development framework is proposed by IDEO (2018) and has been presented in May 2018 on IDEO's online teaching platform - IDEO U. IDEO's business design framework is inspired by Design Thinking, Lean Startup and Business Model Canvas (Bannatyne, 2018), and it is focused on prototyping the business. The framework consists of three steps: "Create Value", "Capture Value", and "Deliver Value" (ibid.). However, the course itself is designed in a way that the participant should first reflect on the business by identifying the business components in Business Blueprint. Secondly, understand how the business can create value. Thirdly, evaluate how the business can capture value and lastly, how the business can deliver value (ibid.). After these four steps, the moment for reflection comes when a participant "identifies [sic] questions for the future", "captures [sic] story for the business", and "updates [sic] business blueprint" (IDEO, 2018, p. 3). Each phase of the framework is supported by assignment templates where a participant has a chance to brainstorm and reflect on each step.

2.2 Service Design

Service design is still considered as a young and appearing discipline (Stickdorn & Schneider, 2011). There is no common or clear definition, but numerous that could be ordinarily presented. Taking an easy way to explain it in a few words, Service Design can be seen as "the design of services" (Reason, 2016, p. viii), or as Stickdorn defines it as "an interdisciplinary approach" (Stickdorn & Schneider, 2011, p.28). Following that thought, Stickdorn & Schneider explain that "Service Design is an interdisciplinary approach that combines different methods and tools from various disciplines" (ibid., p.29). Moreover, Stickdorn & Schneider proposed that further growth of this discipline needs to be followed by a shared language. We observed an interesting division of Service Design definition in their book "This is Service Design Thinking". The book sums up the academic approaches for Service Design definitions and the agency approaches for Service Design definitions. In the academic chapter the following interpretations of Service Design among others are presented:

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"Service Design helps to innovate (create new) or improve (existing) services to make them more useful, usable, desirable for clients, and efficient as well as effective for organizations. It is a new holistic, multidisciplinary, integrative field."

- Stefan Moritz, 2005 (Stickdorn & Schneider, 2011, p.30)

"Service design is an emerging field focused on the creation of well-thought experiences using a combination of intangible and tangible mediums. It provides numerous benefits to the end-user experience when applied to sectors such as retail, banking, transportation, and healthcare."

- The Copenhagen Institute of Interaction Design, 2008 (Stickdorn & Schneider, 2011, p.31)

When it comes to the agency approaches it is expressed as:

"Service design is a holistic way for a business to gain a comprehensive, empathic understanding of customer needs."

- Frontier Service Design, 2010 (Stickdorn & Schneider, 2011, p.32)

"Service design is the application of established design processes and skills to the development of services. It is a creative and practical way to improve existing services and innovate new ones."

- live work, 2010 (Stickdorn & Schneider, 2011, p.33)

- Customers' needs and desires
- Service organization's strategic intention
- Benefits customers received
- Description of how the service should be delivered
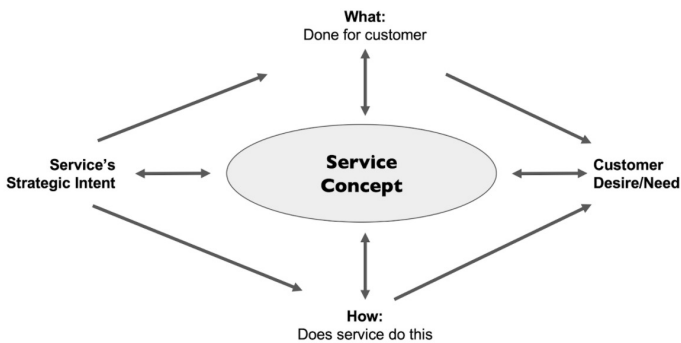
Figure 6: The service concept, Goldstein et al., 2002, p.124)

Those four elements are connected to the holistic approach which Service Design embraces and represents. While planning the processes, the before, during, and after moments are considered and thoroughly analyzed by Service Designers (ibid.). Those actions lead to reduce any gap between a customer or stakeholder's expectations and the service provider (Zimmerman, Forlizzi & Evenson, 2007). Stickdorn & Schneider (2011) also describe Service Design as a process of designing, evaluating, measuring, and redesigning, an iterative process that should be ongoing within an organization or business.

2.2.1 Service Design and Business Model Development

To look further into the usage of Service Design within Business Model Development, a check upon the current literature around these felt needed. Service design is a growing discipline and interest in the business world (Reason, 2016). Reason (2016, p.2) validates this with three growing trends, that make Service Design relevant today:

Economic - The Trend Toward Value in Services: Services cover 70-80% of the economies of mature countries and will just continue to grow rapidly. Services is seen as an area where there is higher potential than pure products, and have the benefits of loyal customers if made with the right design (ibid, p.2).

Social - The Increase in Customer Expectations: Market economies have trained customers to expect more and will no longer accept service providers with a one-size-fits-all concept. They expect to get the best experience, every time they use a service.

The adverse effect happens when they have a bad experience, customers may choose the competitor over their service. As expectations rise, the need to understand the customers' expectations and needs develop in parallel. Service Design is a strong way of connecting this. (ibid. p.3)

Technical - Growth of Digital Means Change: Services are driven to a self-service and digital level. The use of technology can not be overseen by any service company and the impact of the digital revolution has driven radical changes and disruptions in the service sector. Technology can dehumanize and make services harder to navigate for customers. Service Design offers tools to humanize these technologies as well as make it more flexible and understandable for customers. (Ibid., p.3).

Reason (2016) and Moritz (2005) describe further benefits for the use of Service Design within a business as:

- Increase customer satisfaction, retention and improve the level of adoption,
- Reduce customer irritations and prevent costly service failures,
- Improve service experience for customers and build better customer relations,
- Lower cost to serve existing and new customers,
- Create new sales or upsell opportunities by a customer-centric focus,
- Successful launch products and service innovations into the market,
- Internal understanding, alignment, and high staff engagement and participation,
- A true understanding of the market needs and new perspective of the future,
- Connect organizations and customers that differs from competitors,
- Higher quality service experiences as a basis for success.

Ojasalo & Ojasalo (2015) also discuss the usage of Business Models within the field of entrepreneurship. Ojasalo & Ojasalo (2015) provide examples of how to design a better outcome of a business model. This is what they call the service logic (see Figure 7). Ojasalo & Ojasalo (2015) want entrepreneurs to design businesses from a customer perspective. The focus should be on where and how to start a Business Model. This should always be with the understanding of the customer (see Figure 8)(ibid.).
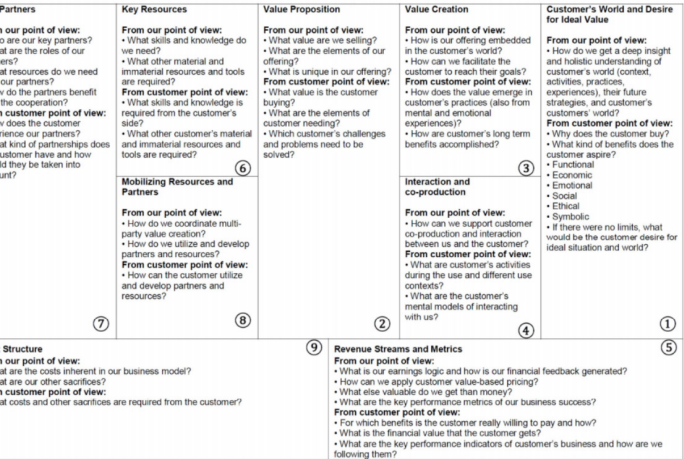
Figure 7: The Service Logic Business Model Canvas (Ojasalo & Ojasalo, 2015, p.9)
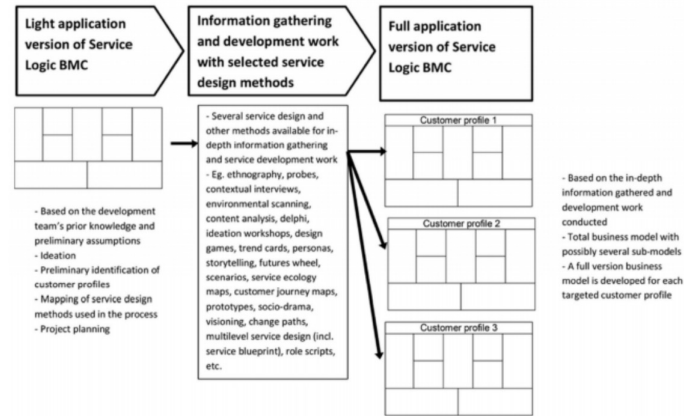
Figure 8: The process of Using Service Logic Business Model Canvas (Ojasalo & Ojasalo, 2015, p.11)

Ojasalo & Ojasalo (2015) aim to get the entrepreneur to use different kinds of methods and tools of Service Design to understand and develop their business. This also includes a selection of Service Design methods and tools that can be useful throughout their work (see Figure 9).

Blocks of Service Logic Business Model Canvas / Examples of Service Design and Foresight Tools	① Customer's World and Desire for Ideal Value	② Value Proposition	③ Value Creation	④ Interaction and co-production	⑤ Revenue Streams and Metrics	⑥ Key Resources	⑦ Key Partners	⑧ Mobilizing Resources and Partners	⑨ Cost Structure
Ethnography, probes	●	●	●	●	●	●	●	●	●
Contextual interviews	●	●	●	●	●	●	●	●	
Environmental scanning	●	●						●	
Content analysis	●	●							
Delphi	●	●							
Ideation workshops, design games	●	●	●	●	●	●	●	●	●
Trend cards	●	●							
Personas	●	●	●	●					
Storytelling	●	●							
Futures wheel	●	●						●	
Scenarios	●	●	●	●		●		●	●
Service ecology maps							●	●	
Customer journey maps		●	●	●	●				●
Prototypes		●	●						
Socio-drama				●			●	●	
Visioning	●	●		●				●	
Change paths								●	
Multilevel service design (incl. service blueprint)				●	●	●	●	●	●
Role scripts			●	●			●	●	

Figure 9: Service Design Methods for Service Logic Business Model Canvas (Ojasalo & Ojasalo, 2015, p.12).

Ojasalo & Ojasalo (2015) focusses on service-dominant logic as the most important aspect of business modeling. Other authors explore areas as Design Thinking. Martin (2009) aims to get users to understand why Design Thinking is the next competitive advantage for businesses. It is a balance between new knowledge (innovation) and current knowledge (efficiency), that through their opinion will create breakthroughs and value for companies (Ibid.). "There should be an interplay of analytical and intuitive thinking that when integrated will end up with Design Thinking" (Ibid, p.5-6).

Figure 10: Interplay of analytical and intuitive thinking, creating Design Thinking (Martin, 2009, p.24).

To get to this state, he uses what he determines as a Knowledge Funnel, which starts with a question or a problem within the service (mystery), then collecting research to get data (heuristic) and end up with an algorithm - which is Design Thinking (Ibid, p.7-8).

To get to the state, where the algorithm can be found, Design Thinking should be the center of attention within your strategy (Ibid., p.9). This field got our interest and we started a further investigation of the field of Design Thinking, as we found it relevant for business modeling.

Figure 11: The Knowledge Funnel (Martin, 2009, p26).

2.2.2 Design Thinking

"To think like a Service Designer you have to transform the way organizations develop products, services, processes, and strategies" (Kurokawa, 2015, p. 10). Kurokawa (2015) describes this as a Design Thinking mindset. A Design Thinking mindset requires that you ask questions to everything from an empathizing perspective of the user. Some of the questions should be: "what are they saying, why are they saying this and what do they actually mean?" (Kurokawa, 2015, p. 12). The Design Thinking mindset is open to exploring any possibilities, any viewpoints, and any objections while empathizing and deeply trying to understand the person (Kurokawa, 2015 p.14).

IDEO (nd.) expresses that there is, as in Service Design, numerous definitions of Design Thinking. It can be seen as an idea, a strategy, a method, and a way of seeing the world. For IDEO, it is a way of solving problems, using creativity (ibid.). They define it as:

"Design thinking is a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success."

—Tim Brown, president, and CEO (IDEO, nd.)

IDEO's (nd.) formula for creating Design Thinking, is based on three elements:
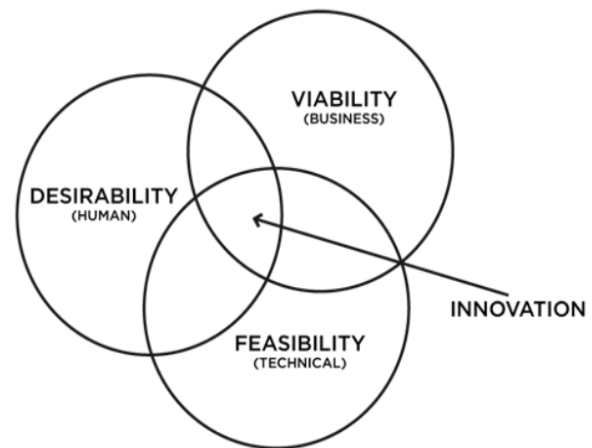
Figure 12: IDEO's formula for Design Thinking

This formula is based on an end result as innovation. Kurokawa (2015) states that Design Thinking can be useful for innovation. At the same time, does Kurokawa (2015) also express that other tools and methods might be required to make it useful and dependable.

There have even been cases where ideas developed through Design Thinking were eventually not useful (ibid.). Kurokawas (2015) therefore changed the formula to:

Design thinking = Business + Human aspects + Technology

This formula defines that there is no need for a focus on innovation. However, Design Thinking should focus on being a mindset, as well as looking at an organization or business with a specific perspective, divided into three blocks. Furthermore, Tim Barton, Executive Chair of IDEO, describes Design Thinking as a discipline where designers use their sensibility, methods, and tools to design solutions that will match people's needs with feasible technology (Butler, 2018). This will result in a viable business strategy that can be transformed into customer value and a market opportunity (ibid.).

Therefore, we should consider Design Thinking as a creative approach solving problems from the human-centric approach. The Hasso-Plattner Institute of Design at Stanford (d.school), which is a leading institution in Design Thinking, proposed the five-stage Design Thinking model (Dam & Teo, 2020).
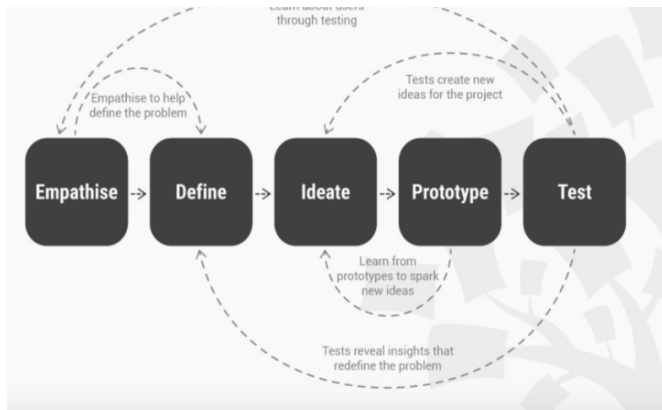
Figure 13: Design Thinking: A non-linear process (Dam & Teo, 2020)

The key to fully understand the proposed process is that it is a non-linear approach (ibid.). The five stages do not have to follow any specific order or be accomplished only once. On the contrary, they should be repeated iteratively (Dam & Teo, 2020). Information flow within the Design Thinking process is constantly used to recognize a problem, find solution gaps, and to eventually redefine the problem(s). That leads to the creation of a continuous loop, where the designer gains new perspectives of seeing the service from users' and stakeholders' points of view (ibid.).

2.2.3 Service Design Thinking

The literature review of Service Design and Design Thinking led us to Service Design Thinking presented by Stickdorn & Schneider (2011) who outlined this way of reasoning as needed and necessary to design services. They came up with the five principles of Service Design Thinking (Stickdorn, Schneider, 2011, p. 34):

1. User-centered: Services should be experienced through the customer's eye,
2. Co-creative: All stakeholders should be included in the Service Design process,
3. Sequencing: The service should be visualized as a sequence of interrelated actions,
4.
5. Evidencing: Intangible services should be visualized in terms of physical artifacts,
6. Holistic: The entire environment of service should be considered.

Nevertheless, it has to be acknowledged that more than often Service Design Thinking is reduced to a Design Thinking mindset. Moreover, the five principles of Service Design Thinking are presented as the five principles of Design Thinking. The distinction between those two might be confusing from the perspective of businesses which more than often are looking for solutions that will fix their problems. Design thinking should be presented as a process with a specific design challenge, so accessible that can be used by anyone to solve any problem. Service Design Thinking, on the other hand, is much more complex, accurate, and systematic. As its name points out that it is all about designing a service that encompasses service users (1. it's user-centered), service providers (2. it's co-creative), processes, and logistics (3. it's sequencing). Furthermore, services are delivered to users through digital or non-digital channels. When the interaction between the user and service appears we identify it as a touchpoint (4. it's evidencing) (Butler, 2018). Touchpoints play a major role in Service Design. Driven by a comprehensive approach, Service Designers involve mapping into their work where touchpoints can be precisely identified. Those mappings are presented by tools such as customer journey, blueprint diagram, or business model diagrams which provide extensive pictures about service from many different angles like user's feelings, requirements of the business, logistics, or possible pains (5. it's holistic) (Stickdorn, Schneider, 2011, p. 34). To fully understand the distinctions, the conclusion of Rebelo, 2015 is that

"Design Thinking is a methodology that is used to innovate and solve business problems. Service Design is about applying Design Thinking and design methodologies into immaterial products."

The main touchpoint between Design Thinking and Service Design Thinking is a supportive manner in which Design Thinking provides for Service Design. Service designers often use the Design Thinking process framework where they implement Service Design maps or other tools and support their developments with Design Thinking methods such as collaborative workshops or customer research. Nevertheless, a significant problem that Design Thinking struggles with is a lack of constructive criticism which could lead to idea evaluation and implementation. More than often ideas generated during the design springs within companies stayed in the shallow as the specific actions are not implemented to bring them into companies' processes (Butler, 2018). As Service Design Thinking refers to its complexity, the thoroughly mapped out processes reveal gaps and pains which require specific actions from the stakeholders in order to provide a usable, desirable, and efficient service.

Combining all this into a new perspective of starting a business can be a hard thing to do. Entrepreneurs tend to not spend a lot of time using methods or tools to create their businesses. One of the most used models in the industry is the Business Model Canvas (BMC). However, this model does not always allow entrepreneurs to think outside of the box. This is where Service Design can help. The biggest challenge in combining Service Design with entrepreneurs is to get them into the mindset of a designer. Kadam (2018) wants entrepreneurs to understand that design is not just something you decide in a linear process or as an addition to your business. Service Design is something you should include all the way through and a mindset you need to learn (ibid.). This is not something all entrepreneurs can learn or adapt to, and this is why the AAU INC should do their best to incorporate the principles of Service Design into their program to create better businesses.

2.3 Research Question

From our research when looking at how Service Design would be used and if it would be helpful for entrepreneurs, we were unable to find a lot of answers within the literature. This is something that still needs to be explored by creating a Service Design environment around developing a business model. The tool used within the Incubator: the Business Model Canvas (BMC), will be the focus for business modelling. We then assume that Service Design can help develop the BMC. However, the ways in which it can help still need to be explored. This will be beneficial in the further development of the thesis in order to test and validate our hypothesis. Through testing various types of Service Design tools as well as methods and mindsets in combination with the BMC, we aim to examine if and how the tools can help to support the model. For this, we created a general research question that will help us in the further design process:

"How can Service Design be used to support the Business Model Canvas?"

To support this research question, it is important for us to highlight that we understand Service Design to be a combination of Service Design tools, Design Thinking, and Service Design Thinking. The area of Service Design throughout this report will include all the mentioned factors when talking about Service Design.

3. **Methodology**

This chapter presents our methodology, which will explore the research question. It was decided that we would create our own methodology that would fit our process of the expected work. As this thesis is based on a primary deductive hypothesis that states that Service Design can be used to support the Business Model Canvas (BMC), a majority of the explanation will be focused on the explore phase, to discover if this theory can be validated. The hypothesis is not only deductive, but also inductive, through the already existing knowledge and collected empirical data about the BMC workshop that proves that this process can be improved.

The following sections will be presented in this chapter:

3.1 Design Process

3.2 Generalization aspect

3.1 Design Process

After framing the problem statement as well as the research question we started to think about the approach towards framing our work. After a short investigation as well as our own experience from the previous project, we felt that our work would not fit a specific Service Design methodology such as the Double Diamond. The path of our process was quite clear and simple from the beginning and was based on conducting research and analysis rather than multiple iterations. Likewise, our finals were not focused on developing anything new but to explore possibilities. Taking this into consideration, the decision was made to create our own design process based on inspiration from the Lean Start-up (Business perspective) and the Design Thinking process (Design perspective).

The Lean Startup (nd.) provides a perspective of identifying a problem and then developing a minimum viable product (MVP) which should be rapidly tested in order to gain valuable feedback from the customer and begin the learning process as quickly as possible. The Design Thinking Process (Dam & Teo, 2020) also provides a solution-based approach to solving problems. However, their approach is from a very complex human-centric perspective followed by the quantitative and qualitative research done more often than not in co-creative ways with potential users or customers.
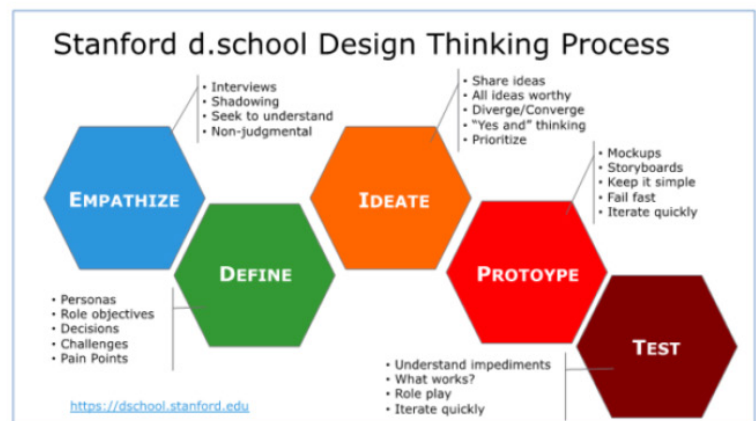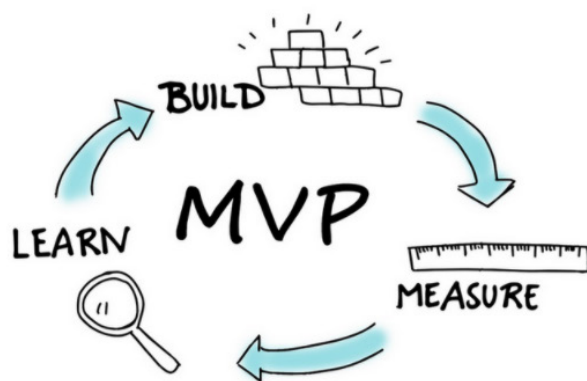
Figure 14: The Lean Startup (to the right) and Design Thinking (to the left)

UNDERSTAND   DEFINE   EXPLORE   DELIVER

| January 2020 | February | Re-define:: March | March | Beginning of May |

pre-phase	**1 month**	**2 weeks**	**1,5 month**	**3 weeks**
• problem statement • literature review • research question	• Stakeholder analysis • Case studies • Actors interviews • BMC understanding	• Workshop design & re-design • SDT toolkit • Measurement & goals • Participant selection	• Online Workshops: Persona & Actors Map • Iteration upgrades • Individual sessions: Customer Journey • Outcome analysis • Comparison of results	• Ideation session • Final outcome • Testing • Reflections & discussion

Figure 15: Our own methodology process

By studying those two approaches we proposed our own methodology, which is divided into four stages: **Understand, Define, Explore and Deliver.**

The **Understand** phase is all about the research and gathering valuable insights. In order to do that, our aim is to conduct the interview with the representatives of Aalborg University Incubator (AAU INC) to get a broader picture of how it works. In addition, how the ecosystem of the startups is built and what values does it give for the students taking a part in the program. Moreover, the Understand phase is also dedicated to deeper studies on BMC in theory as well as in practice. This will give us the opportunity to interview Service Designers and entrepreneurs and gain their perspectives as well as understand their experience with this tool. The results aim to provide us with a broader picture on how the implementation of the Service Design tools might be proceeded.

The goal of the **Define** phase is to analyze all of the findings from the Understand phase and come up with a specific solution of how to test the BMC in relation to the Service Design Tools. The results of this stage is the design of our workshop facilitation and individual interviews/sessions. Due to the Coronavirus limitations the Define phase had been split into two phases: Define and Redefine. This decision was made in order to guide the reader through the design process smoothly as well as give a better understanding of unforeseen circumstances.

The actions taken in the **Explore** phase will be strictly connected to measuring how the specific Service Design tools might influence the BMC. This phase is highly collaborative as we will receive key information from those in the startup community on possible solutions. We will focus on the process in this phase as we aim to create design experiments that validate our hypothesis. Design experiments will help us to conduct research and test the outcome in an iteration of three phases - two workshops and four individual sessions. This redefines the outcome to be based on our learnings and the users real needs (Collins et al., 2004).

The **Deliver** phase will provide an outcome of all of the actions taken in the Define and Explore phase. The goal is to have follow-up interviews with AAU INC as well as with entrepreneurs and Service Designers to get their opinion about our final outcome.

When creating our own methodology, we could focus on the actual process of our work, and not make the work fit a process. When discovering design methodologies, we found that they were often criticised for exactly this. Brooks (2010) states that the use of design methodologies is very limited in the real world, as they are perceived as idealistic models which do not represent real processes. Real processes are more messy, iterative and all of them are different. At the same time we were aware that our methodology focused on a linear process and could tend to not work, as we would have to iterate some times (as when the redesign appeared).

3.2 Generalisation aspect

The aim of the design process in collaboration with the AAU INC is to explore the research question. Given the tremendous opportunity of open dialogue with representatives of AAU INC and hearing their feedback on the program for the startups, we hope to be able to measure the impact of Service Design tools on the BMC. Moreover, as a goal, we aim to provide an outcome of our research in a pro-educational form which the AAU INC will be able to use and implement into the program. We believe that thanks to our research, Service Design tools in combination with the BMC can bring a different perspective and way of developing business ideas by startups.

Nevertheless, the design process might be also seen as beneficial for other parties interested in findings from the Service Design and BMC area. We believe that the outcome of the process might be taken on another more general level that will not be connected with AAU INC only. In addition to our design process, we also ran supplemental studies with Service Designers and entrepreneurs with no connection to AAU INC. The intention of these actions is to measure whether there is an impact on the BMC with the introduction of a designer tool and whether it would be applicable to the broader business world.

Therefore, further exploration of the final outcome of the design process will be needed. Both with the AAU INC, Service Designers, and entrepreneurs. To take it to an even broader scope of generalization, we can claim that the findings of the design process might turn out to be helpful for both Service Designers as other startup incubators.

4. **Analysis & Results**

This chapter defines, analyzes and reflects upon the design process which is used to explore the research question. During the Understand phase, methods of user research will be used to gain a better understanding of the context of the Aalborg University Incubator (AAU INC) program and business model development including the facilitating of the Business Model Canvas Workshop. In the De ine phase these indings are used to design the workshop and experiments.

The Explore phase is the main phase for this thesis, where several Service Design tools will be tested and analyzed through different workshops and individual sessions. This will result in a Deliver phase, where the findings will be analyzed into a final outcome. The outcome will be tested on the stakeholders of the AAU INC and Service Designers through online representation methods.

As our methodology consist of four phases, this chapter consist of the following subchapters:

4.1 UNDERSTAND   4.2 DEFINE   4.3 REDEFINE

4.4 EXPLORE   4.5 DELIVER

4.1 Understand

In this chapter, it is aimed to gain an understanding of the AAU INC, to gain knowledge of the Business Model Canvas (BMC) workshop and the design. This will be done by a stakeholder interview where we aim to get a better understanding of the environment and actors within the AAU INC. Additionally, this chapter also includes an overview of the workshops in the SUP program and the business developers thoughts and observations. Understanding this will help us in the further investigation of the literature of the BMC, including a review of both a given video and a suggested book by the AAU INC. An observation of a workshop made by a Business Developer, creating the LEAN canvas was also made. This helped to see the limitations of the BMC. Comparing this to our own participation (service safari), the BMC workshop gave some opportunities to work on when designing our own workshop. It also resulted in strengths and limitations of the BMC, that gave a deeper understanding of what kind of Service De-sign tools should be included further in the defined phase.

In this subchapter the following sections will be presented:

4.1.1 Stakeholder analysis
4.1.2 Case study: Personal experience of BMC workshop
4.1.3 Case study: Observations of LEAN Canvas Workshop
4.1.4 Actors interviews
4.1.5 Business Model Canvas understanding
4.1.6 Strengths & Limitations of the BMC
4.1.7 Reflections

UNDERSTAND DEFINE EXPLORE DELIVER

| January 2020 | February | Re-define:: March | March | Beginning of May |

pre-phase	1 month	2 weeks	1,5 month	3 weeks
• problem statement • literature review • research question	• Stakeholder analysis • Case studies • Actors interviews • BMC understanding	• Workshop design & re-design • SDT toolkit • Measurement & goals • Participant selection	• Online Workshops: Persona & Actors Map • Iteration upgrades • Individual sessions: Customer Journey • Outcome analysis • Comparison of results	• Ideation session • Final outcome • Testing • Reflections & discussion

4.1.1 Stakeholder analysis

This section is made in cooperation with our stakeholders of the AAU INC. The interview of Jacob Lundberg was conducted February the 20, 2020 and lasted an hour. The interview guide and audio file of the interview can be found in Appendix 3. The stated arguments that are not referenced, is based on this interview.

The AAU INC consists of two business developers; Jacob Lundberg and Rasmus Brorly. Jacob has worked for the AAU INC for several years, where Rasmus started in the beginning of 2020 and is therefore a new business developer at the team.

AAU INC is a startup environment for students at Aalborg University (AAU) in Copenhagen (Inkubator, nd.). In cooperation with Jacob we aimed to get a deeper understanding of how the programs and the AAU INC work.

This would help to understand why the BMC workshop would be placed in the middle of the program and why they had chosen this structure. Jacob was chosen instead of the head of SEA, Marie Fallgaard, who is the top management of all the Incubators (see Figure 18). This was chosen from the perspective of a pyramid organization, where the business developers are closer to the participants than the management is (Wisler-Poulsen, 2015).

Business Developer, AAU Inkubator

Contact Info

Jacob Lundberg

jalu@adm.aau.dk

60 19 96 88

Associations

AAU Startup Program, Startup in Practice, AAU Inkubator CPH

Top 5 Competences

① **Pitching**

Presenting the right content in the right format.

② **Business Modeling**

Tweaking the ins and outs of your startup to setup the optimal way of doing business.

③ **Validation**

Setting up the process for confirming that your idea is actually a good idea.

④ **Early stage innovation**

Taking that idea in your mind and turning it into a feasible business by spotting the potential revenue streams.

⑤ **Building a team**

Setting up your team for success with the right people on board – on a professional as well as personal level.

Education

M.Sc. in Entrepreneurial Engineering
B.Sc. in Information Technology

Startup Experience

Since high school I have been part of several startups mainly working on digital products. My role has always been the business end of the company, but with an understanding of the technical products.
My latest startup was an app consultancy building B2B mobile software solutions for the Scandinavian market.

Business Developer, AAU Inkubator

Contact Info

Rasmus Kastrup Brorly

rkbr@adm.aau.dk

31525452

Associations

AAU Startup program

AAU Inkubator CPH

Top 5 Competences

① **Strategic design**

Whether you need to optimize internal work procedures or help improving customer experiences I'll help you design the framework.

② **Needfinding**

Discovering the right needs is essential for building a product that creates value. I'll help you find the right tools for value creation.

③ **Validation**

Validation through pre- and prototyping is a great way to test your product or service with potential customers and essential for figuring out what to improve. Fail fast to succeed sooner.

④ **Ideation**

Product development sometimes need a fresh pair of eyes. Let me help you think outside the box.

⑤ **Entrepreneurship**

Business models, networking and trial and error.

Education

MA in Experience Economy, Aarhus University

BA in the Study of Religions, University of Southern Denmark
BA minor in Music Business and Culture, Aarhus University

Startup Experience

Started an online job portal for youth workers in high school.

Ran a network for student entrepreneurs at Aarhus University while studying.

Build an event management startup with two friends managing music events and festivals during my masters degree.

Currently doing a startup reusing building materials to help people become better amateur builders.

Figure 16: Profiles of the business developers at AAU INC Jacob and Rasmus

AAU INC is a startup environment for students at Aalborg University (AAU) in Copenhagen (Inkubator, nd.). In cooperation with Jacob we aimed to get a deeper understanding of how the programs and the AAU INC work. This would help to understand why the BMC workshop would be placed in the middle of the program and why they had chosen this structure. Jacob was chosen instead of the head of SEA, Marie Fallgaard, who is the top management of all the Incubators (see Figure 18). This was chosen from the perspective of a pyramid organization, where the business developers are closer to the participants than the management is (Wisler-Poulsen, 2015).

To do so, we first needed to understand the whole program. This was done by creating an ecosystem of the AAU INC. The AAU INC is under the department of Supporting Entrepreneurship at Aalborg University (SEA), which is a part of the department of AAU Innovation. SEA also covers Erasmus+ for young entrepreneurs, Science for Society (PhD research), Legal Help (for the startups) and Entrepreneurial Talent that create public workshops and events.
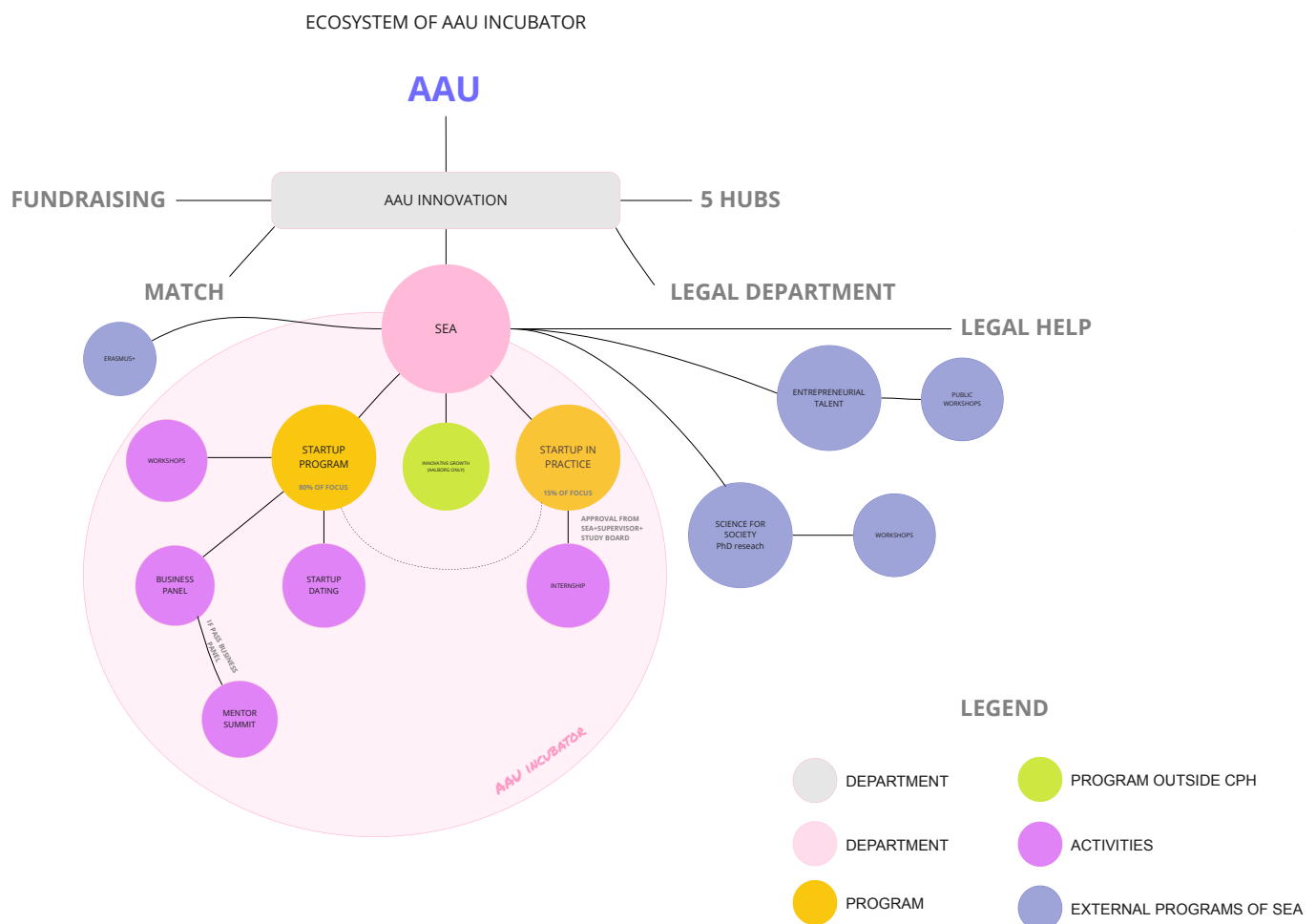
Figure 17: Ecosystem of the AAU INC

The AAU INCs main focus is The Startup Program (SUP), where 80% of their focus is. This is a program for students at AAU where they can work on their business through workshops and events. To become a part of the program, you have to apply to Jacob, who will interview and decide if your idea has enough potential to become a possible business. If you apply as a team, only one of the members needs to be a student at AAU, which makes the program more accessible. At the end of the program, the startups will face a business panel of possible investors where they can get access to a mentor who will help them further on. Besides SUP, the AAU INC also provides the program Startup in Practice (SiP). This is an internship program for students where they get the opportunity to spend one semester on their idea.

To get access to this program, the students need to get approval from both SEA, their internship supervisor, and the Study Board. When participating in SiP, the student also gets the opportunity to participate in SUP which will give them access to the workshops, events and the business panel in the end. The last program Innovativ Vækst (Innovative Growth) is only located in Aalborg, but is a program for researchers who want to work on a startup. To get a deeper understanding of the actors and their connection within the ecosystem of the AAU INC, we created an overview of actors of SEA.
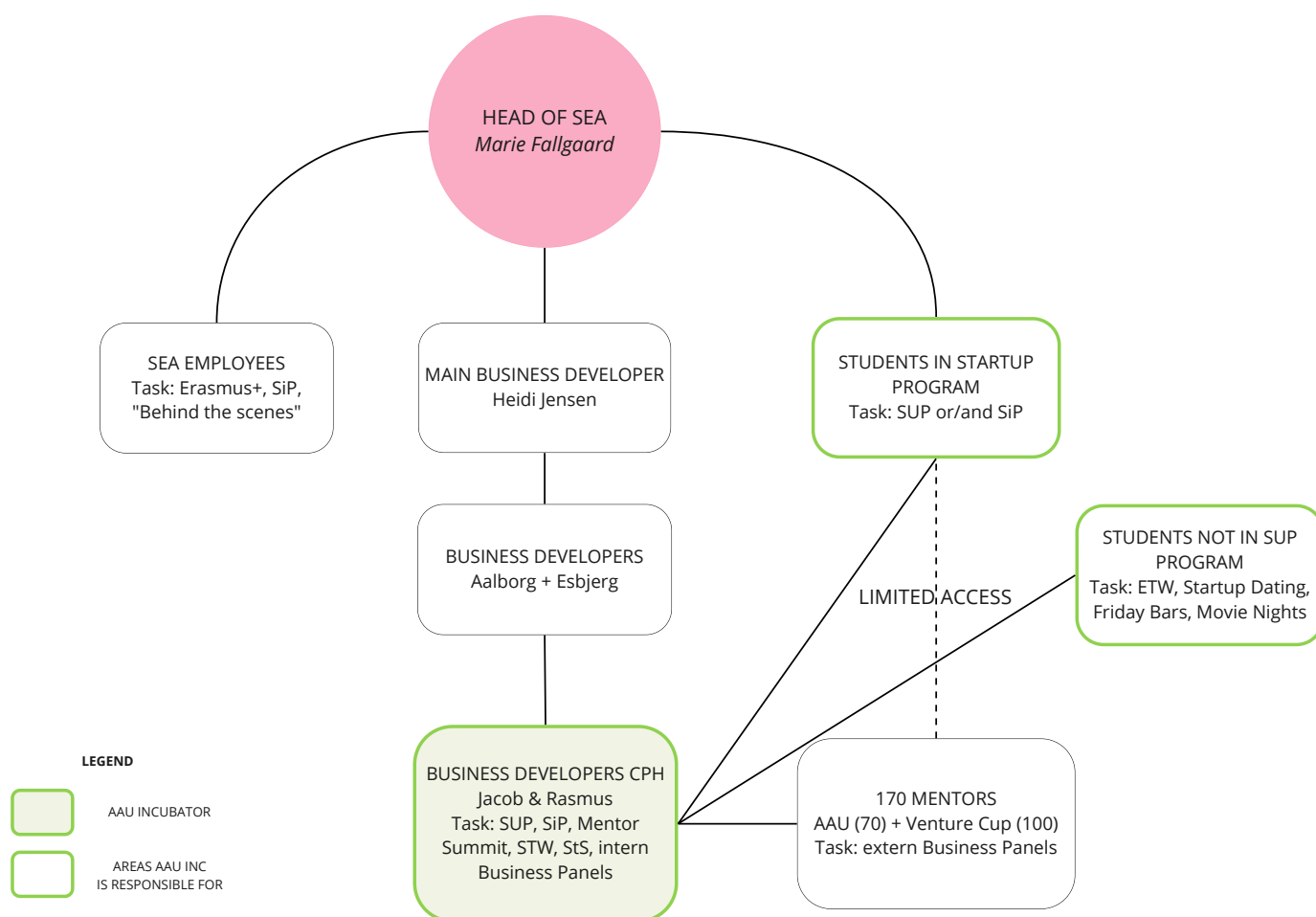
Figure 18: Actors of SEA
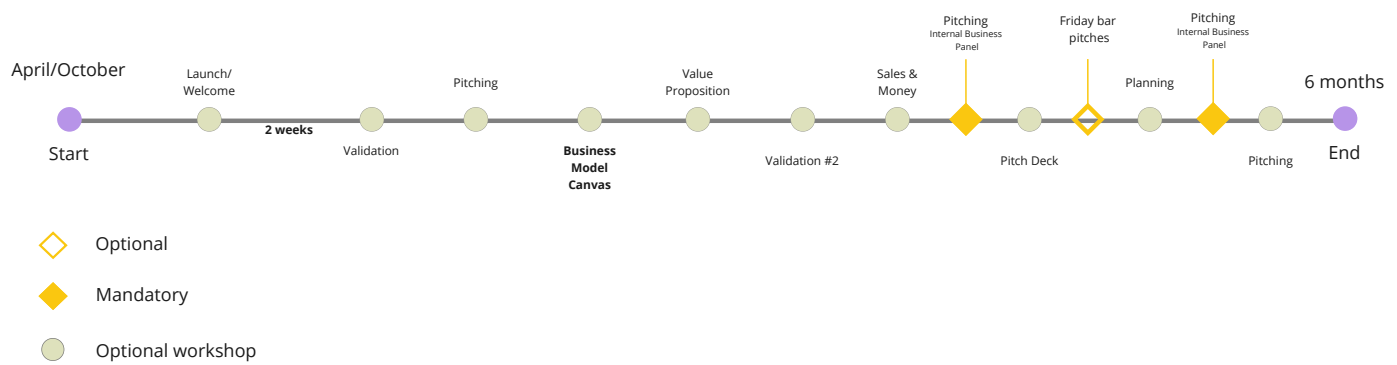
Figure 19: Startup program timeline

This gave us an understanding of Jacob and Rasmus' working areas and who they are connected to within AAU. We also understood who can join the different activities and that the business panels are both the business developers (the intern business panel) and the mentors (the extern business panel). Since SUP is the main focus for the AAU INC and also the place of the BMC workshop, we continued with a timeline of SUP, including all of the workshops the startups can join.

SUP is a six month program for startups, starting in April and October every year. Through this program, the startups have the option to join nine workshops one every second week, where they learn all about starting a business from pitching, validation, value proposition and BMC. The BMC workshop is the fourth workshop of the program. Before, there is a launch/welcome workshop, where the participants learn the basics and try to pitch their idea for the very first time. Second is the validation workshop, where they can test their idea and see how it should be shaped for their upcoming business. Third is the pitching workshop, which aims to give the basics about the importance of storytelling.The fourth is the BMC workshop. Therefore, the business model workshop takes place two months into the program. We talked with Jacob about the structure and why the BMC workshop was at this stage. He indicated that this is made to help the students get an overview of their business model in an early stage, but also question it. He wishes that it will make the students think about if they, for example, can partner up with someone else and reflect on if their business can actually make money.

During this talk, he seems to understand that it could also have been placed both in the very beginning of the program, but also in the end, or even both. In the beginning he mentioned that it could help them easily understand their businesses and afterwards pitch it, where at the end of the program it probably would give more value as an overview and testing tool. If the workshop was iterated and placed both in the beginning and in the end, then he could really see the value of if, since he sees it as an iterative tool, that should be looked at during the process and changed. However, this is not the case at this stage of the program.

Looking deeper into the workshop, Jacob's observations told him that an iterative method would also be the way to work with the tool. Before he used to make the students do the entire canvas block by block, but this gave some limitations by not looking at the blocks more than once. He now gives information about the whole canvas first, lets the students fill it out and then iterate by giving examples and stories from other industries but not removing anything from the canvas, only adding more possibilities and ideas. He makes the students use post-its when filling it out, since he wants the students to keep the canvas during their work and remove and add more elements as the business changes through time. This has to be done by themselves and is not something that is included in the workshops. He sees the canvas as a tool to make startups understand their business, to get things done, and not to show anyone outside the startup. It is used also as the foundation for the business plan, to get investors. Here is one of the limitations mentioned, that the canvas does not include a description of the team.

35

This is a big mistake in his eyes, as "80% of investors think the team is the most important" (Lundberg, Personal communication, February 20, 2020). Some other limitations of the canvas are that everything should be tested and not just assumed and that the canvas only fits for small companies. As soon as the startup is growing to a medium-size stage, the canvas is no longer useful and big companies can not use it at all. The strengths of the canvas are that it is simple, accessible and an easy way to get people into the business mindset but this he also mentions as a weakness as it might be too simple and not include enough as the environment. When asking him about why he then chose the BMC and not any other canvas for the workshop is his answer simple:

"This is what I was taught in the beginning. And I never saw a reason to replace it with something else. [...] all of the models have some kind of pros and cons, but I think it is one of the best ones." (ibid.)

4.1.2 Case study: Personal experience of BMC workshop

As a part of following the AAU INCs program during last semester's internship, one of us also participated in the workshop of creating the BMC. Here is an analysis from our own experience, learnings and observations of the workshop. This also resulted in the idea of using Service Design to make it better.

Figure 20: Analysis of the process of the BMC workshop

After the workshop every participant had a filled out canvas of their own idea from their own perspective and a test-card with 'seven questions to assess your business model design'. Through the session, several other tools and methods were mentioned.
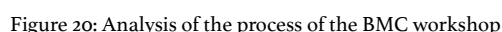
One of them was the tool Persona. This was mentioned when the participants had to create the Customer Segment building block: "Here you can create your Personas". While observing other participants, no one seemed to understand what a Persona was. It was decided to question the teacher about Persona and what it was, and the answer was "different customer segments". This provided us with the understanding that not even the teacher knew what Personas are and that it seems to be just something learned, that can be used to create the customer segments. The workshop gave a feeling of a missed opportunity to generate new knowledge. A lot of time was spent on seeing examples of other business models which could not be connected to their own canvas. This time could have been used on trying out some of the tools mentioned or helping each other ideate on each canvas.
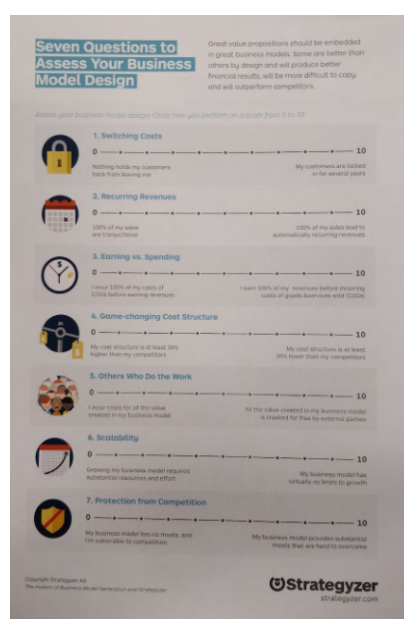
Figure 21: Own BMC and test card after end workshop

4.1.3 Case study: Observations of LEAN Canvas Workshop

As part of research, the decision was made to take part in a workshop organized by the SEA as a part of the Entrepreneurial Talent. The main focus of the workshop was the introduction of a Lean Canvas as a tool to gain an overview of the things that are crucial for the startups. Our goal was to understand the limitations of BMC from the perspective of competitors as the Lean Model Canvas (LMC) is. Moreover, we were curious of what the approach was of the participants using the workshop towards the tool, and how the workshop flow would look like.

The workshop lasted for two hours, and it was facilitated by Ivan Butler - a Business Developer from SEA. All six participants were AAU students from different levels of programs, with the majority of bachelor students and one a graduated master student.

The agenda of the workshop was as follows:

- Quick intro to LMC - what is it?
- Brief comparison of BMC to LMC
- How to approach LMC - supportive numbers placed on the blocks as a guideline
- Quick warm-up exercise - going through LMC blocks
- Group work with the given idea of the business: "Food place with affordable prices".

Our part was to observe the flow of the workshops as well as participants, their knowledge about the LMC and struggles which they had. During the group work we decided to split and join two groups. Thanks to that we were closer with the participants, meaning that we could provide our knowledge to support the process but mainly to observe how they cope with the tool. Our main observations were as follows:

- The participants felt stressed and nervous to speak up in front of others. They were not eager to share their opinions and thoughts unless the facilitator pushed them to do so.

- The participants did not naturally gravitate towards use of the sticky notes. They often talked about the ideas, thoughts or problems but they did not write them down or wrote them directly on the canvas. Due to that fact, they could not move on in the process, they felt lost.

- The participants lacked structure in their actions while filling the canvas, even though the instructions were clearly communicated by the facilitator as well as were displayed on the screen.

- The participants from the one group did not come up with a specific idea which led them to issues when trying to move on further in the process. They were talking a lot about one problem without writing down specific keywords and evaluating them.

Participation in the workshop was a great experience when it comes to observing facilitator, participants and flow of the workshop itself. Thanks to the workshop we gained a better understanding of how to prepare ourselves for workshops facilitated by us as well as limitations of BMC with comparison to LMC.

Figure 22: Pictures of observations and the LEAN Canvas model

4.1.3.1 Comparison of BMC and LMC

To get a better understanding of the two workshops a table was made to compare the workshops, including limitations of BMC from our observation of the LMC.

	BMC	LEAN
Strengths	• Well known tool • Easy to teach and understand • Can be learned on your own • Can learn a lot in short time	• A new tool • Makes more sense • Useful to create a story • A team will create new knowledge
Limitations	• Will be done on your own • You have to think creatively • You might not learn anything new • Can not discuss opportunities	• Need to be taught • You will have to help other people, to get help on your own canvas • Time consuming
Opportunities	• Could help create a storyline and directions as the LEAN • Could make the canvas in teams • Could use storytelling to get an end result of the canvas	• Could make everyone do their own canvas and discuss steps in teams • Could use more examples to help the participants think

Figure 23: Comparison of the BMC and LEAN Canvas workshops

4.1.4 Actors interviews

To gain an outside perspective regarding business models, Business Models Canvas, as well as AAU INC, eight interviews with actors as Service Designers, teachers and students were made. The main goal of the interviews was to gain knowledge of the usage and understanding of the tool. The choice of interviewers was not random. The probe was narrowed to three profiles- Startups, Service Designers and Teachers, as we believed it was best to tackle the BMC opinions from three angles. The table represents the interviews analyzed from the perspective of the organization, knowledge about business models and Service Design as well as BMC.

The interviews were semi-structured, with a checklist of subjects and themes that should be included in the conversations (see Appendix 1, 2 and 3). The interviews were recorded for further analysis and are attached to the interview guides (Appendix 1, 2 and 3). The questions were open-ended, which made it possible to have a conversation and vary the questions. This kind of interview makes it possible to gain a deeper understanding of the subjects and will create more useful answers (Veal, 2011). To gain a simple outcome of the interviews, Kvale and Brinkmann (2015) coordination opinion was used to analyse. This kind of analysis allowed us to rephrase expressions and long sentences into a few words and opinions. This was very useful since we had a lot of interviews and wanted to point out the headings and most important parts (see Figure 24).

An interesting observation was our realization of BMC limitations which were revealed during the interviews subconsciously by the interviewers. Limited positive aspects of this model were quickly transformed into negatives which caused a lack of interest in the model. All interviewees from the startup profile agreed that the BMC might only be useful as a checklist or overview tool. Moreover, because of its simplicity, the model is considered as a tool for startups in a very early stage of development, where the organization's frame is not set up yet. The representatives of bigger organizations either did not know the model or barely heard about it and categorized it as irrelevant for their organization.

Surprisingly, Service Designers working for big established organizations as well as medium size startups had quite broad knowledge about business models. Both agreed that awareness about the value of the organization and its processes is important in order to characterize problems as well as map out actions within and outside its structure. Nevertheless, their experience and approach towards BMC vary. The Service Designers working as a Product Manager in big established companies, uses the model quite often, mainly as a communication tool with different departments or employees. However, they emphasized that the model might be misused if it is not studied and understood in a correct way. This is why it is crucial to introduce its value to the organization first. It was also considered that the Service Design skillset as a supplementary for BMC was useful. One Service Designer working for a startup did not work with the model at any level, as they believed that the startup environment changes so fast that all employees should be aligned with the main values and goals of the organization.

The last profile of the Service Design teacher had limited knowledge regarding the BMC, even though the author of the model, Alexander Osterwalder, was familiar to her. She agreed that her only interaction with BMC is when the model is used by students in projects as an explanation of the business possibilities of the service. In her opinion, the BMC could be supported by many Service Design tools since the nine blocks refer to the users and their needs as well as stakeholders which could be mapped out and analyzed more thoroughly.

INTERVIEWER	NAME OF ORGANISATION	DESCRIPTION OF ORGANISATION	SIZE OF ORGANIZATION	KNOWLEADGE ABOUT BM	KNOWLEADGE ABOUT SD	APPROACH TO BMC
CPO	Contractbook	Digital platform to sign and store documents	Medium size of startup in the mature stage	High	Low	Doesn't apply BMC to organization
Product Manager	Trackunit	Fleet managemet solutions	Big organization	High	High	Use as a communication tool
Service Designer	Winefamly	Online shop with wines from all over the world	Medium size of startup in growing stage	Low	High	Doesn't use BMC
SD teacher	AAU	Danish public Univerity, with 3 campuses: Aalborg, Esbjerg, Cph	Big	Medium	High	Doesn't apply to her work, only if student use it
CEO I	NoHo Partners	Hospitality business in North Europe	Big	High	None	Doesn't apply to his work
Brand Manager	NoHo Partners	Hospitality business in North Europe	Big	Medium	Low	Doesn't apply to his work
CEO II	Dently	Platform for dentists prices	Small	High	High	Uses as a checklist
Owner	Ernst & Christensen	Maintaing properties	Small	Medium	Low	Doesn't apply to his work

Figure 24: Interview table

CPO → "NO ONE NEVER SHOW ME WHAT VALUE BMC CAN BRING TO THE BIGGER SIZE ORGANIZATION"

SERVICE DESIGNER → "IN STARTUP WORL THINGS ARE GOING FAST, THERE IS NO TIME FOR BMC. EVERYONE NEEDS TO BE AWARE OF OUR VALUES "

CEO II → "PERSONALLY, I USE IT AS A CHECK LIST"

PRODUCT MANAGER → "MAKE SOMETING VISUAL CAN HELP YOUR TEAM UNDERSTAND MORE "

SD TEACHER → "IT'S NOT MY EXPERTISE BUT I SEE IT AS A TOOL FOR BEGINNERS"

OWNER → "BUDGET IS MY CANVA"

CEO → "IT WOULD BE NICE TO HAVE ONE HANDY TOOL TO EXPLAIN BM TO INVETSORS, BUT NOT MBC, IT LOOKS TO LIMITED"

BRAND MANAGER → "I'M NOT EVEN SURE IF THERE IS A NEED OF UISNG IT IN OUR COMPANY"

Figure 25: Interviewers' quotes

4.1.5 Business Model Canvas understanding

To gain a deeper understanding of how the model was intended to be used, an understanding of the founder and the given material was analysed.

Alexander Osterwalder is the founder of the BMC, and also the head writer of the book Business Model Generation, written together with Yves Pigneur. Alexander Osterwalder was born in 1974 in Switzerland.

He is known as a business scientist, entrepreneur, author and strategy consultant. Most people know him from his work on business modelling, and especially from the BMC and the Business Model Generation book (Vliet, 2016).

"Co-creation is much more work than writing somewhere in a hidden corner and then publishing your content. However, the benefits outweigh the costs."

"Founders go wrong when they start to believe their business plan will materialize as written. I advise entrepreneurs to burn their business plan – it's simply too dangerous to the health of your business."

"Actions speak louder than words. There is a big difference between what people say and what they do. People might tell you they are excited about your new product, but when they are in a buying situation their behaviour might be totally different."

"Once you understand business models you can then start prototyping business models just like you prototype products."

"Great entrepreneurs are often great listeners and they can spot patterns and pick up on small details in customer stories."

Figure 26: Alexander Osterwalder's quotes

4.1.5.1 Business Model Canvas video review: Alexander Osterwalder: Tools for Business Model Generation

The video from Alexander Osterwalder is a one-hour talk on how the BMC is used as a tool in his book Business Model Generation. The video was accessed February 15, 2020 and can be found in the references under Stanford, 2012. The review is based on our learnings and understanding of the talk. He started the talk discussing the word 'Business Model'. Because how do you even explain what a business model is?

"This is not the same for a single person"

He claims that every person in the world would explain it in a different way. This is why the BMC can be a useful model for a group of people that need to grasp the same understanding of a business. The BMC is a tool that allows you to describe or design an existing or potential business. As Osterwalder explains: ".. as an invisible language, between nine building blocks". When the team makes the nine blocks fit together, it will "[..]create a coherent picture of your business model".

One of the biggest takeaways from the talk is his opinion about the usage. As he explains:

"You never write on the canvas! That's a crime - you only use sticky notes, then you can play with blocks and channels and ask yourself questions such as "What if I remove this type of customer? Will it also remove some cost? What other impacts will it have on my Canvas?""

This fits with his opinion that the Business Model can never be finished. It has to be updated along with changes which take place on the market or inside your business. Another thing is one of the limitations of the canvas. What the tool cannot do is calculate and use numbers. A BMC is only a hypothesis. All you do as a user is guessing. You need to take the Canvas further and test your hypothesis in a simple way to continue. This can be done by calculating your guesses. As Osterwalder explains, the canvas is not used as expected for all the users. He see the usage of the tool, in four levels:

Level 1 - this is one of the ways the tool is used the most: as a checklist. Here you only fill out the boxes to check if you have forgotten something, want to get an understanding of the different elements in a business and use it only in a very basic way.

Level 2 - to get to this level, you need to have a deeper understanding of the tool and why it is useful for you and your business. In this level you gain to have an understanding of the different connections between the boxes. You want to create a story through all elements and make it as an easy walkthrough.

Level 3 - In this level, not only do you understand your own business model, but also other companies' business models. This can be competitors or business models created with success. They can be used to gain an understanding and knowledge that can be used in your own business model.

Level 4 - In the last level, you start to experiment. You not only have one business model, but make and iterate on more canvases by testing hypotheses and ideas. The success factors from different models should be then collected and end up in a final BMC.

For your business to be successful you need to focus on getting the right business model, a good product/service and an extra focus on the Value Proposition and the Customer Segment building blocks. Osterwalder ends the talk explaining that the two elements, containing the Customer Segment and the Value Proposition are two of the most important factors for success, and this should be your main focus as an entrepreneur.

4.1.5.2 Business Model Canvas book review: Business Model Generation

The Business Model Generation written by Alexander Osterwalder (main author) and Yves Pigneur (2010), describes and explores the BMC. The intention of the handbook was meant to be used by anyone who wants to improve an existing, or craft new business model. This review of the book is based on our own thoughts and opinions throughout our reading.

Figure 27: Yves Pigneur & Alexander Osterwalder

The book is divided into seven parts. The first part describes the canvas, going through each block one by one, starting at the Customer Segments and ending at Cost Structure. This structure of the blocks (where to start or end) is not described further in the book. The next part 'Patterns' covers one fifth of the book, giving examples of different kinds of business models such as Freemium and Multi-Sided Platforms. The examples in the book are old and could have been updated a long time ago. Additionally, some of the businesses perspectives have changed. For the reader, it seems confusing that through all of the nine building blocks you could have made up your mind.

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However, now you are going through them all again but not in a linear fashion. Seems messy and time consuming.

The third part is about 'Design' and covers a lot on how to use design tools when creating a business model. Here they cover things such as how to gather and value customer insights, do ideation sessions, use visual thinking, make prototyping, use storytelling and create scenarios, all with good explanations and examples. However, it is not directly connected to the BMC. Only the storytelling and prototyping gives an example of how to use this in connection to the BMC. The Design phase of the book is good and emphasizes that design is important for the BMC. At the same time, it can be hard for the reader to remember anything after finishing the chapter since there are so many different tools and examples and not a concrete way to incorporate it.

The Strategy part looks at the environment of the BMC, including Macroeconomics, foresight, market analysis and competitive analysis. Here they use examples to go through all of the above and help the reader to cover every part. This part makes sense to include in the book since this is one of the weaknesses of the BMC and something that should be included in a business model. At the same time, it does feel strange to cover these parts in this book as the book should be made for the BMC and probably only suggest it. Furthermore, it does not consist of any tools or methods to understand this phase, but only examples.

One of the last parts is 'Process'. This part covers only 17 pages, but is from our perspective the most important. In our opinion, it does not make sense for this section to be at the end of the book as the reader may not even read all the way to this point. The author somehow expects the reader to be able to remember every part of the book when getting to this stage. The 'Process' chapter describes how the Business Model Design Process looks. It is described in a 5 phases method, with explanations on which part of the book to focus on, depending on where you are in your business (see Figure 27). This gives the reader a guideline of how and where to start when creating a business model, how to get further and what to do if they get stuck.

Mobilize	Understand	Design	Implement	Manage
Prepare for a successful business model design project	Research and analyze elements needed for the business model design effort	Generate and test viable business model options, and select the best	Implement the business model prototype in the field	Adapt and modify the business model in response to market reaction
Setting the stage	**Immersion**	**Inquiry**	**Execution**	**Evolution**
Assemble all the elements for successful business model design. Create awareness of the need for a new business model, describe the motivation behind the project, and establish a common language to describe, design, and analyze and discuss business models.	You and the business model design team immerse yourself in relevant knowledge: customers, technology, and environment. You collect information, interview experts, study potential customers, and identify needs and problems.	Transform the information and ideas from the previous phase into business model prototypes that can be explored and tested. After an intensive business model inquiry, select the most satisfactory business model design.	Implement the selected business model design.	Set up the management structures to continuously monitor, evaluate, and adapt or transform your business model.
				249 ■
• Business Model Canvas (p. 44)	• Business Model Canvas (p. 44)	• Business Model Canvas (p. 44)	• Business Model Canvas (p. 44)	• Business Model Canvas (p. 44)
• Storytelling (p. 170)	• Business Model Patterns (p. 52)	• Business Model Patterns (p. 52)	• Visual Thinking (p. 146)	• Visual Thinking (p. 146)
	• Customer Insights (p. 126)	• Ideation (p. 134)	• Storytelling (p. 170)	• Scenarios (p. 180)
	• Visual Thinking (p. 146)	• Visual Thinking (p. 146)	• Managing Multiple Business Models (p. 232)	• Business Model Environment (p. 200)
	• Scenarios (p. 180)	• Prototyping (p. 160)		• Evaluating Business Models (p. 212)
	• Business Model Environment (p. 200)	• Scenarios (p. 180)		
	• Evaluating Business Models (p. 212)	• Evaluating Business Models (p. 212)		
		• Business Model Perspective on Blue Ocean Strategy (p. 226)		
		• Managing Multiple Business Models (p. 232)		

Figure 28: The five phases of the business model design process

Reading about the authors' suggestion on the Process of a business made it clear why readers gave this book a good review. At the same time, it still led to the question of the use of the canvas. If you can use these five steps to create a business model, do you really need a canvas then? The BMC is mentioned as the first part for each of the steps in the design process and is incorporated in the description while also emerging as a pattern throughout the process of creating a business model. It is used as a way to collect and test all of the findings. If the BMC was used in this way and not just something you would fill out as a checklist then the tool seems much more useful. We see it as unlikely that a lot of readers would ever use it in this way as they may read the first part of the book and start creating their business from there. Therefore, including this in the learning or usage of the BMC should be required.

In addition to Osterwalder and Pigneur, this book was written in cooperation with 470 practitioners from 45 countries (Osterwalder, 2010, p. 2). The main sub-authors of the book are described in Figure 28. Here it is shown as six people having a business perspective (intra- and entrepreneurs and investors) and only one designer is among the team. This could also have an influence on the many examples and not that many direct instructions throughout the book.

Overall the book is useful if you have an idea or already existing idea and have no clue on where to start. It will take some time to read it all, time that for an entrepreneur probably could have been more useful in other places, but after finishing it, the understanding of the BMC in use is larger. One thing the book does not focus on are the limitations of the model, only the strengths of it are mentioned. Therefore, in the next section we will explore how these strengths and limitations of the BMC can influence the usage.

Seven Faces of Business Model Innovation

The Senior Executive
Jean-Pierre Cuoni,
Chairman / EFG International
Focus: Establish a new business model in an old industry
Jean-Pierre Cuoni is chairman of EFG International, a private bank with what may be the industry's most innovative business model. With EFG he is profoundly transforming the traditional relationships between bank, clients, and client relationship managers. Envisioning, crafting, and executing an innovative business model in a conservative industry with established players is an art, and one that has placed EFG International among the fastest growing banks in its sector.

The Intrapreneur
Dagfinn Myhre,
Head of R&I Business Models / Telenor
Focus: Help exploit the latest technological developments with the right business models
Dagfinn leads a business model unit at Telenor, one of the world's ten largest mobile telephone operators. The telecom sector demands continuous innovation, and Dagfinn's initiatives help Telenor identify and understand sustainable models that exploit the potential of the latest technological developments. Through deep analysis of key industry trends, and by developing and using leading-edge analytical tools, Dagfinn's team explores new business concepts and opportunities.

The Entrepreneur
Mariëlle Sijgers,
Entrepreneur / CDEF Holding BV
Focus: Address unsatisfied customer needs and build new business models around them
Mariëlle Sijgers is a full-fledged entrepreneur. Together with her business partner, Ronald van den Hoff, she's shaking up the meeting, congress, and hospitality industry with innovative business models. Led by unsatisfied customer needs, the pair has invented new concepts such as Seats2meet.com, which allows on-the-fly booking of meetings in untraditional locations. Together, Sijgers and van den Hoff constantly play with new business model ideas and launch the most promising concepts as new ventures.

The Investor
Gert Steens, President & Investment Analyst / Oblonski BV
Focus: Invest in companies with the most competitive business models
Gert makes a living by identifying the best business models. Investing in the wrong company with the wrong model could cost his clients millions of euros and him his reputation. Understanding new and innovative business models has become a crucial part of his work. He goes far beyond the usual financial analytics and compares business models to spot strategic differences that may impart a competitive edge. Gert is constantly seeking business model innovations.

The Consultant
Bas van Oosterhout, Senior Consultant / Capgemini Consulting
Focus: Help clients question their business models, and envision and build new ones
Bas is part of Capgemini's Business Innovation Team. Together with his clients, he is passionate about boosting performance and renewing competitiveness through innovation. Business Model Innovation is now a core component of his work because of its high relevance to client projects. His aim is to inspire and assist clients with new business models, from ideation to implementation. To achieve this, Bas draws on his understanding of the most powerful business models, regardless of industry.

The Designer
Trish Papadakos,
Sole Proprietor / The Institute of You
Focus: Find the right business model to launch an innovative product
Trish is a talented young designer who is particularly skilled at grasping an idea's essence and weaving it into client communications. Currently she's working on one of her own ideas, a service that helps people who are transitioning between careers. After weeks of in-depth research, she's now tackling the design. Trish knows she'll have to figure out the right business model to bring her service to market. She understands the client-facing part—that's what she works on daily as a designer. But, since she lacks formal business education, she needs the vocabulary and tools to take on the big picture.

The Conscientious Entrepreneur
Iqbal Quadir, Social Entrepreneur / Founder of Grameen Phone
Focus: Bring about positive social and economic change through innovative business models
Iqbal is constantly on the lookout for innovative business models with the potential for profound social impact. His transformative model brought telephone service to over 100 million Bangladeshis, utilizing Grameen Bank's microcredit network. He is now searching for a new model for bringing affordable electricity to the poor. As the head of MIT's Legatum Center, he promotes technological empowerment through innovative businesses as a path to economic and social development.

Figure 29: The seven faces of Business Model Innovation

4.1.6 Strengths & Limitations of the Business Model Canvas

Through our research on the BMC through literature, interviews, and observations we aim to make a simple overview of the strengths and limitations of the tool through two tables. The statements from interviews and observations can be found in Appendix 1-8.

Strengths of the BMC

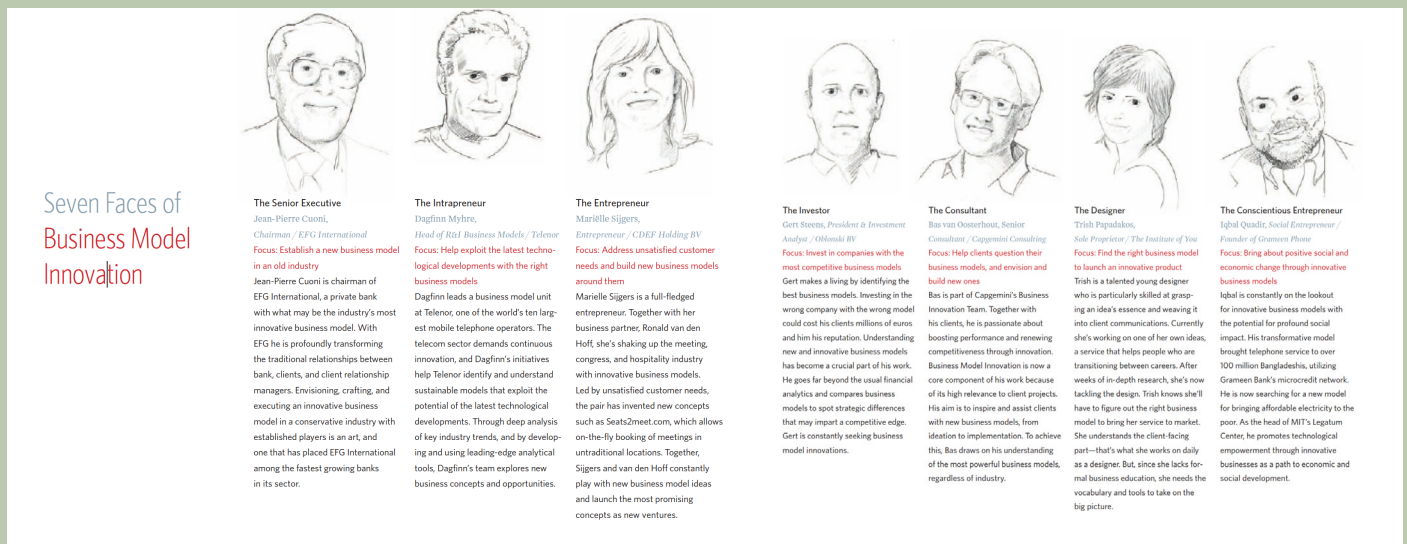| FROM LITERATURE	FROM INTERVIEW	FROM OBSERVATIONS
"Based on the Lean Canvas, strengths of the BMC can be recognized in terms of the visual representation." - Coes, 2014, p.30	"A graphic tool with the opportunity to work with different business models" - Business Developer AAU	It is a simple tool, when explained.
"BMC aims to make the development business models easy. For making it easier they have made concessions about the depth and breadth of covering the topics." - Coes, 2014, p.30	"It's a great inspirational tool" - Business Developer AAU	Everyone can use the tool in "Level 1" (as a checklist).
"... the BMC is focused on the infrastructure and can be applied on existing firms" - Canvanizer, 2014	"Facilitating guidance, discussion, development, validation, etc." - Business Developer AAU	If you have a completely new idea, it is a good and simple tool to start with. It can help you get an all-around check of your idea.
The focus on Value is a strength of the BMC - Coes, 2014; Sort Nielsen, 2017	"I use it for ideation as inspiration for which part of the value chain to innovate. And as a checklist for an idea to make sure everything is covered." - Business Developer AAU	You can test different ideas within the same canvas and see if something changes.
It is an easy checklist to start a discussions from - Sort & Nielsen, 2017	"It's a good tool to help you think of new possible areas of optimization." - Business Developer AAU	Teachers seem to be very optimistic about the usage of the BMC, which optimizes the trust of the tool.
The Canvas can help young entrepreneurs to get a business mindset "The important aspect was to teach the entrepreneurs to use the vocabulary and value thinking from the framework." - Sort & Nielsen, 2017, p. 19	"I used the tool both to facilitate workshops, for presentations and also for communication. One of the strengths are, that people know the tool and it is an easy way to communicate" - Service Designer	It seems like the business models canvas often is only based on assumptions/own feelings which can make it an easy tool to start with.
		The BMC is divided into nine building blocks, or boxes, as some called them. This had a different effect on people. Some really seem to like to "place things in boxes" and feel they get further with their idea if they do so. Other people found it more limiting and had a hard time seeing any use in it at all.

Strengths of the BMC

FROM LITERATURE	FROM INTERVIEW	FROM OBSERVATIONS
The BMC can be used to give a brief overview, illustrating the main value drivers of the potential business opportunity. "I don't want to look through several hundred pages of information. It is okay if it is there, but I want it explained within one or two pages" - Sort & Nielsen, 2017, p.22 The BMC framework can help entrepreneurs produce information and mutual understanding towards stakeholders - O'Niel and Ucbasaran, 2016, p. 28 "... the BMC has the potential to improve communication, information and understandability of investment cases because it forces the entrepreneurs away from technical details and towards thinking in terms of value propositions" - Sort & Nielsen, 2017, p. 29 "Tools such as mapping are useful to explicate business models" - Chesbrough, 2010, p.360	"It can help you take some of the barriers between Service Designers and business people. You can even incorporate Service Design into the canvas and help your team understand it through the tool. You can also use it to make something visual, which can help your team" - Service Designer "Many of the boxes can be used to discover the users, the stakeholders, etc. I see the tool to be used at the end of a design process" - Service Designer and teacher at AAU "I see it as a first step for people who do not know about businesses, a tool for them and startups" - Service Designer and teacher at AAU "It is a simple and accessible tool, that easily get people into the business mindset" - Business Developer AAU "The canvas seems reasonable. If you don't know what your doing, then it is a good tool to test your idea." - Medium Size Startup "It is a strategic tool and a good way to summary the value of your business, but I see it more necessary for bigger companies" - Medium Size Startup "I find it useful as a checklist, to see where you are and what you need to know or do. I like to place things in boxes and know what I have done so far." - Business Developer AAU	Osterwalder is a good speaker and has a lot of good ways to accommodate the limitations of the BMC. He explains the different levels of the usage of the model as a way to get deeper into the model and make it a strategy and not just a checklist. He also came up with extra tools such as the Value Proposition, to gain a deeper understanding of the customers. The way he wants the participants to use the canvas is also more as a testing method, to play around with post-its and try to think of new ways to build your business. The canvas seems to be misunderstood. If you have no knowledge about the business world, then the BMC seems like a good starting point. It can help you get into the mindset and gain an understanding of what is needed of you.

Limitations of the BMC

FROM LITERATURE	FROM INTERVIEW	FROM OBSERVATIONS
One of the main limitations of the BMC is the lack of incorporating strategy - Coes, 2014; Ching & Fauvel, 2013 The BMC is missing a building block with the TEAM or any human/user interactions - Coes, 2014; Ching & Fauvel, 2013; Ojasalo & Ojasalo, 2015 The individual building blocks allow different level of abstractions - Coes, 2014; Ching & Fauvel, 2013 BMC is not taken competition, imitations or its surrounding into considerations - Coes, 2014; Ching & Fauvel, 2013 "Another critique is that the value proposition building block is too abstract, there is no space for how a business satisfies the customers' needs. It is based on a value proposition and infrastructure and not about what is the actual customer need" - Coes, 2014, p.47 "[..] the BMC frame is not a "one-solution-fits-all" but an approach that helped many entrepreneurs" - Sort & Nielsen, 2017, p.29 ".. customer's understanding of service use is different from the service provider's" - Heinonen et al., 2010, p. 535	"You often use it only as a checklist and forget to update it on the way" - Business Developer AAU "It lacks an easy way of turning the work you're put into it into a business plan" - Business Developer AAU "Some of the squares are not as useful as others. It cannot be used well without some guidance" - Business Developer AAU "I have a good experience with the tool when you use it very narrowly, but often people tend to use it wrong." - Service Designer "It can be extremely valuable, but also hard to grasp if you didn't study it. You need at least to read the book" - Service Designer "In our company, the customer base is huge. The customers have different needs and can not be placed in one canvas. We therefore often need to make different canvasses for each customer" - Service Designer "Sometimes the tool is too simple - you should also think about the environment around your business" - Business Developer AAU "It is a tool you use to get things done, not something you use to show anyone. Use the canvas as the foundation for your business plan." - Business Developer AAU	The usage of the tool differs a lot from person to person. To use the tool in a "correct" way you need someone to teach you how to use it or you need to spend some extra time understanding Osterwalder's way of using it (post-its and play around). To get the most out of the tool you need a creative mindset and be able to think differently all the time. People tend to be scared of the word "Business Model", and expect that this is not something they can do on their own or do not feel comfortable with it. We were only able to find one Service Designer that uses the BMC tool in their daily work. It does not seem to be a tool that is very used. When the tool is taught, the usage of a lot of "business wording" can make it difficult for the participants to follow. Service Design teachers seem to only know about the tool through their students. They do not have a business approach to Service Design. The BMC seems to only be used as a checklist in small-sized startups in order to be sure that all things are under control. Even though Business Developers at AAU are using the BMC tool in their workshop, they are still questioning the tool and some even do not like it.

Limitations of the BMC

FROM LITERATURE	FROM INTERVIEW	FROM OBSERVATIONS
The BMC does not help with the next step of creating an actual business model or a running company "[..] nothing is written about how to execute a business model. [...] So the limitation is that the process of starting the company should be included in the Business Model Design process by making a story of how the building blocks are related." - Coes, 2014, p.30-42 "[...] the entrepreneurs sometimes expressed that they knew what the facilitator was talking about concerning the BMC, but when explaining it themselves, they failed to use the vocabulary and mindset from the framework." - Sort & Nielsen, 2017, p.20 "[models as BMC red.] cannot by themselves promote experimentation and innovation" - Chesbrough, 2010, p.360 "Organizational processes must also change (and these are not mapped by those tools)." - Chesbrough, 2010, p.362 The BMC does not guide you to think from a customer perspective, but depends on the users ability to include this. "[..] all the elements of a business model should be carefully analyzed from both the company's and the customers' viewpoint – based on authentic and deep customer insight." - Ojasalo & Ojasalo, 2015	"The tool does not include a description of your Team - 80% of investors think the team is the most important - you also need to test everything in the canvas" - Business Developer AAU "We do not spend much time on models - we think more strategically and try to achieve the business goals. I have tried the BMC once - but I have never seen it provide value. Nobody ever showed me that it worked." - Medium Size Startup "In a startup things are going fast and we make more day by day decisions. We do not spend time on models like BMC" - Medium Size Startup "I know about the BMC, but I have not used it that much. I like to use tools that explore more, such as brand decks, to ask questions to your business as 'what if'." - Business Developer AAU "I know the name (of BMC red.), but I have never used it outside of school. I see results and numbers as the main factor for a business and I do not need any boxes to figure that out" - Small size startup	All startups participating in the interviews, explained that they "did not spend time on models" when asked about the BMC. When asked if they used any Service Design tools, they all mentioned Personas and User Journey (and one Blueprint, Scenarios and prototyping). It seems that the words 'Model' and 'Tool' are very different from the interviewees. The majority of the responders did not know what a 'business model' is but it does not necessarily mean that they have no idea what it is, they just have their own definition. The definitions from literature are also broad and the only thing they all have in common is mentioning the word 'value'. Using the Lean Canvas some limitations of the BMC were made more clear. The Lean Canvas includes much more options and a clear structure of how it should be used. This results in a limitation of the BMC in terms of level of detail of the individual building blocks. The use of both the BMC and the LEAN Canvas from SEA teachers made it unclear which of the models should be used by the startups. The communication in between teachers should be more clear, to understand which models to use. The participants of the workshops seemed to only focus on the perspective of the business and not the perspective of customers. Even when the teacher told them to see it from the customers eye, they still focused on their business in the canvas.

Reflections

There seems to be a lot of different ways to understand and use the BMC. Even the founder of the model, Alexander Osterwalder, explains and knows about the different levels the model is used in. This seems to be one of the biggest weaknesses, but also strength of the model. It can be used in many ways, but no one really seems to use it 'correctly'. But does it even matter if people are using the canvas in different ways? And who can decide what way is correct? Maybe it is a good thing that the canvas can be used in all of the levels, depending on the desired outcome. The different levels and ways to use the model should at least be taught for the user to know. Our observations of the workshops proved that the teachers did not mention the levels of the BMC and this will be considered in our final outcome.

When asked about the model, different perspectives of the BMC were also shown from the business developers. When being a part of the AAU INCs program (and not writing this thesis yet), the developers seemed to be more honest about their opinion of the model. Here, Jacob criticized the model and the usage of it, where he expressed that the model often is not used in real life and people tend to get it wrong. With that being said, the question for us is then, did Jacob even get the model right? During the workshop, he went through the blocks one by one and did not force the participants to go back and look at the whole canvas or connect the blocks. He also said that creating the model is the next step before you as an entrepreneur would start contracting partners. When interviewing, he seemed to be more specific in his wording and expressed a positive approach to the model, telling us that it should be used to create a story of a business to see the whole picture. He even explained that it is a model that should be iterated on something that is never finished, that should be used to play around with your business ideas and never be shown externally. These statements fit the way Alexander Osterwalder wants the model to be used by entrepreneurs. It just does not fit with the way it is actually used by the AAU INC.

Why is the AAU INC not iterating on the model or the workshop? Why are they not playing around with the canvas, using it for testing or ideating? Why are they not including the model in all of the workshops design, to connect the different workshops and iterate on the model? Why are the AAU INC not trying to team up people to get more knowledge creation in the workshop? Why are the business developers not learning from each other and incorporate this in their own workshops? The way we learned how the canvas should be used and not just as a checklist compared to the way we see that it is being used does not make sense to us. We believe that this is the biggest weakness of the model. There is no concrete way to use it and it seems that every person understands the model differently.

Our understanding of the canvas can even be wrong in other people's eyes and we can therefore only assume that these findings can help us in our investigation further. Additionally, we could have analyzed more canvases on the market but decided that the observations of them in use would give us more than just our own opinion about a model and since we were not able to participate in more workshops, the LEAN and BMC were the only two comparisons made.

From a Service Design perspective, a lot of things could be changed around the structure of the AAU INCs program. Things such as: communication between business developers, the structure of the workshops and even the design of the whole AAU INC program. We knew that this was already covered by a previous student of Service System Design (Refn, 2019) and something that the AAU INC was working on. As this research was already covered and our main focus was the BMC, the focus would be placed at the touchpoint of that particular workshop to see how this could be affected by the usage of Service Design. The Understand phase gave a lot of valuable insights to develop further in the Define phase where the design of our workshop and the Service Design tools will be made.

In this chapter, we will present the process of designing a workshop where the goal is to measure the impact of Service Design tools on the BMC. The starting point will be a general presentation of all the steps which have to be taken into consideration while planning and structuring the workshop. We looked at the organizational perspective such as the location of the facilitation as well as the choice of Service Design tools. This stage will be broken down into two subchapters describing chosen Service Design tools as well as their preparation under the needs of the workshop. Moreover, the plan of measurement will be presented which has become a base for the further analysis and organically created the outcome through our research. The chapter will end up with reflections of the entire Define phase which leads into the Explore chapter.

In this subchapter the following sections will be presented:

4.2.1 Workshop design
4.2.2 Designing the Actors Map template
4.2.3 Designing the Personas template
4.2.4 Designing the workshop agenda
4.2.5 Measurements & goals of the workshops
4.2.6 The workshop participants selection
4.2.7 Reflections

UNDERSTAND   DEFINE   EXPLORE   DELIVER

January 2020   February   Re-define::March   March   Beginning of May

pre-phase	1 month	2 weeks	1,5 month	3 weeks
• problem statement • literature review • research question	• Stakeholder analysis • Case studies • Actors interviews • BMC understanding	• Workshop design & re-design • SDT toolkit • Measurement & goals • Participant selection	• Online Workshops: Persona & Actors Map • Iteration upgrades • Individual sessions: Customer Journey • Outcome analysis • Comparison of results	• Ideation session • Final outcome • Testing • Reflections & discussion

4.2.1 Workshop design

In order to measure the effectiveness of the BMC as well as the influence of Service Design tools incorporated into it, the decision was made to facilitate a workshop. The initial idea was to reach startups involved in the AAU INC program of 2020. Unfortunately, a new enrollment of start-ups was scheduled in April 2020, which meant that the waiting time was around 2 months. On the other hand, startups which were already enrolled into the AAU INC, went through the BMC workshop organized by the AAU INC and the chance to reach them was rather low since they were further in the process of working on their business idea.

Taking into consideration all of the mentioned above aspects, the decision was made to reach students or any person with an already existing business such as a startup not necessarily enrolled into the AAU INC with the idea for business development.

Figure 30 presents the process of designing the workshop. The main purpose of the process being mapped out in steps is to present the flow of the actions. This led to the full concept including the measurement methods based on which the full analysis of the workshop efficiency could have been done.
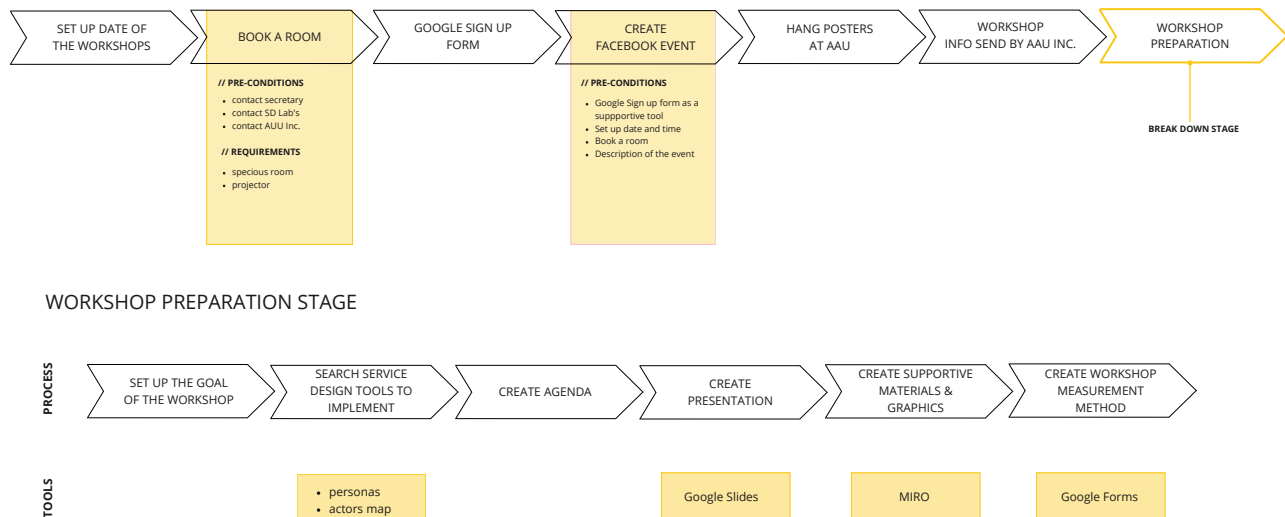
Figure 30: The workshop design process

When some of the steps such as "set up the date of the workshop" are self-explanatory, the important part to discuss is the "workshop preparation" stage. This stage was broken down in Figure 30 and pre-sented with more detail.

Our goal of the workshop was to research how the implementation of Service Design tools can influence the BMC. In order to create the agenda of the workshops, the starting point was to choose specific Service Design tools to work with as well as redesign them from the visual and ease of use angle.

Since the blocks of the BMC are a combination of the business' aspects as well as the perspective of the customers for which the value proposition of the business delivers to, the decision was made to

measure the effectiveness and influence of the Actors Map and Personas on the BMC.

The literature points out that the Actors Map clarifies different stakeholders involved in an experience (Stickdorn, Hormess, Lawrence, & Schneider, 2018). By mapping out all of the actors involved into a business the users end up with a map of the network which illustrates connections between the actors (N. Morelli, C. Tollestrup, 2007). This might also help the creator of a product, to see the services around it (ibid.). The actors should not be understood only as human beings but also as an organization, object or intangible service. Moreover, actor mapping provides a picture of components in the system of the business where it focuses on roles and relations.

Furthermore, the Actors Map can be used in order to clarify the main roles of the actors or to analyze the interaction between the actors (ibid.).

There are numerous ways of creating an Actors Map also known as a stakeholders map. The two main dominant styles are to write down the stakeholders into a table or through drawing them concentric around a business. The chosen method in our case was to draw which would allow participants to see their business from a visual perspective as opposed to something that can be placed in boxes like the BMC. Giordano, Morelli, De Götzen and Hunziker (2018) state this approach to be useful for designers to trigger and support conversations about roles and power distributions, positions, and structure. The tool is not only useful for identification of the stakeholders, but also to analyse and identify opportunities and potentials within the map since connections and analysis can be made (ibid.). Some of the things we were made aware of when the participants were designing the map was to be sure that they would have a people-centred approach, which Giordana et. al. (2018) suggests it is the most powerful for the map. This would be done by giving an example and explanation of a service with actors where there are real people behind it. Another thing to be aware of when creating this tool, is that it was suggested that the tool would be created in a co-creative space, with a lot of people involved, to get different points of view (ibid.). This would not be possible by having the participants online, working on individual business ideas. Therefore, we noticed this as something to just be aware of and reflect upon.

The other tool was Personas. According to Dam and Siang, Personas are "fictional characters which are created based upon the research in order to represent the different user types that might use the service, product, site or brand in a similar way" (Dam & Siang, 2020). Thanks to the creation of Personas the focus of design teams can be shifted from the general demographic needs to the wants and needs of the real people (Stickdorn & Schneider, 2011). In order to create the Persona which could represent the real individual, the detail-oriented characteristic should be formed along with the graphical or photographic visualisation of the Persona's appearance.

Personas would help the participants discuss their ideas and see it from their customers perspective (Cooper, 1999). Using the goal-directed method to create Personas would help them to get a more clear picture of their users, using narratives throughout the template to create a story for them (ibid.). We hoped that this would also create empathy towards their users and make them more realistic. We were aware that the Personas were made in one day and could not be iterated as they should in real life (ibid.). The Personas would also be based on assumptions and the participants would only be able to create one Persona in the session. These limitations would be in our reflection of the participants' work since they might not make a strong enough character of their Persona.

"Until the user is precisely defined, the [sic:the user of Persona] can always imagine themselves as the user or make the users elastic" (Cooper, 1999, p. 126)

Pruitt and Grudin (2003) discuss the use of Personas instead of real users. The creation of Personas tends to help the assumptions and decision-making criteria. Without the Persona, the participants could easily and routinely make decisions about the final concept without comparing it to how their audience would use it (ibid.). The Persona should therefore help the participants to see the rest of their BMC from the users point of view. As Pruitt & Grudin (2003, p.5) states "Without Personas, development teams routinely make decisions about features and implementation without recognizing or communicating their underlying assumptions about who will use the product and how it will be used.

Another criteria for choosing the above described tools was their ease of use with proper introduction and guidelines from the facilitator side. Moreover, it was interesting for us how those tools would influence the nine blocks of the BMC which are clearly dedicated to the business aspects but also the customers.

The following subchapters reveal how the templates of the Actors Map and Personas were designed for the workshop needs based on the knowledge gained during the program of Service Systems Design as well as previously studied papers and books. What is important to emphasize is the fact that template design steps were approached with a human-centered perspective, which means that the templates were created primarily based on the previous experience from the study and work field and then tested on potential participants.

4.2.2 Designing the Actors Map template

Creation of the Actors Map was divided into 5 steps:

1. Write your business idea in the middle,
2. List down the actors,
3. Connect the actors you already are (or have a plan to be) connected with (use black marker),
4. Analyze the map and identify areas where there is room for improvement, possibilities or missing gaps and describe these (use red marker).

The initial plan was to foremost explain what the Actor Map is as a method, then present the 5 steps of creation, and lastly display the example of the already mapped out Actors Map (see Figure 30). The participants would work on a white paper sheets given to them.

The created Actors Map would give the participants an overview of all parties included in their business. As well as, which of them are not necessarily connected with their business idea yet and where the possibility of relationship exists.
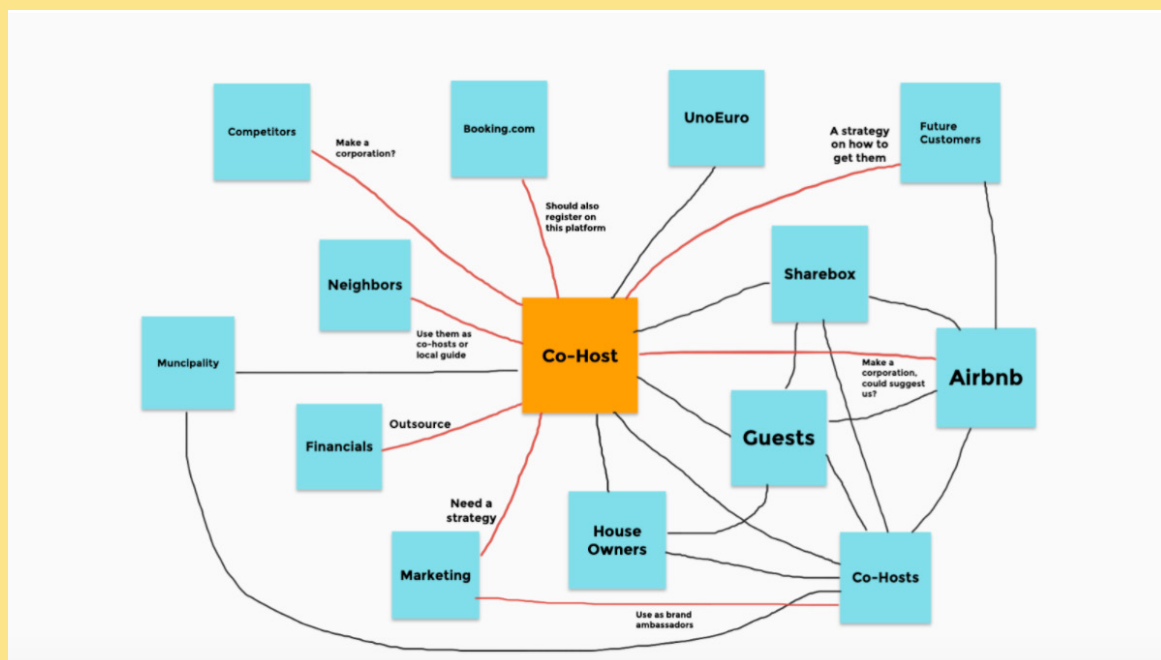
Figure 31: The Actors Map

4.2.3 Designing the Personas template

The Persona template was designed in order to give the participants the possibility to immerse into the potential customer/user's mind and start looking at the business through the Personas perspective. The template is consisted of seven blocks divided into:

- Name & Age
- Channels
- Thinks & Feels
- Goal
- Does
- Pain
- Gain

Each of the blocks contains a short description as a helpful starting point. The initial plan of introducing the tool was firstly to explain what the Persona is and how valuable it is to the process of building a business. The next step was dedicated to presenting the example of Persona created for a particular business. After that the participants would work on the printed Personas template. Each of the participants would design one Persona.
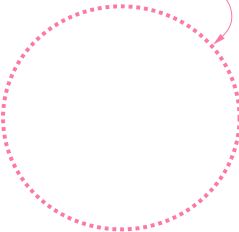
NAME & AGE
+ the nickname

SKETCH YOUR PERSONA HERE!

GOAL

That might be personal desires and life goals.

DOES

What that persona do in order to accomplish goals?

CHANNELS

What channels that persona is using daily?

PAIN

That might be something negative about your product/ service or area of your business which that person wants to avoid.

THINKS& FEELS

That might be a problem or something positive which is related to your business area.
Eg. expectations.

GAIN

That might be something positive about your product/ service or area of your business which will make that person more happy.

Figure 32: Persona template - own design

4.2.4 Designing workshop agenda

While designing the workshop the aim was to create a smooth and easy to understand flow of actions. This would help to gather as much data as possible to further analyse as well as to provide the knowledge to participants, which they would be able to use and implement in their business. To avoid heavy text slides, the agenda was designed based on iconography along with supportive graphics used on different slides of the presentation. All of them are maintained in the same style to keep a coherent look of the workshop.
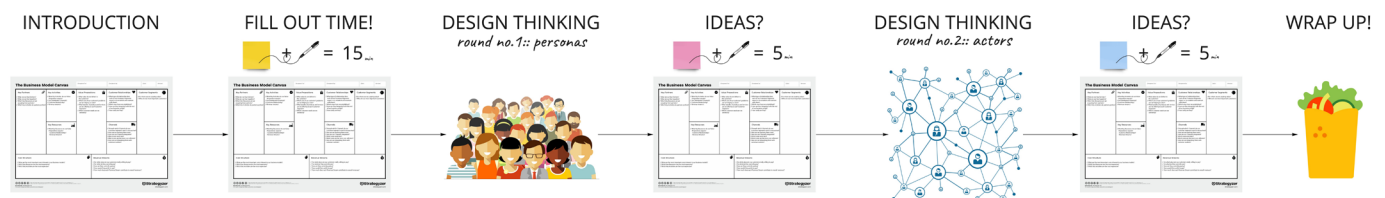
Figure 33: Workshop agenda
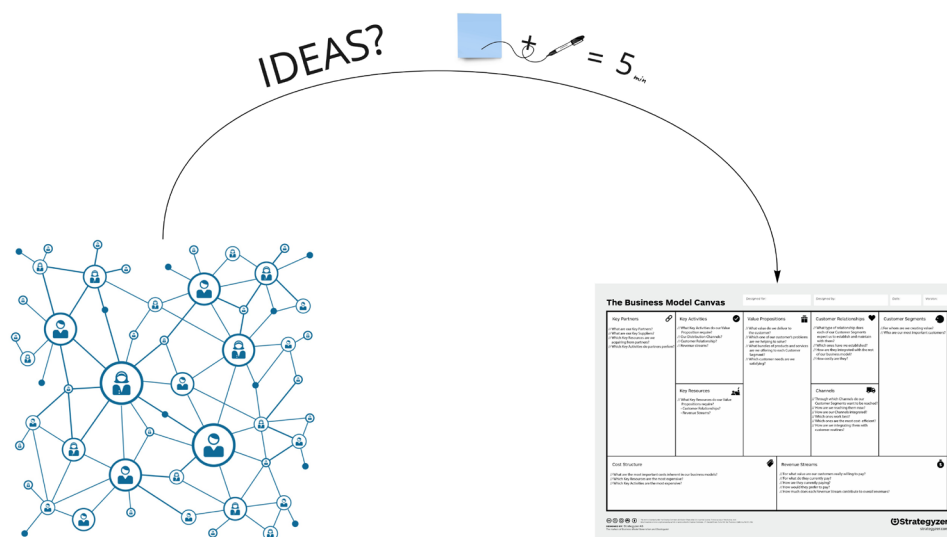
Figure 34: Example of workshop graphics (after the creation of Actors Map)

As mentioned previously, the duration of the workshop was planned to be two hours. Within this time the following actions would take place:

1. Welcome & Introduction
2. Sign up permission to take pictures and recording
3. Quick survey - how familiar are you with BMC
4. Brief presentation of the agenda
5. Intro to BMC - what is it?
6. Explanation of each BMC block
7. First fill out of BMC - 15 min
8. Introduction to Personas - who are they?
9. Presentation of Personas example
10. Designing Persona session - 15 min
11. Second fill out of BMC - 5 min
12. Introduction to Actors Map - what is it?
13. Presentation of Actors Maps example
14. Creating Actors Map session - 15 min
15. Third fill out of BMC - 5 min
16. Quick survey - How familiar are you now with BMC and SD tools?
17. Wrap up

4.2.5 Measurement & goals of the workshops

To measure the impact of the usage of Service Design tools in connection to the BMC, a plan for measurement and objective goals for the workshop were needed. This was done studying Sufi, S. Nenadic, A. Silva, R. Duckles, B. Simera, I. et al. (2018) rules about how to measure the impact of workshops combined with our own previous learnings.

To measure the impact we decided to:

- Make an observation plan of what to notice and how to strategically divide it between us
- Use different colors on post-it notes on the BMC after each Service Design tool
- Take pictures of the ongoing process and videotape the whole session
- Set specific goals and objectives for the workshop
- Collect feedback from participants before, during and after the session
- Measure both qualitative and quantitative data, this will be done by asking the different type of questions that can be seen in Appendix 4
- Write down all questions asked and problems observed by participants
- Discuss possible biases and limitations before, observe during and analyze after

The goals and objectives were defined using Sufi, Nenadic, Silva, Duckles, Simera, et al. (2018) output and outcomes suggestions for measuring:

- Output (what you want to produce): a full BMC and a deep understanding by participants and for us as facilitators; an understanding of the differences when using the Service Design tools

- Outcomes (what difference you hope it will make): the participants should get an understanding of the BMC model as well as the importance of the Service Design tools when creating a business. As facilitators, our aim is to measure the influence of the Service Design Tools (SDT) on the BMC.

We wished to include the participants when creating the goals of the workshop. This would be done by making them note their goals when they arrived. We would then discuss the goals at the beginning and in the end of the workshop, to see if the participants felt they had achieved them. Additionally, we would check if they felt like there was any change in their skills and if they felt we could change anything in our further exploration.

4.2.6 The workshop participant selection

Thanks to the collaboration with AAU INC we could reach members of the AAU INC working on startups as well as students who were involved in classes organized by the AAU INC regarding entrepreneurship learnings. However, to be certain that participants would join our workshops, the decision was made to design a poster and place it around AAU campus. In addition to the poster, we created a Facebook event and shared it on AAU Facebook groups as well as talked with people which we knew were active in the entrepreneurship field. Students mentioned before enrolled in AAU INCs classes could sign up through the online form created by Google Forms.

To get participants to join the workshop, was our final step of defining the workshop. Before the due date, we made a couple of test rounds of the workshop with each other as well as with our classmates to see if the flow of the workshop and timing was efficient. After these steps, we were ready for facilitation.

Reflections

In the Define phase, we placed the focus on designing the workshop. The aim was to bring valuable information and insights regarding Service Design tools and their influence on the BMC. Therefore, the main point of the Define phase was to choose the right Service Design tools or methods.

One of our concerns was whether the Actors Map and Personas would be sufficient enough in the gathering data process. At the same time, we were questioning our choice from the perspective of participants and their business idea. We were doubting if the tools would be easy enough for the participants to understand but also capable of influencing the BMC.

Looking at the Service Design literature and its suggestions towards the Service Design toolkit, the Actors Map, as well as Personas, the suggestions seemed to be more connected to the Design Thinking area rather than analytical and holistic Service Design. Nevertheless, from our own experience from work as well as the creation of the startup, the chosen tools seemed to be easy to implement and influence the mindset towards a human-centric approach. The priority when choosing the tools was to make sure they were easy to understand and could be used within a two-hour workshop.

The tools, such as the Service Blueprint, seemed to be too complicated to explain to participants. Moreover, there was a possibility that none of the participants' business ideas was mature and thought through enough to use a very detail-oriented tool such as the Service Blueprint.

However, after the consultation meeting with the supervisor, it became clear that we would need to facilitate another round of workshops or individual sessions with the implementation of tools that are strictly connected to Service Design. Furthermore, the focus would have to be placed on the tool which will deliver a holistic view of the service as well as put the user in the center of attention. That brought us to the point where Customer Journey was taken into consideration as a tool. With the use of this tool, participants could map out the journey from the perspective of a Persona as well as in a holistic approach. They would divide the journey into three phases: before, during, and after. This will be explained further in section 4.4.6 The Customer Journey individual sessions. At this stage, it was decided to first try out the Actors Map and Personas in a separate workshop, and then move on to the Customer Journey sessions after.

4.3 Re-define

The Redefine chapter was added due to the unexpected circumstances caused by the global COVID-19 pandemic and general lockdown of the country which forced us to take additional actions. In order to complete the design process on time, the decision was made to take the already planned workshop to the online level. Nevertheless, the Redefine chapter should be understood as the pre-introduction to the Explore phase. It also provides information on how the action taken in the Redefine phase will influence the Explore phase.

The chapter starts by capturing the benefits, limitations, and general information regarding the facilitation of the online workshop. The main core of the chapter is focused on the workshop redesign from the offline to the online level, as well as the measurements. The measurements helped us further in the analysis that will be conducted in the following sub-chapter, the Explore phase.

In this subchapter the following sections will be presented:

4.3.1 Coronavirus limitations
4.3.2 Upgrading the workshops to an online level
4.3.3 The workshop redesign
4.3.4 Measurements & Goals for the online workshop
4.3.5 Reflections

pre-phase	1 month	2 weeks	1,5 month	3 weeks
• problem statement • literature review • research question	• Stakeholder analysis • Case studies • Actors interviews • BMC understanding	• Workshop design & re-design • SDT toolkit • Measurement & goals • Participant selection	• Online Workshops: Persona & Actors Map • Iteration upgrades • Individual sessions: Customer Journey • Outcome analysis • Comparison of results	• Ideation session • Final outcome • Testing • Reflections & discussion

4.3.1 Coronavirus limitations

Unfortunately, due to the COVID-19 pandemic, we were forced to change the path of the master thesis process. Five days before the date of the execution of the physical workshop, all public places were closed including Universities. As the country was under lockdown, the decision was made to move the workshops to the online level. In order to do so, we had to adjust the original plan of the workshop. We had to find online tools that could be easily navigated which would allow us to gather all necessary data as well as facilitate the workshop smoothly without possible errors related to the Internet connection.

Sadly we had to cancel the Facebook event but before it was done we wrote a post where it was explained that we would not give up; however, we would now act on the online level. We also created another event on Facebook where we invited all the people who already signed up for the offline version of the workshop. Moreover, we sent an email reminder to those people who signed up through Google Form.

Figure 35: Moodboard of Facebook events and posts

4.3.2.1 The online workshop benefits

It has been demonstrated that online methods for user involvement can offer a multitude of benefits. Some of them will be discussed here:

1. Online communities of users could influence innovation if properly organized (Dahlander & Frederiksen, 2012; Fuller, Matzler & Hoppe, 2008). We need to create a strong structure to create an innovative space for the participants.
2. It allows long-overdue work flexibility. "How many people in America go into an office even when they're feeling under the weather, because of pressure from the company or managers" (Mullenweg, 2020)
3. The participants can get a more high-fidelity outcome of their work and get a feeling that they gained a higher knowledge and success online (Kayan, 2020)
4. The participants will often work faster online (typing) than when writing by hand offline and can get more work done (Pribetic, 2020)
5. "If you have a video conferencing tool that supports 'breakouts' (like zoom), then you can deliver a very productive session without any need for a physical space." (Pribetic, 2020). A lot of authors are mentioning Zoom as one of the best tools for online collaboration and was therefore tested for our work.
6. " [...] every time you have an event with remote participants is an opportunity. It's an opportunity to explore new ways of engaging those people." (Pribetic, 2020)
7. "Through exploring how to make the remote experience as engaging and as seamless as possible, you will find and discover new ways of doing things." (Pribetic, 2020)
8. Some authors even claim that "remote work makes a better design process" (Shirey, 2020), as no person is dominating each individual work.
9. To see the participants in their home and relaxed environment can help us as designers, to better understand them "[..] see each others' homes, families and pets, you can easily understand them more fully as people than you do in a limited workplace setting." (Shirey, 2020).

4.3.2.2 The online workshop limitations

Even though an online workshop would have a lot of benefits, there would still be some limitations to be aware of. Underneath is a couple of limitations that we found through literature and considered in our design:

1. A complementary set of competencies may need to be developed to tackle difficulties and make the most of collaboration with customers (Bengtsson and Ryzhkova, 2013)
2. Personalities (such as introverted or shy) might be harder to capture through online tools, so the need for inclusivity is higher (see 'before' in the next section)
3. It might be harder to keep the participants focused and engaged throughout (Kayan, 2020)
4. The participants need to prepare a bit more and the facilitator will require a bit more from them than just being physically there (Kayan, 2020)
5. When sharing online in a group, the participants can tend either to be the listener or the speaker -and they often tend to stay in this 'role'. Whereas it is easier in an offline environment where you can keep track of who is speaking (Kaynan, 2020)
6. "You won't discover how the technology really works, and whether it works for you until you give it a proper test." (Pribetic, 2020)
7. It's easier to engage participants offline and conversations will flow better. "Higher engagement and better conversations are essential factors in ensuring a successful workshop." (Pribetic, 2020)
8. Some participants might have a harder time using the online tools than others and might end of feeling 'stupid' (Shirey, 2020)

4.3.2.3 The structure of the online workshop creation: before, during & after

To get a better understanding of what to be aware of during our workshop, we created an overview of our learnings from the literature and reflections. This includes the before, during, and after experience of the participants and the things we should remember in each step.

Before:

- Create and send an agenda through email before the meeting "Zoom meetings get 100% better when an agenda is sent out before it starts" (Shirey, 2020). Kayan (2020) also states that to make remote workshops engaging, you must have a clear structure available to participants so they can anticipate how the time will be used.
- Include guidelines in the email to "make sure everyone knows how to use your tools" (Shirey, 2020)
- Make the participants feel as prepared as possible by sending a reminder email the day before with some extra tips such as bringing some drinks and snacks, pen and paper (to draw on) and headphones and mic. Also, make sure they understand the workshop will be done in English and that they will have to have their camera turned on. Prepare the participants (Kayan, 2020).
- Choose the best online tools for the participants and test it a lot of times. "Keep it simple. Practice the tech beforehand. Test it on people who have not used the software before to identify possible fail points" (Tippin, Kalbach & Chin, 2018, p. 13). We will use 'the five key capabilities needed for remote workshops' (see Figure 35) as an inspiration tool and a reminder of how to choose and what to think of.
- Test (and re-test) everything. We will make a lot of test rounds on our own and one test round using friends. "Testing will also reveal the difference between your expectations of how the technology works, and how it really works." (Pribetic, 2020)

During:

- "Reserve some time for team building during online meetings" (Shirey, 2020). This will be done by starting the workshop with an introduction of each of us, the start-ups, their ideas and goals for the workshop. At the end of the workshop, this will be discussed again to hear everyone's thoughts.
- "[...] set aside 10 minutes during a meeting to make sure everyone knows the best practices for your chosen video chat system and discuss ground rules that your team wants to implement." (Shirey, 2020)
- The camera needs to be turned on as "[...] it helps immensely with communication to see your teammates' facial expressions and body language" (Shirey, 2020)
- "Making sure you're in a well-lit place and looking at the camera directly will help you all feel (almost) like you're in the room together." (Shirey, 2020)
- Being online, we as facilitators need to "be inclusive, to value time, and to find conclusions." (Kayan, 2020)
- INCLUSIVITY: Inclusive to those that are remote, those that may be more introverted, and all minorities.
- VALUING TIME: It can be hard to be in a workshop that is not structured and you feel like you are wasting your time. We want to make participants feel like their time is being valued and being utilized in a constructive fashion.
- FINDING CONCLUSION: A successful design workshop is one where we find conclusions, we state goals, and we build something that will drive future work in a different direction than before the workshop.
- We wish to be as engaging as possible, to keep the participants' focus. This will be done by us-ing some of Kayan (2020) engagement tricks:
- Make participants work on their own and then share in a group
- Each participant should be doing something all the time
- Create a shared sensory environment by play-ing music when the participants are working on their own to make them feel connected
- Make time to have a break, move or small-talk
-

After:

Not a lot of authors have written anything particular about how to structure any 'after' knowledge sharing. Therefore, this is done by using our own thoughts and learnings:

- Make them fill out an 'after' questionnaire where we ask about their learnings and thoughts. Not everyone likes to speak in an open environment and might prefer to give feedback on a paper.
- Send a 'thank you' email with all participants attached and let them know what their next steps could be or how we can stay in touch if they wish to
- Call some of the participants who seemed more introverted and did not talk a lot to hear about their experience and learn from them
- Analyze all data online and choose four participants for the next round (Customer Journey).

FIVE KEY CAPABILITIES NEEDED FOR REMOTE WORKSHOPS

COMMUNICATE IN REAL TIME	See everyone's smile and hear everyone's voice when you meet	**Recommended:** Zoom **Alternative:** Skype, Bluejeans
COMMUNICATE ASYNCHRONOUSLY	Create a community before you meet and stay connected between sessions.	**Recommended:** Slack **Alternative:** SMS, HipChat
SHARE CONTENT	Establish the location where videos, PDFs, and other necessary files are stored	**Recommended:** Google Drive **Alternative:** DropBox, Box
STAY ORGANIZED	Track resources, events, and assignments to keep the team aligned.	**Recommended:** Trello **Alternative:** Asana, BaseCamp
THINK VISUALLY	Collaborate, brainstorm, share artifacts and interact like you're in the same room.	**Recommended:** MURAL **Alternative:** UxPin, Invision

Figure 36: Key capabilities for remote workshops (Tippin, Kalbach & Chin, 2018, p. 12)

Quotes about online workshop facilitation

"We might feel that this online workshop is a compromise and not something we should value. This might change during time and be a really good learning for us, as the world might be different from now on."
(Lau, Yang, & Dasgupta, 2020)

"In the early days of 2019, having remote participants in your session is a compromise. As I said above technology has, and will continue to, improve. But it still isn't anywhere near the same as having the people in the room."
(Pribetic, 2020)

"a successful design workshop is one where we find conclusions, we state goals, and we build something that will drive future work in a different direction"
(Kayan, 2020)

"We'll never probably be the same. People who were reticent to work remotely will find that they really thrive that way. Managers who didn't think they could manage teams that were remote will have a different perspective. I do think we won't go back."
- Jennifer Christie, Twitter's head of human resources, BuzzFeed News (Mullenweg, 2020)

"Both online and offline modes of interaction may involve sharing explicit knowledge and externalizing tacit knowledge. However, levels of adoption of various online and offline methods by firms differ due to challenges of their implementation and management as well as their appropriateness for different companies"
(Hemetsberger and Godula, 2007).

4.3.3 The workshop redesign

Redesign of the workshop from offline level to online level:

In order to present the flow of the workshop in an easy to understand way for the reader, the decision was made to create graphs which could present mapped out stages. Starting from the preparation phase, going through the first round of the workshop, and the second one with improvements adjusted from learnings after the first round.
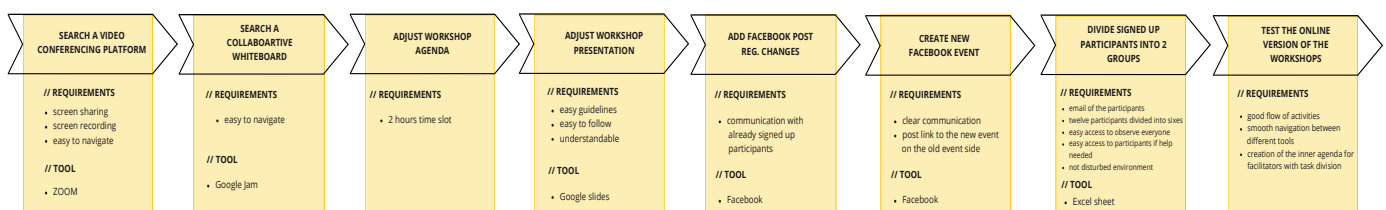
Figure 37: Key capabilities for remote workshops (Tippin, Kalbach & Chin, 2018, p. 12)

Figure 37 presents the preparation phase where many challenging decisions had to be made such as the assortment of the online communication tool, an assortment of the online whiteboard tool, where participants would work on designed templates, or even adjustment of the agenda, which could keep a good pace and flow of the workshop.

The key point was to test the tools before the fi-nal day of the workshops. In order to do that we searched for a few different online communication tools as well as collaborative whiteboards and tested them between us before the final day. The main re-quirements for the online communication tool were screen sharing and recording, ease of navigation as well as the possibility to show all the faces of par-ticipants while sharing the screen. When it comes to the collaborative whiteboard we were aiming for ease of use where the participants could use the tools without any extra understanding or practice how to use them.

Thanks to several tests we were able to adjust all of the steps which brought us to the point where we felt much more confident with facilitation of the on-line workshops even though it was a new experience for us. Moreover, thanks to the testing we could di-vide roles between us, such as:

- Role of the observer
- Role of the host
- Time control
- Sending the links through the chat window
  - :: Content form for data usage
  - :: Google Survey
  - :: Google Jam for each participant

4.3.4 Measurements & Goals of the online workshop

To measure the impact of the usage of Service Design tools in connection to the BMC, a plan for measurement and objective goals for the online workshop had to be adjusted.

To measure the impact, we decided to:

- Make an observation plan of what to notice and how to strategically divide it between us
- Use different colors on digital post-it notes on the BMC during the first and second filling out part as well as on Personas template and Actors Map template

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- Take screenshots of the ongoing process and screen record the whole session
- Set specific goals and objectives for the workshop
- Collect feedback from participants before, during, and after the session using the Google Forms survey (quantitative data)
- Measure qualitative data by talking with participants after the online session comes to its end
- Write down all questions asked and problems observed of participants
- Discuss possible biases and limitations before, observe during, and analyze after.

The goals and objectives were defined using Sufi, Nenadic, Silva, Duckles, Simera, et al. (2018) output, and outcomes suggestions:

- Output (what you want to produce): a full BMC and a deep understanding by participants and an understanding of the difference when using the Service Design tools for us.

- Outcomes (what difference you hope it will make): the participants will get an understanding of the importance of the Service Design tools when creating a business and that the influence will have an impact.

To create the ultimate goals we wish to include the participants. This will be done by sending the link to the prepared Google Forms survey which participants will fill out during the before, during, and after stage. Moreover, an "open feedback" part will be included in the agenda of the online workshop where participants will be able to share their feedback on whether the session met their goals, if they feel any change in their skills and if they feel we could change anything for further exploration. We would also make sure that the participants who had a more introverted role in the workshop would be contacted afterward, to get their feedback in an individual session.

Reflections

The Redefine phase was crucial in order to move forward in the design process. The main focus was put on the online version of the workshop with the aim to gather all necessary information as well as make the process as smooth as possible for participants. The main change occurred in the facilitation when specific guidelines had to be set up and tested by us. Our biggest concern was whether some errors will pop up during the online sessions such as lack of Internet connection. Due to this fact, the decision was made that the workshop would be split into two rounds. The first round would be treated as a "test" where all possible mistakes in facilitation, as well as errors, might occur. Based on that, we would give space for improvement before another session. Moreover, we felt that 6 participants scheduled on the first round would be a perfect number to handle without having any knowledge regarding the online facilitation.

In the perfect scenario, the "test" would happen before the actual workshop sessions. However, the time frame was already pretty tight because of the global pandemic. Due to that fact, the decision was made to proceed with the process and learn from the mistakes throughout the process.

Furthermore, looking from the perspective of time, we could have been more critical towards participant selection. That could be done by requesting the business idea before the workshop or even set up a short interview session from the perspective of getting to know the participants from their Personality perspective. Nevertheless, with the limit on the amount of time we could spend, it would have not given us a possibility to analyze the participants before the workshop. Therefore, we had to proceed with the first round of the workshop as soon as possible. As a solution, the decision was made to measure the profile of participants at the beginning of the workshop session by Google survey.

Explore

This chapter is aimed to provide a full picture of a facilitated online workshop that was designed in the Redefine phase. The explore part is divided into two phases. The first phase consists of two rounds of the online workshops and the second phase includes four individual interview sessions. To present the first phase, an introduction to the actions from the two rounds was made. The focus for the online workshop was the Service Design tools, Actors Map and Persona, and their influence on the BMC. The outcome and analysis of the two rounds will be presented in the following subchapter. In the second phase, the Customer Journey individual sessions are described as another tool which could possibly influence the BMC. Lastly, the comparison of results from the workshops as well as individual sessions is analyzed.

In this subchapter the following sections will be presented:

PHASE ONE: THE ONLINE WORKSHOPS
4.4.1 The first and second round of the online workshop
4.4.2 Participant overview
4.4.3 Outcome of the online workshops
4.4.4 Combined analysis of the BMC
4.4.5 Reflections

PHASE TWO: THE INDIVIDUAL SESSIONS

4.4.6 The Customer Journey individual sessions
4.4.7 Comparison of the results: workshops vs. individual sessions
4.4.8 Reflections

UNDERSTAND DEFINE EXPLORE DELIVER

January 2020	February	Re-define:: March	March		Beginning of May
pre-phase	**1 month**	**2 weeks**		**1,5 month**	**3 weeks**
• problem statement	• Stakeholder analysis	• Workshop design & re-design		• Online Workshops: Persona & Actors Map	• Ideation session
• literature review	• Case studies	• SDT toolkit		• Iteration upgrades	• Final outcome
• research question	• Actors interviews	• Measurement & goals		• Individual sessions: Customer Journey	• Testing
	• BMC understanding	• Participant selection		• Outcome analysis	• Reflections & discussion
				• Comparison of results	

PHASE ONE: THE TWO ONLINE WORKSHOPS

4.4.1 The first and second round of the online workshops

     As mentioned before the online workshop was split into two sessions. The decision was made based on the approach towards the new agenda and environment which we had to adapt to. The first round of the workshop was supposed to point out the gaps in facilitation as well as possible mistakes while presenting the tools and overall feedback from the participants. Figure 38 shows the flow of the first round of the workshop with the participation of 5 people.
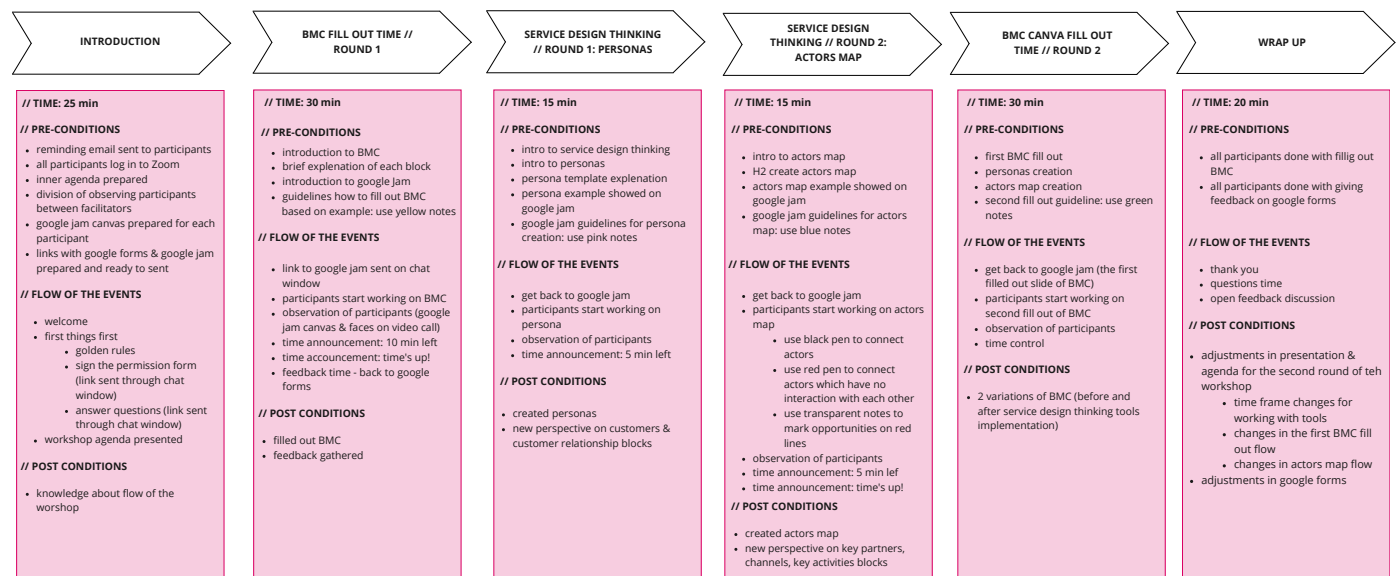
Figure 38: Flow of the first round of the workshop

To get a better understanding of the two phases of workshops and improve our work, an observation and feedback analysis was made (see Appendix 6 and 8). The observations and feedback allowed us to improve the flow of the second round from the perspective of facilitation as well as the introduction of the tools. One of the most important adjustments was done at the beginning of the session when participants had to fill out the BMC for the first time. According to their experience, explaining all of the nine blocks and then filling out the canvas was too overwhelming. They all agreed that the BMC should be filled out after the explanation of the first five blocks and then after another four. In this way, they could have still remembered the meaning and goals of each block.

The second very important comment from the feedback was regarding the creation of the Actors Map. The participants felt lost and overwhelmed by the amount of information and guidelines on how to create the tool. It was not so much that they could not understand how the Actor Map worked, rather it was an overwhelming amount of information to process in a short time. In order to avoid all of the mentioned confusion, the guidelines of Actors Maps were cut into 3 stages. Firstly, the participants had to list out the actors. Secondly, the participants had to connect the actors by using the black pan. Lastly, the participants had to connect the missing or possible connections between the actors by using the red pen as well as describe the possibilities by using transparent sticky notes.

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This created a different and more useful outcome of the Actors Map since the participants were forced to think about all of the actors before they knew that they should be connected. The participants gave a lot better feedback about this way of instructions than the first round.

The last important feedback was regarding communication between participants and us as facilitators. Regarding their experience they lacked simple questions from us such as "does everything make sense to you?" or "do you have any questions?" after the introduction to the tool and after the creation of it.

Figure 39 shows the flow of action of the second round of the online workshops. All of the adjustments were bold in order to highlight the difference between the first and the second round.

INTRODUCTION

// TIME: 25 min

// PRE-CONDITIONS
- reminding email sent to participants
- **all participants log in to Zoom and awaited in the waiting room**
- inner agenda prepared
- division of observing participants between facilitators
- google jam canvas prepared for each participant
- links with google forms & google jam prepared and ready to sent

// FLOW OF THE EVENTS
- **host of the event let participants in to ZOOM chat**
- welcome
- **introduction of facilitators and each participant**
- first things first
  - golden rules
  - sign the permission form (link sent through chat window)
  - answer questions (link sent through chat window)
- workshop agenda presented

// POST CONDITIONS
- knowledge about flow of the worshop

BMC FILL OUT TIME // ROUND 1

// TIME: 15 min + 10 min

// PRE-CONDITIONS
- introduction to BMC
- brief explenation of each block
- introduction to Google Jam
- guidelines how to fill out BMC based on example: use yellow notes

// FLOW OF THE EVENTS
- **introduction to first 5 blocks of the BMC**
- link to google jam sent on chat window
- **participants start working on first 5 blocks of the BMC**
- observation of participants (google jam canvas & faces on video call)
- time announcement: 10 min left
- time accouncement: time's up!
- **introduction to 4 last blocks of business model canva**
- **participants get back to google jam to fill out the last 4 blocks**
- time announcement: 5 min left
- time announcement: time's up!
- feedback time - back to google forms

// POST CONDITIONS
- filled out BMC
- feedback gathered

SERVICE DESIGN THINKING // ROUND 1: PERSONAS

// TIME: 20 min

// PRE-CONDITIONS
- intro to service design thinking
- intro to personas
- persona template explenation
- persona example showed on google jam
- google jam guidelines for persona creation: use pink notes

// FLOW OF THE EVENTS
- get back to google jam
- participants start working on persona
- observation of participants
- time announcement: 5 min left

// POST CONDITIONS
- created personas
- new perspective on customers & customer relationship blocks

SERVICE DESIGN THINKING // ROUND 2: ACTORS MAP

// TIME: 20 min

// PRE-CONDITIONS
- intro to actors map
- H2 create actors map
- actors map example showed on google jam
- google jam guidelines for actors map: use blue notes

// FLOW OF THE EVENTS
- get back to google jam
- **instruction: how to list out the actors on the map**
- **participants start working on listing out actors map**
- **observation of participants**
- **time announcement: 5 min left**
- **time announcement: time's up!**
- instruction how to connect actors
  - use black pen to connect actors
  - use red pen to connect actors which have no interaction with each other
  - use transparent notes to mark opportunities on red lines
- **participants get back to connecting actors and mapping out opportunities**
- observation of participants
- time announcement: 5 min lef
- time announcement: time's up!

// POST CONDITIONS
- created actors map
- new perspective on key partners, channels, key activities blocks

BMC CANVA FILL OUT TIME // ROUND 2

// TIME: 15 min

// PRE-CONDITIONS
- first BMC fill out
- personas creation
- actors map creation
- second fill out guideline: use green notes

// FLOW OF THE EVENTS
- get back to google jam (the first filled out slide of BMC)
- participants start working on second fill out of BMC
- observation of participants
- time control

// POST CONDITIONS
- 2 variations of BMC (before and after service design thinking tools implementation)

WRAP UP

// TIME: 15 min

// PRE-CONDITIONS
- all participants done with fillig out BMC
- all participants done with giving feedback on google forms

// FLOW OF THE EVENTS
- thank you
- questions time
- open feedback discussion

// POST CONDITIONS
- gathered feedback on Google Forms
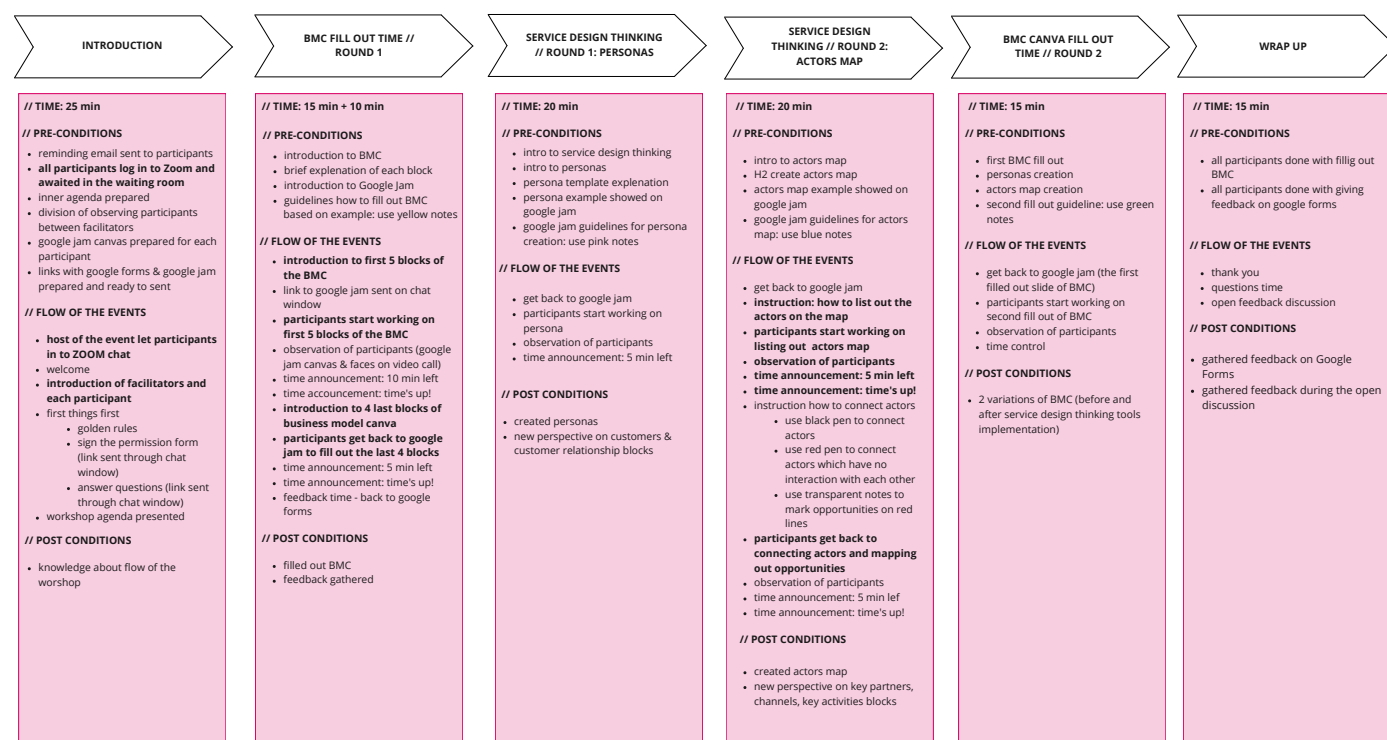- gathered feedback during the open discussion

Figure 39: Flow of the first round of the workshop

The important feedback regarding the improvement of the workshops, which is relevant to mention, is that the participants of the second round of the online workshops felt that some of the slides could have been less text-heavy. Their main argument was that during the online session it was hard to focus both on the facilitator speech as well as the text on the slide. The possible solution would be an infographic communication instead of heavy text.

Another important matter was regarding the first fill out stage of the BMC. The participants would have felt more comfortable that after each block that had been explained, they would have had a possibility to fill out that particular box on the canvas.
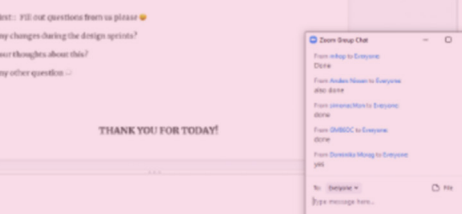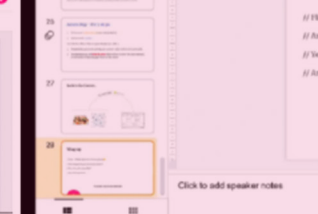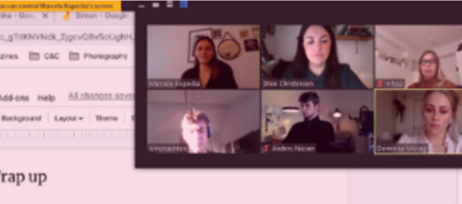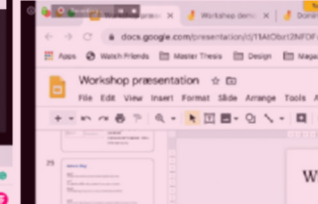
However, considering the time frame, the decision was made to firstly redesign into a model such as:

"explanation of all nine blocks and then first fill out". After the feedback from the first round workshop, the model has changed to: "explanation of the first five blocks and first fill out, back to last four blocks and completion of the BMC".

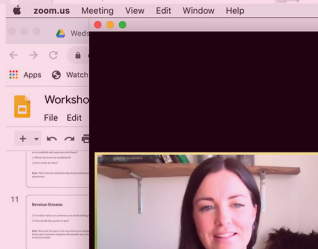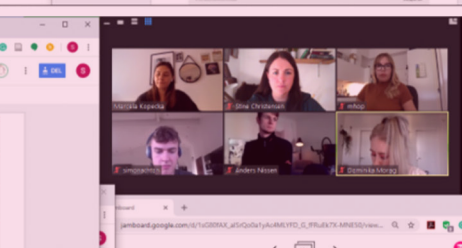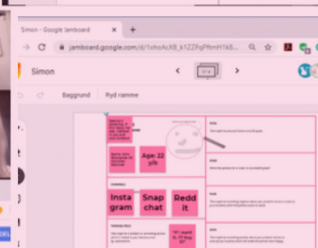Taking into consideration the two points of feedback given to us by participants from the first and second round, the conclusion might be made that another round of testing should be done with the model of: "one block explained back to fill out of a particular block".

That would be the only way to measure the success of all of the above-mentioned models and compare them to each other. At this moment, we can only assume that participants had different needs and perspectives of the facilitation and understanding of the slides and tools.

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First things first

// golden rules
//sign the permission
// answer some questions

workshop – use the link 🙂

The Business Model Canvas

Wrap up

// First : Fill out questions from us please 🙂
// Any changes during the design sprints?
// Your thoughts about this?
// Any other question ...

THANK YOU FOR TODAY!
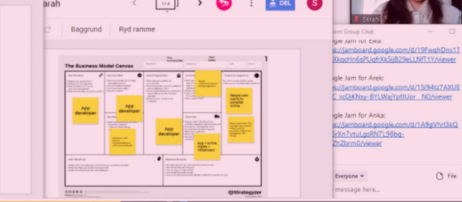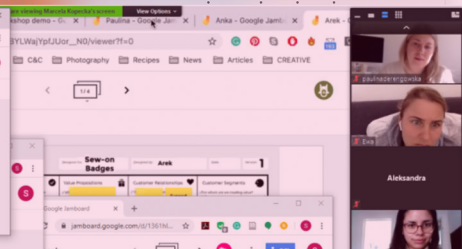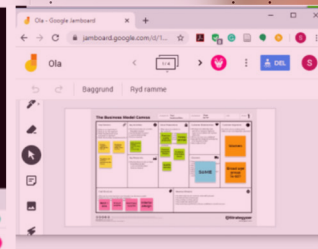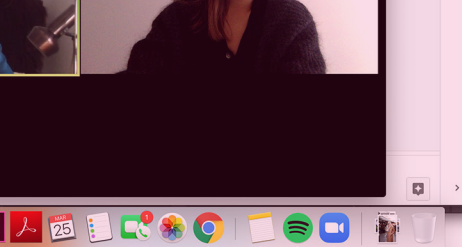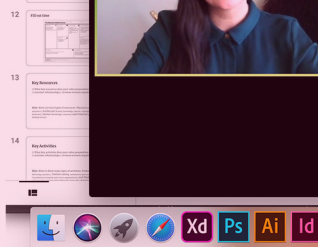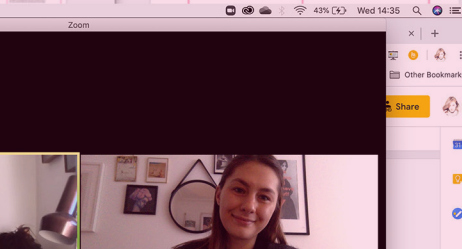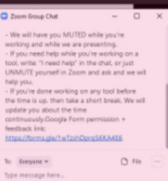
4.4.2 Participant overview

Through the two rounds of workshops, there were a total of ten participants, seven females and three males. In this section, we aim to give a simple overview of all of the participants from the collected information from them (which can be seen in Appendix 4). Underneath the overview, there will be a deeper explanation of each case. Each case will be described including the status of their ideas and goals for the workshop.

IDEA/ BUSINESS NAME	STUDY/ WORK AREA	SECTOR	START DATE
A) Language School	Service	Private sector	01.06.2020
B) Sew-on badges	Service	Retail/E-retail	23.05.2020
C) Nail studio	Nail art services	Service	23.03.2020
D) Let's dine	Project Management	Social Networking	23.02.2020
E) Virtual Party	Travel	Entertainment	05.01.2020
F) OblivioN	Restaurant Industry	Service Industry	05.01.2020
G) Community Garden	Sustainable Design	Farming	01.02.2020
H) Project Poseidon	Entrepreneur	Aquamarine	25.03.2020
I) Make-up Library	Makeup artist	Makeup/Beauty	25.03.2020
J) Todoo	UX Design	Entertainment	20.03.2020

Figure 40: Participants overview

Language School

A woman in her mid-twenties started the idea for Language School. She wishes to help people who want to learn a new language in an easy and cheap way. She has this goal because of her own experience, where she moved to a new country and did not know the language. She will focus on creating an online community and teach through others. Her goal for the workshop is to understand how she can get started with her own business.

Sew-on badges

Sew-on badges is an idea made by a man who wishes to give a product to the creative youth generation that he is also a part of himself. He has not started yet but is still working on how this idea might come alive as he has a lot of ideas for startups. This is also his goal for the workshop: to understand how you work with new business ideas.

Nail Studio

The young woman that came up with the idea of the nail studio wanted to create a local community for women of all ages focusing on a premium experience, design, and quality. She had already worked a bit on the idea and felt ready to take the next step. Her goal for the workshop was to test the idea through the BMC as well as to see how the Service Design tools could affect her point of view.

Let's dine

Let's dine started in March 2020. It's a platform/community for people who are passionate about food, the sharing economy, and food waste. It also specializes in supporting people with specific food preferences. It will be a network with different groups, where you can chat and connect with similar people. The goal for the young woman entrepreneur behind Let's dine wished to get insight into the BMC and the Service Design tools to get further with her business.

Virtual Party

The idea for a virtual party platform occurred from the time in quarantine. These times call for creative ideas and new businesses. The virtual party platform wishes to bring people together and give the possibility to meet new people in social arrangements, even when you cannot leave your home.

OblivioN

The restaurant idea OblivioN was created by a young woman, living in Denmark but with roots in Poland. She wishes to bring the polish traditions and customs to Denmark through food. She would do this by focusing on storytelling and creating an experience for the customers. It would be a unique experience with home-made food chosen by the chef and no menu card with new experiences every day. She joined the workshop hoping to get closer to her final business execution.

Community Garden

The Community Garden is a project between the male entrepreneur, the municipality and schools/private communities. This project would bring young parents living in the city closer to their city and their children and their children's school by giving them the opportunity to grow their own food. This would provide all participants with information about growing their own food as well as access to gardens in the city and a connection between all actors. He joined the workshop to get a clear understanding of the values he brings and who he should involve as well as understand how he should engage with them.

Project Poseidon

Project Poseidon was started by the youngest entrepreneur attending the workshop. He was only at the beginning of his twenties but knew exactly what he wanted. His goal was to make diving a less intimidating and more beginner-friendly experience with better equipment. He had already made a prototype of his product and talked passionately about it. This was also his goal for the workshop: to explore the ideas of other people as well as spread the word about his own creation/idea.

Make-up Library

The young fashion interested woman behind Make-up Library works as a makeup artist herself. This is also where her interest started in creating a delivery service for renting new makeup products for makeup artists to try out new trends in Copenhagen. She also studied at Aalborg University Copenhagen and is in her first year of the Master Service Systems Design. This is why this workshop piqued her interest, she wanted to work with and practice the Service Design tools into her idea and interests.

Todoo

The Todoo app also occurred during the COVID-19 quarantine. This app would help families and singles to generate and share ideas of what to do during quarantine times. It would be a mix of social media, information, idea creation and a place just to have fun. The young female entrepreneur behind the idea participated in the workshop to see if it could help her to clarify some aspects of the development and how to accelerate forward, as well as understand how we would use the Service Design tools as she is also working within this field.

These ten participants all joined the workshop with different ideas and minds. The majority expected to get some kind of understanding of their idea as well as help on how to move forward and closer to a final business. However, some also had a wish to understand and use Service Design tools and see how this might affect their business or ideas.

4.4.3 Outcome of the online workshops

In this section, the outcome of the workshops will be described and analyzed. This will be done to get a better understanding of how the Service Design tools influenced the usage of the BMC. First, the measurements, feedback, and observations of the participants will be presented and reflected upon. Then a deeper analysis of the BMC will be made together with a cross-case analysis of the participant, which will all end out in a reflection of the whole process and the results.

4.4.3.1 Measurements

During the workshop, the participants were asked to fill out a questionnaire both before we started, during the process (after the presentation and first fill out of the BMC) and after (the use and incorporation of Service Design tools to the canvas). Here is an overview of the participants' answers of 'with your current knowledge, how confident do you feel with the BMC?' both before, during, and after.

DEVELOPMENT OF BMC COFIDENCE (from 1-10)

PARTICIPANT	BEFORE	DURING	AFTER
A) Language School	2	5	7
B) Sew-on badges	7	7	9
C) Nail studio	4	7	8
D) Let's dine	5	8	9
E) Virtual Party	2	4	7
F) OblivioN	9	9	9
G) Community Garden	6	7	9
H) Project Poseidon	1	5	9
I) Make-up Library	5	7	7
J) Todoo	6	7	8

Figure 41: Answers from participants about their confidence to BMC

Development of business model canvas confidence (from 1-10)
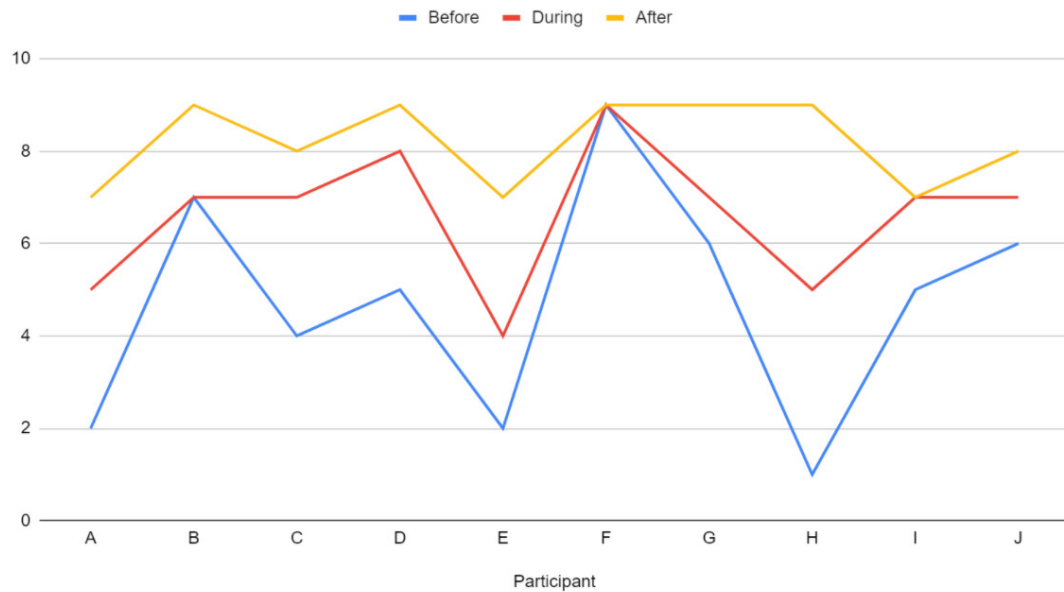
Figure 42: Graphic of the answers from participants about their confidence in the BMC

In the table and diagram, it is shown that almost every participant (except one) is starting at a low or medium level of confidence in the BMC. This rose when the BMC tool was explained (during) and seemed to rise even more after the Service Design tools were used (after). This gave us the understanding that the Service Design tools are useful for gaining confidence in the BMC tool.

With your current knowledge, how confident do you feel with the Business Model Canvas

10 svar

Figure 43: Confidence in BMC before the workshop

With your current knowledge, how confident do you feel with the Business Model Canvas
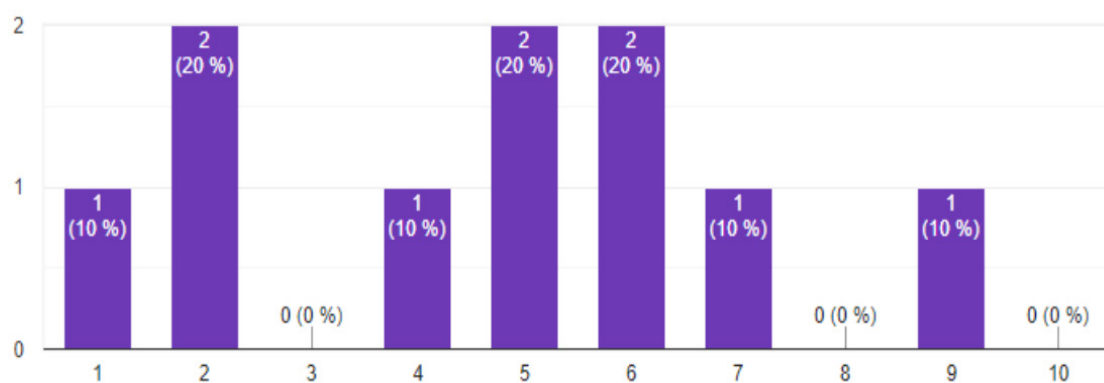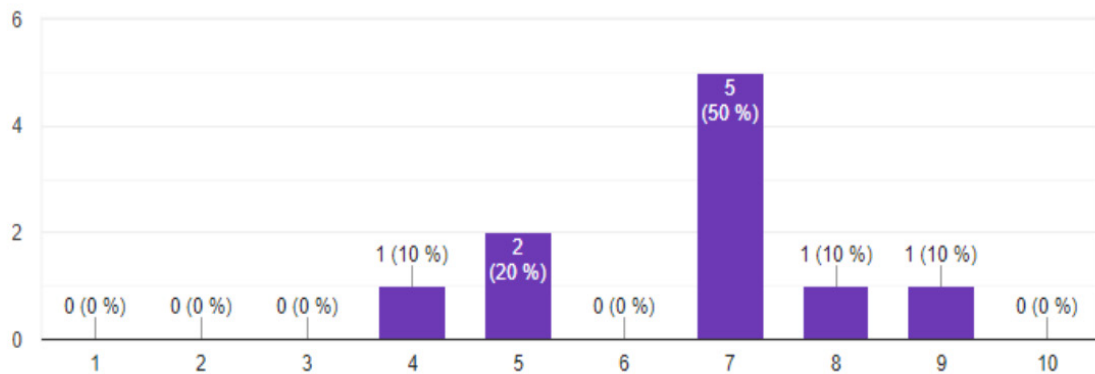
10 svar

Figure 44: Confidence of BMC after the presentation and fill out of the BMC

With your current knowledge, how confident do you feel with the Business Model Canvas
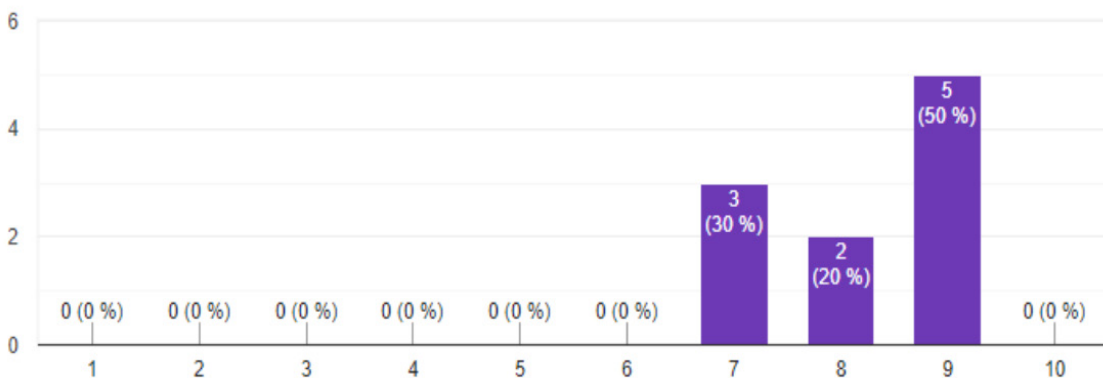
10 svar

Figure 45: Confidence of BMC after the presentation and usage of the SDT in the BMC

The term confidence can mean different things to each participant. It might mean "how well you know the area" or "how well you can do something" or "how well you can explain something" (Sufi et. al., 2018, p. 7). The different understandings of the word did not have an influence on our study, as what we were looking for was an individual's perceived change in confidence, whatever that would mean for them. At the same time, we were also aware that asking about confidence had some limitations, as the participants could find it a difficult or not direct question (ibid.). Also, they may not be able to connect 'confidence' with anything and just answer something without any thoughts beyond that. Furthermore, asking about confidence can still be helpful since we wanted to know whether the workshop made a difference for a particular technique of the BMC.

To measure the change in the confidence we made a timeline to measure emotional response in a quantitative form to see which part of the workshop influenced the participants' confidence the most (Wisler-Poulsen, 2015). The strength of this method is that the participants are asked while they are in the experience and can give a clearer indication of their level of confidence during the workshop (ibid.). At the same time, the participants did know that they were being measured. This could make them feel uncomfortable and might cause possible uncertainty in the end result (ibid.).

To understand if the workshop met the participants' intended goals, we asked about their goals before (described in section 4.3.5 Participant overview) and also after the workshop:

How did this workshop meet your intended goals?

Participant	Answer
A) Language School	A lot
B) Sew-on Badges	I verbalized my old business idea, I`m satisfied.
C) Nail Studio	It met all my goals
D) Lets Dine	This workshop gave me a better understanding of the tools and methods.
E) Virtual Party	It reached the final goal, I came up with new ideas but I may still need something to wrap it up a bit more so I can figure out the next step.
F) OblivioN	Very well, improved knowledge about tools, helped understand better Service Design and showed how important it is to create Personas and Actors Maps. Show the need of going into details for specific customers rather than market.
G) Community Garden	I got a little more out of my project and got some maybe partners I could contact!
H) Project Poseidon	The two instructors (Stine and Marcela) were both very competent and informative. They did a great job explaining everything in such a way that even I (who has never even heard about the BMC before) could easily follow along and still make good progress. All of my expectations have been met and I'm much more confident in my business structure now.
I) Make-up Library	I didn't expect anything, but I am very positively surprised how fast I was able to work with these tools. We tend to overthink and it was a good way to show that it's easy and fast. Also how much you can develop your business idea in just 2 hours. Really good job!
J) Todoo	Well my goal was pretty vague, it was mainly out of curiosity on what you guys are doing and as this business idea is somewhat in zero ground and on an idea level it may have not been so fruitful as it could have been if it was more evolved and certain things would have been already executed.

Figure 46: Measurements of intended goals

To ask about the experience, a well-known method was used to identify the differences in the expectations and the facilitations (Bechmann, 2010). These answers helped understand the participants' outcomes a bit more. Most of the participants thought they had come to a positive outcome and even learned something new. Some even mentioned the Service Design tools as the key to their learnings.

The most important factor for us in the workshop was to understand how and if the Service Design tools would influence the participants' work and understanding of the BMC. A question about this was therefore added:

Did you see any changes in your BMC after the usage of the Persona and Actors Map?

Participant	Answer
A) Language School	Yes
B) Sew-on Badges	Yes, I've added some promotion options
C) Nail Studio	Yes
D) Lets Dine	I could understand and describe my customer segment better after working with Persona and Actors map.
E) Virtual Party	Yes, it made it much more doable and easier to use when you visualize it like tha
F) OblivioN	Definitely
G) Community Garden	I think I should have more than one Persona to see how they would change, but will for sure make more Personas tomorrow! I have already made an actor map, but creating another one with a "fresh" mind helped!
H) Project Poseidon	Yes. I realized I was missing a few key partners to make my business model successful.
I) Make-up Library	Yes, but now many. I think that BMC is quite advanced, and just a few slides about it are not always enough to understand it fully. I believe I could elaborate more if I had better understanding. Although there were questions to help us, I would like to be able to have slides and see the hints that you had there, because I think they were more helpful.
J) Todoo	Very minor details I would say. An app development and a simple app such as this is not again so fruitful for filling out an Actors Map. However I think the Persona was really nice for this one because I think through this you get a grasp on how the app could serve multiple needs better and in more detail. In our business case more Personas are required to go through! The Persona resulted in filling out more detailed customer segments in the BMC. If it was a more complex business model than just an app I think the Actors Map is a valuable tool to go more in depth since the business model may not help in revealing those. Persona definitely helps in creating more in-depth customer segments and bringing understanding and empathy towards them. I think it definitely brought already new ideas on how we can develop the app and even some new concept ideas that may not suit this particular concept.

Figure 47: Measurements of changes using Persona and Actors Map

All of the participants seemed more or less positive about the Service Design tools and with their outcome using it. Although some more than others, which seems to be connected to their knowledge of the tools. The ones who were less positive about their outcome had a higher understanding and knowledge about the Service Design tools. This might be due to the fact that they might already have worked with the tools or knew the outcome. At the same time, the answers did show some frustrations felt by the Make-up Library. She felt that the BMC was too advanced a model and not something you can learn in a workshop. This can be connected to the limitations of the tools. This may be due to the fact that people tend to be afraid of the tool, but also to the fact that it is a model that is made to be used differently and in more steps. The participants with less or no knowledge about the Service Design tools were very positive, mentioning new learnings and changes in their BMC as promotion options, a better understanding of the customer segment, and a better general business understanding using visuals and missing key partners that would help the business direction to be successful.

In the second round of the workshop, additional questions were added at the beginning and the end to gain a deeper understanding of the participants' knowledge of the BMC to see if this would change during the process.

The question "how would you rate your current level of knowledge of the BMC?" was asked, giving the participants the following options:

1. I only know the name of the BMC.
2. I understand the purpose of the BMC.
3. I can describe the BMC.
4. I can apply the BMC to my idea/business.
5. I have a firm plan for how I am going to introduce what I have learned from this workshop into my further work of my idea/business.

This was asked both before and after the workshop, to see if their knowledge had changed during the process.

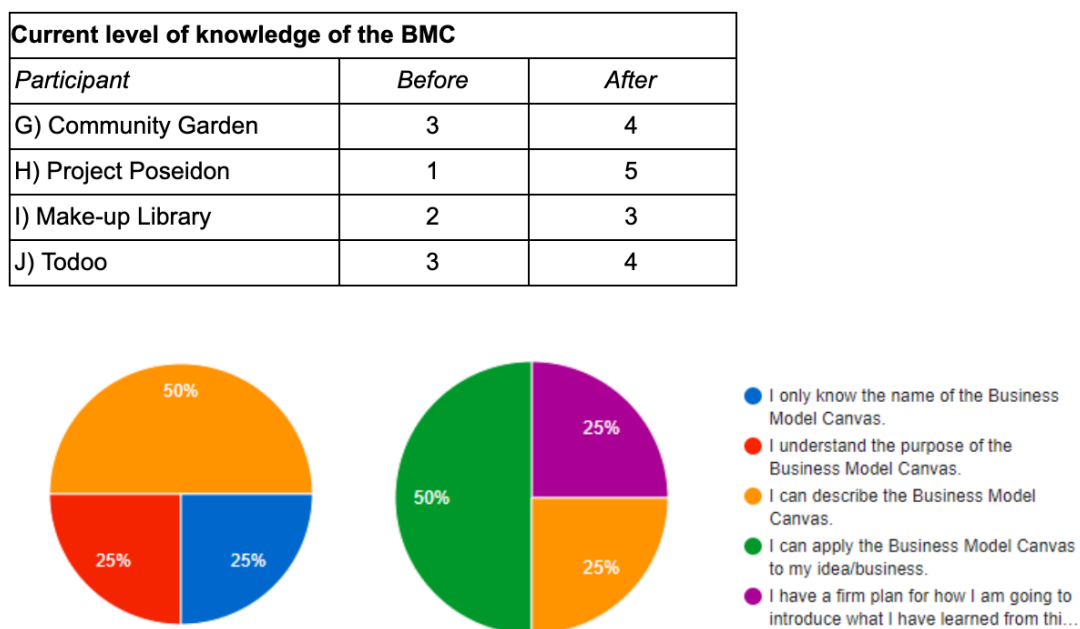| Current level of knowledge of the BMC		
Participant	Before	After
G) Community Garden	3	4
H) Project Poseidon	1	5
I) Make-up Library	2	3
J) Todoo	3	4

Figure 48: Current level of knowledge of the BMC before (left side) and after (right side) workshop

Most of the participants went one level up in their knowledge. The participant Project Poseidon went from only knowing the name of the model to the feeling that he could fully work further on with his business after the workshop. He seemed to work and learn fast and be very confident in his own knowledge, even though he was the youngest in the group.

In the second round, we got deeper into the feedback of the Service Design tools, asking which of the tools (Actors Map or Personas) they found most useful and why.

Which of the tools (Personas or Actors Map) did you find most relevant or changing for your BMC? And why?

Participant	Answer
A) Community Garden	Personas, when thinking through what the Persona would do, I can design more towards them than if I just make up everything from my mind.
B) Project Poseidon	The Actors Map - but only because I am terrible at creating a character that is not based on myself, and I have trouble critiquing my own work. The Actors map helped me visualize all the different aspects of my business model and strategy in a way I hadn't previously thought of. This made it much more clear what needed to be changed and focused on.
C) Make-up Library	Actors map, because you try to think of everyone around you first, without overthinking how could they help. and then try to connect the dots. Personas maybe if they were based on real life scenario (survey/interviews)
D) Todoo	Persona - Actors map is not so valuable if its a simple app development

Figure 49: Measurements of Personas and Actors Map

4.4.3.2 Feedback from participants

Two said Actors Map, while two said Personas. This gave the insight that the usefulness of each tool can depend on what kind of project, the stage, and what kind of knowledge the participants already have. Community Garden answered Personas, but earlier had explained that he had already made an Actors Map for his idea. Todoo also found Personas most useful but explained it with this kind of project. The project Poseidon and Make-up Library felt they got most out of the Actors Map, saying the Personas were too difficult to make up from nothing. Both tools seemed to help the participants to visualize their work and get a deeper understanding of their business model even if they felt they got nothing out of it.

As some people tend to express themselves better verbally rather than through writing, we also invited the participants to give us feedback and talk about their learnings/outcomes at the end of the workshop.
Here are some of the learnings:

- Visualizations really help the understanding of a project
- The BMC is not as difficult as expected
- Actors map was a good match with the BMC since it was easy to incorporate it into the model
- It is great to force the outcomes of tools by having a time limit. They tend to give up on using the tools because they would think it takes a long time, but you can actually get something out of it even in a short time.
- Interactions are important during a workshop which is difficult online

4.4.3.3 Participants workshop journey: the first and second round of the online workshop

To visualize the participants' journey and general observations during the workshop their journey throughout the steps of the agenda was mapped out based on the observations and feedback from the participants (see Appendix 4 and 5). Due to the fact that two rounds of the workshop were facilitated, two separate journeys were created in order to give a clear picture as well as to find differences between the two sessions.

The very first observation from both Figures 50 and 51 is noticeable in the first phase "**BMC FILL OUT // first round"**. The participants from the first round seem to cope with that step on very different levels when the par-ticipants from the second round were rather coherent in their skills. That might be connected firstly with the ma-turity of the business level and BMC knowledge as well as with the fact that the introduction to the BMC as a method was different in the first and second rounds. In the first round, all of the BMC blocks were introduced, and then participants were working on filling it out.

Although in the second round, the five blocks were introduced first after which participants would fill them out, and then the rest of the four were presented and followed up with their creation by the participant. That might provide a conclusion that the better guidelines of the tool helped the participants from the second round to understand the tools better as well as kept them on the same level of knowledge. The presentation of the BMC to the participants of the first round might have been too chaotic for some of them. Furthermore, no time for extra assistance was provided.

The same conclusion might be made regarding phase 3 - "**SERVICE DESIGN THINKING // ROUND 2: ACTORS MAP".** In this phase, the presentation of the tool was also changed after the first round of the workshop. Based on the feedback the extra assistance was added during the creation of the Actors Map. As we can see from the journey, the participants of the second round gained a much better understanding of the tool which is reflected in their high performance. In comparison, the majority of the participants from the first round struggled with how the tool should be mapped out and did not follow the guidelines presented before the creation of the Actors Map. The specific feedback of the participants can be found in Appendix 8.
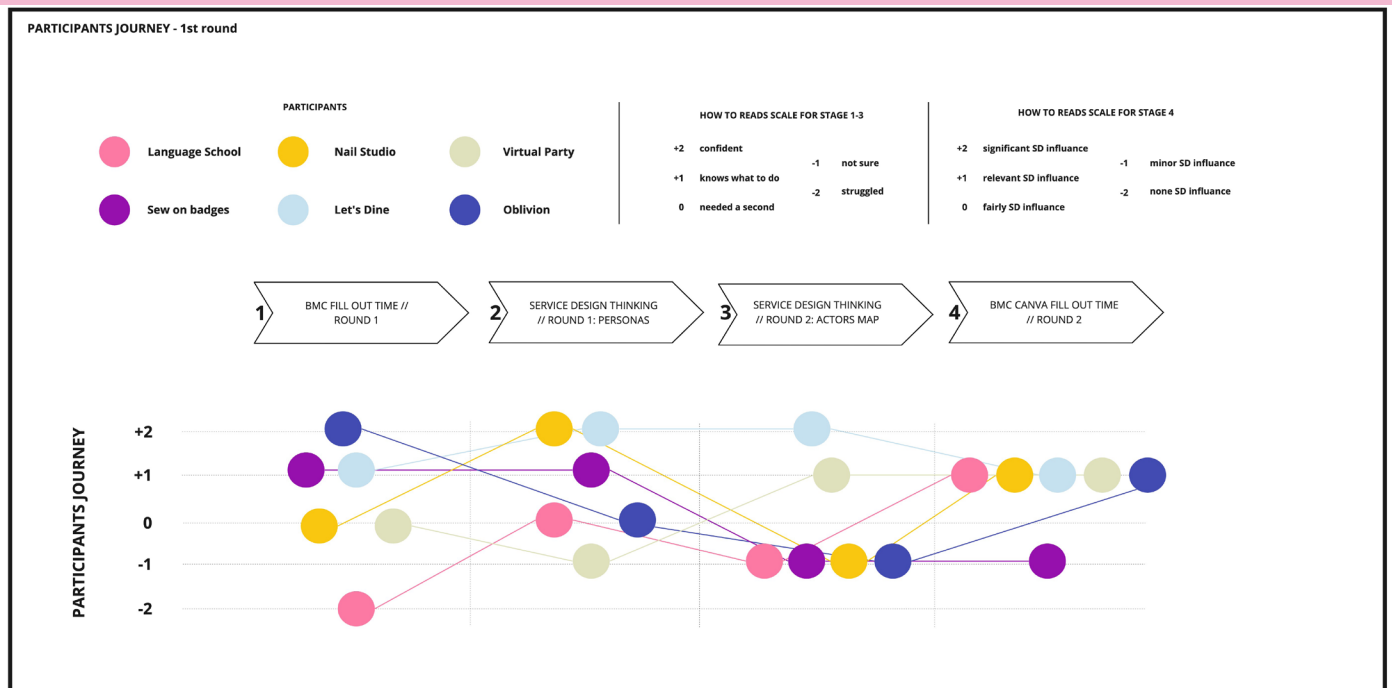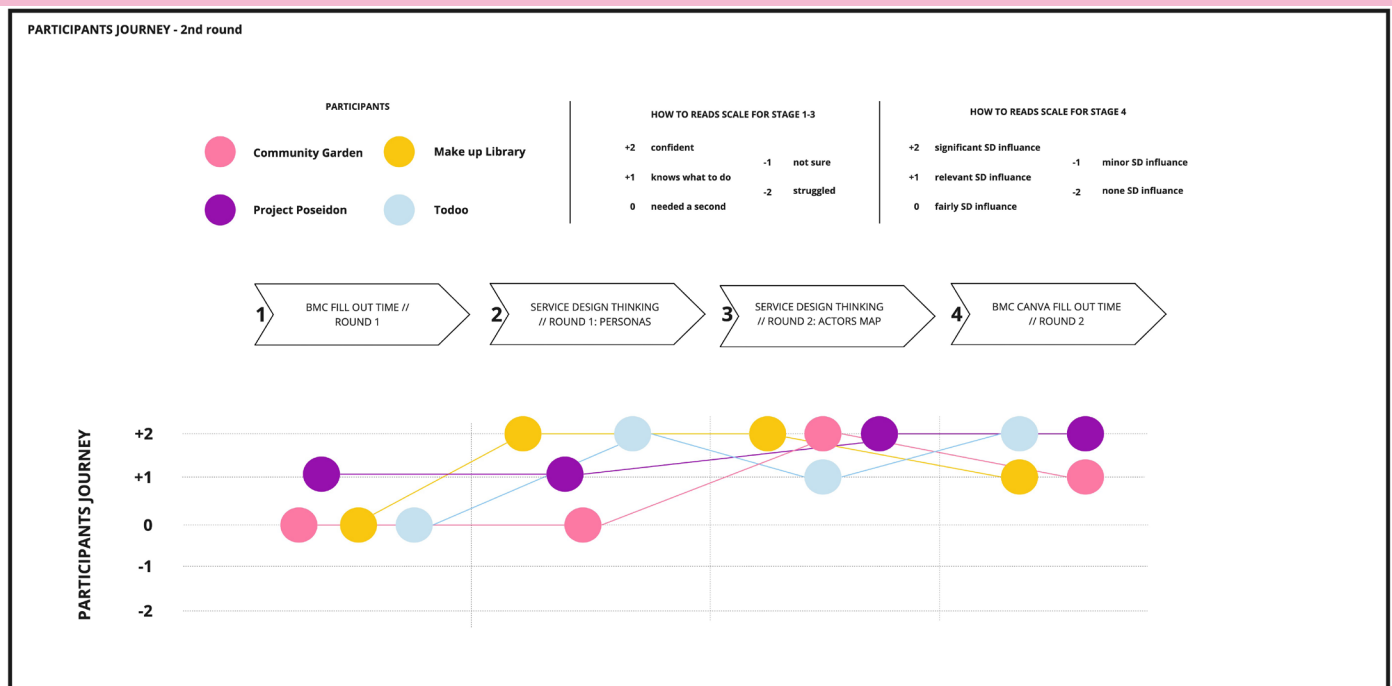
Figure 50: Participants journey - 1st round

Figure 51: Participants journey - 2nd round

4.4.3.4 Participant analysis of the Business Model Canvas: before and after Service Design tools implementation

To give a visual understanding of how the participants BMC looked before and after the creation of the Service Design tools, here we added all participants' BMC with a short analysis of each. The yellow sticky notes are added by the participants after they got an introduction to the BMC and the green after they created their Persona and Actors Map.

A) Language School

Figure 52: BMC of Language School
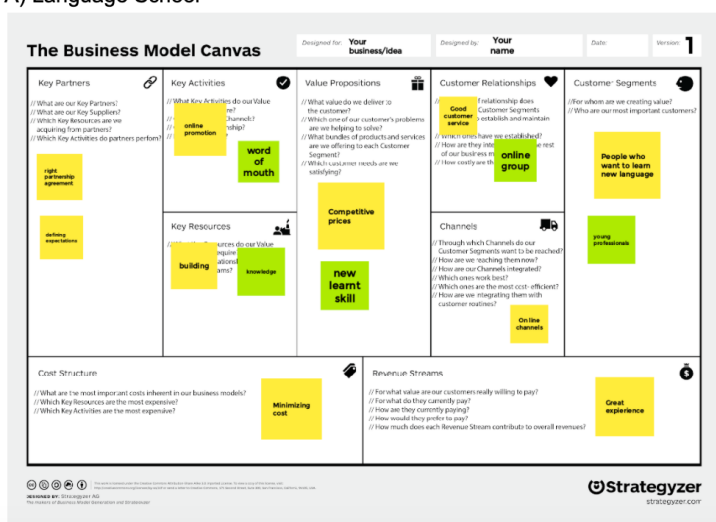
Language school went from 'people who want to learn a new language' to focus on a specific customer segment of young professionals. This created the understanding of a more specific value proposition as well as knowledge of the relationship to the segment which will be through online groups. The participant also seemed to understand that they might need more resources than themselves, including someone with a different set of skills and that one of the activities required is word-of-mouth.

B) Sew-on Badges

Figure 53: BMC of Sew-on badges

This participant was the one that seemed to get the least out of the Service Design tools. The only new thing to the canvas added was the social media in channels. The channels were made more specific which seemed to be that the participant gained a better understanding of how and where to catch the customer segment but did not seem to get more out of the tools. This participant also seemed very distracted throughout the whole session which can have affected the outcome.

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Figure 54: BMC of Nail Studio

When Nail Studio created the BMC, a misunderstanding of the colors was clear. The instructions were given that the participants should use only yellow sticky notes in the first round and green in the second. Nail Studio used different colors for the blocks instead but as we could observe their work throughout the whole process we would know which notes were added in the first and second round so it did not influence the analysis of the work. Nail Studio already had a good understanding of specific customer segments but added the local note after the creation of the Service Design tools. This created the channel of local community groups. The Customer Relationships block was empty before the creation of the Service Design tools but the participant seemed to gain a lot of understanding of the customers and how to build a better relationship. The Key Resources block was also empty, but the Service Design tools made a note that it was not just a nail studio but a high quality/premium design studio. This could indicate that the participant understood what the customer wanted from them. Additionally, marketing costs were added which was a good combination of all the online factors that the participant added to the customer side.

Figure 55: BMC of Let's dine

Let's dine had already an analyzed idea; they just wanted a deeper understanding of it. The Service Design tools seemed to help this participant to understand and describe the customer segments much more. Here there are a lot of specific notes about different segments including both behavior, wishes, needs, and geography. They also further understood that the relationship with the customer should also include a rating and commenting system so the customer could be included in the service. The sharing economy was also added to the value proposition, which seems to come from a deeper understanding of the customer.

E) Virtual Party

Figure 56: BMC of Virtual Party

Virtual Party had a more cautious Personality and approach to the BMC and added fewer notes than the rest of the participants. They only added new notes to the left side of the canvas, which seems to be connected to the participant's usage of the Actors Map. Here they added new possibilities in Key Partners as influencers and investors, which they had forgotten about till now. This also created the inclusion of cost to marketing/promotion. The participant also seemed to gain the understanding that further development and possible testing could be needed.

F) OblivioN

Figure 57: BMC of Oblivion

This participant displayed her frustrations with the post-its notes during the session which is also visible in the end result. They added notes to be transferred from the Actors Map where the participant added new Key Partners that would make their startup stronger. They added local distilleries, happy helpers, and possible cooperation with already existing Polish shops in Denmark. This would add some extra costs and the understanding that the startup should also include sustainability in their resources. This might come from the understanding of the Persona as well as the Actors Map.

G) Community Garden

Figure 58: BMC of Community Garden

This participant was unable to see the BMC template on their screen and had to draw their own lines. This could have created a misconnection in what was taught since this participant did not have the include descriptions in each block of the template, which were added to help the participants. Even without the template, the participant still managed to fill out all of the blocks and added new notes after the usage of the Service Design tools. The analysis of the results was harder since the participant did not say much during the workshop and it was not possible to talk individually as we could have done in an offline setting. The added notes seemed to be transferred from both the Actors Map and the Persona and the participant also gave the feedback that both tools helped them to understand the business better.

H) Project Poseidon

Figure 59: BMC of Project Poseidon

I) Make-up Library

Figure 60: BMC of Make-up Library

Project Poseidon had a hard time transferring the learned knowledge to the BMC. Additionally, they found that the Persona was hard to create from the users' perspective and not the participant's own perspective. This can also be seen in the end result where the participant only added three new notes: prototyping in Key Partners (they would probably need help with this), retailers to activities, and shipping costs to the value proposition (they could have gained the knowledge that the Persona would prefer free shipping and therefore buy more). This does not seem like a lot of new learnings but from the observations and the feedback, the participant expressed they got a lot more out of the tools than shown through the notes. This gave us the understanding that the learnings might be hard to transfer between the tools and that this should be taken into consideration.

The Make-up Library had a hard time getting the Google Jams to work and did not manage to get the BMC template to be shown. This resulted in a messy plate with a lot of sticky notes all around a blank screen which was harder to understand. Reading all of the notes and comparing it with the usage of the Actors Map and Persona, it could be understood that this participant actually changed the direction of the project using the Service Design tools. The added value proposition of makeup delivery with a description that there would be 'no need for going to photoshoots with luggage' seemed to have influenced all of the extra six added notes to the canvas. The direction of the business would change from only renting out makeup to a delivery service delivering full makeup kits to any location. This would create new Key Partners as a luggage company, influencers, and a delivery company.

J) Todoo
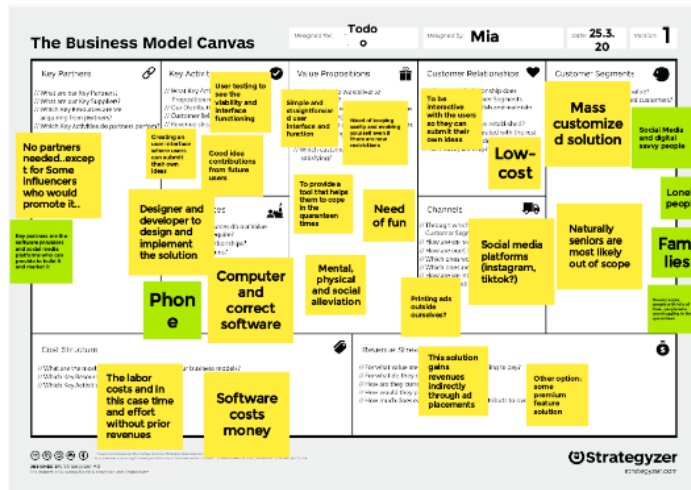
Figure 61: BMC of Todoo

This participant gave the feedback that the Persona helped the most when creating the BMC. The newest added notes were also added to the Customer Segments block where the focus changed from a mass customized solution to more specific customer segments such as lonely people, families, quarantine people, bored people, and digitally savvy people. The Actors Map also seemed to have an influence even though the participant did not feel it. The Key Partners went from 'no partners needed, except for some influencers who would promote it' to include software providers and social media platforms that would provide and build it. These seem like really important partners for an online business, which showed us that the participants do not always can see their own learnings of the tools.

4.4.4 Combined analysis of the Business Model Canvas

To get a combined understanding of how the Persona and Actors Map influenced the BMC of all the participants, a visual, qualitative analysis, and reflections of the added sticky notes were made (see Figure 61). This showed that notes were added to both the left and the right side of the canvas after the creation of the Service Design tools. The left side is surrounded around partners and activities which can be directed to the Actors Map. Whereas the right side is directed at the customer and relation which can be directed to the Persona. These connections can not be confirmed. Both sides of the BMC could be possibly connected to both SDTs. The participants could have added new notes to the BMC only from learnings from one of the SDT, none at all, or a mix they made. Therefore, these connections can not provide a conclusion only to be assumed as participants fill out the BMC after the presentation of two SDT not one after another. In total, all of the participants added 55 new sticky notes to the canvas after the creation of the Service Design tools. This is an average of 5,5 new notes for each participant. Most new notes were added in the Customer Segments and Key Partners blocks which make a lot of sense since the tools were surrounded around these.

BMC ANALYSIS AFTER ACTORS MAP & PERSONAS
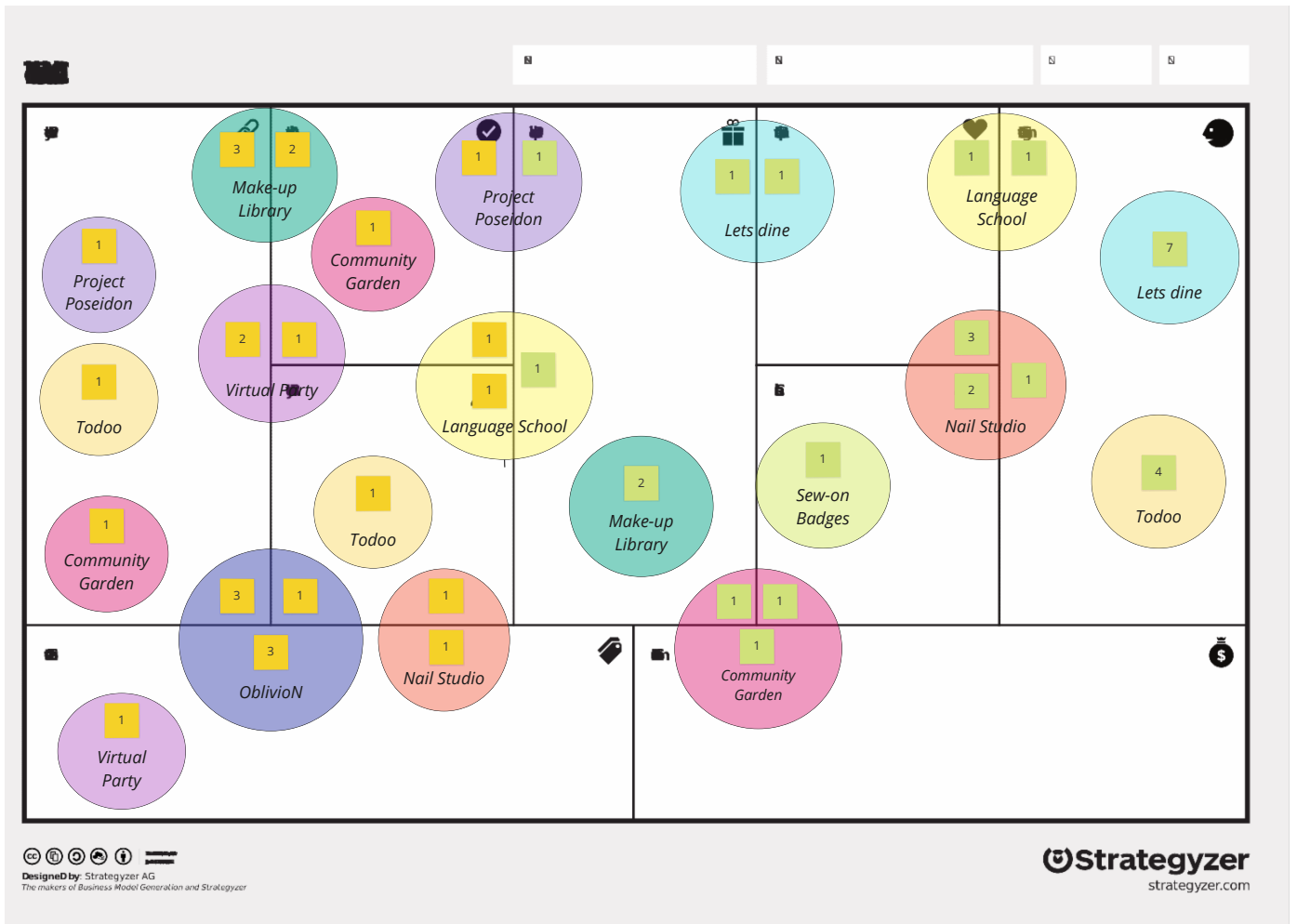
Total added post-its in right & left side of canvas

26 = Left side		**55** = In total
/ 2,6 new post-its pr. participate		
29 = Right side		/ 5,5 new post-its pr. participate
/ 2,9 new post-its pr. participate		

Lets dine: 0 | 9
Language School: 2 | 3
Nail Studio: 2 | 6
Sew-on Badges: 0 | 1
Community Garden: 2 | 3
Todoo: 2 | 4
Virtual Party: 4 | 0
OblivioN: 7 | 0
Make-up Library: 5 | 2
Project Poseidon: 2 | 1
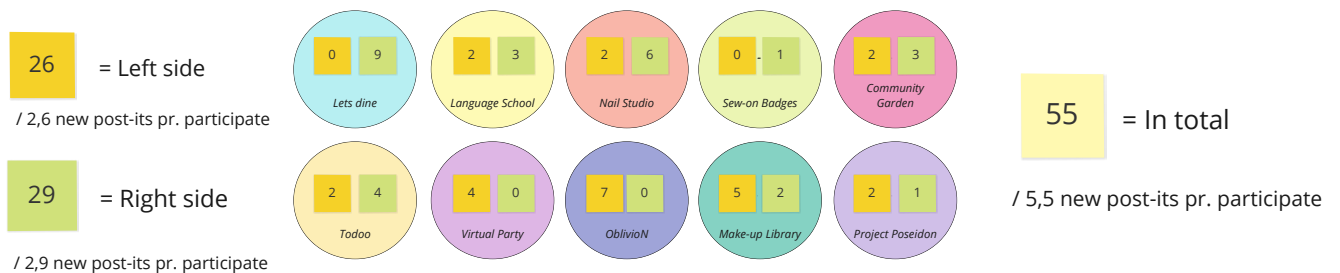
Total added post-its in blocks

13 = Customer Segments	**4** = Key Resources	
5 = Customer Relations	**6** = Key Activities	
4 = Channels	**11** = Key Partners	
6 = Value Proposition	**5** = Cost Structure	
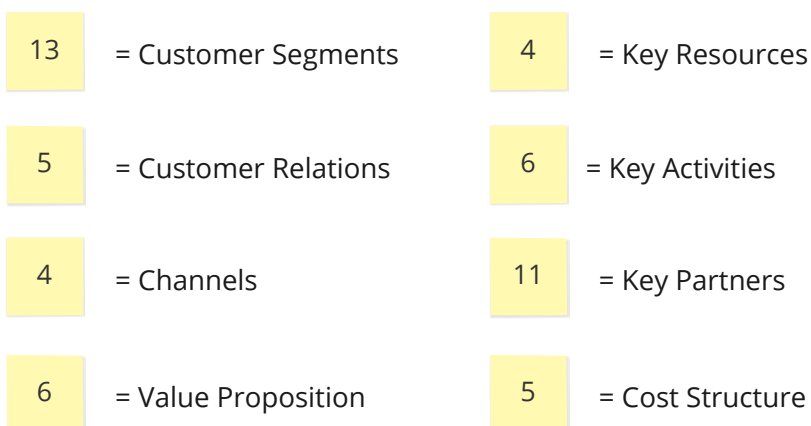
Figure 62: Analysis of added sticky notes to the BMC after the creation of Persona and Actors Map

KEY POINTS OF ADDED POST-ITS
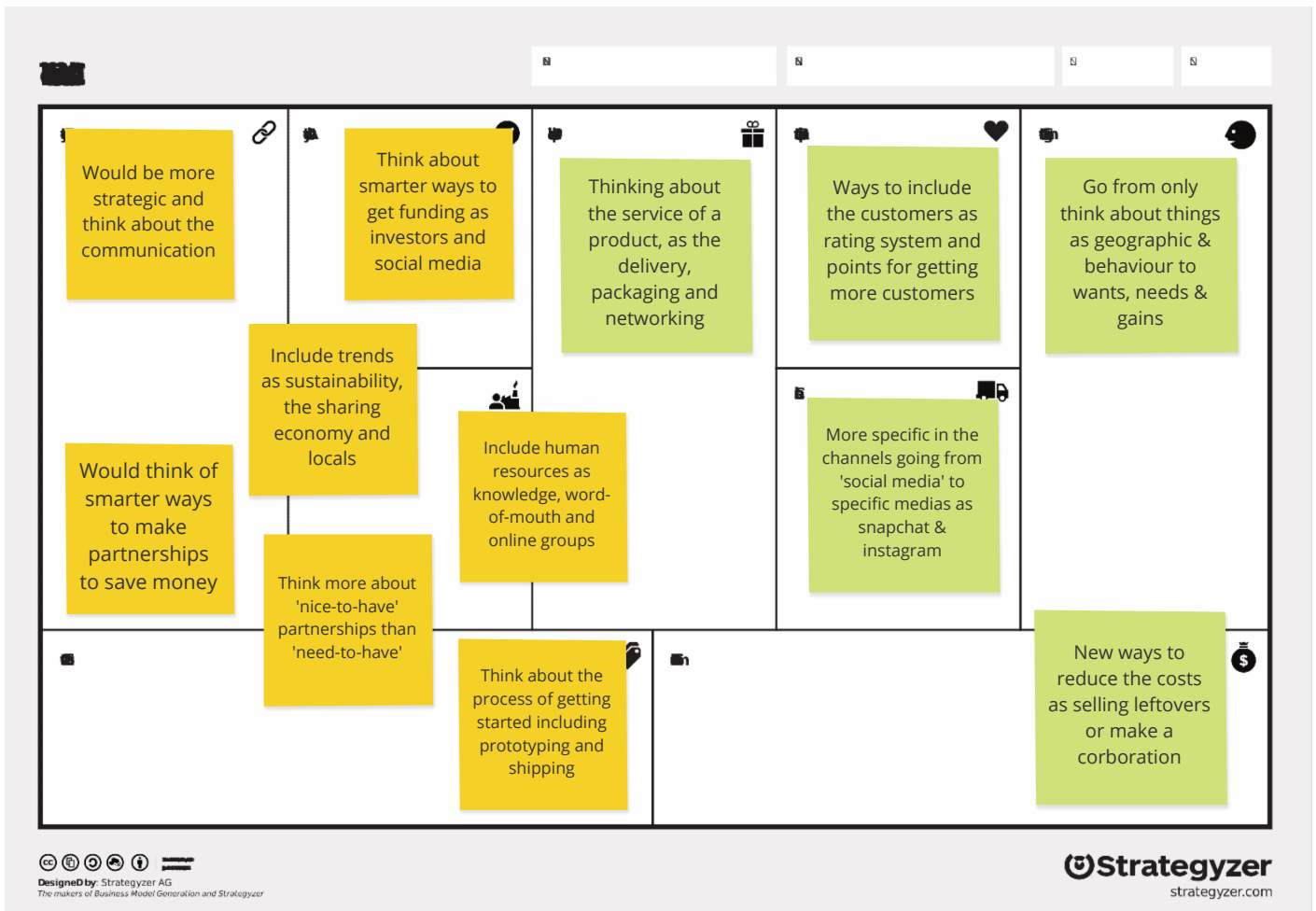
Figure 63: Analysis and reflections of participants feedback, measurements, observations

To get deeper into the analysis of the outcome, we not only wanted to include a quantitative analysis of the newly added notes to the BMC but also include a more qualitative analysis that would give us a better under-standing. Figure 62 shows some of the analyzed key points of the added sticky notes to the BMC after the creation of the Service Design tools. The notes are an-alyzed and reflected upon from the results of the feed-back from the participants, the measurements made, and the observations done throughout the workshop. This resulted in thoughts, actions, and reflections the participants might have had and done. The left side fo-cuses on the results from the Actors Map, whereas the right side is connected to the Persona. Some of the notes are also a result of both tools, but have been colored any-way, since the goal of the outcome is not to know which tool was the best, but only if and how they would affect the BMC.

Some of the most important learnings of the analysis were that the participants would think a lot more out of the box when designing their business. The Service Design tools would help them be more strategic and think of smarter ways to find and make partnerships, including trends, investors, and the power of social media. They would also be more holistic in their mindset, thinking about the process of how to get started and include the design around their product as delivery, packaging, and networking. They also seemed to gain a deeper under-standing of their customers' needs and designing more customer-focused businesses, including rating systems and specific channels.

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4.4.4.1 Cross-Case-Analysis of the outcome

To check if the observed is consistent with the participants' own feelings and feedback, a cross-case analysis of the two was made (see Appendix 7). Some of the main points from the analysis are pointed out here.

What they expressed.....	What we observed.....
Confidence in BMC raised from 7 (before and during) to 9 after the usage of Service Design tools	Only added one new note to the BMC after the usage of the Service Design tools
The most influential learning was the BMC introduction	After the creation of the BMC in the first round (after BMC introduction), two blocks were still empty but filled out after the usage of SDT
The customer segment block got improved from the SDT - both in understanding and description	Seems like the Persona had the most influence in the learnings of the SDT; added eight new notes in the Customer Segment block
Visualizations were the biggest factor for a better understanding of the business	Only added new notes in the Key Partner side of the BMC; seemed to get most of the learnings from the Actors Map
Had a measured confidence of nine through the whole process of creating the BMC	Was familiar with the BMC, and found it easier to create than the SDT
Felt that the Persona gave the newest created knowledge to the BMC	Added only new notes in the Key Partners and Activities blocks that seemed to arise from the creation of the Actors Map
Had already made an Actors Map for the business and felt, therefore, the Persona gave the most to the BMC	New notes were added all over the BMC after the usage of the SDT, but seems to be notes from the perspective of the Persona
Confidence went from 5 (during) to 9 after the creation of the SDT; felt the tools helped to gain a better understanding and know what to do next with the business	Had a hard time transferring the learnings from the SDT to the BMC; only added add three new things to the BMC after the usage of the SDT
The SDT did not help to develop more confidence or knowledge of the BMC	Created a new business opportunity and changed the whole direction of the business after incorporating the learnings of the SDT
The Actors Map can not help if it is a small business	Went from 'no partners needed' to adding two new Key Partners after the usage of Actors Map

Figure 64: Cross-case analysis of expressions vs observations

This analysis helped us understand that we needed to be critical of what the participants were saying and not just trust their feedback. The analysis of their actions also helped us better evaluate the usage of the Service Design tools.

Reflections

Taking the workshops to the online level had some limitations but also gave some valuable learnings. Online communication can be less transparent and we had a harder time getting the participants' attention. It can be harder to concentrate since you might have distractions from people around you or even your own computer. This can be easier to handle in an offline setting, where people tend to be more polite. One of the biggest weaknesses was that the online version would not allow us to walk around and help the participants while they were working on their own. Therefore, we can not get a real picture of what they were doing or create a conversation about their outcome without spending a lot of the other participants' time which we did not wish to do. At the same time, this is a good thing since we did not have any influence on the final outcome so the results did give a better picture of how future work would be done. One of the biggest strengths of the online version was that it made it possible to observe more of the participants at the same time. This would not have been possible offline, where we would have had to observe every participant one-on-one to gain a deeper understanding of what they were doing.

In the online setting, the participants did not have physical canvases/tools in front of them, which could have made the knowledge transfer harder. They could not look at the SDT at the same time as they looked at the BMC. The notes from the BMC could, therefore, be harder to create since they were only created from their memory. This could be made easier in the future, helping the participants to analyze and understand their created SDT and not just go directly from the creation of filling out the BMC.

The online version made it possible to record the sessions without distracting the participants. We could look back at the recordings and analyze our observations, based on both our roles as facilitator and observer. Observations are a highly recommended method to understand the users since it is often not the whole truth we get back in feedback (Wisler-Poulsen, 2015). It is not because the participants want to lie but often they are just not aware of their behavior (ibid.).

They will tend to give a rational explanation or a politically correct answer (ibid). This was also the reason why we used different methods as well as analyzed and compared them.

Thinking about the outcome of the workshop, compared to knowledge and learnings of previous offline workshops the main factors of why online workshops should be considered for the future are the final outcomes. The participants and the facilitator can get a high-quality outcome from an online workshop, whereas when they are in an offline setting they will end with a big paper with some notes on it. If this should be used further on, the findings would often need to be transferred online. The facilitator will often in an offline setting not even see what the participants created through the sessions and will have a harder time adjusting. Using the online version, the participants will have the online result ready for fine-tuning and the facilitator can use it for analysis after a workshop.

One of the main learnings from this phase which was not even considered before the workshops was when taking the workshops online it might create a better outcome and results for the users. This is also something to consider in the future since a lot of people in these times are forced to learn how to create the best solutions online. Perhaps we will not even go back to offline due to time, money and environment savings.

Looking deeper into the analysis of the outcome, we could understand that the Service Design tools could not affect all of the blocks in the BMC equally. The Cost Structure and Revenue Stream blocks focus on the cost and revenue of a business and are not something the SDT directly focuses on. This aspect should probably be included in the next step for AAU INC. They should look at the results from the SDT as well as test and analyze it from a financial perspective. This is also mentioned by Alexander Osterwalder in his video where useful supportive tools are explained.

The blocks Customer Segment and Key Partners were the most affected by the SDT, which makes a lot of sense since we used the Personas and Actors Map. The analysis did not give us any direct answers that either the added post-its came from the tools or if it can be divided as we did in the analysis. This made it harder for us to evaluate the two tools and give our exact recommendations further. We can only go with our assumptions and feelings from the observations and analysis. We also do not know if the new sticky notes added after the usage of the SDT are directly affected by new ideas or improvements for the businesses. It could also just be comments or thoughts of the existing added notes on the BMC. We could have included the participants in the analysis part to discuss this and not just decide from our own knowledge. In general, our measurements cannot assure that our findings are correct. We can not be sure that the collected data (what the participants say and write) is connected to their actions. This is also why we made a cross-case analysis to compare the expressed feelings and words with our observations and analysis of the participants. Nevertheless, trusting one outcome more than the other is not our main focus. However, we decided to take both into consideration when creating the final outcome.

We are aware that the used tools Persona and Actors map are not specific Service Design tools, but tools that should be used in cooperation with other methods such as observations, interviews and/or other Service Design tools such as the Customer Journey or Service Blueprint to give a more holistic and inclusive approach to the participants. We also received feedback from participants that it was hard to create the tools based on assumptions. In real life, the tools should be supported by learnings and this will be included in the final outcome but was not possible for us at this stage. If we had more time, we could have found entrepreneurs and followed their everyday life for a period to get a better understanding of how SDT might help them. We would also have liked to test more tools in the online workshop to get a better comparison of different results. The learnings from the SDT can also not be directly combined with the BMC. It was observed that it could be hard for the participants to transfer their knowledge from SDT to their BMC. They are not directly connected and wording, as well as boxes, can influence the participants' ability to do so. Therefore, participants sometimes felt they got less out of the tools than observed. This is something to be aware of and better analysis and understanding of the SDT should be included.

Our wishes were not to affect the outcome of the SDT and BMC from the participants. We aimed to design the workshop agenda so the participants would not get lost in the process and feel that they could not follow up with us or that they would not be able to concentrate throughout the whole session. Our first idea was to design the agenda differently, where the participants would go back to the BMC after creation of one SDT. This might give us a different outcome to analyze and a better understanding of the tools separately and not as something that is combined. Due to timing and the above-mentioned factors, we decided not to since we did not place our focus on the tools separately, but get an analysis of SDT in general. Our design of a specific structure did affect the final outcome but our different instructions did. We could see from just the two rounds of online workshops that changing small things in what we said or did would give a completely different outcome. In the first round, the participants had a hard time understanding and using the Actors Map. However, when there was a change of the instructions in the second round it resulted in a much better understanding and outcome. This is something we need to consider when creating the final outcome and make sure that the users will understand. As we only made two rounds of workshops, our final analysis is not based on a valid enough ground as we would have liked. Carrying on with more workshops and iterating on the process and design would have given us a much more valid result. Due to the time limit and the COVID-19 global pandemic, it was harder to get participants to join the workshop and it was more time consuming to create the workshops.

PHASE TWO: THE FOUR INDIVIDUAL SESSIONS

4.4.6 The Customer Journey individual sessions

The analysis of the workshop pointed out that the implementation of the Service Design tools such as Actors Map and Persona influenced the BMC by taking it to a higher more detailed oriented level. Nevertheless, the Actors Map, as well as Persona, seemed to be "soft" tools of Service Design meaning that they are also used in indifferent specialization areas such as marketing or Design Thinking. Moreover, the analysis revealed that the chosen Service Design tools influenced different blocks of the BMC which were varied by the participant. Unfortunately, due to online sessions and not enough control over the participant work we could not fully clarify which Service Design tools influenced the blocks. On the other hand, some of the participants used long sentences on the post-its which were a combination of the Actors Map and Personas Influence. All of the mentioned arguments, as well as self-critique towards the planned agenda of the workshop mentioned in the reflection section in the previous sub-chapter, brought us to the decision of facilitating the individual Customer Journey sessions.

A Customer Journey map gives a rich but well-structured perspective of a service users' experience. The touchpoints which are an interaction point between the user and service provide a broader perspective where the possible gaps can be found. Moreover, the accompaniment to the users' emotions makes the journey even more detailed with vivid points for deeper analysis of the service (Stickdorn & Schneider, 2011). From the Service Design perspective, Customer Journeys are often implemented in order to map out the current customer or user experience as well as to find new possibilities for improvement.

In order to bring as much insight which could give the participants a broader perspective of their business as well as possibly influence the BMC, the decision was made to design a template of a Customer Journey from scratch. A template presented in Figure 64 consist of four important elements:

1. The guidelines on how to start
2. Service and Service Moment bars to fill out
3. Personas template filled out on the first round of the workshop
4. The Customer Journey

SERVICE
:: Irma supermarket

SERVICE MOMENT:
:: Saturday morning
:: Chris doesn't have any products to prepare breakfast

HOW TO START?

1. Pick the service moment
2. Map out before the moment
3. Map out during the moment
4. Map out after the moment

NAME & AGE + the nickname

SKETCH YOUR PERSONA HERE!

BUSY CHRIS **38 yo**

GOAL
That might be personal desires and life goals.
- There is always a way to save up time!

DOES
What that persona do in order to accomplish
- Checking the website of the restaurant before visiting.
- It's nice to be prepared and ask good questions

CHANNELS
- LINKED IN
- FACEBOOK
- INSTAGRAM

PAIN
That might be something neg... ...uct/ service
your business which that per...
- Chaotic service
- when not enough attention is given

THINKS& FEELS
That might be a problem or something positive which is related to your business area. Eg. expectations.
- "Great quality is a key to success"

GAIN
That might be something posit... ...ce/ service
area of your business which w... ...re happ...
- Extra attention to guests
- If great service he always recommends a place to friends

Figure 65: Customer Journey template (own design)

BEFORE
How persona knows about service/ product?
How persona gets in touch with service/ prouct?

DURING
How the process of using service/ product looks like?

AFTER
What the persona does after using the service/ product?
Leaving the comment? Share experiance with others?

	BEFORE					DURING										AFTER		
customer journey	wakes up	his fridge is empty	checks coop's app	finds breakfast recipe & adds it to grocery list	leaves house	enters the shop	takes a basket	checks the grocery list	goes to the bread section and choose the bread	goes to the veggies & fruits section	checks the grocery list again	goes to the diary section& choose the recommended products	goes to the self - cashier	pays with the coop app	leaves the shop	gets notification about loyalty points	starts cooking	gets notification to rate experiance and recipe
touchpoint			coop app, phone	coop app, phone		door, brand signage	basket	coop app, phone	brand signages, products	brand signages, products	coop app, phone	brand signages, products	cashier	cashier, coop app, phone	door, brand signage	coop app, phone	coop app, phone	coop app, phone
feelings	relaxed	dissapointed	curious, hoped	curious	hungry	hungry	hungry	hungry	surprised of easy navigation	surprised of easy navigation	surprised of easy navigation	surprised of easy navigation	wants to do it fast	easy	in rush to go home, huungry!	happy	in good mood	Sure will do!
requirements			has downloaded app	algorithms which know his food preference		clean entrance	well maintained basket area	easy access to grocery list tab	well maintained, clean shop	well maintained, clean shop	easy access to grocery list tab	special section for recommended products	clean cashiers, easy to navigate	smoothly running app	thank you sign on the door	smoothly running app	app connected to spotify	smooth rating process
pains							only one big size of baskets		lack of labels	lack of labels		lack of labels	long line	lack of internet connection	arrogant personel			
gains				any special diet? (data)	navigation to the closest IRMA	smell of freshly baked bread				paper bags			personel always around		smiley personel	bill saved on the app	smart app - music as a nice thing	loyalty points after rating

line of interactions

The important part of the Customer Journey is the specified Service Moment as well as Persona which was designed by a participant during the workshop. When the Service Moment puts the Customer Journey into a specific frame and pushes the participants to focus on the particular point, the Persona helps them remember that the Customer Journey is mapped out from the user perspective.

The Customer Journey template was designed from the perspective of three stages:

- BEFORE - How does a customer/user know about service/product? What steps bring a customer/user to use the service/product?
- DURING - What the process of using a service/product looks like
- AFTER - What does a customer/user do after using a service/product?

As a result of this division, a participant will be able to analyze the holistic perspective of the journey. The perspective will be able to illustrate the journey which a user goes through while interacting with a service or a product without losing valuable information and activities which happen in the before and after stage.

To bring more insights as well as map out possible trouble which could be transformed into opportunities the Customer Journey is composed of six rows:

- Customer journey (steps) - what steps does a customer/user need to take?
- Touchpoints - what is the interaction point between customer/user?
- Feelings - how does a customer/user feel while going through each step?
- Requirements - what specific actions does the service provider need to take or accomplish so a customer/user can go through the journey successfully?
- Pains - what possible pains or gaps are there that a customer/user might come across on the journey?

Gains - what can the service provider additionally do to make the journey even more successful?

The important part to emphasize is the "line of interaction" which cuts through the Customer Journey template between the third row of feelings and the fourth row of requirements.

All of the actions which take place above the "line of interactions" must be mapped out from the perspective or particular user. Nevertheless, the actions which take place below the "line of interactions" should also take into consideration the perspective of the business provider. The Customer Journey mapped out in this way gives us a more complex picture which when done in a correct way might bring many valuable insights and findings never revealed before.

4.4.6.1 Participant profiles

Since the Customer Journeys were designed as individual sessions, the decision was made to choose a smaller number of participants from the last workshops with slightly different profiles as well as the maturity of the business idea. Thanks to our observations as well as Google Form answers, we were able to choose four participants who seemed to work the most efficiently during the workshops and whose business ideas were influenced the most by the Service Design tools. To capture all of the mentioned characteristics the special Participants template was designed which captures essential info about participants. This helped us understand the participants' personalities and create more personalized sessions for each of them, considering their individual knowledge, needs, strengths, and behavior.
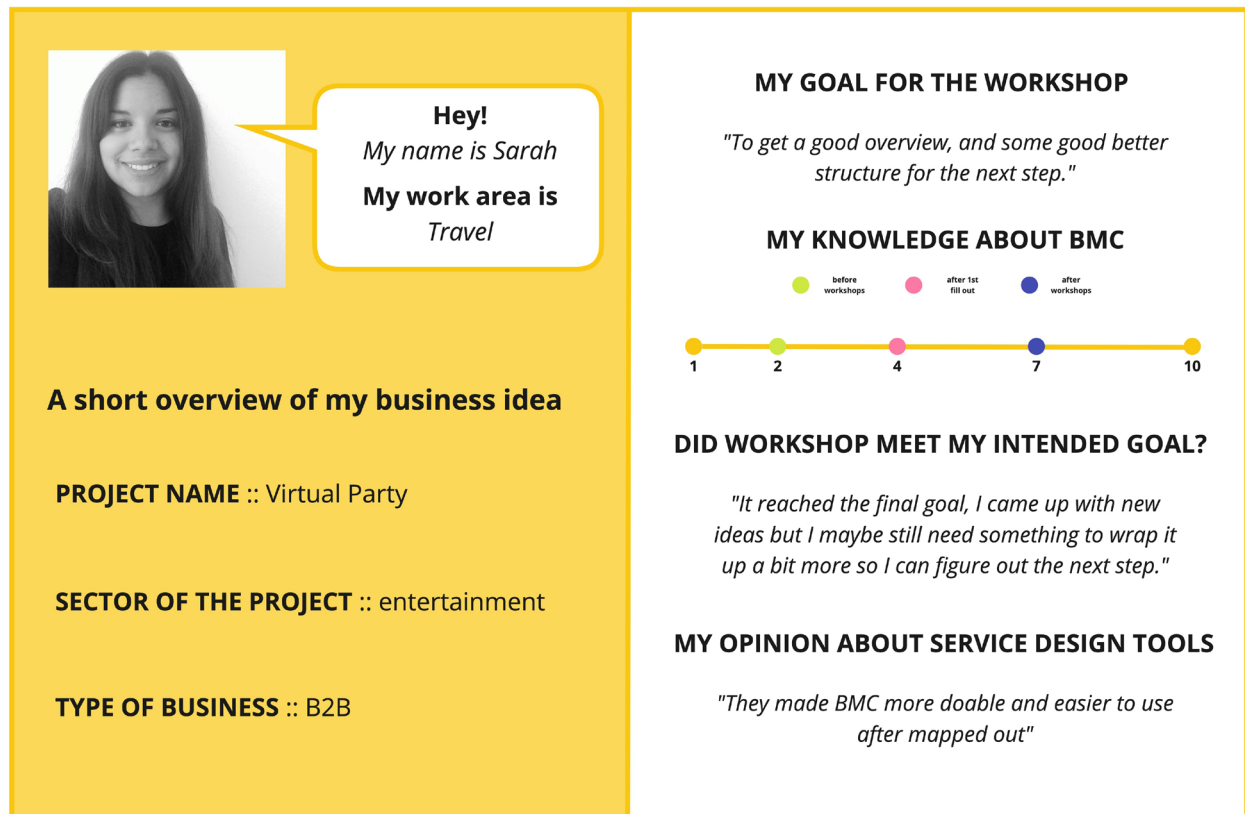
Figure 66: Participant Profile Sarah

Figure 67: Participant Profile Simon

Figure 68: Participant Profile Paulina

Hey!
My name is Paulina

My work area
Project Management

A SHORT OVERVIEW OF MY BUSINESS IDEA

project name :: Let's Dine

sector of the project ::Social networking

type of business :: B2C

note: behaviour during the workshop

Confident and fast in her actions. It seemed that she thought through her business idea very well so working with tools was not complicated for her.

MY GOAL FOR THE WORKSHOP

"Insight in the business model canvas and service design thinking"

MY KNOWLEDGE ABOUT BMC

before workshops · after 1st fill out · after workshops

1 — 5 — 8 · 9 — 10

DID WORKSHOP MEET MY INTENDED GOAL?

"This workshop gave me a better understanding of the tools and methods. "

MY OPINION ABOUT SERVICE DESIGN TOOLS

"I could understand and describe my customer segment better after working with Persona and Actors map."

Figure 69: Participant Profile Ewa

My work area
Service Industry

Hey!
My name is Ewa

A SHORT OVERVIEW OF MY BUSINESS IDEA

project name :: Restaurant Oblivion

sector of the project ::Service Industry

type of business :: B2B & B2C

note: behaviour during the workshop

Very confident and fast with BMC. She had many ideas in her head so she struggeled a bit with time to finish SD tools.

MY GOAL FOR THE WORKSHOP

"To get closer to final business project. "

MY KNOWLEDGE ABOUT BMC

before workshops · after 1st fill out · after workshops

1 — 9 — 10

DID WORKSHOP MEET MY INTENDED GOAL?

" Improved knowledge about tools, helped understand better service design and showed how important it is to create personas and actors map"

MY OPINION ABOUT SERVICE DESIGN TOOLS

"Show the need of going into details for specific customers and actors rather than overall market. "

4.4.6.2 The Customer Journey guidelines

The aim of the individual Customer Journey session was to give the participant another Service Design tool that could deepen their perspective on their business idea and possibly point out some parts that could be improved or adjusted. Additionally, the outcome of the sessions was highly important from the angle of how or if the Customer Journey could influence the BMC.

Since the Customer Journey sessions were going to be facilitated individually, the plan was established to provide the participants with a short but essential pdf guideline. The guideline would make them feel knowledgeable about the tool itself as well as be used as the template which was designed for the needs of the session. The guideline was sent as an attachment to email one day before the session along with the link to the Google Jam boards in order to refresh participants' minds about their work.
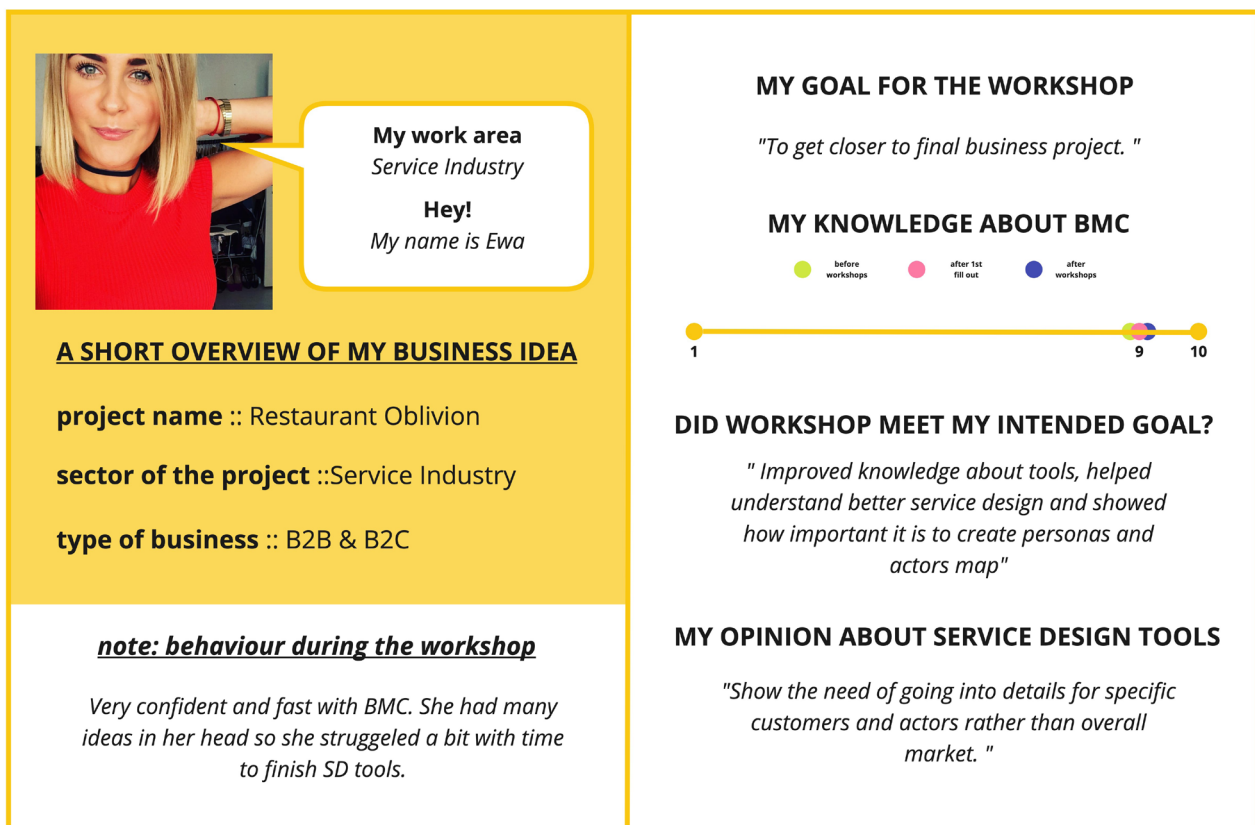
The guideline consisted of 3 parts:

- **What is a Customer Journey** - a short introduction to the tool explaining its purpose and value
- **Customer Journey Exercise** - short sentences to be filled out which get participants in the mindset of mapping out the steps of the Customer Journey. The sentences are divided into three stages (as in the Customer Journey template) - Before, During, After, and are initiated with Service Moment chosen by the participant. Each of the sentences has supportive questions to think about in the context of the stage.
- **How to create the Customer Journey** - presentation of the Customer Journey template with specific examples of the grocery shop business as well as an introduction to the digital platform MIRO where the participant will be working on filling out their own Customer Journeys.

Figure 70: The Customer Journey Individual Session Guidelines

4.4.6.3 The process of the Customer Journey sessions

The individual Customer Journey session was scheduled into the 1-hour time frame and was facilitated online through ZOOM. During that time, the participant first shared his experience regarding the pdf guidelines sent through email as well as the confidence and knowledge regarding the Customer Journey. All of the participants agreed that the pdf guidelines prepared them for the session as well as gave them a great understanding of what they can expect in terms of their business idea development.

The next step was use of the MIRO collaborative tool. The participant previously logged into MIRO started filling out the Customer Journey template by first identifying the service moment and second presenting a Persona from the perspective which the journey would be mapped, and lastly by mapping out the steps in every six rows of the template. The important tweak in the flow of action happened during the session with the first participant when the facilitator took over the digital post-its and started creating them for the participant. This decision was made based on the struggles which the participant had while using the MIRO. Moreover, time spent on figuring out by the participant how the MIRO works prolonged the time slot of the workshop as well as made the participant stressed which led to their thoughts and efforts focusing on the MIRO rather than filling out the Customer Journey. Since the intentions of the individual sessions were not to concentrate on how to learn online tools in order to fill out the Customer Journey but rather on measuring the influence of the Customer Journey on the BMC, the decision was made to keep this style of work throughout all scheduled sessions. As a result, the rest of the participants were more focused on mapping out the steps as well as were more open for discussion with the facilitator. Moreover, they were not intimidated by the possible errors in typing which definitely stopped the first participant from expressing herself fully. This distinction is mapped out in two graphs (see Figures 71 and 72) which point out the differences between the process from the first individual session and the process from the rest of them.

Another important fact to emphasize is the constant assistance from the facilitator as well as communication between facilitator and a participant during the session. The role of the facilitator was to navigate the participant into specific steps as well as helping them in the decision-making process. The Service Moment might be used as an example here. Instead of agreeing on the Service Moment chosen by the participant, the facilitator first questioned the moment asking the participant whether it is too broad and what specific outcome of the Customer Journey will be based on the chosen Service Moment. In all cases, participants agreed that their chosen Service Moment was not concrete enough and they would end up with too many steps but not many mapped out details. Another example was the assistance given while mapping out the steps of the Customer Journey or any other row of the template. Whenever the participant felt lost or could not move further the facilitator was starting a discussion of possible options.

The same "assistance" approach was implemented during the third time filling out the BMC. The facilitator read aloud the post-its placed on the particular block in order to outline them for the participant. This kind of behavior pushed the participant to discuss the new possibilities with the facilitator wherein the facilitator stayed passive towards the process of choosing the new ideas placed in the blocks without influencing them with their opinion.

The detailed process of the Customer Journey session was mapped out as illustrative graphs with a comprehensive description divided into pre-conditions, the flow of the events, and post-conditions (see Figure 71 and 72). As mentioned before the two illustrative graphs were created in order to point out the differences between the first and rest of the individual sessions.
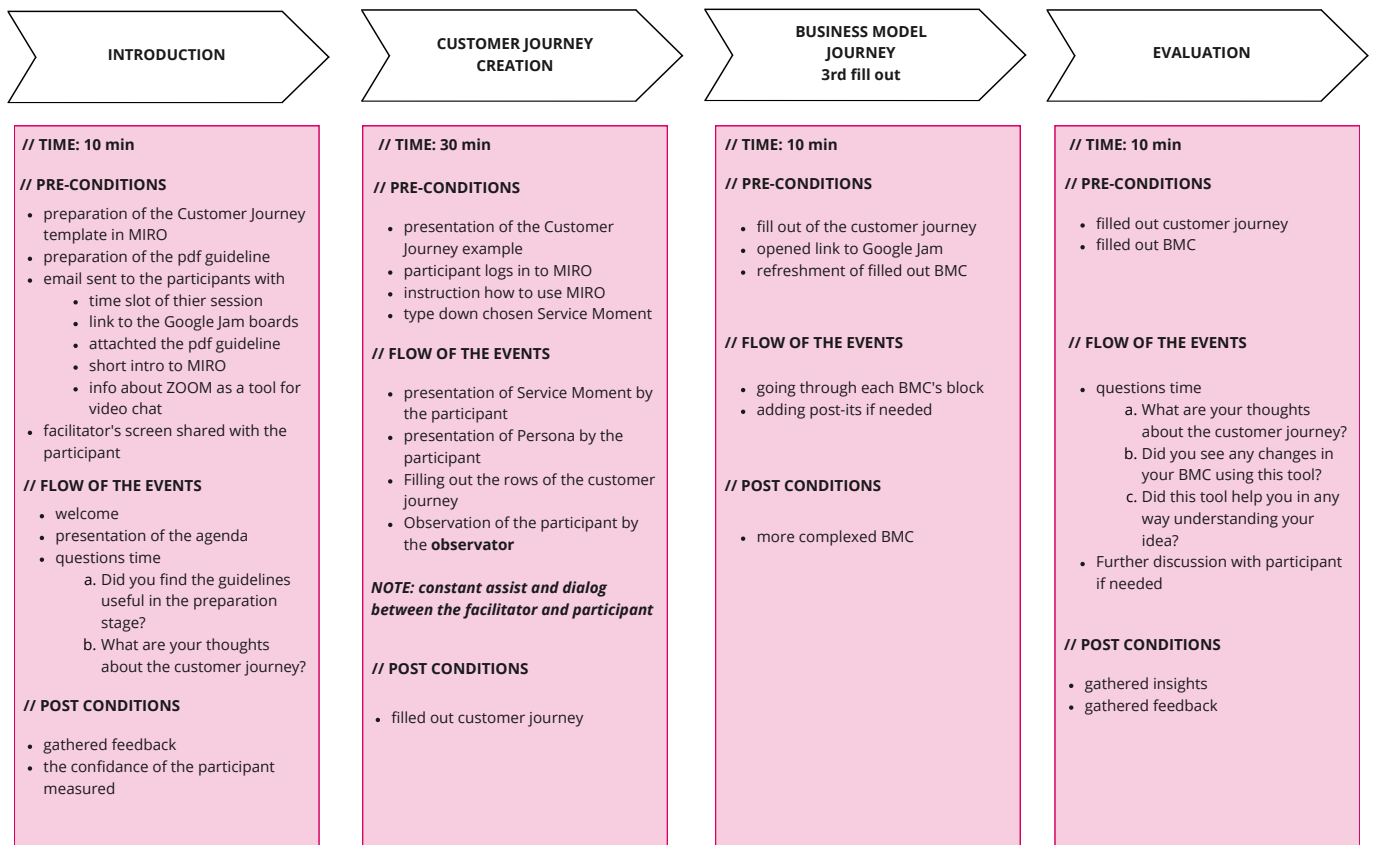
THE CUSTOMER JOURNEY INDIVIDUAL SESSION PROCESS

INTRODUCTION	CUSTOMER JOURNEY CREATION	BUSINESS MODEL JOURNEY 3rd fill out	EVALUATION

INTRODUCTION

// TIME: 10 min

// PRE-CONDITIONS

- preparation of the Customer Journey template in MIRO
- preparation of the pdf guideline
- email sent to the participants with
  - time slot of thier session
  - link to the Google Jam boards
  - attachted the pdf guideline
  - short intro to MIRO
  - info about ZOOM as a tool for video chat
- facilitator's screen shared with the participant

// FLOW OF THE EVENTS

- welcome
- presentation of the agenda
- questions time
  a. Did you find the guidelines useful in the preparation stage?
  b. What are your thoughts about the customer journey?

// POST CONDITIONS

- gathered feedback
- the confidance of the participant measured

CUSTOMER JOURNEY CREATION

// TIME: 30 min

// PRE-CONDITIONS

- presentation of the Customer Journey example
- participant logs in to MIRO
- instruction how to use MIRO
- type down chosen Service Moment

// FLOW OF THE EVENTS

- presentation of Service Moment by the participant
- presentation of Persona by the participant
- Filling out the rows of the customer journey
- Observation of the participant by the **observator**

NOTE: constant assist and dialog between the facilitator and participant

// POST CONDITIONS

- filled out customer journey

BUSINESS MODEL JOURNEY 3rd fill out

// TIME: 10 min

// PRE-CONDITIONS

- fill out of the customer journey
- opened link to Google Jam
- refreshment of filled out BMC

// FLOW OF THE EVENTS

- going through each BMC's block
- adding post-its if needed

// POST CONDITIONS

- more complexed BMC

EVALUATION

// TIME: 10 min

// PRE-CONDITIONS

- filled out customer journey
- filled out BMC

// FLOW OF THE EVENTS

- questions time
  a. What are your thoughts about the customer journey?
  b. Did you see any changes in your BMC using this tool?
  c. Did this tool help you in any way understanding your idea?
- Further discussion with participant if needed

// POST CONDITIONS

- gathered insights
- gathered feedback

Figure 71: The Customer Journey individual sessions process

THE CUSTOMER JOURNEY INDIVIDUAL SESSION PROCESS // after adjustments

INTRODUCTION	CUSTOMER JOURNEY CREATION	BUSINESS MODEL JOURNEY 3rd fill out	EVALUATION

INTRODUCTION

// TIME: 10 min

// PRE-CONDITIONS

- preparation of the Customer Journey template in MIRO
- preparation of the pdf guideline
- email sent to the participants with
  - time slot of thier session
  - link to the Google Jam boards
  - attachted the pdf guideline
  - short intro to MIRO
  - info about ZOOM as a tool for video chat
- facilitator's screen shared with the participant

// FLOW OF THE EVENTS

- welcome
- presentation of the agenda
- questions time
  a. Did you find the guidelines useful in the preparation stage?
  b. What are your thoughts about the customer journey?

// POST CONDITIONS

- gathered feedback
- the confidance of the participant measured

CUSTOMER JOURNEY CREATION

// TIME: 30 min

// PRE-CONDITIONS

- presentation of the Customer Journey example
- **introduction how the facilitation will look like:**
  - **participant the brain of the session**
  - **facilitator - participant's hand (writing everything down)**
- facilitator shares the screen with the participany
- type down chosen Service Moment

// FLOW OF THE EVENTS

- presentation of Service Moment by the participant
- presentation of Persona by the participant
- Filling out the rows of the customer journey
- Observation of the participant by the **observator**

NOTE: constant assist and dialog between the facilitator and participant

// POST CONDITIONS

- filled out customer journey

BUSINESS MODEL JOURNEY 3rd fill out

// TIME: 10 min

// PRE-CONDITIONS

- fill out of the customer journey
- opened link to Google Jam
- refreshment of filled out BMC

// FLOW OF THE EVENTS

- going through each BMC's block
- adding post-its if needed

// POST CONDITIONS

- more complexed BMC

EVALUATION

// TIME: 10 min

// PRE-CONDITIONS

- filled out customer journey
- filled out BMC

// FLOW OF THE EVENTS

- questions time
  a. What are your thoughts about the customer journey?
  b. Did you see any changes in your BMC using this tool?
  c. Did this tool help you in any way understanding your idea?
- Further discussion with participant if needed

// POST CONDITIONS
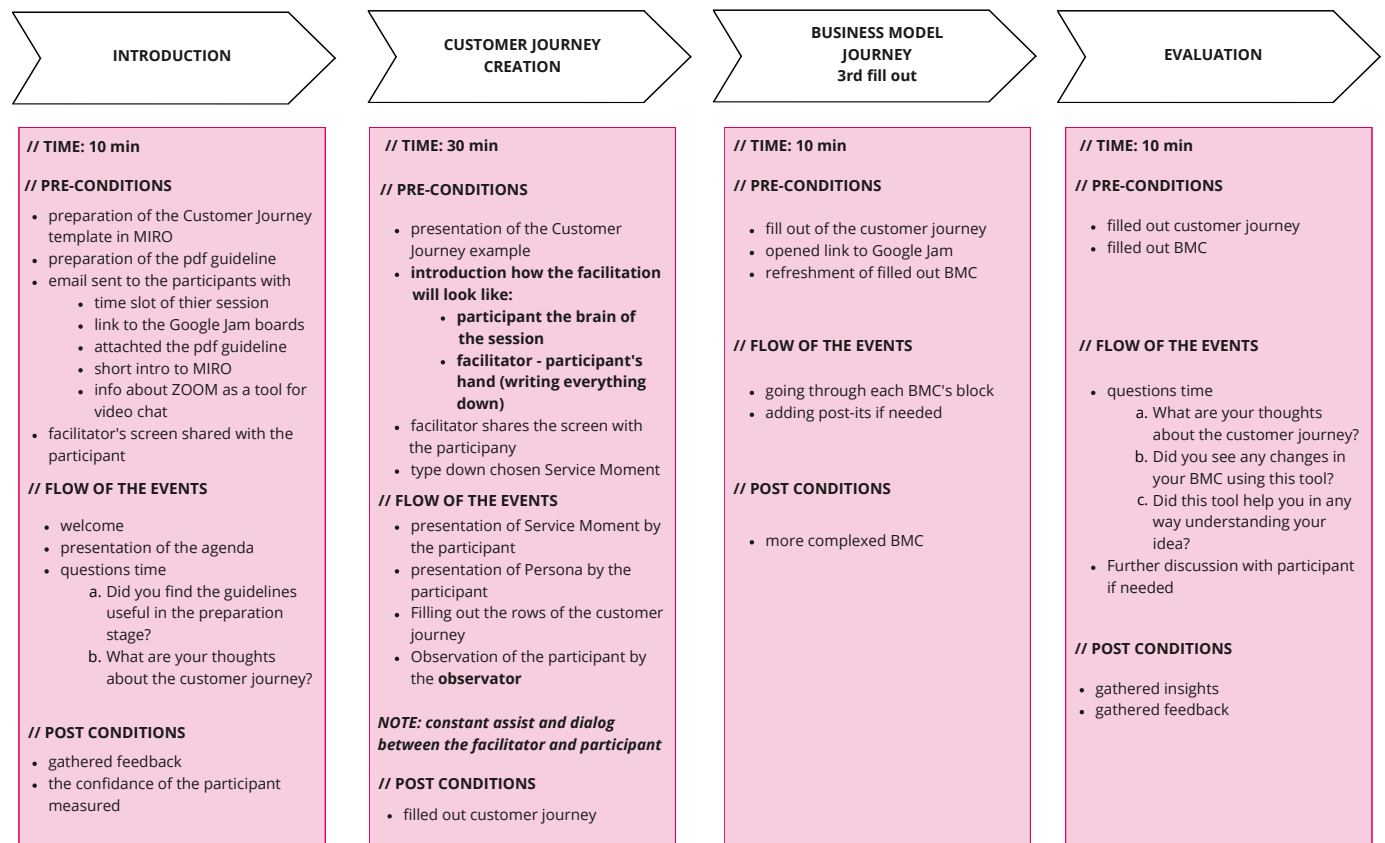
- gathered insights
- gathered feedback

Figure 72: The Customer Journey Individual Sessions Process with after adjustments (in bold)

4.4.6.4 Participant individual session journey

A choice of the participants for the Customer Journey Individual sessions was based on the efficiency of work during the workshops, the maturity of the business as well as behavior which was connected to the Personality of the participant (see observations in Appendix 6). After the facilitation of the individual sessions, the participant journeys were created to capture the process of going through the session from the perspective of the participant.

The participant journey template consisted of six rows providing a complex picture of the participant's performance throughout the session. The "pains" row provides a picture of the participant struggling either with a business mindset or attempting to put him or herself into the Personas' shoes from the perspective which the journey was mapped out. Moreover, the "gains" row gives us an overview of how important the role of the facilitator is as assistance for the participant. Based on constant communication, the participant felt more confident while creating the steps as well as could get another point of view on the business idea which not only generated new opinions which encouraged self-critique.

In order to gain a bit more visual understanding, the "emotional journey" was mapped out based on the "pains" and "gains" rows. By using the emoji as well as a scale from -2 to +2, we created a scale as shown below:

- +2 - confident
- +1 - knows what to do
- 0 - need a second
- -1 - not sure
- -2 - needs help

We can observe how the participant coped with the particular stage of the Customer Journey. To gather a holistic perspective all of the "emotional journeys" were placed on one graph (see Figure 73). Based on the graph we can claim that none of the partic-ipants went through exactly the same process. The maturity of each business idea had a significant in-fluence. Those participants who felt confident with their idea and already figured out how the service or product would look had no problem describing the steps in the "Customer Journey" row. However, the same participants had issues with the critique of their own service in the "pains" row as well as driv-ing themselves to look at the service not from their own, but rather the Persona's perspective.
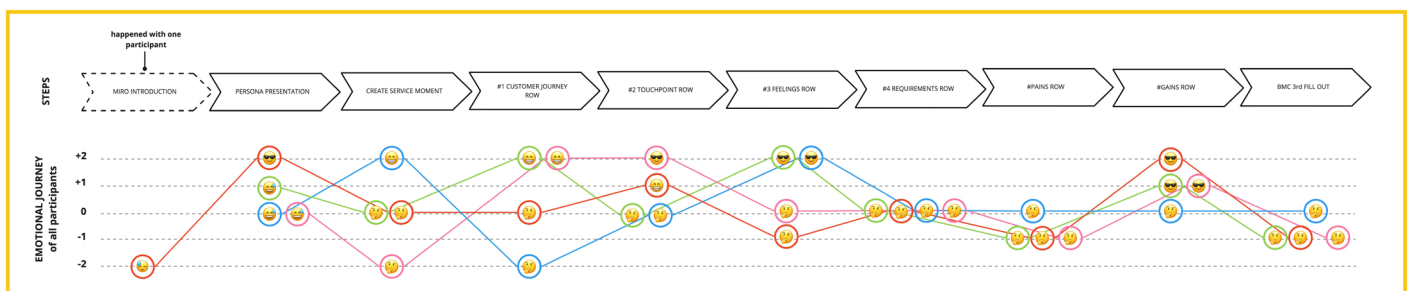

Figure 73: Emotional journey of all participants

All of the participants struggled with the "requirements" row. They needed a specific example rather than an explanation of what the "requirement" means. On the other hand, they fully understood that the requirements do not have to be added to each step of the "Customer Journey" as well as "pains" and "gains". Nevertheless, all of them seemed to have a broader picture of the entire Customer Journey template and a quick analysis could add specific "gains" which could influence their business in a positive way.

The "service moment" was also critical for the entire process of creating the Customer Journey. The very first participant chose the whole moment from the service in the restaurant. From choosing the restaurant by the customer, until receiving a bill, and leaving the comment. Without the assistance of the facilitator, who was trying to merge some of the steps and navigate the participants throughout the journey, the entire process would be much longer and complicated. We could observe that the participant was a bit lost with the amount of details which she created, which was also due to the fact that her concept of the restaurant business was thoroughly analyzed. We learned for the next scheduled sessions to discuss the chosen service moment with a participant first before approaching filling out the Customer Journey template. Moreover, the participants acknowledged that the Customer Journey does not have to be mapped out only once from one perspective, but rather can be used as a tool as many times as needed.

The emotional journey reveals the behavior of the participants during the third fill out stage of the BMC. Only one participant felt they "needed a second" to analyze her canvas and add new post-its. However, it has to be considered that this participant never felt confident with the BMC and she did not see any benefits from using the tool. The rest of the participants had to refresh their minds on what kind of ideas were created by them in the blocks as well as take a look at the freshly mapped out BMC. After those steps, they were able to name the missing elements which they added to the blocks. In the next subchapter, there we will continue further with an in-depth analysis of the BMC.

Last but not least, we can clearly see from the "emotional journey of all participants" that the step "MIRO introduction" was a big pain for the participant and influenced the stage "Customer Journey row". In the "touchpoint row" when the facilitator takes over the navigation of MIRO, the participant feels much freer to express their thoughts and discuss steps together with the facilitator.
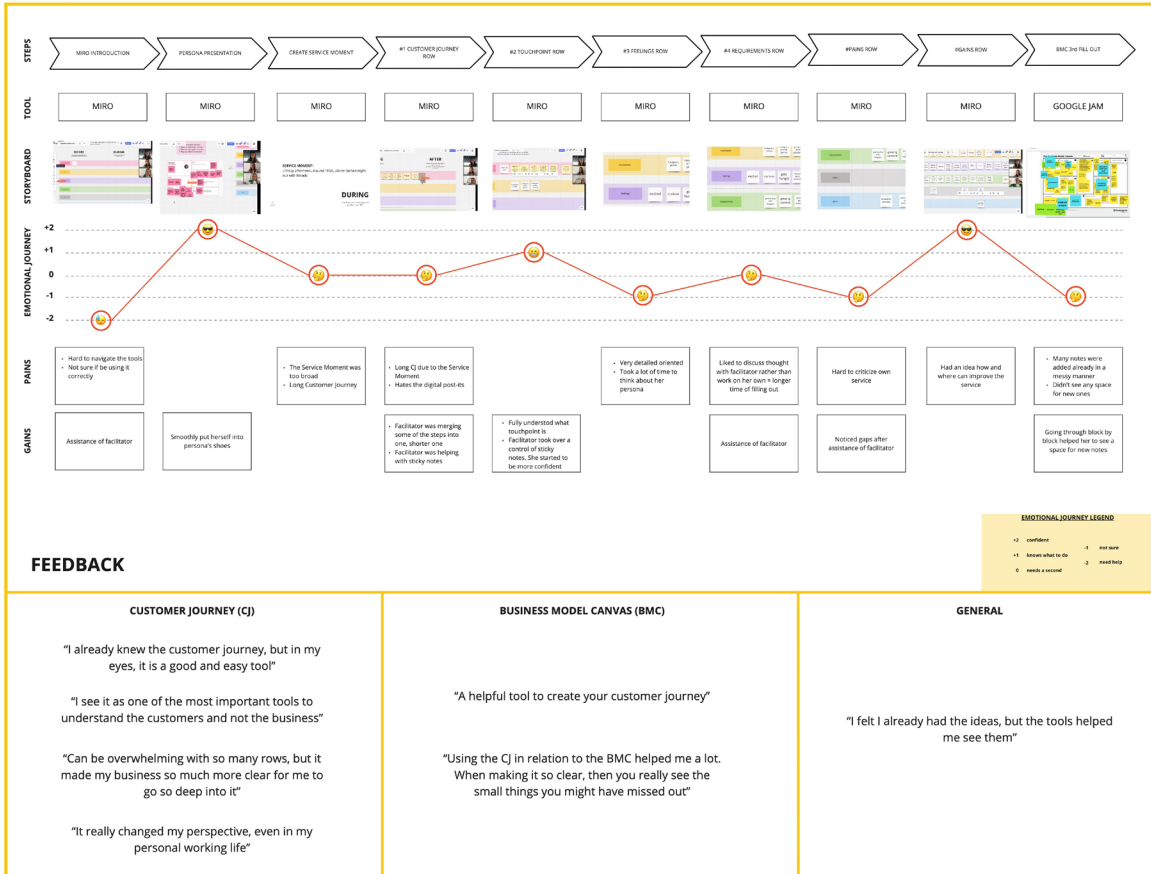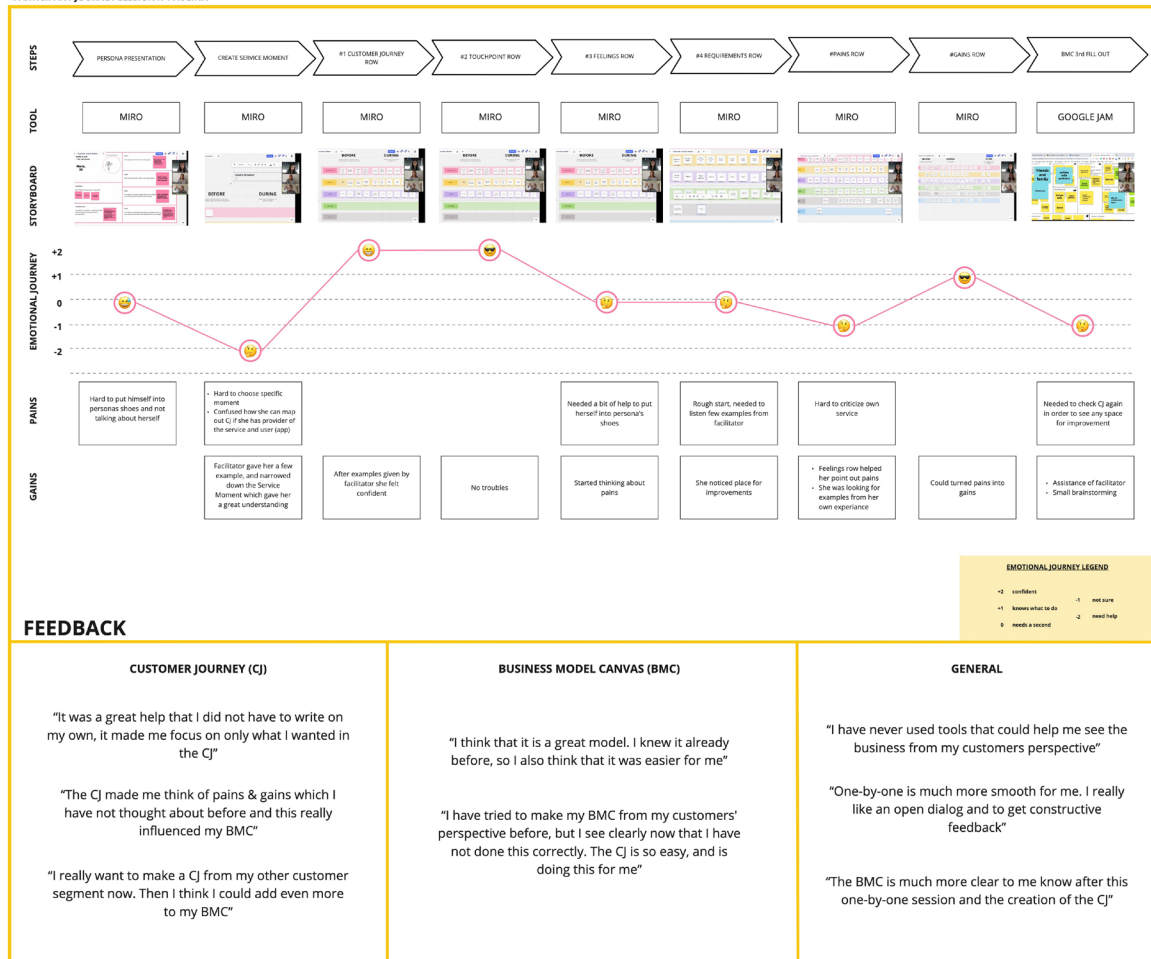
STEPS: MIRO INTRODUCTION | PERSONA PRESENTATION | CREATE SERVICE MOMENT | #1 CUSTOMER JOURNEY ROW | #2 TOUCHPOINT ROW | #3 FEELINGS ROW | #4 REQUIREMENTS ROW | #PAINS ROW | #GAINS ROW | BMC 3rd FILL OUT

TOOL: MIRO | MIRO | MIRO | MIRO | MIRO | MIRO | MIRO | MIRO | MIRO | GOOGLE JAM

EMOTIONAL JOURNEY: +2 / +1 / 0 / -1 / -2

PAINS

- Hard to navigate the tools
- Not sure if be using it correctly

- The Service Moment was too broad
- Long Customer Journey

- Long CJ due to the Service Moment
- Hates the digital post-its

- Very detailed oriented
- Took a lot of time to think about her persona

- Liked to discuss thought with facilitator rather than work on her own + longer time of filling out

- Hard to criticize own service

- Had an idea how and where can improve the service

- Many notes were added already in a messy manner
- Didn't see any space for new ones

GAINS

- Assistance of facilitator

- Smoothly put herself into persona's shoes

- Facilitator was merging some of the steps into one, shorter one
- Facilitator was helping with sticky notes

- Fully understood what touchpoint is
- Facilitator took over a control of sticky notes. She started to be more confident

- Assistance of facilitator

- Noticed gaps after assistance of facilitator

- Going through block by block helped her to see a space for new notes

EMOTIONAL JOURNEY LEGEND
+2 confident | +1 knows what to do | 0 needs a second | -1 not sure | -2 need help

FEEDBACK

CUSTOMER JOURNEY (CJ)

"I already knew the customer journey, but in my eyes, it is a good and easy tool"

"I see it as one of the most important tools to understand the customers and not the business"

"Can be overwhelming with so many rows, but it made my business so much more clear for me to go so deep into it"

"It really changed my perspective, even in my personal working life"

BUSINESS MODEL CANVAS (BMC)

"A helpful tool to create your customer journey"

"Using the CJ in relation to the BMC helped me a lot. When making it so clear, then you really see the small things you might have missed out"

GENERAL

"I felt I already had the ideas, but the tools helped me see them"

Figure 74: Participant journey // Ewa

STEPS: PERSONA PRESENTATION | CREATE SERVICE MOMENT | #1 CUSTOMER JOURNEY ROW | #2 TOUCHPOINT ROW | #3 FEELINGS ROW | #4 REQUIREMENTS ROW | #PAINS ROW | #GAINS ROW | BMC 3rd FILL OUT

TOOL: MIRO | MIRO | MIRO | MIRO | MIRO | MIRO | MIRO | MIRO | GOOGLE JAM

EMOTIONAL JOURNEY: +2 / +1 / 0 / -1 / -2

PAINS

- Hard to put himself into personas shoes and not talking about herself

- Hard to choose specific moment
- Confused how she can map out CJ if she has provider of the service and user (app)

- Needed a bit of help to put herself into persona's shoes

- Rough start, needed to listen few examples from facilitator

- Hard to criticize own service

- Needed to check CJ again in order to see any space for improvement

GAINS

- Facilitator gave her a few example, and narrowed down the Service Moment which gave her a great understanding

- After examples given by facilitator she felt confident

- No troubles

- Started thinking about pains

- She noticed place for improvements

- Feelings row helped her point out pains
- She was looking for examples from her own experience

- Could turned pains into gains

- Assistance of facilitator
- Small brainstorming

EMOTIONAL JOURNEY LEGEND
+2 confident | +1 knows what to do | 0 needs a second | -1 not sure | -2 need help

FEEDBACK

CUSTOMER JOURNEY (CJ)

"It was a great help that I did not have to write on my own, it made me focus on only what I wanted in the CJ"

"The CJ made me think of pains & gains which I have not thought about before and this really influenced my BMC"

"I really want to make a CJ from my other customer segment now. Then I think I could add even more to my BMC"

BUSINESS MODEL CANVAS (BMC)

"I think that it is a great model. I knew it already before, so I also think that it was easier for me"

"I have tried to make my BMC from my customers' perspective before, but I see clearly now that I have not done this correctly. The CJ is so easy, and is doing this for me"

GENERAL

"I have never used tools that could help me see the business from my customers perspective"

"One-by-one is much more smooth for me. I really like an open dialog and to get constructive feedback"

"The BMC is much more clear to me know after this one-by-one session and the creation of the CJ"

Figure 75: Participant journey // Paulina

FEEDBACK

CUSTOMER JOURNEY (CJ)	BUSINESS MODEL CANVAS (BMC)	GENERAL
"I had not thought about how my product could fit in an everyday moment - that it is actually also a service" "It seemed a little overwhelming when reading about it, but so smooth when doing it together" "Way more useful than I would ever have expected from just reading about it" "It really helped me to criticize my product and think about potential pains & gains"	"I had not thought about how my product could fit in an everyday moment - that it is actually also a service" "When looking at my BMC after the creation of my CJ, I can now see that I need to think about other things. It really opened up for new ideas"	"When looking at my BMC after the creation of my CJ, I can now see that I need to think about other things. It really opened up for new ideas"

Figure 76: Participant journey // Simon

FEEDBACK

CUSTOMER JOURNEY (CJ)	BUSINESS MODEL CANVAS (BMC)
"It is funny to me how such a little service moment of my service can influence my service this much - it gave me insights about everything" "Very useful and helpful to break it up in before, during and after" "Normally I would only focus on during - on how the app should work - but I can see that I really would have missed out on a lot of money and opportunities if I did"	"I have never liked the tool. I felt the same last time during the workshop - there is too much to think about and you get confused" "I think it is much better to use other tools, where you can visualize your thoughts - that is just easier and better for me" "When creating the CJ in relation to the BMC I got a much more clear mind on how I want to earn money"

Figure 77: Participant journey // Sarah

4.4.6.6 Analysis of the Business Model Canvas after individual sessions

To get a better-combined understanding of how all of the Customer Journeys influenced the BMC, visual analysis and reflections of the added sticky notes were made (see Figure 78). In total, the four participants added 30 new sticky notes to the canvas.

This is an average of 7,5 new notes for each participant. After the creation of the Customer Journey, the participants added between 2-7 new notes to all of the blocks on the BMC except the value proposition block. From this, we can understand that Customer Journeys seems to affect the surroundings of the businesses but not change the business itself.
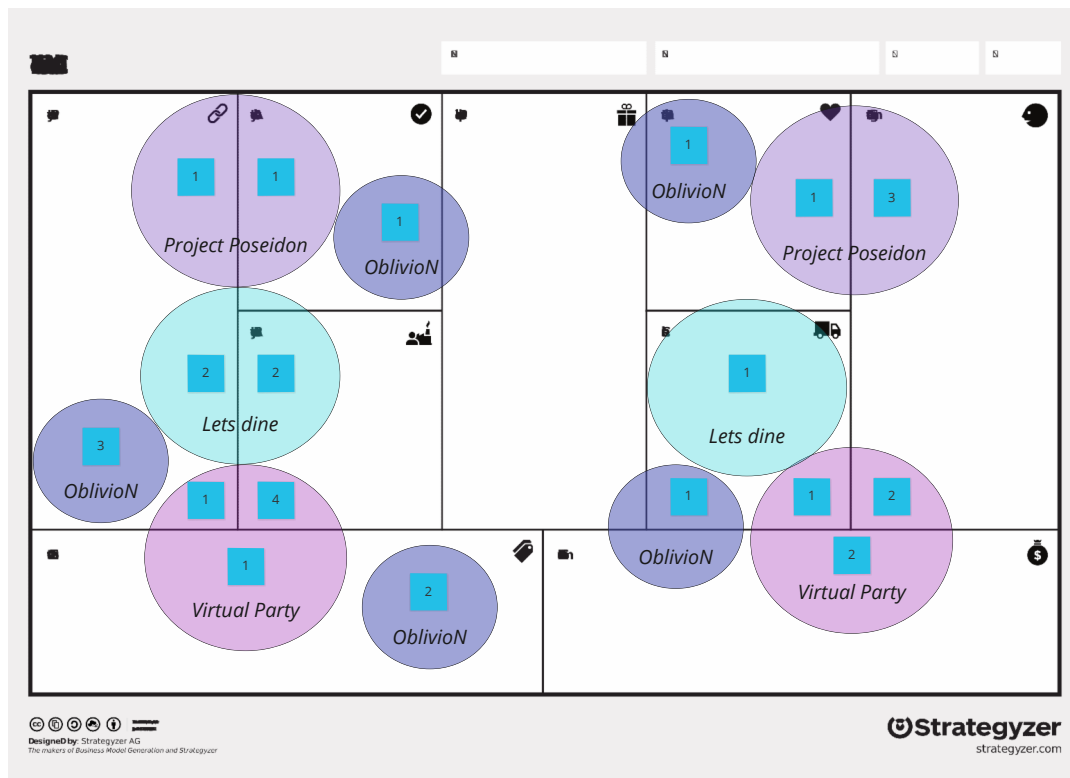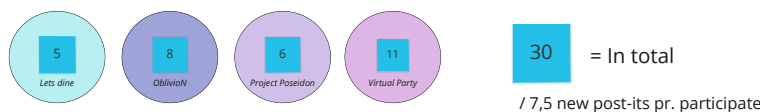
Figure 78: Analysis of added sticky notes to the BMC after the creation of Customer Journeys
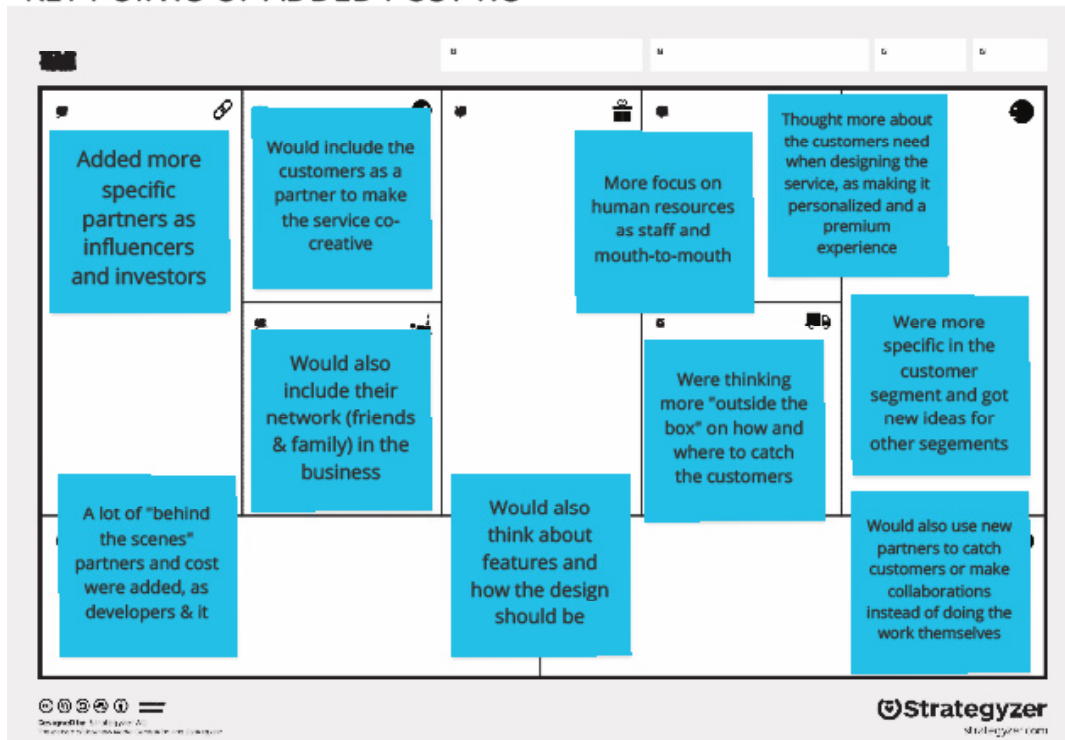
Figure 79: Analysis and reflections of participants feedback and observations

Figure 79 shows some of the analyzed key points of the added sticky notes to the BMC after the creation of the Customer Journey tool. The notes are analyzed and reflected upon the results of the feedback from the participants and the observations made throughout the workshop. This resulted in the thoughts, actions, and reflections which the participants might have had or done. This gave us a better understanding of how the Service Design tools affected BMC. To get an even deeper understanding, a comparison of the two results was made.

4.4.7 Comparison of the results: workshops vs. individual sessions

To explore and understand the different outcomes: results and methods, a comparison of the two (workshops and individual sessions) were made.

In the BMC workshops, the participants worked on their own while creating their BMC, Persona, and Actors Map. This resulted in an outcome where all of the added sticky notes to the BMC were created by their own thoughts and we had no influence on this.

On average the participants added 5,5 new sticky notes to their BMC after the usage of the Service Design tools. Most of the new notes were added in the customer segments block (13 new = 23% of all new sticky notes) and in the key partner block (11 new = 20% of all new sticky notes). This makes a lot of sense since the Service Design tools that were used were the Persona and the Actors Map which fit best in these blocks. There were 4-6 new sticky notes added in each of all of the rest of the blocks, except the revenue streams, where only one new sticky note was added to the BMC. It was expected that the revenue stream and costs structure blocks would not be as affected as the rest of the BMC blocks since the Service Design tools do not have a direct connection to the financial aspect of a project. At the same time, the participants added 5 new sticky notes to the cost structure which shows that they would still have this in mind creating the tools. As written, the sticky notes added during the workshops were made by the participants on their own and we could not affect the outcome or talk with them while they created it. This resulted in a harder time analyzing the data after finishing since we could not be sure that what we read from the sticky notes exactly as they intended them to be understood.

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Therefore, the new added sticky notes could be a result of improvements, new ideas, or simply comments to their business. We could also not be sure that these new notes were created as a result of the Service Design tools, but could also just be things they came up with because they had to. From the feedback, we got the response that these Service Design tools did help the participants gain new ideas and one of them even changed the direction of their business. The visual aspect of the tools was mentioned as one of the biggest factors for understanding and exploring their businesses more.

In the individual session, the participants created a Customer Journey of their business and then looked back at their BMC to see if anything new could be added. During these sessions, we created the tools for them while they would tell us what to do, asked questions, and discussed the outcome together. We tried not to influence the outcome too much; however, we still gained a lot of knowledge on the participants' thoughts and how they used the tools. The participants would ask us a lot of questions along the way such as "what do you think?", "what would you do", "what would you add?", which created a more co-creative session than the workshop. As a result, we had a bigger influence on the outcome. The BMC ended up with an average of 7,5 new sticky notes for each participant added after the usage of the BMC tool. Since we could follow the participants through the whole session and talk about every move, we ended up with a better understanding of the new added sticky notes as well as what they meant and why they were added. The participants would add new sticky notes to all of the blocks in the BMC except the value proposition block. The Customer Journey helped the participants see the whole picture of their business but not change the business itself only features or other aspects of the usage of the service. By including the Customer Journey during the 'before' and 'after' process, it made the participants include many factors they may not have thought about.

The workshop made it possible for us to teach how to use the tools to a lot of participants at the same time and we would not have a direct influence on the outcome. The individual sessions can be made more personalized and the option for co-creation is much bigger. The participants gave a lot of positive feedback about us helping them through the individual sessions and said that this was one of the best things about the session.

This gave us the understanding that the Service Design tools probably work better as a team and not something the participants should create on their own when discussing and seeing it from other people's perspectives. At the same time, the outcome might be influenced by the online factor, since we were not able to walk around and help each participant while they were working on the tools, as we could have done in an offline setting.
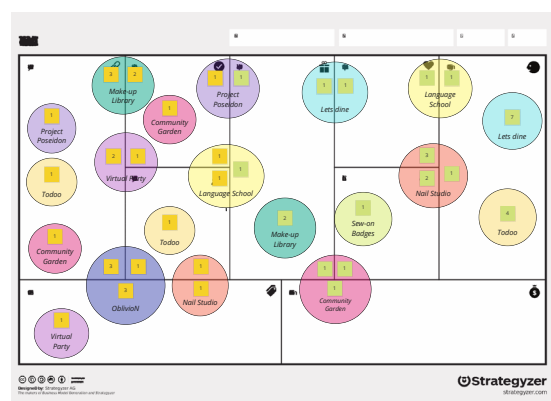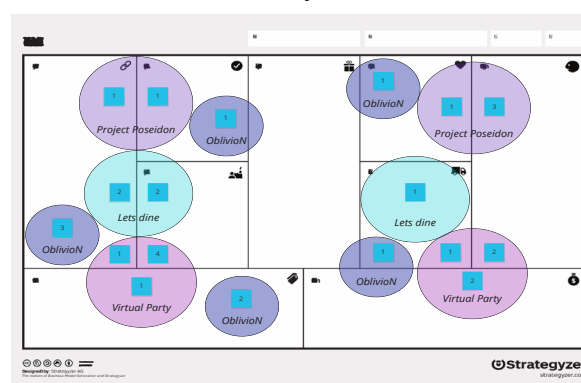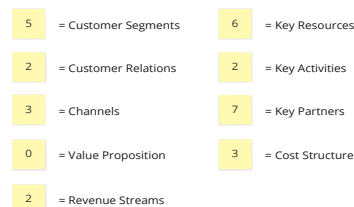
Figure 80: Comparison of the workshops and the individual sessions

Reflections

The design for the Customer Journey (CJ) sessions was formatted so the participants would design the journey on their own to see how they would do. Throughout the first round, we quickly realized that the participants had a too hard time using the online tool MIRO and that they used more time being frustrated on the tool and their writing, than focusing on the CJ. This would not be a problem in an offline setting and it was decided that we as facilitators would create the SDT for them being their hands and they would just have to express how and what the CJ should include. Our goal was not to teach them how to use MIRO or any other online tool but to help them understand the tools and knowledge of Service Design and that way of thinking. Making the tools for them might seem like the participants would not think for themselves. However, by being their hands it seemed to make participants more comfortable and not afraid of things that do not matter as much as spelling and make them focus only on telling their stories and understanding the tool and their business.

The main negative side of our approach was that we were not able to measure how the tool would be used without assistance since we probably influenced their process of thinking. On the other hand, the participants did express a lot of gratitude towards us for helping them understand the tool better. The solution for this could be creating a simpler template that would be easier to navigate alone without any Service Design knowledge. At the same time, all of the participants did express that the template and guidelines were great and helped them dive deeper into their businesses. Especially the "pain" and "gains" gave them a lot to think about and were thought of as "game changers" for their businesses.

Discovering more pros and cons of making the tools in individual sessions and not as workshops, the main positive factor was that we were able to personalize each session for the participants. We aimed to get a better understanding of each of them helping them throughout the session and assisting them where they felt lost. This created a feeling from the participants that they got the most out of the tool as possible and they also expressed that the individual session was much more helpful for them than the workshop. The consequences of this were that the participants sometimes got distracted and we would have to keep the conversation going all the time to include them in the work. This made it much more demanding for the facilitator. Also, as a facilitator we would have to go through a lot of single sessions to create the same learnings that we could give the whole group once in workshop design.

Comparing the two results made it clear that the participants got the most out of the CJ session and gained a better understanding of their business from this. This made us think that SDT seems to work better when you are more than one person making and evaluating the tools. Discussing and helping throughout the individual sessions seemed to give a much clearer picture, understanding, and outcome for the participants. Participants might need to be a team when creating your SDT to get the most out of it. This could also work in a workshop setting if the presenter requires the participants to work in teams and elaborate on the same idea. Also, this depends on each participant's strengths and knowledge. However, everyone has weaknesses and can discover something new by working with other people. Therefore, helping the facilitator creating the best settings for the participants is something to be aware of.

The positive feedback from the individual sessions not only was because of the co-creative way of learning but also because of the CJ tool itself. After the session, all of the participants realized that they can map out many different CJ's from different angles. They all said that this would help them in the future to not only get new ideas but also help discover their businesses and find potential gaps. The CJ tool seemed to give a much better understanding of their business diving deeper into a holistic perspective from the users' point of view. This tool needed the support of the Persona tool created in the workshop and would not have worked on its own. This opened up the possibility of a workshop focusing on these two tools where it would be clear that the focus for the BMC would be the Customer Segment.

4.5 Deliver

This chapter is aimed to present the outcome based on the previously conducted research. The first subchapter starts from the ideation session where the process of clustering data and ideas quickly proceeded. That gave a base for a technique that was used during the ideation - Lotus Blossom (Michitti, 1997). As a result of applying this upgraded brainstorming technique the process of generating the outcome was much smoother and efficient. Consequently, many valuable ideas were listed out, which later on were evaluated by the COCD box created by Mark Raison in 1977. The aim of the tool is a categorization of the ideas based on their feasibility, originality, and ordinarily (Byttebier, 2012).

The following chapter will also reveal two outcomes created during the ideation session. Those two outcomes will be divided into two phases of potential implementation.

Outcome number one will be dedicated mostly to AAU INC whereas outcome number two will be given over to a more generalized audience such as Service Designers, business developers, and the broad startup scene.

The Deliver chapter ends up with reflections and propositions on further research which will make both of the outcomes more advanced.
In this subchapter the following sections will be presented:

4.5.1 Ideation session
4.5.2 Final outcome
4.5.3 Testing of phase one
4.5.4 Reflections

pre-phase	1 month	2 weeks	1,5 month	3 weeks
• problem statement • literature review • research question	• Stakeholder analysis • Case studies • Actors interviews • BMC understanding	• Workshop design & re-design • SDT toolkit • Measurement & goals • Participant selection	• Online Workshops: Persona & Actors Map • Iteration upgrades • Individual sessions: Customer Journey • Outcome analysis • Comparison of results	• Ideation session • Final outcome • Testing • Reflections & discussion

4.5.1 Ideation session

The Emphasize phase brought us many valuable insights that became a solid base to create a specific outcome of the research. In order to organize our thoughts and ideas the decision was made to conduct an ideation session. Nevertheless, before diving ourselves into the creative process, the data gathered as well as potential ideas that came on the surface along the process were clustered.

Aiming for the most efficient outcome but also a concrete structure the Lotus Blossom was used as a supportive method. The technique is an upgraded version of a popular brainstorming method whose main goal is to focus on specific areas of interest. Moreover, the technique aims to generate more ideas around the core idea. The name Lotus Blossom refers to flower petals which are representatives of freshly created solutions (Michitti, 1997).

"How can Service Design be used to support the Business Model Canvas?"
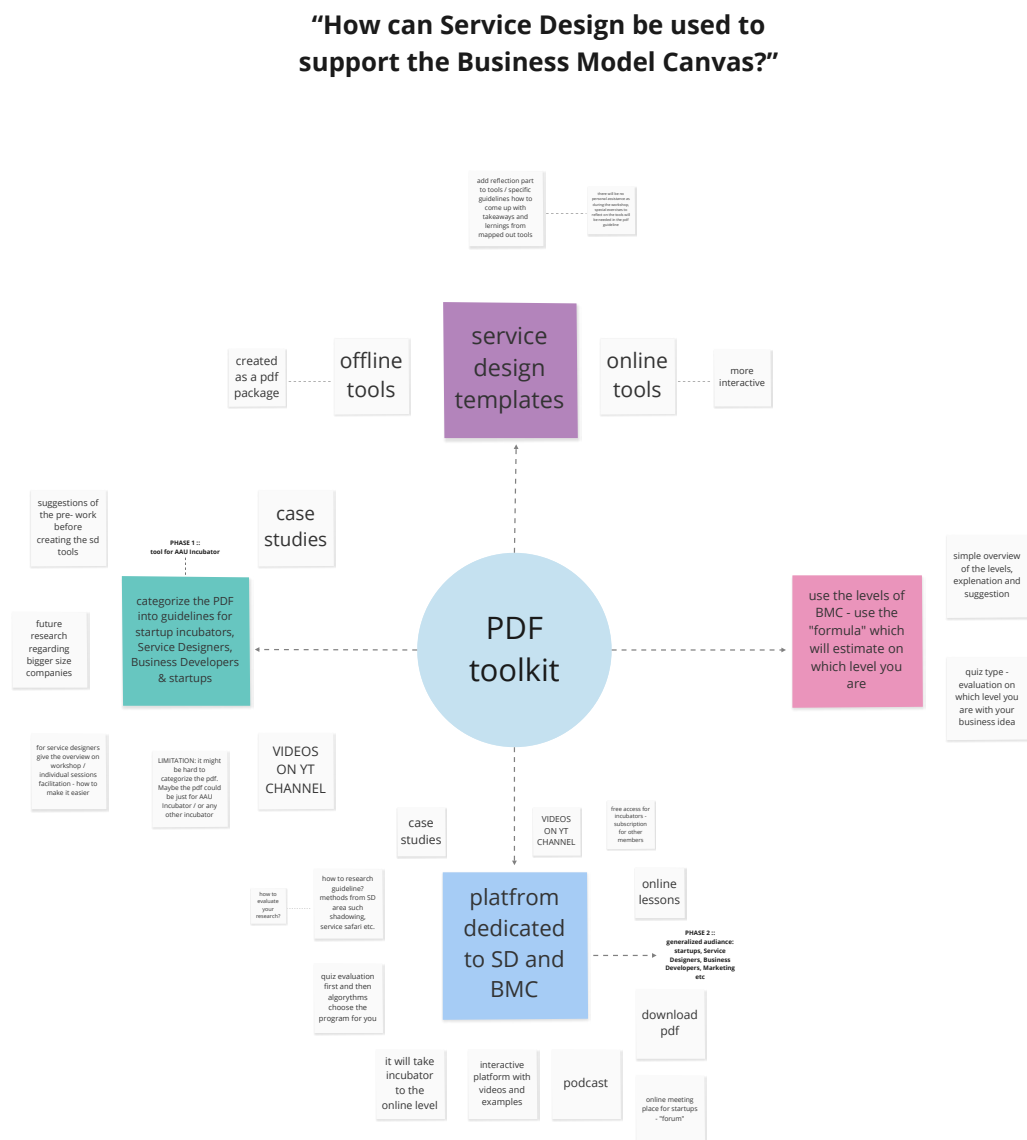
Figure 81: Lotus Blossom, Ideation session

The ideation session started with the research question: "how can Service Design be used to support the Business Model Canvas?". Based on the analysis of the workshops as well as individual sessions, the core of the Lotus Blossom became a PDF version of the toolkit with access to Service Design tools which effectively influence Business Model Canvas. Following the rules of the Lotus Blossom technique, we started to extend the core idea by ideating more specific solutions that could make the toolkit more structured.

The Understand phase deepened our knowledge regarding the Business Model Canvas. One of the takeaways was how the method should be used on four Levels. That gave us an idea that the PDF toolkit would get started from a business idea evaluation in connection to the BMC levels. Based on the evaluation, the specific Service Design tools could be proposed which would help to boost the business models. Moreover, the BMC would be understood much more thoroughly than just a checklist. Following that thought, we listed another idea which was the development of Service Design templates on the offline and online levels. One of the findings from the workshops and individual sessions was the importance of professional assistance throughout the process of creating tools. Therefore, in order to reflect on the mapped out Service Design tools, a user would need specific guidelines on how to extract specific findings and solutions which could be a game-changer on BMC influence. The main aim of the PDF toolkit would be to understand the business better thanks to Service Design tools. Without specific reflection and analysis of the tools a user would not fully be capable of learning and understanding perspectives that would positively influence the business.

Building on two previously described ideas we started to analyze the audience of the PDF toolkit. The audience would be the AUU INC as well as Service Designers, business developers, or startups looking for innovative tools to implement within their structures. It gave us the idea that the PDF should be categorized by a specific audience. Under each category a slightly different angle of the content would be presented. Nevertheless, this concept revealed its limitations quite quickly. We could not see how the categories would be evaluated and their content divided into relevant portions of knowledge and practice for a dedicated audience.

Moreover, the PDF would be too long and not intuitive enough to deliver its purpose. Another flaw was a lack of further research in respect of Service Design tools influencing the business model canvas. At this moment only three tools were tested: Personas, Actors Map, and Customer Journey, which could not be sufficient enough to build the PDF toolkit consisting of different categories of audience. In the worst-case scenario each category would be pretty much the same without valuable content.

Setting ourselves into a more critical mindset, we started extending the idea of a simple PDF toolkit to the platform dedicated to Service Design tools and business model canvas. This solution would be much more complex. By using coding and algorithms the level of tool interaction would be much more advanced.

The Lotus Blossom method allowed us to ideate around the PDF toolkit and extend it to different, more specific, and advanced levels. Nevertheless, there was still a need to evaluate the ideas by making a decision on which of them should be implemented immediately and which could wait for further development upheld with additional research. At this point, the COCD box was taken into practice. The COCD box filters generated ideas and would allow us to choose the one with the biggest potential right now (Byttebier, 2012). The box itself is organized into four boxes:

- ordinary and not (yet) feasible: forget these ideas
- ordinary and feasible: these "standard" ideas might be certainly included
- original and not (yet) feasible: park these ideas for later
- original and feasible: these ideas will make a difference

The COCD box helped us to evaluate ideas as well as forming the structure of the final outcome of our research.
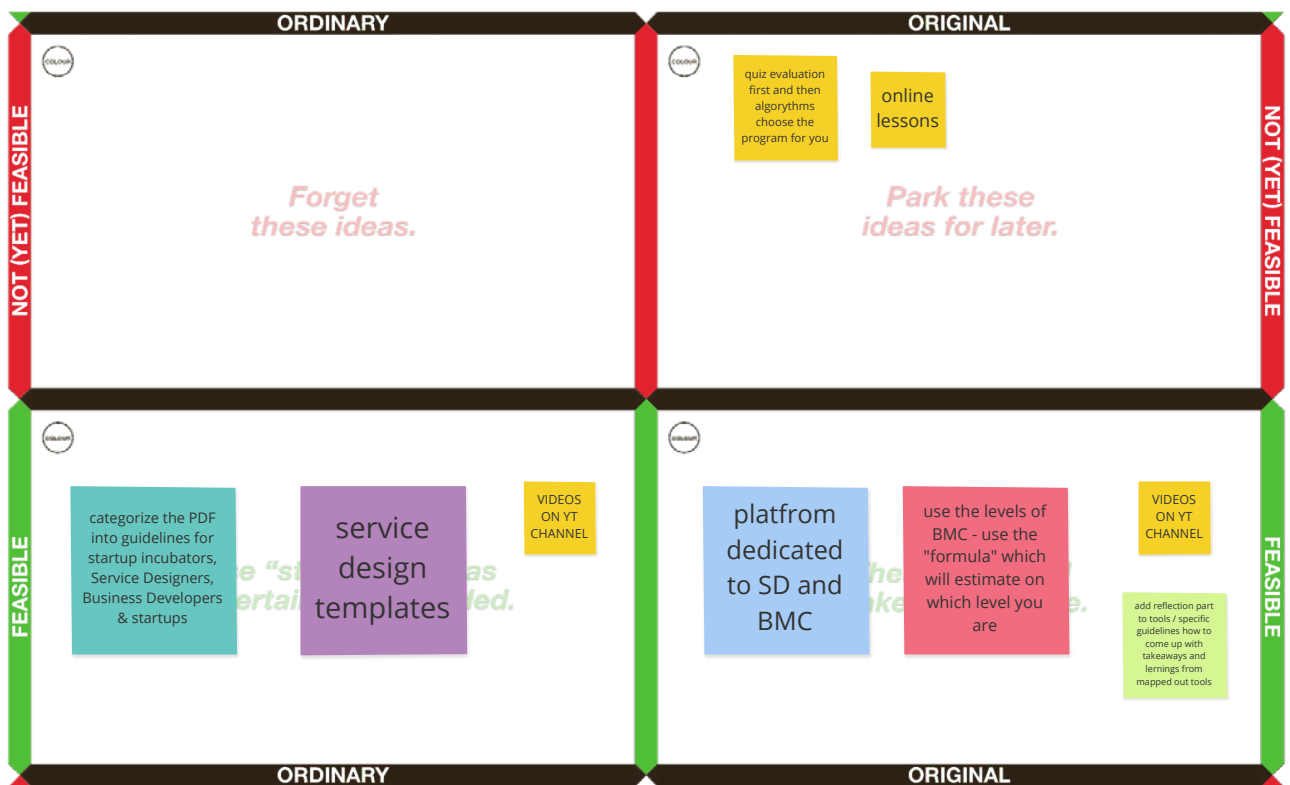
Figure 82: COCD box with ideas

4.5.2 Final outcome

The COCD box gave us the understanding that we would need to divide our ideas into two phases as we would not yet be able to incorporate them all into a final solution. The first phase would include our final outcome with the best possible solutions. Phase two would include further work to be done.

Phase one: the PDF toolkit

The PDF toolkit is dedicated to the AAU INC. The Business Developers would be the users and were the focus of the design. It includes specific guidelines of the tools, Service Design and the way of thinking, and how to gain a better understanding of this field. It also gives a brief introduction to the BMC and our understanding of the model including the different levels and usage. The used SDTs are the Persona, Actors Map, and Customer Journey.

These will be explained through specific guidelines on how to use the tools and what to be aware of. There will also be suggestions given for exercises of methods that can be used in cooperation with the SDT. This will include specifications on how to help the participants evaluate and learn from the SDT and how they should use this knowledge to analyze or create their BMC. To make sure the toolkit addresses different mindsets it will include case studies, visuals, and instructive videos that can help teach and provide better understanding.

The focus was to get a more general outcome that can be used in the AAU INC as well as additional places. This will be done by including a section focusing on how to facilitate workshops, key points, and what to be aware of. This will include our main learning of online vs. offline levels of workshops and our recommendations for such. To make sure that all users of the toolkit do not feel overwhelmed it will be made simple and easy. To make sure that our understanding of the toolkit is the same as the users, it will be tested (see section 4.5.4 Testing of phase one).

SDT #Facilitator guidebook page flow

Service Design Thinking
#FACILITATOR GUIDEBOOK

Kits introduction

Goals of service design thinking kits

Limitations

Principles of service design thinking*

Case study // how SDT can influence BMC?

Process of workshop facilitation

Workshop Journey // 1st round

Workshop Journey // 2nd round

Business Model Canvas

Business Model Canvas // 4 levels

Business Model Canvas // 9 blocks

Business Model Canvas // 9 blocks

Business Model Canvas // golden rules

Service Design Thinking tools // ACTORS MAP

Service Design Thinking tools // ACTORS MAP example

Service Design Thinking tools // PERSONAS

Business Model Canvas // 9 blocks

Service Design Thinking tools // PERSONAS example

Service Design Thinking tools // CUSTOMER JOURNEY GUIDELINES

Service Design Thinking tools // CUSTOMER JOURNEY example

GOLDEN RULES

:: Do not think too much - just WRITE
:: Use keywords - no long sentences needed
:: If you get stuck - just continue to another block
:: Try to use only between 1-2 minutes in each block
:: Use sticky notes

Phase two: the digital platform

The ideation session also generated some ideas that were not yet were feasible for us but that could be used for further work. This would be a digital platform focusing on Service Design tools and the Business Model Canvas. Our ideas for the platform would include the above-mentioned toolkit but be much more than that. The users would not only be workshop facilitators but focus on entrepreneurs. It would start with a quiz evaluation that would evaluate the maturity of each business to give a simple starting point. This would create suggestions for SDT and on which level the BMC should be used.

It would be an interactive platform including all levels of BMC creation and assistance on how to understand the business through these. This will be done in a research section where information about how and where to gather information on competitors, target groups, and the industry in general as a base of the creation of the SDT. This would include instructions on how to evaluate data and findings and help the users in different ways. Online lessons by Business Developers and Service Designers, podcasts, and interactive videos would support the toolkits and create a range of different kinds of Service Design tools that could support the BMC. The users should have the possibility to download the PDF toolkit, the SDT, and the BMC. Additionally, the platform should also include the possibility to take the next step and incorporate the learnings of the tools and models into a business plan. This could be done in cooperation with a mentor so that the user could be suggested from the AAU INC (for the AAU INC participants) or have a subscription for online lessons (for other participants outside of AAU).

4.5.3 Testing of phase one

To test our outcome we decided to do four testing iterations on different target groups. The first round would be on a Service Designer to get her feedback about the design and her opinion about the usage within the Service Design world. She is currently working as a Service Designer in a company where they are using the BMC. She would give us knowledge about the Guidelines, Workbook and Toolkit

(The Frameworks) potential, and an evaluation of the usage in her field. She had more than eight years of experience working with the BMC together with Service Design, so we found her knowledge valuable for our work. The second round would be with an expert in the BMC model to get a deeper understanding of possible bias, limitations, and what we should be aware of in our design when it comes to the BMC. He would also know how to talk to Business Developers, and this helped us create a better flow. The third round would be with the Business Developers at AAU INC to get their feedback on our work and to see if they could see it be used within the AAU INC program. The last round of testing would be done with a startup that is not currently using the BMC but other tools such as Personas to get their feedback if this could be extended or give any potential with the BMC. All of the interview guides can be found in Appendix 9. The group of participants was chosen to get a general and broad perspective of our final users and a deeper understanding of our findings. The testing was iterated on to evaluate our work and change it along in the process. All of the findings from the different testing rounds can be found in Appendix 10, but here is presented the main key findings:

Test round 1 // The Service Designer

- Our job as Service Designers is to visualize how the jobs should be done. It is good that it is made as a cookbook (step by step with a result) but the connections between the tools should be made more visual and simple.
- The chosen tools make much more sense when you think about the work around the BMC. We were told that it was really clever of us that we chose these simple tools and did not go further than using the Service Blueprint or other tools that could be easily misunderstood or design tools that were too complex for business people.
- The limitations of the BMC are often the missing value found in the connections between the blocks. This can be connected with the Customer Journey and should be simplified and be more connected to the BMC. As a startup, you tend to focus more of your attention on funding and goals rather than tools. To help the users actually use tools they should be made simple and fast to use.

Test round 2 // The BMC expert

- The words inside the BMC are business economics and even this can be hard for the students to understand. As a facilitator, you need to understand your audience. Each participant has a different background and knowledge, which can influence each outcome of the workshop.
- BMC is a communication device. One of the biggest limitations is the way it is being used. If you continue brainstorming in the same team you will not get anything new out for it. Should give more suggestions for how it can be used.
- It is also an economical question for the organization. How much will it cost to implement this? Is it valuable enough for AAU INC to do so?
- If you dive into each block of the BMC there are so many other fields that can support each of the blocks - is Service Design the most valuable for this?
- Those who need the BMC the most do not use it because they do not understand it. If you do not have the imagination and a creative way of thinking, you cannot use it in the right way. The people who know how to use it, use it without knowing.
- Maybe we should start somewhere else. Instead, start with some creative thinking tools that can help people to get into this mindset.
- We mention four levels - there is a higher level. Alexander Osterwalder was an IT specialist who wanted to understand the systems of a business. Can you innovate a way to do business? Not with a focus on a specific product and service. There are a lot of examples of this such as Ryan Air. However, can you teach people to do this? This can be challenging.

Test round 3&4 // The Business Developers

- A couple of questions regarding the validation of the tools: is it iterated enough within one workshop? Will they get enough new ideas or suggestions in one workshop to iterate on it? A couple of days between the use of the tools might help the participants to gain new knowledge. To use the tools right after each other might just add existing knowledge on the BMC.
- It would be good to test if the participants can play with the canvas and create a story from it. This would be the biggest value for Business Developers.

- The Persona should be the first tool to be used. This really helps some students to have the human-center focus. It is really good to turn the canvas into a story. The Business developers previously tried to do this, showing a video but the students could not do it. Business Developers would really like to know if the students would be able to use it in this way.
- The Frameworks ads inspiration, reflections, and iterations about how to make different kinds of workshops. This would provide the startups with more value through a creative way of thinking. The visual aspect is important.
- We do not have to make a 'one model fits all'. It would be nice to have some suggestions and then the user can choose what they see the value in.
- We should be aware that there are a lot of tools and models that can be used instead of our suggestions and maybe mention these.

Test round 5 // The entrepreneur:

- The template is difficult to understand on its own. There would be a need for a consultant to teach it to get the most out of it for people who do not know SD.
- "I believe that for inexperienced entrepreneurs, this is a way to start. This is a way to put you in the thoughts of business. Who can help with your business? How would the users think? Help you to consider much more, than just your idea."
- It is very generalized and seems like something that can be used for everything. It needs to be more specific, showing what problems it solves and who it is for.
- "You are filling it out and you do not know why. This is the problem with all tools."
- It could be used as ongoing work. Come back to it every month, and not in a workshop. Have tried out workshops, but the use of it stops after that one workshop, where continued, iterated work helps better in the end.
- "You can tell me what the tools do, but it doesn't speak to my problems. What can Service Design fix for me?"

These testing rounds really made it clear for us, that our focus on creating a generalized outcome might end up not being used by anyone. We were doubting if anyone would ever read the whole thing, without knowing exactly why you should read it, what you would get out of it and what problems it would solve. This would be difficult for us to know since the Frameworks could work in different settings and solve different problems depending on so.

To know how the final outcome can be used within the AAU INC program, a continual measurement would be needed (Wisler-Poulsen, 2015). Testing, evaluating, and reflecting on the experience of the workshop should be a general part of the development within the AAU INC, to create the best possible way to include and use the tools (ibid.). The Business developers also said that they would like to get hands-on and test the outcome in the next program, to see how it would work.

At the same time, the AAU INC should be aware that the measurements on participants can be difficult and that they need to trust their observations more since the participants will not know the difference between the tools and workshops without participating in all of them (Bechmann, 2010).

An important factor for us when doing the testing at AAU INC was to highlight that the design is not an all-or-nothing process. All of our findings, tools, and guidance is suggestions. Tha AAU INC could easily start just including one of the tools in the next round of workshops and see how it goes. This will be better than doing nothing. The most important factors were to make the AAU INC understand how important a customer-focus and a Service Design Thinking mindset could help them further.

Reflections

At the beginning of the Deliver sub-chapter, an ideation session was carried out to help us understand our findings and how to present them in the most beneficial way. In the session it was only the two authors of the project discussion opportunities and ideas. Already from the beginning of the session, the main ideas were in mind and this did affect our focus, which was already placed on a PDF file as our final result. To create a better session, we could have involved more stakeholders, such as the AAU INC, service designers, or startups to get a deeper understanding of what they would like to have included in the outcome. Nevertheless, this was done in the testing phase, where the stakeholders' point of view did form the final outcome from their opinions. Our ideas did not only focus on the PDF, but the ideation session also created the idea for taking the outcome further to an online level. This would allow us to create a digital platform, where all of our results and analysis in an interactive way could help both startups and business developers to gain an understanding of how service design and a service design thinking/mindset could help them. This phase could have been really interesting to prototype, test, and implement, but the time limit did not allow us to explore both, so the decision was made that at this point, the PDF files (the Frameworks) would be enough.

The testing was done together with both AAU INC, service designers, an expert in BMC and with an existing startup, to get a broader perspective on our results. This helped us iterate our work and make the final Product Report (see Appendix 11). We would have liked to test our results on real users of the AAU INC, but due to the COVID-19 pandemic, this was not possible. It was decided in cooperation with the Business Developers at AAU INC that our findings would be tested in the next round of startup at the beginning of the upcoming semester. Our testing also made us understand that we did not involve the AAU INC enough in our design process. We got the understanding that their biggest wish was to figure out if the startups would be able to play around with the BMC and create a storyline/pitch. These were only mentioned as suggestions in the Frameworks, but have not been tested. We felt that this could have been done and would have helped the Business Developers to gain a better understanding of how service design could support the BMC. At the same time, we did mention that the Frameworks were only suggestions and should be explored further to get a deeper understanding. We also want to highlight that our final wish was not to get the Business Developers to use the service design tools and methods in the exact way as we did, but only to help them get in the mindset of Service Design Thinking. If they would decide to only use one or two of the tools, this would be fine, as long as they just get closer to a more co-creative and design thinking mindset.

Reflection upon the suggestions in the Framework, we can not conclude that the tools and methods would be the best way to support the BMC. There are a lot of supportive tools in the market. We can not know if the suggestions we have are the best. From our point of view they probably are but potentially not from the Business Developers or startups view. They might focus more on strategy and goals than getting in a design mindset. As mentioned, the block Cost Structure and Revenue Streams are focusing on the cost and revenue of a business and this is not something Service Design directly focuses on. This aspect should probably be the next step for AAU INC. To look at the results from the SDT, to test and analyze it from a financial aspect. This is also mentioned by Alexander Osterwalder in his video where useful supportive tools are explained. Another limitation of the Framework is also that it was not tested in cooperation with the rest of the structure of the AAU INC program and the used tools and methods. These could affect the supportiveness of the BMC and should have been taken into consideration. Furthermore, the existing work of Strategyzer and the webpage of Alexander Osterwalder including the BMC and a lot of other supportive tools have not been taken into consideration. These tools might work a lot better as supportive tools for the BMC and should have been analyzed and discussed.

The final reflection of our delivery work is the visualization of the final Product Report. We got the understanding that it was hard to grasp the usage of the Frameworks from all of the stakeholders and that it did not catch their attention enough to be read all the way through. As discussed with the service designer, it is our job to visualize how the jobs should be done. We made the structure as a 'cookbook' (step by step with a result), but the connections between the SDT and the BMC should be made more visual.

We should have helped the users even further in understanding how service design can help them. As the startup told us: "You can tell me what the tools do, but it doesn't speak to my problems. What can Service Design fix for me?". This made us understand that the Frameworks should be made more simple and visually. It needs to speak to the users, showing what problems it can solve and how it will provide value for the users.

5. Discussion

In this chapter the following sections will
be discussed:

5.1 General reflections

Having our research question:

"How can Service Design be used to support the Business Model Canvas?"

in focus, the general reflections are first of all surrounded by the final result.

Based on the findings it is our belief that the use of Service Design on some level can support the understanding of businesses through visualizations and human focus as well as provide a holistic approach. Service Design, as in our opinion, should cover both the way we wanted the users to think (design and service design thinking) as well as specific methods and tools. Our main learning from the process is that Service Design is a broad and kind of difficult field for people in the business world to learn. The BMC already persists in wording within Business Economics, which itself can be hard for some users to understand. Depending on the profile of the user, Service Design can help to get in a mindset, where visualizations and creativity seems to support their understanding of the BMC. It also seemed to help some users get more co-creative and gave a deeper understanding of not just their Service or Product, but also their way to do business. Nevertheless, the whole BMC cannot be directly affected by Service Design. Areas such as finance would need other supportive tools and methods. The fact that the explore phase did not consist of tools outside of Service Design, did also affect our validity of the study. We can not know if SDT would be the most supportive tools

of the BMC, or if tools within for example finance would support the BMC even more. Additionally, one of the biggest weaknesses of the canvas seems to be on different levels of use. Every person seems to work on it differently. This is not something that our study of Service Design focused on. The different ways of using the canvas are not just a limitation but one of the biggest strengths. It is a tool that can be used on many levels and Service Design can help to support the users' understanding of the different levels. Getting the customer in the center and creating a more visualized storytelling of the model.

Looking deeper into the BMC, we also understand that the outlined limitations were surrounded by not only the usage of the model but the understanding of it. To get the most out of the tool your mindset should be creative and be able to think differently. This might be done best in teams but can be difficult to incorporate into a workshop. The business wording within the model could also prevent this creativity and make the usage difficult for some of the participants. Additionally, this might create a business focus for the participants and make them not include the customers in the creation of the BMC. Having the customers in our focus is something we as Service Designers prioritize. This does not seem to be the case for the AAU INC program. Furthermore, research of startups outside AAU showed that they tend to focus more on daily decisions, having goals, and income as their top priorities. These factors are not something Service Design takes into consideration so Service Design potentially is not the best approach for supporting the BMC when acknowledging two financial blocks such as "cost structure" and "revenue stream". Maybe the AAU INC should look more into financials and strategy, helping the participants of the program gain a better knowledge of this.

Maybe the customer approach is better to be included later in the process of a business when you have started to grow. At the same time, the feedback from the participants did show that it was valuable for them to have the customer in the center from day one of creating the business. Thanks to Service Design, startups gain an understanding of their customers, which nota bene are related to the main income of the business. This observation made us think that financial factors are included anyway; however, on the basic level. Follow up exploration would be needed to understand.

Going through our design process we had a feeling that we could have included the generalization aspect of the BMC more. The focus was placed on startups and the usage of the model was only tested in the beginning phase of creating a startup. None of the participants had a growing business or a fully evaluated idea which could have affected the outcome. Including real participants of the AAU INC program or other startups at different levels could have created a more general perspective of our findings. The AAU INC itself could also have been included more throughout the whole design process. To get their feedback on the workshop design, the analysis and understanding of the results and even the creation of the final outcome could have had a positive effect on the end result and create a better understanding of the outcome. At the testing phase, we understood that the wish for AAU INC was to understand if the BMC could work at a higher level. Understanding, if the participants would be able to play around with the canvas and use it to create a storyline. This area has not been tested and would be an interesting field for further study.

When using the BMC, our focus was in a workshop setting. The BMC can also be used by businesses, privately, or in other teaching settings and our exploration should also have included this. Our focus was on helping the AAU INC program but we could have been more general by looking at other ways to use the canvas and how Service Design might affect this. Consequently, our focus topic can be questioned: did we look at the BMC as a workshop or only as a canvas? We did not include the surrounding factors of the workshop including the participants' journey before and after the participation only on what happened while they were using the canvas. Introducing the Customer Journey a session before guidelines and work were included only in the second part.

Correspondingly, we could ask: what about the participants' journey after the creation of the BMC and the SDT? Could we have made a follow-up design that could help us understand the journey even better? The explore phase did also focus a lot on SDT. Service Design is much more than tools. It is also a way of thinking and understanding. This was only taken into consideration in the design of the workshop but should have been included more throughout the whole process. When evaluating the outcome it was discussed that it could have been done by requesting the participants to evaluate and analyze more from their work and outcome of the SDT before moving to the BMC. This could have affected the participants' understanding and way of thinking but it is only something we can assume. Another way to solve the missing factor could be to adjust the problem statement to 'how can Service Design tools...' instead of focusing on Service Design in general, but this would maybe have changed the whole direction of our thesis and was not something we wanted to do. The understanding phase ended with a set of strengths and limitations of the BMC that could have been used further to investigate the weakest touchpoints of the model and tried to solve these using Service Design. Maybe this would have created a more holistic approach to the solution and not only focusing on the canvas but also the problems around it.

The used SDT: Persona, Actors Map, and Customer Journey might not be the strongest tools of Service Design. The tools were chosen from our own knowledge and learnings regarding the use and related outcome. Tools such as the Service Blueprint are a more inclusive tool meaning that it would allow the users to look even deeper into their businesses. This tool was mentioned by many authors as a strong tool to use in relation to business. This could have potentially created even stronger and better results. It was chosen not to use it since we felt that it can be a hard tool to learn and maybe not useful for participants with little or no Service Design understanding. Moreover, there was a possibility that none of the participants' business ideas were mature enough to use a very detail-oriented tool such as the Service Blueprint. However, this can only be assumed and should have been tested. This could have been done by preparing the participants more. Specific guidelines regarding SDT could have been given as well as explaining what the Service Design is and the philosophy behind it (helping the participants gain an understanding of how to have a more holistic human-centric approach) before the usage of the tools.

Comparing the results of the individual sessions and the workshops gave a better understanding of the specifications the SDT needed. The key points were related to the understanding of the canvas, the knowledge transfer, and the customer focus. We felt that the Customer Journey tool created the best holistic approach but needed support from the previous tool Persona. This created the reflection that the support of the BMC might not need to be directly connected to the canvas but a separate step before the usage of the BMC. Including another workshop where the participants could create Personas and Customer Journeys before the BMC would potentially be a better solution. This could help the participants have a more holistic approach and a customer focus when starting their BMC. Knowing some Personas already could create a story from each perspective. This might also help the participants see the canvas from the customers' perspective and play around in it and even take it to the next level.

5.2 Learning objectives and goals

This master thesis is made in collaboration with AAU INC, which allowed us to practice our skills in cooperation with relevant study design. Following our own methodology design that made it clear for us that no method is correct and each process is different. We learned that not trying to fit your process to a specific methodology design can help you focus more on what would fit your own intangible journey rather than focussing on what other methodologies want you to do as the next steps. However, we should also consider the missing opportunity of getting to know an existing design methodology better. Taking this into consideration, we would not know the exact learnings if we followed another methodology other than our own.

Our focus for the design process should have been on complex product-service systems. We evaluated that the services might not be that complex since they are start-ups and their processes were not that evaluated yet. Nevertheless, these services might, in fact, be really complex since it can be harder to understand and the design when it has to start from scratch. This could only be figured out by exploring different business sizes in relation to the BMC.

Our general work was focused a lot on independence since we were in quarantine and could not meet. Even though there was added pressure mentally from moving the project online this did not deter our focus or cause any major pitfalls. Being in constant touch with each other despite the limitations due to coronavirus helped our individual work. Frequently online meetings helped us stay aligned with our goals but also made the writing process coherent. We practiced discipline throughout the work and made it as cooperative as possible with the involvement of both our supervisor and the AAU INC showing professional responsibility.

Through our own work experience we could better register and address the problem field and we were able to find problems and solutions throughout the whole process. Even under lockdown by taking everything to an online level. We showed that we could master design and develop work in this complex and unpredictable situation which required new solutions and ways of thinking. We were able to analyze and assess the work that led to the design of solutions and further experiments for AAU INC. Evaluating our work we felt that we took an independent responsibility for our own work and direction of the project with good leadership provided by the supervision by Luca Simeone who helped us achieve our goals.

5.2.1 Personal learning goals

Our main goal for this thesis was to investigate how the implementation of Service Design might help to develop the Business Model Canvas in real life. These findings were created by exploring tools and methods that we knew from previous experience. This created a feeling of understanding of the tools and how to use them further on.

We also aimed to be more aware of the flexibility of Service Design which in the future might help us to implement this knowledge into a set of skills used at work. Testing the tools on the participants helped us understand that even the simplest things for us can be hard to understand for people without Service Design knowledge.

An example could be when explaining the word touchpoint. A lot of participants had to have instructions repeated and explained further before they understood. The wording may be well known within the Service Designers community but might not be the best to use in the business world. Knowing your audience is important for you to choose the best practice. Nonetheless, we did gain a Service Design skill set of tools and a way to use them in a setting of entrepreneurs. However, we should still be aware of this when describing and using Service Design. It should be done in the easiest and convincing way which will be beneficial for entrepreneurs.

Our last goal was to be able to facilitate online workshops and acquire a better knowledge set of this form of facilitation. This was a goal that was created in the process since we felt that it was one of our biggest learnings. We had no knowledge of online settings but do now feel that we have enough learnings from our exploring to be able to facilitate future online workshops and be able to also pass on our knowledge.

5.3 Limitations

One of the biggest limitations of this thesis was the COVID-19 pandemic. This resulted in a different direction taking all of the work to an online level as well as not including real participants of the AAU INC Startup program. More work on understanding the resources was required as well as a lot of testing before executing. We already had a limited time which made it even more demanding and new resources were needed. Due to that fact, we did feel that not every aspect of our analysis could be taken into consideration excluding the following aspects:

The different levels of the BMC. The different levels of usage were not taken into consideration. The usage of the BMC is still in the level of a checklist with parts of storytelling included. The experiments could have included more playing around in the canvas and usage of the BMC in different ways. This could have been done from the created Personas perspective which could create a story from the canvas. This was only mentioned as suggestions for the AAU INC, since it has not yet been tested (see Appendix 11 for the Product Report).

Testing of more Service Design tools. To test more Service Design tools and make more iterations, the sessions could have been tested to gain a more valid result.

Take a holistic approach towards the AAU INC program. It was decided to look only at one touchpoint of the journey: the BMC workshop. This excluded the possibility of changing the whole journey of the AAU INC program. We do not know how the learnings from the other workshops at AAU INC might have affected the participants' journey. Some of the thoughts about doing this were to include the five design phases and the business model generation book suggested. With the use of the BMC throughout all of the workshops as well as to actually use the BMC the way the book suggests it should. Doing so would allow us to come up with suggestions on how to include SDT in all sessions. In that way the BMC would be used as Osterwalder states: throughout the whole creation of a business.

Testing on real participants from the AAU INC program. Due to coronavirus lockdown, the enrollment of new startups in the AAU INC program was stopped. As a result, we were unable to focus our explorations or test of the outcome of the real participants and see how the PDF toolkit would influence their work within the AAU INC journey. Our only possibility was to test the outcome on Jacob and Rasmus as representatives of AAU INC.

Taking everything online. Due to the coronavirus, we could not meet. Nevertheless, we still had to test and talk with AAU INC. We moved everything online and as a result felt a bigger time pressure which made us downgrade our co-creative structure and not involve the stakeholders as much as we would have liked to. The online level did teach us a lot of valuable things which we can use in our further work.

Specifying our findings from a limitation viewpoint, we can reflect that:

Our own understanding was the biggest factor. The investigation is built on our own understanding and it can be argued that the areas of explorations have been designed towards a specific outcome. The time of the investigation was limited since entrepreneurs in general would probably not start a new business in the middle of a pandemic. The investigated industry is also changing quite severely at this moment which could have affected the outcome.

The variants of the participants are not taken into consideration. The variance of the participants' different abilities, prerequisites, and empathy had a big influence in each outcome. Some of the participants did not seem to care and/or know-how to move forward, whereas other participants seemed to dive deeper into their cases. A bigger variant and number of participants would have supported the outcome in a good way.

Using us as experts. Using our own knowledge, creating the design, and facilitating the sessions, and using us as experts could have created some limitations in the outcome. We might have a unique way of using and understanding both the BMC and the SDT which can be different in other settings using different people for facilitating.

As a result, due to the limitations, we feel that we cannot conclude anything. However, we have additional suggestions. For a greater result, the following research for future research is suggested.

5.4 Future research

The project context was made in cooperation with the AAU INC and their startup program. To make a more valid study, it could include real participants of the program and include the stakeholders more throughout the design process. More representative rounds of the workshops and individual sessions would also have helped us to get a more valid foundation. How to help the business developers to create the best setting for the participants should be investigated more. We could have gained a deeper knowledge of the participants' influence on each others' work. Also, we could have made a deeper analysis of their weaknesses, deciding who should work together and make them learn from each other. These would be interesting areas to explore and could be something the AAU INC could test in their future work. As facilitators, we seemed to have an influence on the outcome of the workshops and the individual sessions as our guidance and design influenced their way of thinking and use of the SDT. This is something to be very aware of in future design and something that should be explored. There should be a focus on giving the best instructions for each participant.

An additional area for further investigation is to make the sessions more personalized. This area can be difficult as incorporating personalization in the future workshops seems almost impossible but could result in a better outcome.

The collected data can also be questioned if it is reliable. The reliability questions if the data can be produced again with the same result. This can only be answered if tested. It seems that it may not be possible as the participants would probably change their mindset if a different facilitator with different knowledge would attend as well as if different instructions were given. Moreover, time and participants' circumstances would change their answers. To make sure the reliability was covered as much as possible in this project, specific guidelines and instructions were made. These could be interesting to test in a similar environment as ours or even in the real environment to see the difference.

To explore the AAU INC program's journey using Service Design and focusing on the BMC is also highly suggested for further research for the AAU INC. They could try to design the whole journey in a different way including using the BMC in every session. They could use the BMC already in the first workshop based on assumptions. Before the next workshop, they would then get suggestions for investigation such as observations, interviews, or other testing/exploration methods that could help them understand their business. Furthermore, they would then incorporate all of their data into the BMC in every session, including their learnings from the workshop. This would be a way to use the BMC as a design process and play around with the ideas/findings, as Alexander Osterwalder suggests it should be done (see section 4.1.5 Business Model Canvas understanding). This would be an interesting area to explore and a great way to understand if the BMC is more useful in this way.

6. Conclusion

This chapter concludes the key findings from the experiments and gives an answer to the problem statement: "How can Service Design be used to support the work on the BMC workshop for the startups within the AAU Incubator?"

In this thesis, Service Design was explored in combination to the Business Model Canvas to see if Service Design could support the model. A case study of the Business Model Canvas workshop for the startups within Aalborg University Incubator in Copenhagen has been used to examine the different Service Design methods. To do so, we created our own methodology to support the process. This included an Understand phase, where research made the foundation for the project; continuing to a Define and Redefine phase that created a workshop flow for the tests that were examined in the Explore phase; ending with the results of suggestions in the Deliver phase.

The main focus for this research was placed on the Explore phase. This phase examined two rounds of workshops and four individual sessions with upcoming entrepreneurs as participants. Within the workshops, the two tools Persona and Actors Map were explored to test their potential to support the Business Model Canvas. The individual sessions were focused on testing the more complex Customer Journey tool. In all tests the understanding of Service Design as both tools, but also as a mindset were in mind. The outcome of all tests were analyzed and compared to reflect on their effectiveness of supporting the Business Model Canvas. From these results, we concluded several suggestions.

The first suggestion is that from the perspective of the three tools, the Customer Journey seemed to have the biggest influence on the Business Model Canvas. The tool helped the participants to have a much more holistic approach towards their businesses. The fact that this tool was used in individual sessions with the participants and not in a workshop setting might have had an influence. The individual sessions were more personalized for each participant and their business idea.

This also created a more co-creative space where the participant could reflect and get input from the facilitator which was not possible in a workshop setting. By reflecting and testing these results, the suggestion was made that the Service Design tools would probably work better while working together as a team rather than when creating it on your own. As an entrepreneur, you get the most out of including other people into the design process to see the business from different perspectives and a design thinking mindset is more creative as a team.

The results from the measurement of the workshops showed that the participants' confidence in the Business Model Canvas would increase after the usage of the tools Persona and Actors Map. Furthermore, the observations and analysis showed that the participants gained a lot of new ideas and some of them even changed the direction of their project after the usage of these tools. In general it was concluded that the visual aspect of all of the Service Design tools had a big influence in the outcome. The visual aspect, such as designed templates with specific guidelines, helped the participants think in different ways, understand the customers better, and gain new ideas for partnerships. However, the visual aspect was also a struggle for some of the participants. Some of them found the Business Model Canvas more self explanatory and the Service Design tools more complex, not easy to understand at first glance. This depended a lot on each participants' ability to be creative but also their personality and way of thinking. These aspects are hard to influence but some suggestions were made around the way the Business Developers could help the participants to think more creatively and gain a Service Design Thinking mindset. Therefore, a general conclusion on how Service Design is supportive for the Business Model Canvas cannot be coherent and be possible to implement for all entrepreneurs. It is dependent on each entrepreneurs' personality and needs and cannot be made into a general perspective. Thus, suggestions on how to support entrepreneurs, the tools and methods, workshop designs and limitations of such were the final recommendations shown to the Aalborg University Incubator and also in the conclusion of this thesis.

Through the process, some critical limitations and suggestions for further research were made to support the findings. These limitations were mainly due to the COVID-19 pandemic. First, a limitation of the participants within the study should be considered. The participants were not a part of the Incubator at Aalborg University, but independent upcoming entrepreneurs - some of them without a status of a student. This could have affected their knowledge about business development since they did not participate in any other workshops or sessions about the topic and their businesses may have not been as developed.

Secondly, the pandemic also affected our ability to follow the journey of Aalborg University Incubator and the Startup Program, which could affect the outcome of the Business Model Canvas workshop. As a result of the pandemic, the program which was to start in Spring 2020 did not take place and we were unable to take a holistic approach towards the program. In turn, we were only able to focus on the touchpoint of the single workshop of the Business Model Canvas.

Lastly, the fact that the COVID-19 pandemic took everything to an online level had a big influence in the outcome. We cannot know if the outcome would be the same in an offline setting. In the normal work of the Aalborg University Incubator program nothing happens on an online level. All of these limitations should be tested in an offline setting with real participants of the Aalborg University Incubator following their journey and learnings to see if the same results would arrive. At the same time, the suggestions on how to create the online lessons and the outcome of so might be one of the biggest learnings of this study. At this moment, there is uncertainty in when or if everything will go back to normal. The world might change from now on and things may move online more than ever before.

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8. Appendix

Appendix 1: Interview guide for interview with Service Designers

User interview: Service designers
Length: 30 min
Participants: Current Service Designers working in startups

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Request to sign the Consent Form + permission to record

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Small talk about what you do, what is your position, what is the profile of the company, how SD is important in the company where you work?

Are you familiar with the business models and what is your experience?
Do you think that people around you know what a business model is? Why?
How would you explain the value of a business?
Does the company communicate in a clear way its value/ business model? How?
What is your experience with the business model canvas? (show canvas if not)
Do you have any ideas about how Service Design could be used in the business model canvas?
Do people understand the role of Service Design and how its tools and methods influence the organization?
Do you know any sd tools? Have you used any in your start-up? Which one do you find valuable?

Appendix 2: Interview guide for interview with startups

User interview: Startups
Length: 30 min
Participants: Current startups, no longer students

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Request to sign the Consent Form + permission to record

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The goal was to gain an understanding of business models and knowledge of such. The following subjects were included in the conversation:

How would you explain the value of a business model?
Would you use any canvases to explain a business? What kind?
What is your experience with the business model canvas? (show canvas if not)
Do you have any ideas about how Service Design could be used in the business model canvas?
Do people understand the role of Service Design and how its tools and methods influence the organization?
Do you know any sd tools? Have you used any in your start-up? Which one do you find valuable?

Appendix 3: Interview guide for interview with business developers at AAU

Stakeholder interview: Business Developers at AAU
Length: 60 min
Participants: Business Developers at AAU INC

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Request to sign the Consent Form + permission to record

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This interview was more structured and followed a specific set of questions but also allowed us to ask extra questions. The interviews were recorded for further analysis, but notes were also taken throughout the session. Here is an overview of the question asked and our notes:

Questions:
• Data about startups - 30
• Programs? really broad, from every one of them
• How many?
• Knowledge? normally 0 when they enter
• Similar startups? Tourism and fashion - mostly products
• Contacts to startups
• His observations about BMC from students - fill it once, block by block, new way: do entire canvas first, and then iterate with inspiration from other industries - not remove things, but add new post its

- Like/dislikes/limitations - simple, accessable, easy to get people into the business mindset, do not like: sometimes it's too simple - think about the environment. It is a tool you use to get things done, not something you use to show anyone. Use the canvas as the foundation for the business plan. Not include the TEAM (80% of investors think the team is the most important). You need to test everything on the canvas, thinks that it is not for big companies.
- Why BMC? Why not another canvas? (Ex Lean) - what he knows. Use other tools in other canvases. He thinks it's the best.
- Structure of the AAU INC program - workshops etc in timeline (start april + october)
- Why is the BMC workshop at this stage - "maybe I can partner up with someone else" "How can I actually make money"
- When is the BMC workshop
- Date: 25 feb - validation workshop with Rasmus
- CV from Rasmus and Jacob is missing (online from SEA webpage)
- Suggestions for books/papers

Organization map out (connections, responsibilities, task):

- SEA : studerende, researchers og alumni
- SiP
- Inkubator
- Business Booth
- Startup Program
- Erasmus for Young Entrepreneurs
- Staff?
- Departments
- Events: Inkubator Cafe, Entrepreneurial talent, Startup dating
- Study board
- "Networking"
- Mentors vs Business Developers - task, responsible
- Research to Business
- Innovativ Vækst
- How are they connected? What are their tasks and responsibilities?

Business developers - questions about the set ups
Mentors - CAAV - university start up welcome - win trip to China

SEA employees - project managers, behind the scenes for SIP
JAKOB face of SIP

Extra partners: events with PROCED inventors (own by DTU), organization for employers - a lot of money, Angel investor

Go to the other incubators find leaders and ask about BMC

Tuesday 12.30 - go to the classes and ask people about mails and if they want to participate - location of the room

Create Facebook post - for Jakob to post it on Incubator SM/ as a promo

Additionally we created a Google Survey, asking the other Business Developers about their opinion to the BMC. The questions can be seen here: https://forms.gle/TeyNkgEnp81KqqwT8

Appendix 4: The measurements from workshop

The measurements were made in a Google Survey before, during and after the sessions. A fully overview of all the asked questions and answers can be seen here:

https://docs.google.com/forms/d/e/1FAIpQLSeIJh-PAjeZMyWHvY1rNuqK3WPXQBy1GlE7OUsLz5D-NcFqAOQg/viewform?usp=sf_link

Appendix 5: Observations of the two phases of workshop

After analysing the measurements and feedback, a walkthrough of each participant was made, to understand if their expressions and work fit their own opinion about their outcome.

PARTICIPANT	1ST ROUND OF BMC	PERSONAS	ACTORS MAP	2ND ROUND OF BMC	NOTES
A) Language School	-It took her awhile to start - Added mostly one post-it per box - She asked to there to be displayed deeper explanation of each box - first she had to research them, even though they were explained during presentation	- First she read all descriptions of the boxes, and then started filling them out - She worked quicker than during BMC fill out	- She didn't fully understand what actors are, so she also added a post-in such as "Word of Mouth" - She didn't feel comfortable with the method, although she added few gaps and potential connections	- Again she started after a while - SD tools definitely influenced her perspective since the added post-its were formulated almost the same way as the one added to Persona and Actors Map	-Was struggling with BMC - didn't feel comfortable with it - She could use more time to research purpose and meaning of BMC by herself
B) Sew on Badges	-Worked fast, it seemed like he knows the tool - Added 3 different notes to Value Proposition - Was rather strict while typing - no long sentences. Just keywords	-Did take a bit of time to start -Had fun while drawing the Persona's image - Used rather long sentences while describing	-Mapped out only 3 actors which all were connected to his Persona - Did not follow the structure. He was using colors of lines and gaps at the same time	-Added only one note to channels, which was definitely influenced by Persona	-Worked fast with BMC -It seemed that he lost his focus on Actors phase. which probably influenced 2nd fill out of BMC
C) Nail Studio	-Start in left side of canvas - Use different colour post-its - End with two empty blocks: Key Resources and Customer Relationships	-Got started right away - Spend most time on post-its - Looked happy while doing this - Finished faster than the rest	-Did not follow structure - Placed one actor and then started connecting and describing them	- Filed empty blocks up - Placed in total 8 new post-its to canvas - Most new ideas seems to fit the customer side	- Fast at making the SD tools, had a hard time making the BMC - Got something new from both tools

D) Let's dine	- Got started right away from Key Partners - Was moving from the left to the right - Did not fill out Customer Segments	- Used mostly one post-it per box, with long sentences - It seemed that she thought before about who could use the service, so she quickly created Persona	- Quickly mapped out the majority of actors. Most of them were taken from BMC Key Partners - She followed instructions on mapping out of the actors, connecting them with black and red lines as well describing gaps	- After SD tool caught up with Customer Segment box adding 6 new post-its - She didn't spend as long time on the second fill out since the first one seemed to be successful for her, although added new post-its to the right side	- She knew her concept pretty well, that's why she was moving fast
E) Virtual Party	- Spent first 5 minutes understanding the canvas - Placed 1-2 post-its in each block - Started on right side - Seemed a little nervous	- Spent most time on drawing the Persona - Placed only one post-it in each block - Could use more time, did not make things that	- Make a small Actors Map with a few post-its - Make the tool as told - Seems to get some new ideas from the map - Done after	- Only added new post-its to the left side of canvas (Key Partners) - Place only 4 new post-its (but it is a lot for her) - Got some important new	- Did not talk much and seemed to be a bit afraid that she said or did something "wrong" - Did all models and looks very
	about doing things wrong	fast	10 minutes	aspects as investors	slow, could use more time
F) Oblivion	- Got started right away - Started on the right side of canvas - Placed A LOT of post-its - Seems to know the tool, done after 20 minutes - Ended with a messy canvas	- Slower getting started on this than the BMC - Do not sketch her Persona, but found a picture online - Placed some post-its outside the canvas	- Start creating A LOT of post-its notes all over - Ended with a messy page - Did not follow the structure - Looks really frustrated while doing it	- Only added new post-its to the left side (Key partners) - Seems to get most out of the Actors Map, even though she made it wrong - 7 new post-its added	- Did not care about the visuals of her work - Found the BMC easier than SD tools - Had a hard time using the Google Jam post-its notes
G) Community Garden	- Needed to draw own canvas, got started later than everyone else - Still filled out the whole canvas - First time using the tool but no problems	- Also needed to draw own Persona template - Made a Persona 'family' - Still focus on only one person - the mother - Could use more time	- Made a lot of actors and follow the taught structure - Seems to know the tool - Made/found a lot of new opportunities/connections in between actors	- 5 new post-its added - Added in different blocks all over the canvas - Seems to have equal amount new knowledge from Actors Map and Personas	- The Google Jam did not work probably, had to draw his own tools - Did not communicate through the workshop, worked more on his own - Feel learner

H) Project Poseidon	- Got started right away - Start in the middle with value proposition - Place between 2-4 in each block -Fewest in the customer segment (2)	- Made a Persona that seems to be like himself - Had a hard time sketching, but made a smiley - Filled out all of the elements	- Had no problems getting started - Made a lot of actors at the same time - Had a very positive and fast way of using the tools - Got new ideas through	- 3 new post-its added to canvas - 2 in Key partners/activities and 1 in value proposition - Seemed to have gotten more out of the tools	- Really fast learner - Had no knowledge about the tools or models, but got into it right away - Got a lot out of the tools, but not canvas
I) Make-up Library	- Had a problem with Google Jam. The BMC template couldn't load - She googled an example of the template and added the notes without "blocks" on	- She knew how to create Personas so it was hard for her to adjust to the new template and switch mindsets	- Had no problems in mapping out the actors nor characterizing the gaps and opportunities	- Didn't add any new post-its for a quite a long time - Finished with 2 new post-its on Key partners block	- Had a strong opinion on the tools as well as BMC because she already knew them. It might have influenced the process of creating them a bit
	Google Jam - Quickly caught up and finished on time				
J) Todoo	- Place one sticky note at a time - Filled entire canvas before time (5 mins before) - Used longer sentences and fewer post-its notes	- Started right away with her Persona - Seems to know the tool - Works as a Service Designer so has the needed know-how	- Is not following the taught structure - Made her own version of the tool - Seems to still get an understanding from it	- 6 new post-its added - 4 new on the customer segment and 2 on the key partners - Writing long sentences, instead of more post-its	- Had her own opinion about how to make and use the tools - Started each assignment before we were done explaining - Fast

The online workshops were also recorded for further analysis. The full recording can be seen through this link:

https://drive.google.com/open?id=15yTcQyY6plN-wctRmvwnnCw48BINJlNe8

Appendix 6: Observations of the third phase; Individual Customer Journey Sessions

The participant journeys in subchapter xxxx gives a general overview how the participant went through the creation of the Customer Journeys based on their business idea. The subchapter "observation" provides the table where all of the insights were gathered and divided into three stages:

Customer Journey - all of the insights from filling out the Customer Journey template
BMC - all of the insights from 3rd filling out of the BMC
Notes - extra insights/ findings regarding behavior of the participants

Participant	Customer Journey (CJ)	BMC	Notes
OblivioN	- No problem creating a storyline through her Persona - Did not like sticky notes and had troubles using MIRO - The service moment was a long period of time (a couple of hours) and was a pain - Used a lot of time thinking about the feelings and trying to	- First try we gave her a time limit and she should fill out extra sticky notes if she felt anything could be added after creating the canvas. We quickly understood that this did not work and that the canvas was too messy (she had placed a lot of notes already) and that the knowledge	- Difficult to be patient when we know the online tools and the participants were not - Spelling and know-how of MIRO would slow down the process a lot - The duration of creating the CJ and adding notes to the BMC took in total 1,5 hour in this first round
	get into her Personas mindset - She was very detailed - Had a hard time finding pains and criticizing her service - Liked to discuss the things and get feedback instead of deciding everything on her own, would often ask "what do you think?" - She knew what Customer Journey was, she helped create it once - She really liked the template of CJ and its division into 6 rows. It was much cleaner for her than the one which she used at work (just a bullet points - "super messy and not visible at all")	from the CJ might also seem overwhelming at the same time, we therefore helped her through the blocks one by one and let her come up with new ideas from the CJ. - She added eight new sticky notes in total to the BMC.	- After this round with her in MIRO, we changed and did not make the participants use Miro themselves (too time-consuming), but told them to be the brain and we would add notes for them while they told their story.
Project Poseidon	- Had a very creative and vivid personality and imagination, could easily create a story of his Persona - He has so many thoughts at the same time that he fills out more than one row at a time - add feelings to the story easily together with the journey -He never used CJ before, although the PDF guidelines gave him some understanding	- Added 'customers' as a new key partner. The CJ helped him think co-creatively and include the customers into how to make the product which he had not thought about before. - He still had a hard time with the customer segment, but after discussing it with us, he got some new ideas	- Were doing the CJ so fast that it sometimes could be hard to follow his story and add all the notes he wanted - The CJ seemed to influence his business a lot. He made a new strategy and got a new way of thinking. - He was really fast creating the tools and if he got stuck then he easily continued after a small talk - He created a whole story narrative although he knew what steps might be important for his product and service and which do not

Virtual Party	- Had a hard time creating the story, since she had not thought the specifications through - wanted to be precise and detailed - The CJ helped her create specifications	- Did not feel sure about the tool and had a hard time coming up with any new ideas during the first fill out on the workshops. She felt more comfortable during the third	- The guidelines helped her feel more secure on how to make the tool - For her support through the tool was very important, she liked to get help and
	- Would ask a lot of questions throughout the creation, glad to get support through the tool - Had a hard time criticizing her work and come up with possible pain and gains	attempt. However, it still wasn't her best tool to work with - Change the business model from being mass-customized to a Personalized service - Got new customer segments - Added main things. She can now see that she forgot such as app development and collaborations	discuss potential ideas and possibilities. - She added in total 11 new sticky notes to the BMC after CJ
Lets dine	- Her first time to create a CJ, but seems to get it right away after explaining the example - She had a difficulty to cut the journey into smaller ones - at the beginning of interviews she was struggling how to map out the journey - from which perspective - she thought it is impossible - She gets started right away and has a lot of ideas for the service moment, she wants to make it long - She gets inspiration from the given example to add feelings - Try hard to put herself into the shoes of her Persona. Will tell the story as "She knows"	- Really difficult to expand the new learned knowledge from CJ into the nine blocks of BMC - The different wording in the BMC seems to block her from remembering what she just made - Needs to go back to the CJ to see what she wrote to understand if anything can be added	- She is positive and excited to see how this tool might help her - Nervous that the CJ might not help her enough since she has two customer segments that are needed to get her business running - Really happy to get ideas and discuss outcome with us - wants to collaborate on how the app could work - She understood that she can use CJ multiple times and map out different processes which show her gaps and new possibilities - She understood that pains might be changed into possibilities which was super positive for her

All of the individual sessions were also recorded and can be seen through this link:
https://drive.google.com/open?id=15kFkeTny_VvC-BHcEiuDTnq8_BEnDTx1e

Appendix 7: Cross-case analysis of all participants

Participant	*Benefits of Service Design tools in BMC from measurements & feedback*	*Benefits of Service Design tools in BMC from observations & analysis*
A) Language School	• Confidence raised from 2 (before) to 5 (during) and then 7 (after) • Wrote that they saw changes in the BMC using the Service Design tools and that the workshop met the goals • Did not write a lot or say much during process	• Added in total 5 new post-its to the BMC after the use of Service Design tools • Seems to focus more on human artifacts after using the Service Design tools • Added notes such as "word of mouth" "knowledge" "online groups" and "new learnt skills"
B) Sew-on Badges	• Confidence were steady from 7 (before), 7 (during) to 9 (after), so the only thing that changed the confidence were the Service Design tools • Felt the Service Design tools helped to see more possibilities by 'adding promotion options'	• Only added one extra post-it note to the BMC after creating the Service Design tools
C) Nail Studio	• Confidence in the BMC raised from 4 (before) to 7 (during) and 8 (after). The most influence in the learning seems to be the BMC and the SDT only gave a little extra knowledge • Said they could see changes in the BMC using the SDT, but did not explain further	• After the creation of BMC in the 1st round, two blocks were empty: Key Resources and Customer Relationships. • Made the SDT fast and did not seem to have any troubles in doing so • Placed eight new post-its to the BMC after the creation of the SDT • Most ideas seem to fit the customer side of the BMC, but got something new from both tools • Filled up the empty blocks of the BMC after creating the SDT • The measurement and feedback showed that the participant got most out of the BMC part, but the observations and analysis seem like they got more out of the SDT
D) Let's dine	• Their confidence rose from 5 (before) to 8 (during) and 9 (after) which shows that the BMC 1st round gave a lot but the SDT made it almost perfect • The workshop helped them to gain a better understanding of the tools	• Post-it notes only added to the right side of the BMC (the customer side) • Seems like the Persona had the most influence for the participant • Added eight new post-its notes after creating the SDT; six of them in the customer

	• Felt that the customer segment of the BMC was improved from the SDT both in understanding and description	segment field, which seems like they got a lot out of creating the Persona
E) Virtual Party	• Knew about and has already worked with BMC before • Confidence only started at a 2 (before), to 4 (during) and then a 7 (after) • Seems like the participant got a lot out of the SDT, since the confidence was raised a lot using the tools • Visualizations seems to help the participant understand	• Only added new post-its to the left side of the BMC; Key Partners/Activities/Resource • Gained some important aspects of the business in the BMC as investors, promotion, influencers and cost of such. • Did not make any changes in the customer side of the BMC • Looking at the SDT it seemed like the participant got a lot of new ideas and help for the BMC from the Actors Map
F) OblivioN	• The only participant whose confidence did not rise or fall during the process, but started and ended at nine (high level of confidence for the BMC). • Gained knowledge from the SDT; how important it is to think about specific customer segments rather than market. She feels she got most out of the Persona • Told that she definitely could see a change in the BMC using the SDT, but did not gain more confidence in the BMC	• Could see in observations that she was very familiar with the BMC. Placed a lot of post-its, but did not seem to think too much about it • Had a hard time creating the SDT. Did not follow the structure and was messy • Added only new post-it notes to the left side of the BMC (Key partners/activities) • Seemed to get most new knowledge from the Actors Map even though she mentioned the customers in her feedback
G) Community Garden	• Confidence rose from 6 (before) to 7 (during) and all the way up to 9 (after) • Seems like the SDT had a big influence in the participants feeling of confidence; a lot more than the BMC 1st round • The knowledge of the BMC went from the participant feeling he could describe the tool, to actually applying it to the idea/business • The participant seemed to gain the understanding of the SDT and got some new ideas	• Had some technical issues, but worked on their own and did not ask a lot of questions • Added five new post-its notes all over the BMC after creating the SDT; did get something out of both tools • Seemed like the new post-its were made from the view of the Persona and what this Persona would like to have in the business • Got a new way of thinking from the SDT; from the customers perspective
	after creating them • The Persona was the tool that helped the most; it could help the participant create the BMC from the view of the Persona and not from own • Wants to make more Personas. Had already made an Actors Map, but still felt they got something out of it	

H) Project Poseidon	• Did not have any knowledge about the BMC or SDT • Went from only knowing the name 'BMC' to the feeling of having a firm plan of how to implement the knowledge and continue the idea • Confidence of the BMC raised from 1 (before) to 5 (during) and 9 (after). This participant gained the most confidence development during the process • Got knowledge about the key partners from the SDT and felt they got the most out of the Actors Map, by visualize the different aspects of the BMC • The SDT helped to gain focus on what should be done, focussed on, and what should be changed	• Have a very creative and fast way of doing things • Seems to get a lot out of the SDT, but only added three new post-it notes to the canvas • Added post-its to the key partners, as the ideas came from Actors Map • Have a hard time transferring the knowledge learned from the SDT to the BMC • Seems from the measurements and feedback that he got a lot of knowledge and confidence from the SDT, but when applying it to the BMC something went wrong • It could be that the understanding of the BMC still was not clear to him, or that he could not remember how to use it
I) Make-up Library	• Confidence in the BMC went from 5 (before), to 7 (during), and ended also at 7 (after) • Positively surprised on how much the SDT and BMC can help you develop your idea in a short amount of time • Felt that the BMC is very advanced and not something you should be able to learn in a few hours • Felt the knowledge only went from understanding of the BMC to being able to describe the BMC. However, not use it correctly • Seems to feel that the SDT	• Maybe did not feel that they got a lot out of the SDT, but observing and analysing the BMC after creation of SDT they added seven new post-it notes • The added notes surrounded a new business opportunity: to deliver makeup and networking around it • Five of the notes were added to the left side of the BMC, key partners and activities, covering this new aspect of the idea to deliver makeup
	did not help that much, only the Actors Map a bit, since the Personas should not be based on assumptions	

| J) Todoo | • Had a middle level of confidence to the BMC (6) before, this raised to 7 (during) and ended at 8 (after) in the process
• The knowledge of BMC raised from being able to only describe the BMC to applying it to ideas/businesses
• Felt the SDT did not influence the BMC much. Felt the Personas were the best match for the idea, but they needed to create more than one Persona
• The phase of the idea did not suit the Actors Map | • Had no problems creating any of the tools but started before the explanation was done. Seemed to be maybe too confident in the tools to learn anything new.
• Felt they only got something out of the Personas, but did add two extra post-its to the BMC in the key partner field
• Had only influencers in the key partner field and even wrote "no partners needed" after 1st round of BMC
• Added important partners as software providers and social media after creating SDT
• Added also four new post-it notes to new customer segments after creating the SDT; got a broader perspective
• Felt that the SDT did not change anything in BMC, but observations and analysis of results said something different |

Appendix 8: Feedback from Customer Journey Individual Sessions feedback

Participant	Customer Journey (CJ)	BMC	Notes
OblivioN	"I already knew the Customer Journey, but in my eyes, it is a good and easy tool" "I see it as one of the most important tools to understand the customers and not the business" "Can be overwhelming with so many rows, but	"A helpful tool to create your Customer Journey" She was really glad that we helped her through the blocks when filling out because she had already forgotten how the canvas worked from last time.	- Halfway through the CJ we took over by placing the sticky notes for her in MIRO and she just talked. This was faster, but harder to keep her focused, but her feedback was: "I'm just so grateful that you are writing" "I felt I already had the ideas, but the tools

	"it made my business so much more clear for me to go so deep into it" "It really changed my perspective, even in my Personal working life"	"Using the CJ in relation to the BMC helped me a lot. When making it so clear, then you really see the small things you might have missed out"	helped me see them"
Project Poseidon	"I had not thought about how my product could fit in an everyday moment - that it is actually also a service" "It seemed a little overwhelming when reading about it, but so smooth when doing it together" "Way more useful than I would ever have expected from just reading about it" "It really helped me to criticize my product and think about potential pains & gains"	"I now feel even more that I know what it is and how I can use it. It is a good way of structuring your business" "When looking at my BMC after the creation of my CJ, I can now see that I need to think about other things. It really opened up for new ideas"	"One-by-one sessions is so much better than the workshop, I got much more out of this one hour than I did from two hours of workshop" "I can now understand my business even better - I have not thought about it as a service, but only how the mask would be working - this helped me understand what I should think about, and added pains and gains and can create a better experience for my customers"
Virtual Party	"It is funny to me how such a little service moment of my service can influence my service this much - it gave me insights about everything" "Very useful and helpful to break it up in before, during and after" "Normally I would only focus on during - on how the app should work - but I can see that I really would have missed out on a lot of money and opportunities if I did"	"I have never liked the tool. I felt the same last time during the workshop - there is too much to think about and you get confused" "I think it is much better to use other tools, where you can visualize your thoughts - that is just easier and better for me" "When creating the CJ in relation to the BMC I got a much more clear mind on how I want to earn money"	- Got a much better perspective from the CJ than from the BMC - Want to use tools that can help her visualize her service - One-by-one sessions is a great way to help people who can have a hard time criticizing their work and creating opportunities on their own
Lets dine	"It was a great help that I did not have to write on my own, it made me focus on only what I wanted in the CJ"	"I think that it is a great model. I knew it already before, so I also think that it was easier for me"	"I have never used tools that could help me see the business from my customers perspective"
	"The CJ made me think of pains & gains which I have not thought about before and this really influenced my BMC" "I really want to make a CJ from my other customer segment now. Then I think I could add even more to my BMC"	"I have tried to make my BMC from my customers' perspective before, but I see clearly now that I have not done this correctly. The CJ is so easy, and is doing this for me"	"One-by-one is much more smooth for me. I really like an open dialog and to get constructive feedback" "The BMC is much more clear to me know after this one-by-one session and the creation of the CJ"

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Appendix 9: Interview guide for testing

User and stakeholder interview: Service designers, Business Developers, Startups and Expert of BMC
Length: 5 x 30 min
Participants: Current Service Designer, two Business Developers at AAU INC, Expert of BMC and a one working at own Startup

_____

Request to sign the Consent Form + permission to record

_____

Five individual interviews asking questions about our outcome and results, to test, iterate and get feedback. Showed Product Report while testing (see Appendix 11).

Questions:

Rikke - the Service Designer in startup, use BMC in her daily work and have eight years of experience with BMC

Introduce our project
What is your overall feeling regarding the Frameworks?
What do you think about the flow of each of the Framework? Are they easy to follow? Are they intuitive?
Can the Frameworks be used by Service Designers in a workplace or while conducting projects? If yes, in what stage of the process? Or why not?
Can you perceive the Frameworks used by anyone else? (please be more specific - how and why)
Can you see any similarities between your daily work with the usage of Business Model Canvas and Service Design and the Frameworks?
Are there any improvements which you would suggest implementing?

Jacob & Rasmus - business developers at AAU Incubator

Introduce our project (written text sent)

- What is your overall feeling regarding the Frameworks?
- What do you think about the flow of each of the Frameworks? Are they easy to follow? Are they intuitive?

- Can you see the use of the Frameworks at AAU Incubator?
- Would you use the Framework at your workshops? If yes, why?
- Would the Framework provide extra value for the start-ups involved in the program?
- What are the possible pros and cons of the Frameworks?
- Are there any improvements which you would suggest implementing?
- Do you feel more confident about Service Design Thinking after reading the Framework?

Ivan - business model canvas expert

- Introduce our project (written text sent)
- What is your overall feeling regarding the Frameworks?
- Do you have any knowledge about Service Design? Have you ever used it in combination with BMC?
- Would the Framework provide extra value for the start-ups involved in the program?
- What are the possible pros and cons of using Service Design in combination with BMC?
- Is there something you think we should be aware of using the BMC?
- Do you have any improvements or suggestions for the framework?

I will quickly introduce you to the 3 frameworks which we designed based on our research. Do you have any knowledge regarding Service Design tools? Please be aware that I will ask questions only regarding BMC in combination with Service Design.

Jarek - entrepreneur - CEO of contract book start-up

- Introduce our project (written text send)
- What is your overall feeling regarding the Frameworks?
- What do you think about the flow of each of the Frameworks? Are they easy to follow? Are they intuitive?
- Who could you see to use the Frameworks?
- Who would be the main target group of the Frameworks in the startup world?
- Can you see the value of implementing the Frameworks into the startup world?
- What are the pros and cons of the Frameworks?
- Do you have any improvements or suggestions for the framework from the startup perspective?

Text send to the participants:

Hi …

Thanks again for participating in the testing of our final outcome!

As you might know, we are studying Service Systems Design and are writing our Master Thesis at the moment. Our research question of the thesis is "How can Service Design be used to support the Business Model Canvas?" focusing on the Startup Program at Aalborg University and their workshop about Business Model Canvas. This was explored through our own workshops and the final outcome ended with a Framework including our tips & recommendations, a toolkit and a workbook to be used within the Startup Program and maybe also for others of interest.

We want you to read through the Frameworks #1, #2 & #3 to see if they make sense and to hear your thoughts about them. The Frameworks are attached as separate files and please note that they are still draft versions. We look forward to getting your opinion.

Best,
Marcela & Stine

Appendix 10: The Testing

Key points from testing round #1, the Service Designer with BMC experience:
- The Frameworks are too long with a lot of repetition. It would be good enough with two - one guidebook and one workbook.
- It is confusing to call them Frameworks. Call it what it is: a Guidebook and a Workbook.
- Our job as Service Designers is to visualize how the jobs should be done. It is good that it is made as a cookbook (step by step with a result) but the connections between the tools should be made more visual and simple.
- We should start with the Persona and visually take it through the BMC (using the Customer Journey) and connect it to the Actors Map.
- The chosen tools make much more sense when you think about the work around the BMC. We were told that it was really clever of us that we chose these simple tools and did not go further than using the Service Blueprint or other tools that could be easily misunderstood or design tools that were too complex for business people.

- It made us understand that it can be used by Service Designers in a business setting but then we need a deeper connection between the tools to help people that are not Service Designers to understand.
- The limitations of the BMC are often the missing value found in the connections between the blocks. This can be connected with the Customer Journey and should be simplified and be more connected to the BMC. As a startup, you tend to focus more of your attention on funding and goals rather than tools. To help the users actually use tools they should be made simple and fast to use.

Things to change before next test: #simplify #connections #guiding #visuals

Key points from testing round #2, the BMC expert:

- It takes a bit of knowledge for the Business Developers to implement it. It could be really cool to help the students in this way but it might be too specific.
- The starting points of the users are really important. We should be more specific on who this is made for. Maybe users with knowledge of BMC but not SDT.
- The design of the workshop seems to be a bit difficult for students. We should think about who our target group is and customize it more for them.
- The words inside the BMC are business economics and even this can be hard for the students to understand. As a facilitator you need to understand your audience. Each participant have different knowledge, which can influence each outcome.
- There is an element that we probably need to think about: it might not work as a workshop - proposals that can be used in different sessions could work better.
- The BMC is a communication device. One of the biggest limitations is the way it is being used. If you continue brainstorming in the same team you will not get anything new out for it. Should give more suggestions for how it can be used.
- It is nice to have a manual but suggestions are much more useful in the real world. Let's say the Business Developers change jobs and someone new needs to take over. Will they know how to use this?

- It is also an economical question for the organisation. How much will it cost to implement this? Is it valuable enough for us to do so?
- If you dive into each block of the BMC there are so many other fields that can support each of the blocks - is Service Design the most valuable for this?
- Those who need the BMC the most do not use it because they do not understand it. If you do not have the imagination and a creative way of thinking, you cannot use it in the right way. The people who know how to use it use it without knowing.
- Maybe we should start somewhere else. Instead start with some creative thinking tools that can help people to get into this mindset.
- We mention four levels - there is a higher level. Alexander Osterwalder was an IT specialist who wanted to understand systems of a business. Can you innovate a way to do business? Not a specific product and service. There are a lot of examples of this such as Ryan Air. However, can you teach people to do this? This can be challenging.
- What should the teachers think about when teaching? We should explain that this is a starting point and can be used in different settings and ways. We should also highlight more of what to be aware of and the limitations of the BMC.

Things to change before next test: #audience #specify #suggestions #limitations #mindset #learning-philosophy

Key points from testing round #3, the AAU INC Business Developer:

- The Frameworks were not understandable on their own. They need an explanation and walk through to get it. He expressed, that he would still be in doubt of how to use it on his own.
- The tools are good and simple for the Business Developer and the students to use. He liked that we chose validated tools and not tried to build our own tools. It is nice that the tools seem to fit the model and can be implemented into this one. In the startup world there are often just a lot of tools and it is not shown how they can work.
- A couple questions regarding the validation of the tools: is it iterated enough within one workshop? Will they get enough new ideas or suggestions in one workshop to iterate on it? In his opinion, a couple of days between the use of the tools will help the participants to gain new knowledge.

- He thinks that the use right after each other might just add existing knowledge on the BMC.
- It would be good to test if the participants can play with the canvas and create a story from it. This will be the biggest value for him. This could create the homework for the students that they should try to tell this story to someone before the next round.
- Playing around with the canvas with post-its is also a key for the blue ocean strategy. This is a well-known tool within the business world, but not for Service Designers. This model might work better to help the students to play around on the canvas with the post-its when they have both financials and customers in focus.
- The Persona should be the first tool to be used. This really helps some students to have the human-center focus. It is really good to turn the canvas into a story. He tried showing a video but the students could not do it. He would like to know if the students can use it in this way.
- It would need a better flow of explanations (keep it simple, a few lines is enough). It should show more of our results to know if and how they work. It would also include what he should be aware of as well as possible biases and limitations

Things to change before next test: #results #validations #testing #explanations #suggestions #human-center

- Key points from testing round #4, the second AAU INC Business Developer:
- The Customer Journey tool is new for him. He knew about the Persona and Actors Map. He believes the Actors Map and the Persona work great together with the BMC and would add a lot of extra value.
- He might need a better explanation of the Customer Journey (CJ). He has heard about touchpoints and areas and these but would need a more explanation. The area of SD is still fuzzy for him. He has worked as a Service Designer but did not even know the CJ tool.
- The Frameworks ads inspiration, reflections, and iterations about how to make different kinds of workshops. This would provide the startups with more value through a creative way of thinking.
- The visual aspect of the Frameworks helped him to understand. He also liked the fact that it seemed like we were trying to make the SDT fit into the BMC.

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- He is questioning who we thought should use it - should be more clear.
- It has potential as a stand-alone tool to develop further on. The startups saw the value of the tools which was important information for him and should be in the guidelines.
- We do not have to make a 'one model fits all'. It would be nice to have some suggestions and then the user can choose what they see the value in.
- We should be aware that there are a lot of tools and models that can be used instead of our suggestions and maybe mention this.

Things to change before next test: #visuals #results #users #value #suggestions #competitors

Key points from testing round #4, the entrepreneur:

- The template is difficult to understand on its own. There would be a need for a consultant to teach it to get the most out of it for people who do not know SD.
- "I believe that for inexperienced entrepreneurs, this is a way to start. This is a way to put you in the thoughts of business. Who can help with your business? How would the users think? Help you to consider much more, than just your idea."
- It is very generalized and seems like something that can be used for everything. It needs to be more specific, showing what problems it solves and who it is for.
- "You are filling it out and you do not know why. This is the problem with all tools."
- Pros: Planning is more important than sticking to the plan. I see this as planning.
- Cons: The increased awareness of the steps you can take and how it will help you. It might be too time-consuming.
- It could be used as ongoing work. Come back to it every month, and not in a workshop. Have tried out workshops, but the use of it stops after that one workshop, where continued, iterated work help better in the end(as impact planning every week)
- "You can tell me what the tools do, but it doesn't speak to my problems. What can Service Design fix for me?"
-
- Things to change after the last test: #segment #problems #focus #iterations

Appendix 11: Product Report / final outcome / Frameworks

On the following pages the final outcome will be presented. The first file is named as SDT Facilitator Guidebook. The second file is named as SDT Toolkit. The third file is named as SDT Workbook.

Service Design Thinking
#FACILITATOR GUIDEBOOK

1. Service Design Thinking #Facilitator Guidebook

The core of the facilitator guidebook is the proposed process of the facilitation of the workshops regarding service design thinking tools and their influence on business model canvas. The tools supporting the have been chosen to support and boost a business idea into a detailed and thoroughly thought business model.

The guidebook should be considered as a preparation point for facilitators.

#outcome of use: familiarization with the workshops process, preparation to workshop facilitation, gained knowledge about BMC & SDT, familiarization with canvas templates used during the workshops.

2. Service Design Thinking #Toolkit

The toolkit presents the business model canvas and service design tools which are implemented into the proposed process of the workshop. The toolkit is handed into startups before the workshops.

#outcome of use: gained understanding and knowledge about BMC & SDT tools, familiarization with canvas templates used during the workshops.

3. Service Design Thinking #Workbook

The workbook is a „ready to use" A3 file created to be adopted during the workshops. It was designed to follow each step of the proposed process: preparation, usage of the BMC & SDT templates, and reflections & conclusions. The workbook should be printed and handed in by the facilitator to the participants.

#outcome of use: the creation of a more coherent and detailed business model, creation of SDT, mapped out possible gaps, pains, and gains of the business idea

Goals of service design thinking kits

1 UNDERSTAND YOUR BUSINESS

The main goal of the Service Design Thinking kits is to provide tools that will allow startups gain a deeper understanding of their business. Thanks to a combination of Business Models Canvas and Service Design Thinking Tools, a business idea can be measure from different points of view. Startups will learn how to step into customer's shoes or how the actors involved in their business can help to improve processes and relationships.

2 INVOLVE SERVICE DESIGN THINKING

The main positive about the Business Model Canvas is its easiness. At the same time, it might be considered as its limitation as a tool is usually used as a quick checklist. The Service Design Thinking Tools take the BMC on higher levels of use, which allows startups to look deeper into the business idea from many different angles.

3 GAIN A HOLISTIC APPROACH

A combination of Service Design Thinking and Business Model Canvas brings a holistic approach towards business creation. Proposed in the kits tools and methods highlight the importance of looking at the service or product beyond the business perspective only. By using the tools startups gain an understanding of their customers and stakeholders which as an outcome allows to identify gaps and pains which can be turned into possibilities and bring their business on the higher more coherent level.

4 REFLECT & EXPERIMENT

The Service Design Thinking kits give a base to create, reflect, and experiment with business model. Thanks to Service Design Thinking tools, Business Model Canvas can be taken on a higher, more complex level than just a checklist. Startups will gain a holistic approach which will allow to reflect on their business idea, play with different options of implementation to the market as well as introducing it to their customers.

Limitations

The choice of SDT tools, as well as the creation of the process, was designed under the needs of the startups enrolled in AAU Incubator. Chosen SDT tools are simple and easy to navigate. However, their impact on the BMC was investigated together with startups in their early stage of development. The outcome was highly positive. Involved in research startups gained a deeper and more coherent understanding of their business idea. Yet, the outcome of the usage of the process by startups on a more mature level is unknown and requires further research.

Nevertheless, as researchers we presume that the human-centered approach of chosen SDT, their specificity, and the ability to expose service gaps and potential improvements will benefit any size of the startup.

POSSIBLE BIAS

:: Difficulty to set oneself in the design mindset

:: Difficulty to step out of the business mindset and start thinking from the customer point of view

:: Difficulty to kick off with the process - extra help from facilitator might be needed

:: Extra encouragement of working with canvas after workshops might be needed

:: Recommended time frames might be too long or too short - facilitator need to control flow
    of the workshop and pace of work of each participant

Principles of service design thinking*

1 USER CENTRED

Services should be experienced through the customer's eyes.

As a service/ product provider it is important to understand the habits, culture, social context, and motivation of users or customers.

2 CO-CREATIVE

All stakeholders should be included in the service design process

Providing a service requires recognition of various stakeholders such as front-line staff, back-office employees and managers, external support, and non-human interfaces as machines or digital solutions.

3 SEQUENCING

The service should be visualised as a sequance of interrelated actions.

It is dynamic processes that take place over a certain period of time. While designing a business model the rhythm of service should be considered as a factor influencing the mood of customers.

4 EVIDANCING

Intangible services should be visualised in terms of physical artefacts.

Service evidence such as "thank you card" can prolong a nice feeling of service moment thanks to which customers might become more loyal to the business.

5 HOLISTIC

The entire enviroment of a service should be considered.

Working in a holistic way might feel almost as an impossible task. However, the goal should be set to have a wide perspective on the business and its surroundings as possible.

4

Case study // how SDT can influance BMC?

To measure how the SDT tools might influence BMC, two rounds of workshops were facilitated with startups. All of the startups were at the beginning of their business road, meaning that they had only business ideas ready to develop into business models.

The first two rounds of the workshop were dedicated to Personas and Actors Maps tools. Firstly participants, fill out BMC according to their knowledge and understanding of the business idea. Secondly, SDT was introduced to them. Based on the new learnings they created one persona as well as mapped out all actors connected to their businesses. After these exercises participants got back to BMC to reflect on it and possibly add new elements relevant for their business model development. The majority of new elements were added to "Customer Segment" and "Key Partners" blocks. Throughout all sessions, the facilitator controlled a time which turned out to be a positive aspect, since SDT tools could positively influence BMC even in a relatively short time. The participants' feedback gave us an understanding that SDT allows them to look beyond their business lenses only by switching their focus on a more holistic perspective.

The second round of the workshop was dedicated to the Customer Journey tool. Since the CJ is more complex and requires a deeper focus on details, the workshop turned into individual sessions with a startup that takes part in the first round of the workshop. In order to gain as much as possible from the session, startups had to prepare themselves by analyzing BMC from the first round as well as fill out few short exercises which allow them to gather a deeper understanding of the tool. After feeling out the Customer Journey template with the assistance of a facilitator, participants got back to their BMC again. The individual session helped the participants to see the whole picture of their business, which means that almost all of the blocks of BMC were influences by the CJ tool. The exception was Value Proposition which means that the core of the business stayed the same while new features and solutions were added in order to improve the user or customer experience.
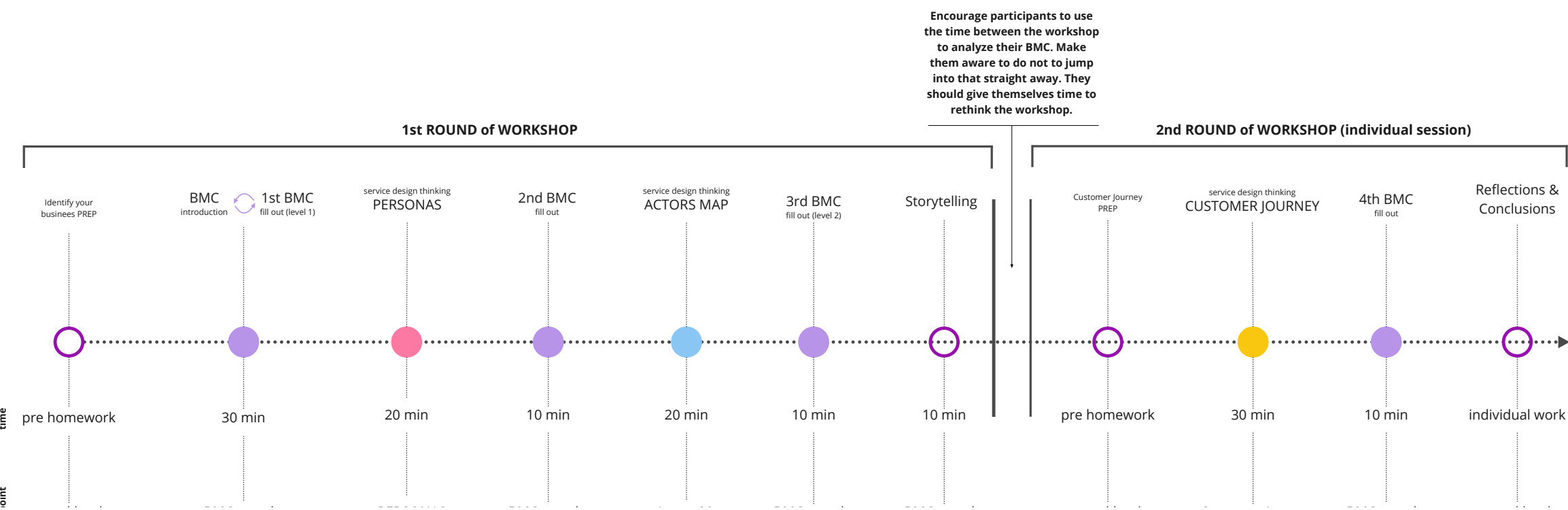
Process of workshop facilitation

A key to the successful facilitation of the workshop is the thoroughly planned process. To help you get into a good flow but also allow participants to gain valuable knowledge and understanding about their business the process was divided into 2 rounds.

Each of the rounds requires a bit of preparation from the participants in order to put them into business and service design thinking mindsets. Moreover, rounds end up with exercises that drive participants towards reflections upon their businesses.

All of the necessary information regarding business model canvas and service design thinking tools are provided on the next pages of the guidebook. The "identify your business PREP", "customer journey PREP" and "reflections and conclusions" are presented in the workbook.

Please noted that the recommended time was placed on the process as well as touchpoints. Those should give you an idea of what extra materials need to be prepared to fulfill the good flow and experience of the workshops.

Encourage participants to use the time between the workshop to analyze their BMC. Make them aware to do not to jump into that straight away. They should give themselves time to rethink the workshop.

1st ROUND of WORKSHOP

2nd ROUND of WORKSHOP (individual session)

Identify your businees PREP	BMC introduction	1st BMC fill out (level 1)	service design thinking PERSONAS	2nd BMC fill out	service design thinking ACTORS MAP	3rd BMC fill out (level 2)	Storytelling	Customer Journey PREP	service design thinking CUSTOMER JOURNEY	4th BMC fill out	Reflections & Conclusions
pre homework	30 min		20 min	10 min	20 min	10 min	10 min	pre homework	30 min	10 min	individual work

time

point

TIPS

Templates: The Service Design Thinking Framework: Workbook was designed in A3 high print resolution size. That means that the file can be printed and used during the workshop. There is no need for printing extra template sheets or drawing them on the papers.

Post-its: It is not necessary to keep an exact color scheme of the post-its. However, it is important to keep their designed order. Thanks to that participants are able to see results of their work much cleaner as well as the influence of service design thinking tools on business model canvas.

Workshop rounds: Each of the rounds require a lot of energy from participants. You can either schedule the workshops on one day with a longer break between rounds or book two individual days. We recommend the second option since the participants will have time to reflect on the first round as well as prepare themselves before the second one. We also recommend to facilitate the 2nd round as an individual session with each startup, since the Customer Journey is more complex.
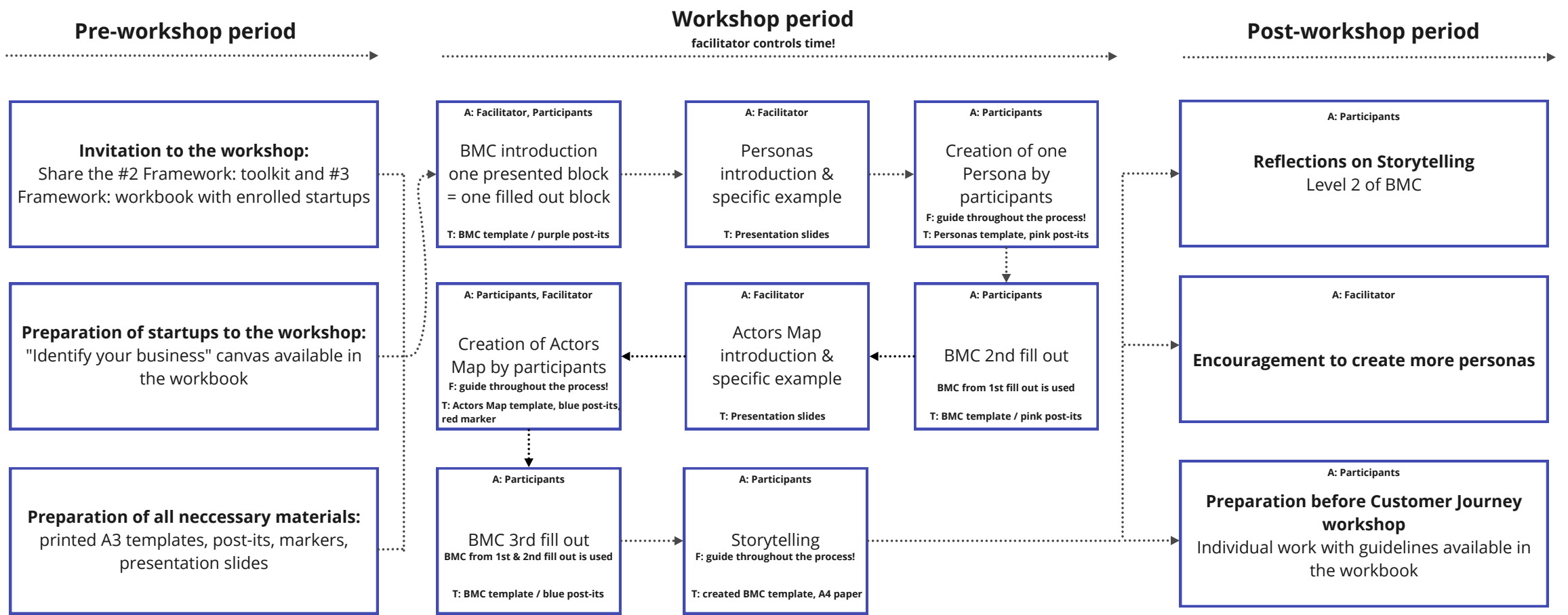
BMC introduction: Keep the "one after one" flow of introduction - meaning that after one presented block participants have time to fill it out. They won't lose their focus and gathered knowledge will be used immediately.

Workshop Journey // 1st round

The workshop journey captures the entire process with division into 3 stages: pre-workshop period, workshop period, and post-workshop period. However, to make the process more clear we split it into two rounds. That gives you an overview of how participants should prepare themselves before each round of the workshop but also what takeaways should be taken after the workshop. You can also see a division of roles on each stage, marked as an A (Actor) and touchpoints crucial for workshop facilitation (marked as T).

KEYS

A: Actor
T: Touchpoint
BMC: Business Model Canvas

Pre-workshop period

Invitation to the workshop:
Share the #2 Framework: toolkit and #3 Framework: workbook with enrolled startups

Preparation of startups to the workshop:
"Identify your business" canvas available in the workbook

Preparation of all neccessary materials:
printed A3 templates, post-its, markers, presentation slides

Workshop period
facilitator controls time!

A: Facilitator, Participants
BMC introduction one presented block = one filled out block
T: BMC template / purple post-its

A: Facilitator
Personas introduction & specific example
T: Presentation slides

A: Participants
Creation of one Persona by participants
F: guide throughout the process!
T: Personas template, pink post-its

A: Participants, Facilitator
Creation of Actors Map by participants
F: guide throughout the process!
T: Actors Map template, blue post-its, red marker

A: Facilitator
Actors Map introduction & specific example
T: Presentation slides

A: Participants
BMC 2nd fill out
BMC from 1st fill out is used
T: BMC template / pink post-its

A: Participants
BMC 3rd fill out
BMC from 1st & 2nd fill out is used
T: BMC template / blue post-its

A: Participants
Storytelling
F: guide throughout the process!
T: created BMC template, A4 paper

Post-workshop period

A: Participants
Reflections on Storytelling
Level 2 of BMC

A: Facilitator
Encouragement to create more personas

A: Participants
Preparation before Customer Journey workshop
Individual work with guidelines available in the workbook

Workshop Journey // 2nd round

KEYS

A: Actor
T: Touchpoint
BMC: Business Model Canvas
CJ: Customer Journey
POV: Point of View

Pre-workshop period

Workshop period
facilitator controls time!

Post-workshop period

Preparation of startups to the 2nd round of the workshop:
Read and do exercises from workbook "customer journey guidebook"

A: Facilitator

Quick introduction to Customer Journey

T: slides, info from CJ guidelines

A: Facilitator

Customer Journey example

T: CJ template, slides

A: Participants

Presentation of persona as a POV of creating CJ

T: Persona template

A: Participants

Reflections & Conclusions
Individual work together with assignments from the workbook

Startups analyze of created BMC from the 1st round

A: Participants

BMC 4th fill out
BMC from 1st & 2nd & 3rd fill out is used

T: BMC template, yellow post-its

A: Participants

Creation of Customer Journey

F: guide throughout the process!

T: BMC template / blue post-its

A: Facilitator

Encouragement to create more CJ from different Personas POV

TIPS

Time control: As a facilitator remember to control the time of each session. 5 minutes before the end of the time participants should be acknowledged that time is up soon.

Assistance: As a facilitator, your role is also to guide participants throughout the sessions whenever they feel in doubt or need another perspective. The assistance is important especially during the Customer Journey session as the template is much more complex and requires a good understanding of the business and its features.

Encouragement: The better participants are prepared for the workshop, the smoother sessions are. It's also important to reflect on the created tools and BMC after each workshop. Moreover, participants should be encouraged to work on service design thinking tools after the workshop and try to create them from a different perspective.

Online facilitation: Both of the rounds can be taken on the online level of facilitation. However this step requires an extra preparation such as choice of online whiteboard tools (e.g. Miro, Google Jam) or online communicator (e.g Zoom, Teams).

8

Business Model Canvas

The BMC gives a holistic picture of an organization and in the same way pushes us to reflect on its values, information flow, and partners. Each block asks questions that are used to start a brainstorming session.

Additionally, it can be filled out as many times as needed in order to capture the business from different angles or improve previously developed canva.

Key Activities

Value Proposition

Customer Relationships

Key Partners

Customers

Costs

Key Resources

Channels

Revenue

drawings by JAM

Business Model Canvas // 4 levels

Business Model Canvas is relatively consider as an easy tool to design or evaluate business idea. However, it might be taken to higher, deeper levels which allow consider the business from different angles, compare it with already existing ones or even experiment in order to come up with the best possible model.

All four leveles are implemented into the process of workshops. As a facilitator your role is to navigate the startups throughout the levels which as a result give them a broader picture of their business ideas.

Level 1 - this is the way when the tool is used as a checklist. Here participants fill out the boxes to list out all components of their business and to get an understanding of the different elements which exist within their business model. The level 1 is used at the beginning of the 1st round of the workshop.

Level 2 - In this level, participants gain an understanding of the different connections between the boxes. Based on that they create a story through all elements and make it an easy walk through the business model. The story is created at the end of the 1st round of the workshop.

Level 3 - In this level, not only do participants understand their own business model, but also other companies' business models. This can be competitors or business models created with success. They can be used to gain an understanding and knowledge that can be used in their own business model.

Level 4 - In the last level, participants start to experiment. They should not only have one business model, but make and iterate on more canvases by testing hypotheses and ideas. The success factors from different models should be then collected and end up in a final BMC.

Business Model Canvas // 9 blocks

VALUE PROPOSITIONS

// What value do we deliver to the customer?
// Which customer needs are we satisfying?
// Which job are we helping the customer get done?

Hint: Your value proposition solves your customer's problem or satisfies their needs. It might be quantitative as price of speed of service of qualitative as design or customer experience.

CUSTOMER RELATIONSHIPS

// What type of relationship does each of our Customer Segments expect us to establish and maintain with them?
// Which one have we established?
// How costly are they?

Hint: The Customer Relationship deeply influence the customer experience.

CUSTOMER SEGMENTS

// For whom are we creating value?
// Who are the most important customers, client, users?

Hint: You business model might have one or more customer segments, but remember that you craft you business proposition under their needs! You can't design your product for everyone.

CHANNELS

// Through which channels do our customer segments want to be reach?
// How are our channels integrated? Which ones work the best?

Hint: You can divide channels between communication, distribution and sales. Remember that your value proposition is also deliver through channels!

CUSTOMER RELATIONSHIPS

// For what value our customers are really willing to pay?
// How would they prefer to pay?

Hint: Revenue Streams is the way how your company generates money from each Customer Segment. Remember you can have more than one revenue stream!

The Business Model Canvas

Business Model Canvas // 9 blocks

VALUE PARTNERS

// Who are your key partners?
// Who are your key suppliers?
// Which activities are carried out by partners?
// Which resources are we acquiring from partners?

Hint: there is different motivations for creating a partnership. This could be for optimization and economy of scale, reduction of risk and uncertainty, strategic alliances, licensing instead of building it yourself.

KEY ACTIVITIES

// What key activities does your value proposition / distribution channels / customer relationships / revenue streams require?

Hint: there is three main types of activities: Production (Designing, making and delivering a product), Problem solving (solutions to your customers' problems, Consultancies, hospitals and service organizations), and Platform/Network (management and promotion, Amazon, eBay, Microsoft, Apple, Visa, MobilePay).

KEY RESOURCES

// What key resources does your value proposition / distribution channels / customer relationships / revenue streams require?

Hint: there are four types of resources: Physical (Facilities, buildings, vehicles, machines), Intellectual (Brands, knowledge, patents, copyrights, partnerships, customer databases), Human (knowledge, creativity) and Financial (guarantees, line of credit, banking license).

CUSTOMER RELATIONSHIPS

// Which are the most important costs in your business model?
// Which key resources or activities are the most expensive?

Hint: you could focus on either a cost-driven (minimizing costs) or value driven (focus on premium experience) structure - both have pluses and minuses. Also remember to include both fixed- (Costs that remain the same) and variable costs (Costs that scale up or down).

As a facilitator communicate the golden rules of the 1st fill out of the BMC with participants before they start working with the canvas. Remember that the 1st fill out happens on Level 1, which means that the BMC is used on a basic level as a checklist.

GOLDEN RULES

:: Do not think too much - just WRITE
:: Use keywords - no long sentences needed
:: If you get stuck - just continue to another block
:: Try to use only between 1-2 minutes in each block
:: Use sticky notes

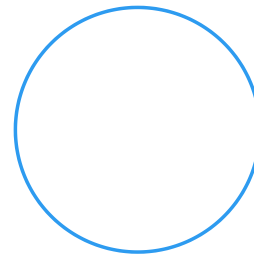*(might be use as an text on presentation slides)*

Service Design Thinking tools // ACTORS MAP

Actors Map illustrates numerous stakeholders involved in the business. An actor should not be understood only as a human being but also as an organization, object, or intangible service like the MobilePay.

Moreover, mapped out Actors Map provides a picture of a coherent picture of relations, roles, and connections between all of the actors which can point out gaps and new possibilities.

4 STEPS TO CREATE ACTORS MAP

START WITH: 1. Write business idea (name) inside the circle; 2. List down the actors on blue post-its
CONTINUE WITH: 3. Connect the actors you already are (or have a plan to be) related with;
4. Analyze the map and identify areas where there is a room for improvement, possibilities or missing gaps and describe these by using red marker (e.g. connect not related with each other actors whose relation could be beneficial - describe the benefits shortly.)
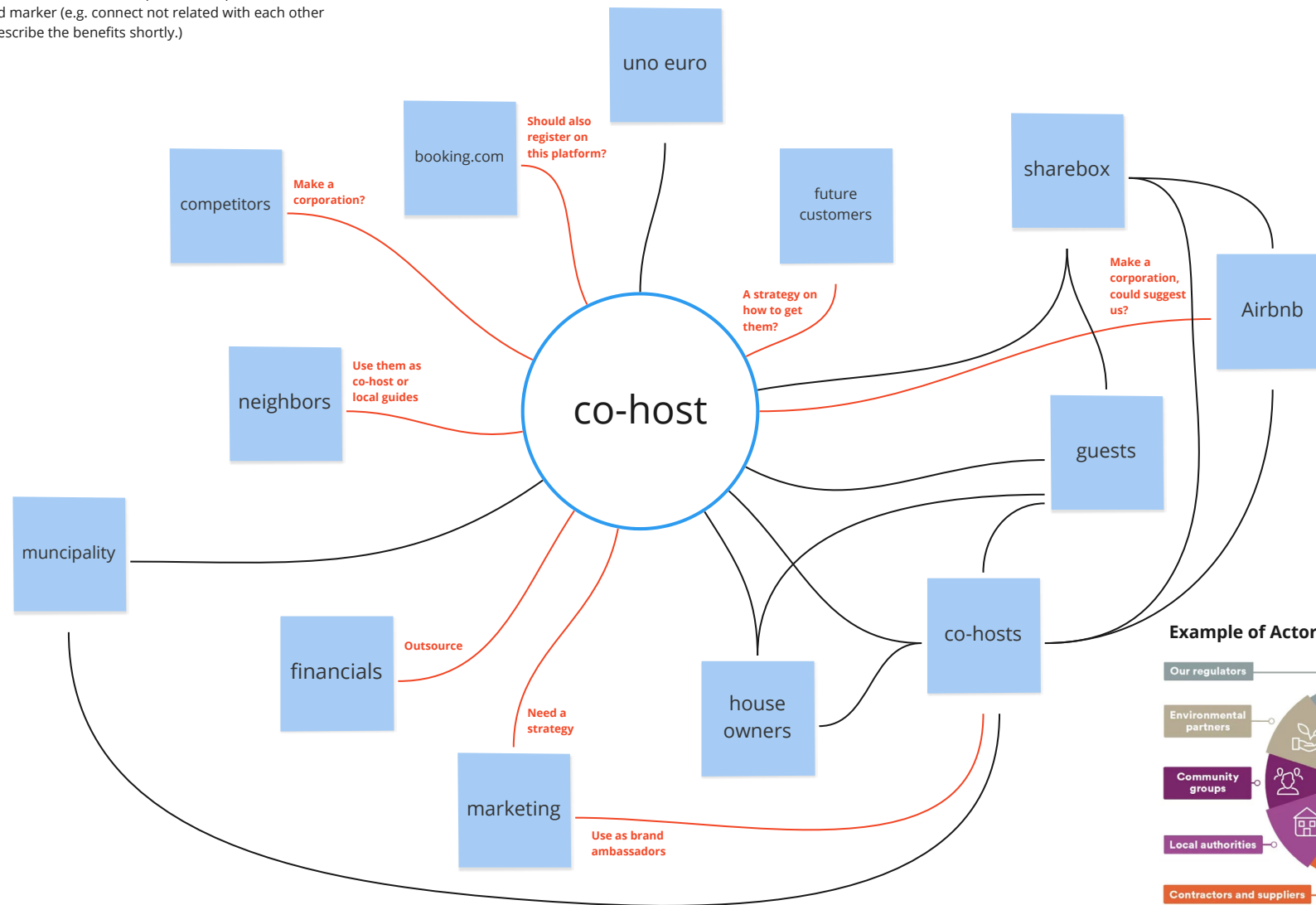
Actors Map template

Example of Actors

Our regulators
Environmental partners
Community groups
Local authorities
Contractors and suppliers
Customers
Employees
Investors
MPs
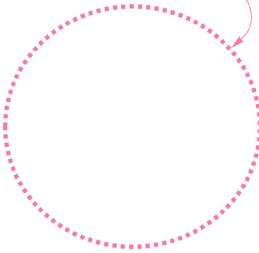Media

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4. Analyze the map and identify areas where there is a room for improvement, possibilities or missing gaps and describe these by using red marker (e.g. connect not related with each other actors whose relation could be beneficial - describe the benefits shortly.)

uno euro

Should also register on this platform?

booking.com

Make a corporation?

competitors

future customers

sharebox

Make a corporation, could suggest us?

Airbnb

A strategy on how to get them?

Use them as co-host or local guides

neighbors

co-host

guests

muncipality

co-hosts

Example of Actors

financials

Outsource

house owners

Need a strategy

marketing

Use as brand ambassadors

Actors Map example

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Service Design Thinking tools // PERSONAS

Personas are typical representatives of the customer sugment. They help to imagine how a certain person would behave and react while using the product or service. Moreover, personas point out on real needs of the potential customers or users.

NAME & AGE
+ the nickname

SKETCH YOUR PERSONA HERE!

GOAL

That might be personal desires and life goals.

DOES

What that persona do in order to accomplish goals?

CHANNELS

What channels that persona is using daily?

PAIN

That might be something negative about your product/ service or area of your business which that person wants to avoid.

THINKS& FEELS

That might be a problem or something positive which is related to your business area. Eg. expectations.

GAIN

That might be something positive about your product/ service or area of your business which will make that person more happy.

GOLDEN RULES

:: Try to put yourself into persona's shoes, be empathic!

:: Don't look through business lenses only, take a broader picture!

:: Personas are not average of Customer Segments, they are individuals!

:: Try to design as many personas as possible. They allow you to have different points of view on the bussiness.

(might be use as an text on presentation slides)

Service Design Thinking tools // PERSONAS example

NAME & AGE
+ the nickname

SKETCH YOUR PERSONA HERE!

BUSY CHRIS

38 yo

CHANNELS

...hat ... daily?

LINKED IN

FACEBOOK

INSTAGRAM

THINKS& FEELS

That might be a problem or something positive which is related to your business area. Eg. expectations.

"Great quality is a key to success"

GOAL

That might be personal desires and life goals.

There is always a way to save up time!

DOES

What that persona do in order to accompli...

Checking the website of the restaurant before visiting.

It's nice to be prepared and ask good questions

PAIN

That might be something neg... ...uct/ your business which that per...

Chaotic service

when not enough attention is given

GAIN

That might be something posit... ...t/ service area of your business which w... ...ore happ...

Extra attention to guests

if great service he always recommends a place to friends

The Customer Journey is a visualization of all the experiences which a customer interacts with while using the service or product. While mapping out the customer's steps it is important to put yourself into customer shoes, meaning that you have to look on the journey from the customer perspective. Remember that customers have much more in their minds than just thought of your service or product.

While designing the customer journey we tend to think about the certain moment of interaction between the customer and service/ product. However, it is extremely important to look beyond that moment and consider the whole journey including before and after moments.

BUSINESS IDEA
::

SERVICE MOMENT:
::

HOW TO START?

1. Present the persona
2. Pick the service moment
3. Map out before the moment
4. Map out during the moment
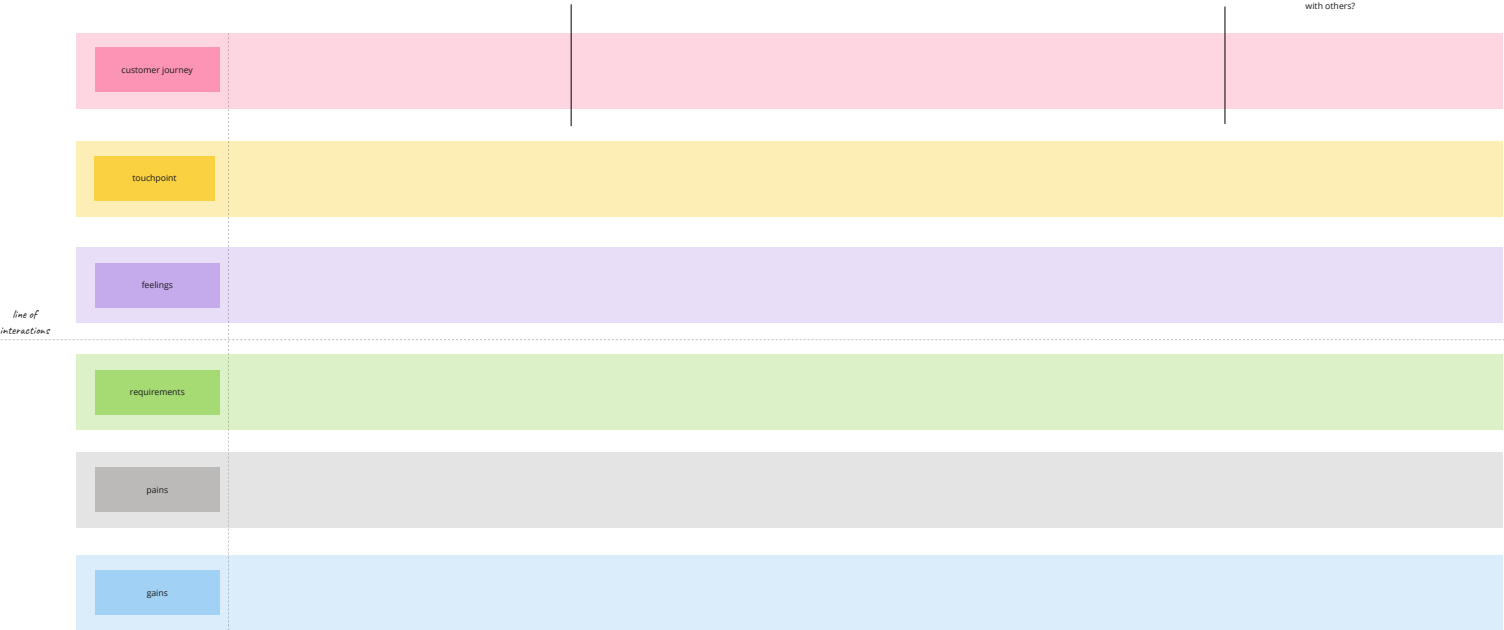5. Map out after the moment

BEFORE

How persona knows about service/ product?
How persona gets in touch with service/ prouct?

DURING

How the process of using service/ product looks like?

AFTER

What the persona does after using the service/ product?
Leaving the comment? Share experiance with others?

customer journey

touchpoint

feelings

line of interactions

requirements

pains

gains

NAME & AGE
+ the nickname

SKETCH YOUR PERSONA HERE

GOAL
That might be personal desires and life goals.

DOES
What that persona do in order to accomplish goals?

CHANNELS
What channels that persona is using daily?

PAIN
That might be something negative about your product/ service or area of your business which that person wants to avoid.

THINKS& FEELS
That might be a problem or something positive which is related to your business area. Eg. expectations.

GAIN
That might be something positive about your product/ service or area of your business which will make that person more happy.

REMEMBER:

Touchpoint: a tangible or intangible point of interaction between the service and consumer/ user e.g. website or menu.
Feelings: what does customer/ user feels on certain step of the journey?
Line of interaction: All actions above are mapped out from customer/ user perspective only. All actions below also consider a business provider perspective.

Requirements: What business provider needs to deliver so a customer/ user is able to accomplish each step of the journey.
Pains: Possible mistakes.
Gains: Possible extra service which will make a customer/ user more satisfied.
NOTE: The Customer Journey row is an indicator for rest of the rows. However, not all of the CJ steps needs to be covered with e.g gains.

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BUSINESS IDEA
:: Supermarket Irma

SERVICE MOMENT:
:: Grocery shopping in the morning

HOW TO START?

1. Present the persona
2. Pick the service moment
3. Map out before the moment
4. Map out during the moment
5. Map out after the moment

NAME & AGE + the nickname
SKETCH YOUR PERSONA HERE!

BUSY CHRIS   38 yo

GOAL
That might be personal desires and life goals.
There is always a way to save up time!

DOES
What that persona do in order to accomplish...
Checking the website of the restaurant before visiting.   It's nice to be prepared and ask good questions

CHANNELS
LINKED IN   FACEBOOK   INSTAGRAM

PAIN
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How the process of using service/ product looks like?

AFTER
What the persona does after using the service/ product?
Leaving the comment? Share experiance with others?

| customer journey | wakes up | his fridge is empty | checks coop's app | finds breakfast recipe & adds it to grocery list | leaves house | enters the shop | takes a basket | checks the grocery list | goes to the bread section and choose the bread | goes to the veggies & fruits section | checks the grocery list again | goes to the diary section& choose the recommended products | goes to the self - cashier | pays with the coop app | leaves the shop | gets notification about loyalty points | starts cooking | gets notification to rate experiance and recipe |

| touchpoint | | | coop app, phone | coop app, phone | | door, brand signage | basket | coop app, phone | brand signages, products | brand signages, products | coop app, phone | brand signages, products | cashier | cashier, coop app, phone | door, brand signage | coop app, phone | coop app, phone | coop app, phone |

| feelings | relaxed | dissapointed | curious, hoped | curious | hungry | hungry | hungry | hungry | surprised of easy navigation | surprised of easy navigation | surprised of easy navigation | surprised of easy navigation | wants to do it fast | easy | in rush to go home, huungry! | happy | in good mood | Sure will do! |

line of interactions

| requirements | | has downloaded app | algorithms which know his food preference | | clean entrance | well maintained basket area | easy access to grocery list tab | well maintained, clean shop | well maintained, clean shop | easy access to grocery list tab | special section for recommended products | clean cashiers, easy to navigate | smoothly running app | thank you sign on the door | smoothly running app | app connected to spotify | smooth rating process |

| pains | | | | | | only one big size of baskets | | lack of labels | lack of labels | | lack of labels | long line | lack of internet connection | arrogant personel | | | |

| gains | | any special diet? (data) | navigation to the closest IRMA | smell of freshly baked bread | | | | | paper bags | | | personel always around | | smiley personel | bill saved on the app | smart app - music as a nice thing | loyalty points after rating |

Service Design Thinking
:: TOOLKIT

Kits introduction

1. Service Design Thinking #Facilitator Guidebook

The core of the facilitator guidebook is the proposed process of the facilitation of the workshops regarding service design thinking tools and their influence on business model canvas. The tools supporting the have been chosen to support and boost a business idea into a detailed and thoroughly thought business model.

The guidebook should be considered as a preparation point for facilitators.

#outcome of use: familiarization with the workshops process, preparation to workshop facilitation, gained knowledge about BMC & SDT, familiarization with canvas templates used during the workshops.

2. Service Design Thinking #Toolkit

The toolkit presents the business model canvas and service design tools which are implemented into the proposed process of the workshop. The toolkit is handed into startups before the workshops.

#outcome of use: gained understanding and knowledge about BMC & SDT tools, familiarization with canvas templates used during the workshops.

3. Service Design Thinking #Workbook

The workbook is a „ready to use" A3 file created to be adopted during the workshops. It was designed to follow each step of the proposed process: preparation, usage of the BMC & SDT templates, and reflections & conclusions. The workbook should be printed and handed in by the facilitator to the participants.

#outcome of use: the creation of a more coherent and detailed business model, creation of SDT, mapped out possible gaps, pains, and gains of the business idea.

Goals of service design thinking kits

1 UNDERSTAND YOUR BUSINESS

The main goal of the Service Design Thinking kits is to provide tools that will allow startups gain a deeper understanding of their business. Thanks to a combination of Business Models Canvas and Service Design Thinking Tools, a business idea can be measure from different points of view. Startups will learn how to step into customer's shoes or how the actors involved in their business can help to improve processes and relationships.

2 INVOLVE SERVICE DESIGN THINKING

The main positive about the Business Model Canvas is its easiness. At the same time, it might be considered as its limitation as a tool is usually used as a quick checklist. The Service Design Thinking Tools take the BMC on higher levels of use, which allows startups to look deeper into the business idea from many different angles.

3 GAIN A HOLISTIC APPROACH

A combination of Service Design Thinking and Business Model Canvas brings a holistic approach towards business creation. Proposed in the kits tools and methods highlight the importance of looking at the service or product beyond the business perspective only. By using the tools startups gain an understanding of their customers and stakeholders which as an outcome allows to identify gaps and pains which can be turned into possibilities and bring their business on the higher more coherent level.

4 REFLECT & EXPERIMENT

The Service Design Thinking kits give a base to create, reflect, and experiment with business model. Thanks to Service Design Thinking tools, Business Model Canvas can be taken on a higher, more complex level than just a checklist. Startups will gain a holistic approach which will allow to reflect on their business idea, play with different options of implementation to the market as well as introducing it to their customers.

Principles of service design thinking*

1 USER CENTRED
Services should be experienced through the customer's eyes.

As a service/ product provider it is important to understand the habits, culture, social context, and motivation of users or customers.

2 CO-CREATIVE
All stakeholders should be included in the service design process

Providing a service requires recognition of various stakeholders such as front-line staff, back-office employees and managers, external support, and non-human interfaces as machines or digital solutions.

3 SEQUENCING
The service should be visualised as a sequance of interrelated actions.

It is dynamic processes that take place over a certain period of time. While designing a business model the rhythm of service should be considered as a factor influencing the mood of customers.

4 EVIDANCING
Intangible services should be visualised in terms of physical artefacts.

Service evidence such as "thank you card" can prolong a nice feeling of service moment thanks to which customers might become more loyal to the business.

5 HOLISTIC
The entire enviroment of a service should be considered.

Working in a holistic way might feel almost as an impossible task. However, the goal should be set to have a wide perspective on the business and its surroundings as possible.

Tool #1

#Business Model Canvas

Business Model Canvas

The BMC gives a holistic picture of an organization and in the same way pushes us to reflect on its values, information flow, and partners. Each block asks questions that are used to start a brainstorming session.

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drawings by JAM

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Tool #2

#Service Design Thinking : Actors Map

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4 STEPS TO CREATE ACTORS MAP

START WITH: 1. Write business idea (name) inside the circle; 2. List down the actors on blue post-its
CONTINUE WITH: 3. Connect the actors you already are (or have a plan to be) related with;
4. Analyze the map and identify areas where there is a room for improvement, possibilities or missing gaps and describe these by using red marker (e.g. connect not related with each other actors whose relation could be beneficial - describe the benefits shortly.)

Example of Actors

Our regulators
Customers
Environmental partners
Employees
Community groups
Investors
Local authorities
MPs
Contractors and suppliers
Media

Actors Map template

Service Design Thinking tools // ACTORS MAP example

4 STEPS TO CREATE ACTORS MAP

START WITH: 1. Write business idea (name) inside the circle; 2. List down the actors on blue post-its
CONTINUE WITH: 3. Connect the actors you already are (or have a plan to be) related with;
4. Analyze the map and identify areas where there is a room for improvement, possibilities or missing gaps and describe these by using red marker (e.g. connect not related with each other actors whose relation could be beneficial - describe the benefits shortly.)

uno euro

Should also register on this platform?

booking.com

sharebox

competitors

Make a corporation?

future customers

Make a corporation, could suggest us?

Airbnb

A strategy on how to get them?

neighbors

Use them as co-host or local guides

co-host

guests

muncipality

financials

Outsource

co-hosts

Need a strategy

house owners

marketing

Use as brand ambassadors

Example of Actors

Our regulators

Environmental partners

Community groups

Local authorities

Contractors and suppliers

Customers

Employees

Investors

MPs

Media

Actors Map example

12

Tool #3

#Service Design Thinking : Personas

Service Design Thinking tools // PERSONAS

Personas are typical representatives of the customer sugment. They help to imagine how a certain person would behave and react while using the product or service. Moreover, personas point out on real needs of the potential customers or users.

NAME & AGE
+ the nickname

SKETCH YOUR PERSONA HERE!

GOAL

That might be personal desires and life goals.

DOES

What that persona do in order to accomplish goals?

CHANNELS

What channels that persona is using daily?

PAIN

That might be something negative about your product/ service or area of your business which that person wants to avoid.

THINKS& FEELS

That might be a problem or something positive which is related to your business area.
Eg. expectations.

GAIN

That might be something positive about your product/ service or area of your business which will make that person more happy.

GOLDEN RULES

:: Try to put yourself into persona's shoes, be empathic!

:: Don't look through business lenses only, take a broader picture!

:: Personas are not average of Customer Segments, they are individuals!

:: Try to design as many personas as possible. They allow you to have different points of view on the bussiness.

(might be use as an text on presentation slides)

NAME & AGE
+ the nickname

SKETCH YOUR PERSONA HERE!

BUSY CHRIS

38 yo

GOAL

That might be personal desires and life goals.

There is always a way to save up time!

DOES

What that persona do in order to accompli...

Checking the website of the restaurant before visiting.

It's nice to be prepared and ask good questions

CHANNELS

...hat   daily?

LINKED IN

FACEBOOK

INSTAGRAM

PAIN

That might be something neg... ...uct/ your business which that per...

Chaotic service

when not enough attention is given

THINKS& FEELS

That might be a problem or something positive which is related to your business area. Eg. expectations.

"Great quality is a key to success"

GAIN

That might be something posit... ...t/ service area of your business which w... ...ore happ...

Extra attention to guests

if great service he always recommends a place to friends

15

Tool #3

#Service Design Thinking : Customer Journey

Service Design Thinking tools // CUSTOMER JOURNEY GUIDELINES

The Customer Journey is a visualization of all the experiences which a customer interacts with while using the service or product. While mapping out the customer's steps it is important to put yourself into customer shoes, meaning that you have to look on the journey from the customer perspective. Remember that customers have much more in their minds than just thought of your service or product.

While designing the customer journey we tend to think about the certain moment of interaction between the customer and service/ product. However, it is extremely important to look beyond that moment and consider the whole journey including before and after moments.

BUSINESS IDEA
::

SERVICE MOMENT:
::

BEFORE
How persona knows about service/ product?
How persona gets in touch with service/ prouct?

DURING
How the process of using service/ product looks like?

AFTER
What the persona does after using the service/ product?
Leaving the comment? Share experiance with others?

HOW TO START?

1. Present the persona
2. Pick the service moment
3. Map out before the moment
4. Map out during the moment
5. Map out after the moment

customer journey

touchpoint

feelings

line of interactions

requirements

pains

gains

NAME & AGE
+ the nickname

SKETCH YOUR PERSONA HERE

GOAL
That might be personal desires and life goals.

DOES
What that persona do in order to accomplish goals?

CHANNELS
What channels that persona is using daily?

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That might be something negative about your product/ service or area of your business which that person wants to avoid.

THINKS& FEELS
That might be a problem or something positive which is related to your business area. Eg. expectations.

GAIN
That might be something positive about your product/ service or area of your business which will make that person more happy.

REMEMBER:

Touchpoint: a tangible or intangible point of interaction between the service and consumer/ user e.g. website or menu.
Feelings: what does customer/ user feels on certain step of the journey?
Line of interaction: All actions above are mapped out from customer/ user perspective only. All actions below also consider a business provider perspective.

Requirements: What business provider needs to deliver so a customer/ user is able to accomplish each step of the journey.
Pains: Possible mistakes.
Gains: Possible extra service which will make a customer/ user more satisfied.
NOTE: The Customer Journey row is an indicator for rest of the rows. However, not all of the CJ steps needs to be covered with e.g gains.

16

BUSINESS IDEA
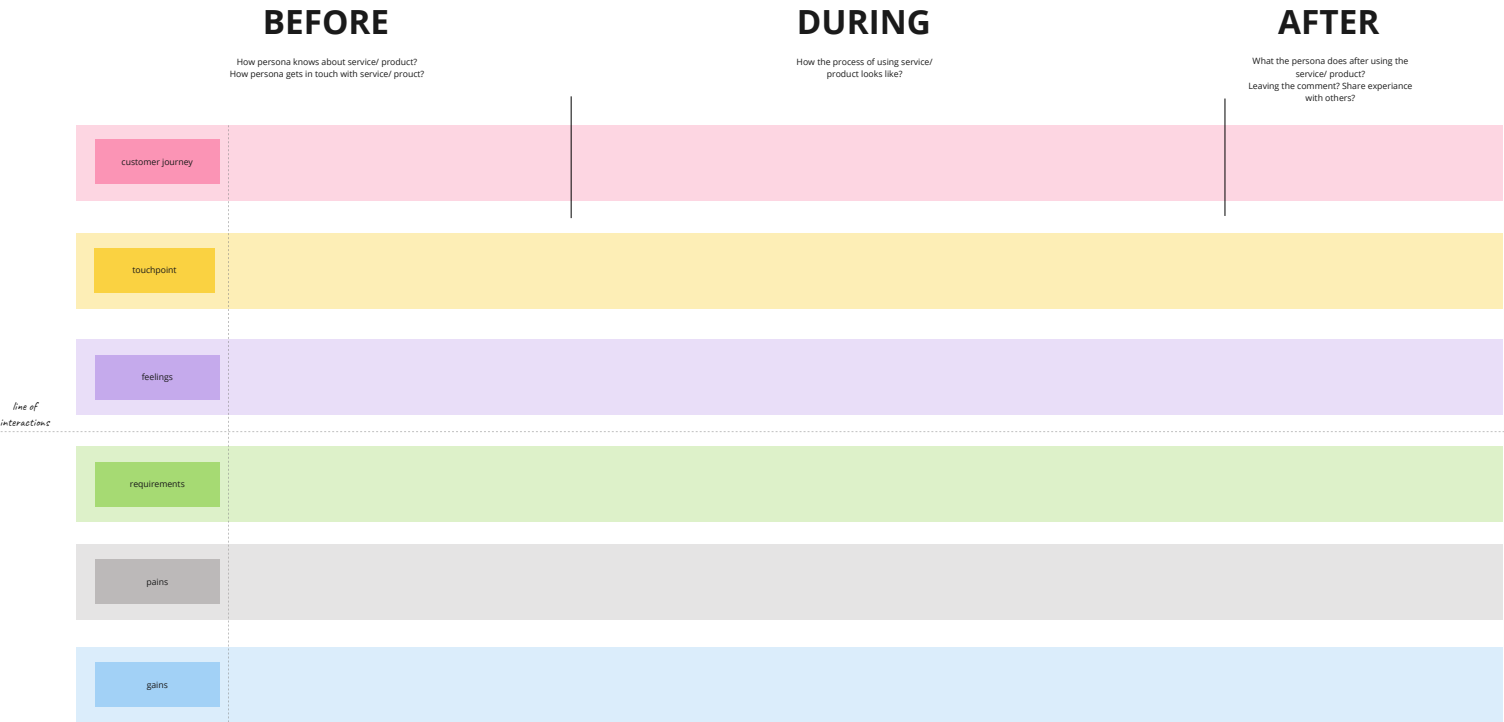:: Supermarket Irma

SERVICE MOMENT:
:: Grocery shopping in the morning

HOW TO START?

1. Present the persona
2. Pick the service moment
3. Map out before the moment
4. Map out during the moment
5. Map out after the moment

NAME & AGE
+ the nickname

SKETCH YOUR PERSONA HERE!

BUSY CHRIS **38 yo**

CHANNELS

LINKED IN **FACEBOOK** **INSTAGRAM**

daily!

THINKS& FEELS
That might be a problem or something positive which is related to your business area. Eg. expectations.

"Great quality is a key to success"

GOAL
That might be personal desires and life goals.

There is always a way to save up time!

DOES
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when not enough attention is given

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How the process of using service/ product looks like?

AFTER
What the persona does after using the service/ product?
Leaving the comment? Share experiance with others?

customer journey	wakes up	his fridge is empty	checks coop's app	finds breakfast recipe & adds it to grocery list	leaves house	enters the shop	takes a basket	checks the grocery list	goes to the bread section and choose the bread	goes to the veggies & fruits section	checks the grocery list again	goes to the diary section& choose the recommended products	goes to the self - cashier	pays with the coop app	leaves the shop	gets notification about loyalty points	starts cooking	gets notification to rate experiance and recipe
touchpoint		coop app, phone	coop app, phone			door, brand signage	basket	coop app, phone	brand signages, products	brand signages, products	coop app, phone	brand signages, products	cashier	cashier, coop app, phone	door, brand signage	coop app, phone	coop app, phone	coop app, phone
feelings	relaxed	dissapointed	curious, hoped	curious	hungry	hungry	hungry	hungry	surprised of easy navigation	surprised of easy navigation	surprised of easy navigation	surprised of easy navigation	wants to do it fast	easy	in rush to go home, huungry!	happy	in good mood	Sure will do!
requirements		has downloaded app	algorithms which know his food preference			clean entrance	well maintained basket area	easy access to grocery list tab	well maintained, clean shop	well maintained, clean shop	easy access to grocery list tab	special section for recommended products	clean cashiers, easy to navigate	smoothly running app	thank you sign on the door	smoothly running app	app connected to spotify	smooth rating process
pains						only one big size of baskets		lack of labels	lack of labels		lack of labels		long line	lack of internet connection	arrogant personel			
gains		any special diet? (data)	navigation to the closest IRMA	smell of freshly baked bread				paper bags			personel always around			smiley personel	bill saved on the app	smart app - music as a nice thing	loyalty points after rating	

line of interactions

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Service Design Thinking
:: WORKBOOK

1. Service Design Thinking #Facilitator Guidebook

The core of the facilitator guidebook is the proposed process of the facilitation of the workshops regarding service design thinking tools and their influence on business model canvas. The tools supporting the have been chosen to support and boost a business idea into a detailed and thoroughly thought business model.

The guidebook should be considered as a preparation point for facilitators.

#outcome of use: familiarization with the workshops process, preparation to workshop facilitation, gained knowledge about BMC & SDT, familiarization with canvas templates used during the workshops.

2. Service Design Thinking #Toolkit

The toolkit presents the business model canvas and service design tools which are implemented into the proposed process of the workshop. The toolkit is handed into startups before the workshops.

#outcome of use: gained understanding and knowledge about BMC & SDT tools, familiarization with canvas templates used during the workshops.

3. Service Design Thinking #Workbook

The workbook is a „ready to use" A3 file created to be adopted during the workshops. It was designed to follow each step of the proposed process: preparation, usage of the BMC & SDT templates, and reflections & conclusions. The workbook should be printed and handed in by the facilitator to the participants.

#outcome of use: the creation of a more coherent and detailed business model, creation of SDT, mapped out possible gaps, pains, and gains of the business idea.

☐ PRINT THE SHEETS OF SERVICE DESIGN THINKING FRAMEWORK #Workbook.

☐ PREPARE POST-ITS:

: Purple - BMC 1st fill out
: Blue - Actors Map & BMC 2nd fill out
: Pink - Persona & BMC 3rd fill out
: Yellow - Customer Journey & BMC 4th fill out

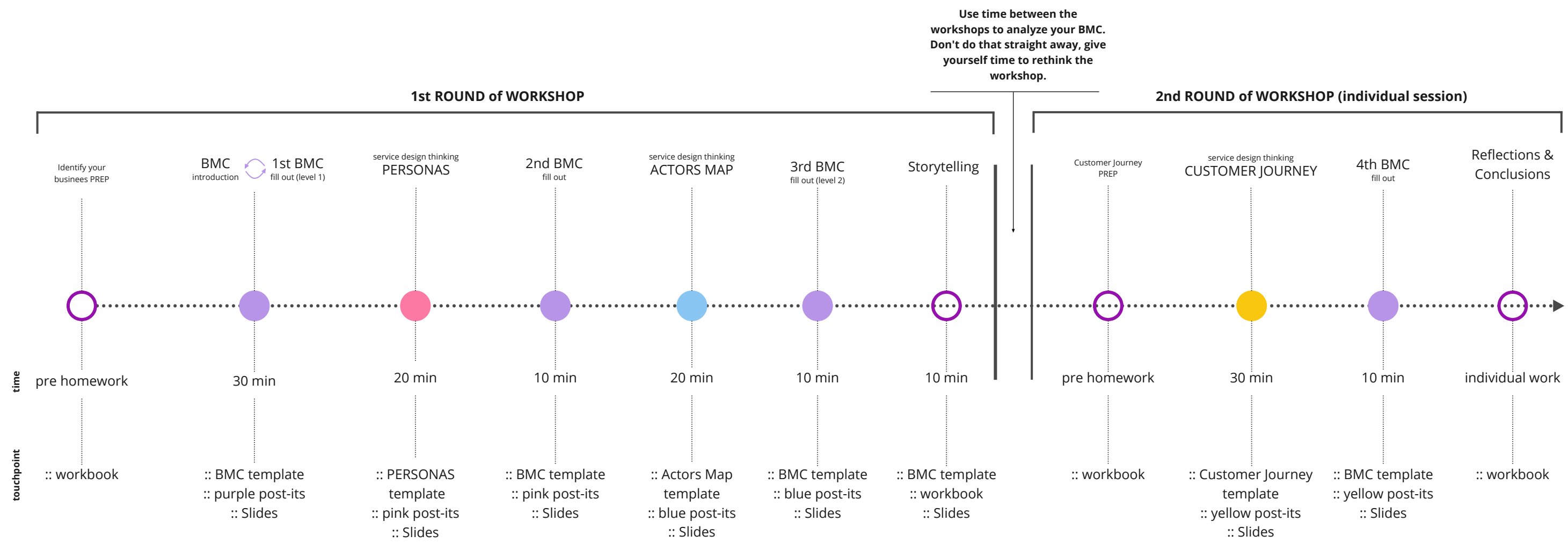* Consider a smaller size of post-its (38x51mm) - more of them will fit on the templates
* The suggestion of colors is random. Different colors might be used. However, it is important to keep their designed order.
* You can also consider yellow post-its with different colors of markers.

☐ REMEMBER TO BRING FILLED OUT CANVAS FROM THE 1st WORKSHOP
TO THE 2nd ONE

☐ REMEMBER TO HAVE YOUR DESIGNED PERSONA ON THE 2nd ROUND OF THE
WORKSHOP.

Process of workshop

1st ROUND of WORKSHOP

2nd ROUND of WORKSHOP (individual session)

Use time between the workshops to analyze your BMC. Don't do that straight away, give yourself time to rethink the workshop.

Identify your businees PREP	BMC introduction	1st BMC fill out (level 1)	service design thinking PERSONAS	2nd BMC fill out	service design thinking ACTORS MAP	3rd BMC fill out (level 2)	Storytelling	Customer Journey PREP	service design thinking CUSTOMER JOURNEY	4th BMC fill out	Reflections & Conclusions

time

pre homework	30 min	20 min	10 min	20 min	10 min	10 min	pre homework	30 min	10 min	individual work

touchpoint

:: workbook	:: BMC template :: purple post-its :: Slides	:: PERSONAS template :: pink post-its :: Slides	:: BMC template :: pink post-its :: Slides	:: Actors Map template :: blue post-its :: Slides	:: BMC template :: blue post-its :: Slides	:: BMC template :: workbook :: Slides	:: workbook	:: Customer Journey template :: yellow post-its :: Slides	:: BMC template :: yellow post-its :: Slides	:: workbook

3

Pre homework // identify your business

Let's take a moment to think what is your business about? Clearly set up goals and value of the business will help you gain a deeper understanding where you are at this moment but what is more important where you want to be, what you want to achive and deliver to your customers or users.

MY BUSINESS IDEA IS

WHAT IS MY BUSINESS IDEA ABOUT?

WHO IS MY BUSINESS FOR? WHO IS NOT FOR?

WHY MY BUSINESS IDEA IS UNIQUE?

HOW I CAN BRING MY IDEA ON NEXT LEVEL?
(collaborations? prototyping? marketing?)

WHERE IS MY BUSINESS IDEA NOW?
WHEN IT WILL BE IN 6 MONTHS? (sketch it)

The Business Model Canvas

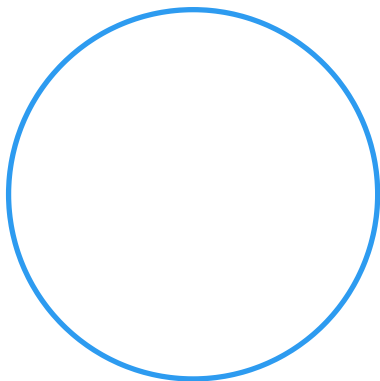Designed for:

Designed by:

Date:

Version:

Key Partners 🔗

// What are our Key Partners?
// What are our Key Suppliers?
// Which Key Resources are we
   acquiring from partners?
// Which Key Activities do partners perfom?

Key Activities ✓

// What Key Activities do our Value
   Proposition require?
// Our Distribution Channels?
// Customer Relationship?
// Revenue streams?

Key Resources 👷

// What Key Resources do our Value
   Propositions require?
   - Customer Relationships?
   - Revenue Streams?

Value Propositions 🎁

// What value do we deliver to
   the customer?
// Which one of our customer's problems
   are we helping to solve?
// What bundles of products and services
   are we offering to each Customer
   Segment?
// Which customer needs are we
   satisfying?

Customer Relationships ❤

// What type of relationship does
   each of our Customer Segments
   expect us to establish and maintain
   with them?
// Which ones have we established?
// How are they integrated with the rest
   of our business model?
// How costly are they?

Channels 🚚

// Through which Channels do our
   Customer Segments want to be reached?
// How are we reaching them now?
// How are our Channels integrated?
// Which ones work best?
// Which ones are the most cost- efficient?
// How are we integrating them with
   customer routines?

Customer Segments 👤

//For whom are we creating value?
// Who are our most important customers?

Cost Structure 🏷

// What are the most important costs inherent in our business models?
// Which Key Resources are the most expensive?
// Which Key Activities are the most expensive?

Revenue Streams 💰

// For what value are our customers really willing to pay?
// For what do they currently pay?
// How are they currently paying?
// How would they prefer to pay?
// How much does each Revenue Stream contribute to overall revenues?

5

4 STEPS TO CREATE ACTORS MAP

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4. Analyze the map and identify areas where there is a room for improvement, possibilities or
missing gaps and describe these by using red marker (e.g. connect not related with each other
actors whose relation could be beneficial - describe the benefits shortly.)

Example of Actors

Our regulators
Customers
Environmental partners
Employees
Community groups
Investors
Local authorities
MPs
Contractors and suppliers
Media

Actors Map template

GO BACK TO BMC

REMEMBER: USE BLUE POST-ITS
TIME: 10 min

**NAME & AGE
+ the nickname**

SKETCH YOUR PERSONA HERE!

GOAL

That might be personal desires and life goals.

DOES

What that persona do in order to accomplish goals?

CHANNELS

What channels that persona is using daily?

PAIN

That might be something negative about your product/ service or area of your business which that person wants to avoid.

THINKS& FEELS

*That might be a problem or something positive which is related to your business area.
Eg. expectations.*

GAIN

That might be something positive about your product/ service or area of your business which will make that person more happy.

GO BACK TO BMC

REMEMBER: USE PINK POST-ITS
TIME: 10 min

Storytelling // 1st round of the workshop - LEVEL 2

Your BMC should be filled out with many ideas now. It's time to take it to the next level.
Let's write a story about your business! The only rule which applies here is to use at least
one element from each block of BMC.

WORTH TO TRY: read your business story to someone else than to your closest family and
friends. Constructive feedback, from a different point of view, is a key to improvement!

WE ARE _____ WE'RE GOING TO DELIVER/ _____
　　　　　　　business idea　　　　　　　　　　　　　　　　　　　　OFFER　　　*value proposition*

FOR _____ THANKS TO OUR _____ AND _____
　　　　　　customer　　　　　　　　　　　　　　　　　　　　*channels*　　　　　　　*customer relationships*

WE CAN _____ 　　　　　　　_____
　　　　e.g. satisfy customer / propose / maintain　　　　　　　　　　*how? what?*

OUR FOCUS IS ON _____ AND MAINTENANCE OF OUR _____
　　　　　　　　　key activities　　　　　　　　　　　　　　　　　　　　*key resources*

IT'S POSSIBLE THANKS TO OUR _____
　　　　　　　　　　　　　　　　key partners

WE'LL BE PROFITABLE BUSINESS THANKS TO _____
　　　　　　　　　　　　　　　　　　　　　　revenue streams

WHICH WILL BE PAID EVERY _____ BY _____
　　　　　　　　　　　　frequency　　　　　　　　　　*customer*

TO MAINTEIN EFFICIENT BUSINESS MODEL AND DELIVER VALUE PROPOSITION OUR MOST

IMPORTANT COSTS INCLUDE _____
　　　　　　　　　　　　　　　costs

Customer Journey prep // 2nd round of the workshop

In order to help you visualize the customer journey, firstly let's imagine the journey from your perspective. Go through the following short tasks before you start working on your CJ.
_____

1. CHOOSE A SERVICE MOMENT
Choose a common moment in your life. It might be an activity like doing grocery shopping.

Think about the last time you experianced_____(e.g. grocery shoping).

2. BEFORE THE MOMENT
Think about what happened before (you went to the grocery shop) _____

_____

Supportive questions:
What were you doing before you go to the grocery shop?
Why did you decide to go to the grocery shop?
How did you decide on the particular grocery shop to go to?

3. DURING THE MOMENT
Think about what happened while (you where doing grocery shopping) _____

_____

Supportive questions:
Was the line long?
Did you find your product easily?
Did the customer service was helpful?

4. AFTER THE MOMENT
Think about what happened after (you came back from grocery shopping)_____

_____

Supportive questions:
Did you feel satisfied with the quality of your groceries?
Did you pay a fair price for your groceries?
Did you get a loyalty point?

Customer Journey prep // 2nd round of the workshop

BUSINESS IDEA
::

SERVICE MOMENT:
::

BEFORE

How persona knows about service/ product?
How persona gets in touch with service/ prouct?

DURING

How the process of using service/ product looks like?

AFTER

What the persona does after using the service/ product?
Leaving the comment? Share experiance with others?

| customer journey |
| touchpoint |
| feelings |

line of interactions

| requirements |
| pains |
| gains |

GO BACK TO BMC

REMEMBER: USE YELLOW POST-ITS
TIME: 10 min

REFLECTIONS & CONCLUSIONS

After two rounds of the workshop, you should feel more confident about your business idea. At this moment the first draft of your business model should be done and ready to work with. Although remember that your fill outed BMC is not meant to hang on the board to be admired. It is a living canvas that you can and should work with throughout the entire process of business development and even when you achieve a more mature stage of the business.

Yet, let's reflect on the process which you went through. The successful accomplishment of it will be possible when you fully understand how your business idea has been evolved, as well as on which part you still need to work on.

HOW YOUR BUSINESS IDEA CHANGED AFTER WORKING WITH SERVICE DESIGN TOOLS AND BUSINESS MODEL CANVAS?

WHAT IMPORTANT QUESTIONS DO YOU HAVE NOW?

WHICH PARTS OF THE BMC YOU STILL NEED TO WORK ON?

WHAT KIND OF RESEARCH NEED TO BE DONE IN ORDER TO MAKE YOU BUSINESS IDEA SUCCESFUL?

WHAT DO YOU NEED TO TEST/ PROTOTYPE BEFORE THE FINAL LAUNCH OF YOUR BUSINESS IDEA?

Play with your BMC on another 3 Levels. Treat Level 1 of the 4th fill out as a starting point of your business idea development. Now is a time for even more creative thinking!

BMC LEVEL 2: UPDATE YOUR BUSINESS STORY

Use the storytelling frame from page 9 again to write a new story about your business. Maybe this time you'll use different elements from each block? Maybe you will write the story from the perspective of a different persona? Remember you can use the storytelling frames as many times as you need it.

BMC LEVEL 3: CHECK YOUR COMPETITORS

Do a quick research and find 2 of your closest or the biggest competitors. Try to fill out BMC on Level 1 based on their business model. That exercise should give you a perspective of how others work but also point out possible gaps in your business model.

BMC LEVEL 4: CREATE DIFFERENT SCENARIOS

Have you ever thought about what would happen if you take one of the elements from any block of BMC? How it would affect your business model? Try to come up with 3 different scenarios by removing some elements from blocks, make the price higher/ lower in the "Cost Structure" block, or by playing around with the "Revenue Streams" block. You can go with positive or negative scenarios. It's all about prototyping and learning!