Exploring how Improvisation Theatre can affect the co-creational aspects of Service Design.

Co-creative case study with co-living hub residents in Copenhagen.

Master Thesis - Process Report. Elizabete Salte.

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#### I. Abstract

This thesis explores how improvisation theatre can affect the co-creation aspects in service design, in this way exploring the underlying value that improvisation theatre can add to service design.

The research was conducted in a context of a co-creative case study, where the participants were invited to participate, and several improvisation theatre inspired exercises were facilitated in the format of workshops.

The exercises were carefully chosen and designed, based on research and expert interviews, with the purpose to enhance the participant experience and outcomes of the workshop sessions.

The co-creation exercises were applied throughout the design phases in the case study with co-living hub residents. The case study's main focus area was to involve residents in co-creational activities, through which we could find a way to design a service, to improve the co-living hub - FSB owned family and student housing - Artillerihuset.

The impact of the improvisation theatre was measured by participant feedback and facilitator observations.

The outcomes of the research, based on this particular case study, have proven that improvisation theatre can provide additional value to the service design and service design practitioners can add improvisation theatre elements or exercises to their practice.

**Keywords:** Service design, improvisation theatre, co-design, co-creation, co-living.

## II. Acknowledgements

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Thirdly, I'd like to thank FSB - for the premises, where I was able to conduct the co-creation sessions in the uncertain times of COVID-19. Without the premises, it wouldn't be possible to conduct the research.

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# 1. Introduction.

In this chapter, the thesis topic will be introduced, followed by learning goals and a reading guide.

- 1.1. Introduction.
- 1.2. Learning objectives.
- 1.3. Reading guide.

#### 1.1. Introduction.

In recent years, design research has paid more interest to investigate, how designers can invite users and other stakeholders in the design process from early stages by using co-creation. That has changed the design research focus, from investigating creative ways of designing new products and services, to investigating new opportunities to foster creative collaboration between different actors and stakeholders.

Whilst studying service design, I have asked myself how I see my role as a service designer and what it entails. Throughout my studies, I have learned that co-creation facilitation is a big aspect of the service design practice. Facilitating co-creation can come with many challenges, which brings up questions, such as: what makes the facilitation successful? How we can achieve the best outcomes from co-creation sessions? Some of the challenges might arise from participant internal relationships, workplace hierarchy, or different personalities. As a service designer, it is not uncommon to face such challenges in daily work, when facilitating co-creation sessions. Some other challenges might be engaging the participants and fostering creativity in non-creative people. Therefore, when reflecting on some of these challenges that service designers face, a deep interest in how it would be possible to improve co-creation processes from a facilitator point of view stemmed as the motivation for the thesis research scope.

The aim for this thesis is to contribute to the service design community, by conducting research about how to enhance co-creation aspects in service design. The aim is to create something, that could be used as a tool to facilitate successful co-creation sessions and provide safe spaces for the co-creation participants, where they would feel safe and comfortable to participate, contribute and share, to truly co-create something together, with an equal contribution from all the participants.

My personal years-long interest and participation in theatre activities, and particularly improvisation theatre activities, has made me reflect on the correlation between theatre and design and some of the similarities that both of these disciplines share. From there, I could reflect on several similarities, such as an emphasis on collaboration and creative thinking. From taking years-long participation in theatre activities I could not ignore the fact, that possibly service design could "borrow" some of the theatre activities in order to improve parts of the design processes. From there came my interest in investigating these two disciplines deeper, particularly if there is documented any overlap in the literature and usage of any theatre activities in service design processes.

The case study of this thesis is within the co-living theme. Decision to dedicate the case study to this theme came from a personal interest of the recent expansion and popularity of co-living housing. According to literature, some of the first co-creation activities took place within housing sector, to empower housing inhabitants in the decision making. And because of the co-creational nature of my research scope, this factor worked as an inspiration to empower a particular newly built co-living housing hub - Artillerihuset residents.

This thesis can work as a bridge of empowerement between the housing residents and the housing company, that owns the housing, in order to create a better living conditions for the new inhabitants of Artillerihuset.

Throughout the case study several co-creational activities have been performed, as a part of the research scope, where feedback from the workshop participants was collected, as well as facilitator observations were documented, in order to assess the research success or failure.

Improvisation Theatre activities, were implemented, with the aim to gain highly valuable insights throughout the co-creation sessions - by using the improvisation theatre as a support to foster high levels of creativity and collaboration in the participants.

## 1.2. Learning objectives.

The official learning objectives, presented by the Service Systems Design education hereafter have been presented, as well as my personal objectives for the thesis.

#### Knowledge

Students who complete the module will obtain the following qualifications:

- 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

Students who complete the module will obtain the following qualifications:

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

#### Competences

- Students who complete the module will obtain the following qualifications:
- 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 specialisation (synthesis). (Aalborg University, 2020)

My personal learning objectives, based on a personal motivation:

- Apply service design skills and knowledge from the studies, such as using the service design tools and creating system maps.
- Improve my knowledge about Service Design, and particular areas of it, such as co-creation.
- Provide an innovative perspective on applying Improvisation Theatre in co-creation activities.
- Create useful research that can be used by other service designers in the future.

## 1.3. Reading guide.

The chapters in this thesis are explained below:

#### **Chapter 2: Theoretical Foundations.**

This chapter represents the theoretical foundations of the thesis. The chapter covers the literature review and prelimenary research. The prelimenary research consists of expert interviews, that were conducted with epxerts in both design and improv fields.

#### Chapter 3: Methodology.

This chapter explores the methodology that has been used, regarding the research scope and design processes in the case study throughout the thesis. It was chosen to split the methodology in two parts: case study methodology and methodology to address the research question.

#### Chapter 4: Description of the Case.

In this chapter the case study design brief is introduced. The chapter introduces to the particular co-living hub that the case study focuses on - Artillerihuset and after that a problem statement is represented.

#### Chapter 5: Discover.

Chapter 6 is the first chapter to include the start of the design process for the case study. As double diamond was used to structure the design processes - the first chapter of the design process stands for the discover phase. In the discover phase the initial research is represented, as well as the first co-creative activities - the first workshop.

#### Chapter 6: Define.

The define chapter represents the define phase in the design process - one of the divergent phases, where the focus is on analyzing the data from the previous phase. The chapter includes data synthesis, stakeholder map and personas - that were created based on the data from the discover phase. Finally an identified problem area and a new problem statement is represented in the chapter.

#### Chapter 7: Develop.

This chapter focuses on the second convergent phase of the design process - develop. In the chapter the second worksop is documented, as well as 2 ser vice design ideas that could solve the problem statement. After that the final idea is represented. The chapter includes also workshop feedback.

#### Chapter 8: Deliver.

The deliver chapter represents the final idea, that was presented to FSB - the housing association that owns the co-living hub - Artillerihuset, that was the focus of the case study. The deliver phase includes the final ideas service representation. The idea is represented by a a customer journey, service blueprint.

#### Chapter 9: Discussion.

This chapter includes reflections on the thesis processes. It includes three reflections: reflections on the research question. In this part the research scope that was defined in the beginning is discussed. The second reflection is regarding the learning goals. And thirdly, general reflections are represented.

#### Chapter 10: Conclusion.

In this chapter key findings are represented regarding the research scope. Potential future research is also covered in this chapter.

## 2. Theoretical foundations.

This chapter contains the theoretical foundation of the thesis. This chapter dives deep into both improvisation theatre, and service design, as well as co-creation, topics that are explored in this thesis.

- 2. Theoretical foundations.
- 2.1 Literature review.
- 2.1.1 Service design.
- 2.1.1.1. What is service design.
- 2.1.1.2. The value of service design.
- 2.1.2 Co-creation.
- 2.1.2.1 Co-design.
- 2.1.3 Improvisation theatre.
- 2.1.4 Improvisation theatre in design.
- 2.1.5 Key Takeaways.
- 2.2 Preliminary research through expert interviews.
- 2.3 Research scope.

#### 2. Theorethical foundations.

#### 2.1. Literature review.

The following chapter covers the literature review, which covers topics, such as co-creation, co-design, improvisation and improsvisation theatre in design. It explores the correlation between theatre and design and how theatre methods have been incorporated in design processes.

## 2.1.1. Service design.

## 2.1.1.1. What is service design.

Service design is a field, that entails both the improvement of existing services and the development of new ones (Teixeira, 2010). Best Management Practice(2011) similarly to Stickdorn and Schneider(2018) and Stott(2018) sees service design as a framework or "language" that can be understood across departments in a company setting.

Best Management Practice (2011) emphasizes the importance of business requirements when designing service as well as keeping a holistic approach. In several literature examples service design is seen as a framework in which design thinking and tools are systematically applied, for the creation of new or improved services. (Fieldmann, Cardoso, 2015)

The term "service design" was first mentioned by Lynn Shostack in 1982. Shostack(1982) was the first, to emphasize the aspect of modelling and mapping services, by, for example, using a service blueprint. Shostack was the first to use the term "service design", as well as the inventor of the service blueprint. According to Shostack, services and products are closely linked, however there are many differences, for example, that services exist only in time, whereas products are tangible objects that exist both in time and space. He gives an example of a department store, where the service of retailing is performed, and it could not exist without the products. (Shostack,1982)

Best Management Practice (2011) explores how if not designed, services will evolve organically by reacting to the environment. They argue how it is important to use iterative and incremental approaches, to ensure that the service continually adapts to the environment and business needs.

According to Stickdorn&Schneider(2018) there are 5 service design principles:

- 1. **User-Centred**(Human Centric), they emphasize, how service design is a human-centred approach, which means service design focuses on any user of a service system, if it's an employee or customer.
- 2. **Co-Creative**, they emphasize how any service can only exist, if there is a participation of a customer. Which means, that the value is co-created together. In service design process, service design practitioners usually focuses on another aspect of service design being a co-creative approach, which is a process of creating together by people, who are normally from different backgrounds. Emphasis is on the factor, how service design is a cross-disciplinary and collaborative approach.
- 3. **Sequencing**, according to Stickdorn&Schneider(2018), stands for the importance of experience in service design. Journey mapping is used most commonly, in order to map the sequencing steps and touch points in service design.
- 4. **Evidencing** is the principle, that is the strongest connected to branding, where a value is showed by the service offering, even if it is first presented out of the customer's sight.
- 5. **Holistic**, stands for several meanings. Most often the word these days is used in regards to service design being a mindset to shape an entirety of a service, not just small parts of it. Another meaning is the aspect, that one service can include several customer journeys. Third meaning behind this principle is the implementation of service design mindsets behind corporate organizations goals and identity.

## 2.1.1.2. The value of service design.

Stickdorn&Schneider(2018) argue how many organizations they've worked with, practice service design, however, might call it in another way, for example: customer experience or design thinking.

Stickdorn and Schneider (2018), Teixeira (2010) argue that service design focuses on customer experience. They emphasize how many companies focus on the core product of offering, and not so much on the different layers, such as interaction with the staff, or visiting the website, that actually forms the overall customer experience.

As early as 2009, it was estimated that poor customer experiences led to
83 billion of lost business in the United States alone.

(Stickdorn, Schneider, 2018)

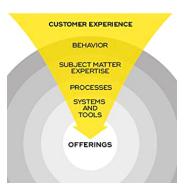


Figure 1: Customer Experience, (Stickdorn, Schneider 2018)

According to Teixeira (2010), the foundation of any service design initiative is a thorough understanding of the customer experience.

Stott(2016) argues, how customer experience and service design are two distinctive fields, and while service design focuses on the collaboration and synergy, customer experience as a discipline, spends time measuring, and not enough time designing.

Service design is the means by which to deliver on the value of customer experience.

(Stott, 2016)

She argues how customer experience as a discipline on its own lacks approaches to link data insights with customer insights, to execute real innovation. Customer experience leaders often don't question untouchable traditions and status quo. Anchored with human-centred design principles, service design can provide then necessary tools to build on the customer experience data insights. She argues how customer experience is the value proposition, and service design is the framework and process on how we get there. Andreassen, et.al.(2016) argues, how service design thinking plays a part as an enhancer of customer satisfaction and service quality. They also argue how companies can use service design and design thinking in order to see the service through customers eyes.

Service design emphasizes the service-dominant logic. This term means, that customer is a contributor to value co-creation, as mentioned in the service design principle, mentioned above by Stickdorn&Schneider(2018). On contrary

good-dominants logic emphasizes that value is something that is created without customer contribution in terms of co-creation. (Andreassen, et.al.2016)

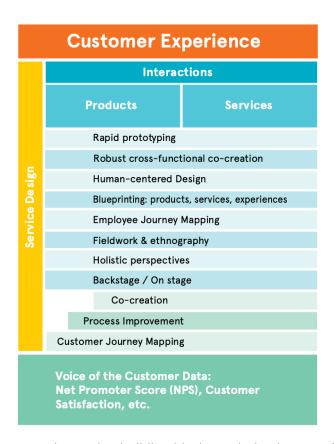


Figure 2: Service Design building blocks, to design improved customer experience(Stott, 2016)

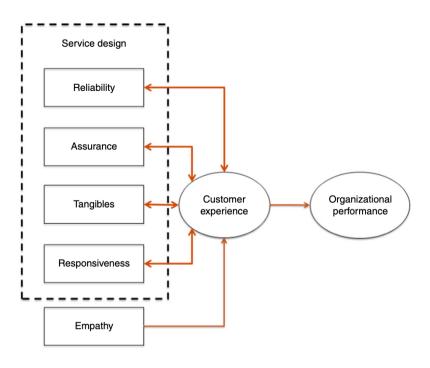


Figure 3: Service designas a turbo-charger ofquality, experience, and performance (Andreassen, et.al., 2016)

#### 2.1.2. Co-creation.

Since the early 2000s customers have been recognized as active collaborators in service systems. Since then, co-creation has been seen as a vital part of competitive strategy and service design practice. (Oertzen, A.-S., et.al., 2018) Co-creation is a term, that is used to describe a shift of mindset - from organization or designer being the one, that defines the value, to value being defined through a more participatory process, where different actors and stakeholders are involved in the value co-creation.

Ind&Coates(2013) argues that it is important to involve the stakeholders in a useful way, so it doesn't become that co-creation is exploiting customers and other stakeholders time and intellect. Co-creation is a familiar term also in fields like marketing, economics.

In design co-creation is often associated with participatory design, that emerged in the 70s in Scandinavia. De Koning, et.al.(2016) also mention these movements were described as "empowering".

According to Zamenopoulos & Alexiou (2018), one of the key roots of co-design and co-creation can be tracked in the 60s, where co-creation approach emerged in the USA and Britain, particularly in the housing sector. It started as a collective sense, that people should have the right to participate in the processes of managing and shaping the places where they live. Back then different terms were used to describe this practice, such as "participatory architecture", "participatory planning", "community design", and others. (Zamenopoulos & Alexiou, 2018)

## 2.1.2.1. Co-design.

Terms co-design and co-creation are often tangled. (Mattelmäki & Sleeswijk-Visser, 2011)

The prefix "co" stands for collaborative, therefore the term "co-design" stands for collaborative designing. (Zamenopoulos & Alexiou, 2018)

According to Sanders and Stappers (2008), co-creation stands for any collaborative creativity process that involves two or more people. On the other hand, co-design stands for a more narrow approach, where collective creativity is applied through the design process. (Sanders, Stappers, 2008)

A range of benefits are associated with co-design in service design projects. (Steen, M., Manschot, M., & De Koning, N. 2011).

During the late 1990s, co-design became popular in design practice. Vink, et

al.,(2016) argues the value that is co-created in the co-design process is not a by-product, but a large component of the total value creation. They argue that co-design is a process that co-creates value. They widely discuss the well-being of the co-design participants, and how it can enable them to feel empowered. (Vink et al., 2016, pp. 1–3)

Co-design is commonly used in the public service. It can be used in different design phases, and for different purposes. Cruickhhank, et.al.(2016) argues how co-design can be applied mainly in two ways: as a tool to gather data and a way of facilitating people in generating solutions and ideas. They also mention, a case, where co-design approach failed, due to lack of imaginative methods to engage citizens in co-design activities. (Cruickshank, et.al.2016)

Van Mechelen (2016) argues the importance of paying attention to different group dynamics, when facilitating co-design workshops. He outlines six challenging group dynamics:

- 1. Unequal power: some participants might feel like they have a higher status, then other participants. It might be challenging to more shy or less verbal participants to speak up.
- 2. Apart together: Such dynamic occurs, when participants work individually, instead of having the same vision. They might create their own prototypes and hold onto their own views and interests.
- 3. Free riding: If some members don't feel as responsible or capable, as other members, they might not contribute to the group efforts as much, therefore "free riding".
- 4. Laughing out loud: such challenge arise, if the participants don't take the design challenge seriously. That creates disruptive atmosphere.
- 5. Dysfunctional conflict: Different types of conflicts might arise between the participants. He defines 2 subcategories conflicts about what tasks should be done, and conflicts about how these tasks should be done.
- 6. Groupthink: This challenge arises, if participants are reluctant to criticize others ideas. Team might rush into decisions, without discovering other alternatives.(Van Mechelen, 2016)

In Van Mechelen's (2016) study, the focus was on children and their group dynamics. However, if looking at different literature regarding group dynamics, similar challenging aspects of group dynamics have been mentioned. Term "free riding", and others are common in the literature. (Toseland, Ronald & Jones, Lani & Gellis, Zvi. 2004).

## 2.1.3. Improvisation theatre.

As improvisation has been traditionally rooted in theater, dance, and music, the focus on performance is anticipated. (Gerber, 2007)

Theatre improvisation is a way of theatre in which performances are produced by actors interacting spontaneously in front of an audience. It entails a set of guidelines and principles, in order to collaborate with other improv actors on the stage without a script. (Vilc, 2017) The development of improvisation theatre began as an avant-garde rebellion against traditional theatre with set roles. What sets improv apart is the collaborative approach to create improvised scene together. Improv was pioneered by theatre educator Viola Spolin in 1930s, who taught improv by facilitating improv workshops followed by an formation of a professional improv troupe The Compass during the 1950s. After that Keith Johnstone developed and popularized improv also during the 1950s. (Vilc, 2017)

Keith Johnstone, the British director and drama teacher, initially popularized improvisation in drama theatre. He designed exercises for the actors, to relieve any fear of performance and open up the actor to creativity and collaboration. His exercises and methods, have been still used in improv to this day. (Gerber, 2007)

Johnstone (1987), started introducing improv in drama theatre, with status exercises. He asked actors, to play a visibly "lower" or "higher" status then the other, to see what happens. He argues how important it is to be aware of status in theatre and how being aware of it, can beneficially change the scene. He also discusses how we encounter status, in our every day encounters, with friends, co-workers, and others. The status exercises increased the awareness of status, how to diminish or enhance it in the play.

Johnstone (1987) strongly argues, the importance of acceptance and how blocking is a form of aggression. Blocking - disagreeing to someone's idea, saying "no", instead of "yes, and".

I often stop an improvisation to explain how the blocking is preventing the action from developing.

(Johnstone, 1987)

Kulhan&Crisafulli emphasize the importance of the training that improvisers go through, in order to collaborate succesfully.

They also argue about myths that "Improvisation is Comedy" and "Improvisation is making stuff up as a last resort."

They argue how, improvisation is not comedy and the importance of the context, in which improvisation takes place. In relation, to the other myth, they argues how improvisers don't make stuff up in a moment, and the importance of training that improvisers go through, to learn how to draw on everything around them, and based on everything they have learned up to the moment they have to improvise. Kulhan&Crisafulli(2017) argue how important it is to prepare and be aware as an improviser.

Improvisation, when stripped down to its basic building blocks,

is about reacting, adapting and communicating.

(Kulhan&Crisafulli, 2017).

The improv pioneers popularized improv principles, that are still used to this day.

- 1. The actor must "say yes", accept their own first instinct. When an actor walks onto a stage, they perform the first action that comes to mind, implying that the first choice that comes into mind is always the best.
- 2. The second principle implies that you must "say yes" to your fellow performers, accepting their acts as accepted fact do not deny what other actors onstage say or do. It exists if another actor creates it, whether physically or verbally.
- 3. The third principle states that you should choose the active choice rather than the passive choice. This implies that you have complete control of your behavior onstage. You must not only embrace the truth created by another actor, but you must also create additional reality for yourself.
- 4. The final concept is to create meaningful connections between the previously identified elements. (Vilc, 2015)

According to Kulhan&Ciasfulli, when improv is applied to other fields, such as business, it can be used as a way to improve new idea generation, learn to adapt quickly by using the right improvisation techniques at the right time. (Kulhan&Crisafulli, 2017)

## 2.1.4. Improvisation theatre in design.

Several authors state how the process of making a good comedy, is similar to the process of developing innovative products. (Hatcher et. al., 2016). Gerber (2009) explores, how designers can use improvisation techniques for brainstorming. She argues how designers can foster a supportive group dynamic by using improv techniques.

Designers use improvisation to foster a group dynamic necessary

for effective brainstorming.

(Gerber, 2009)

Kudrowitz and Wallace (2010) held a workshop in which 11 participants did a brainstorming exercise before and after playing a series of shortform improv games, which resulted in a 37 percent boost in idea generation.

Hatcher et. al.(2016) explored humor-based ideation in design, and improv in design. They conducted several experimental workshops. They argued that several improv exercises have close parallels with brainstorming rules, that are used in design. They concluded that structured improv technique is more learnable, practicable then brainstorming rules, and therefore achieves good ideation results.

Fragniere, et.al.(2012) performed Service Design experiments by using ethnomethodology and theatre-based reenactment. The experiments they facilitated were mainly role-play exercises, and they were generally successful. The case study they used was advisory service, therefore role-playing was beneficial to explore the customer and advisor interaction.

Gerber(2010) explores, how improvisation can support design work, and mentions, like other authors, that even though improv has received a lot of attention in academic research, but research in terms of improv usage in design is still quite neglected and lacking, sometimes due to misconception of what is improv. Even though it could be certainly beneficial for the designers.

As mentioned above, authors have explored improv with different approaches and techniques in their research. After reading some of the literature, I recognized that some authors - Fragniere, et.al.(2012) used only the role-playing aspect of improv. Gerber(2010), Hatcher et.al.(2016), Kudrowitz and Wallace(2010) and draws big parallels with design thinking and theatre.

Gerber(2007) describes 5 main areas, where improvisation can be applied to design work. These are: "(1) Creative Collaboration; (2) Fostering Innovation (3)

Supporting Spontaneity (4) Learning through Error; and (5) Developing Presentation Skills" (Gerber, 2007). For each area she describes, how there are visible parallels to improvisers daily work and designers.

For example, in creative collaboration both improvisers and designers have to collaborate with different actors, designers. When a person takes action in either design or improv, their peers might accept the action and build on it, or reject it. In improv there is a strong belief, that by accepting and building on each other's idea a better progress is achieved. Improv teaches to accept others ideas and build on them.

Gerber(2007) argues how in design a common belief is to try to withhold judgement, however "blocking" or "rejecting" is still the norm in design work. Both Gerber and Johnstone mentions a lot in their works, how desire to appear more clever, or creative can become an obstacle in a group creative collaboration setting. The best way to achieve group creative collaboration is by focusing on the groups goals instead of individuals goals.

A common concept in improv is to "fail cheerfully" (Gerber, 2007), which is quite similar to designer's mantra "fail early, fail often", (Stickdown, Schneider, 2018), (Müller-Roterberg, 2018) however Gerber (2007) argues how it is easier said then done from designers point of view. Designers can learn a lot from improvisation theatre, by learning to fail cheerfully, because by being comfortable with failure can lead to a better success in the end.

General themes that a lot of authors have explored is improvisation usage in brainstorming and divergent thinking, as well as improv role-playing aspect usage in design, as well as how to boost creativity with improv. I will discover these themes in this thesis further. Unfortunately, there is a lack of research literature about improv in service design, apart from the study performed by Fragniere, et.al.(2012), where they used theatre tecniques in service design.

#### 2.1.5. Key takeaways.

The literature review has been done with focus on service design and co-creation and the improvisation theatre in design, which are the core themes of this thesis.

The literature has highlighted the areas, where there is a lack of research, as well as given inspiration to possible research paths. The literature has shown, that there is a lack of research in the field of improvisation theatre in service design. The research also has shown, what are the areas of improvement that improvisation theatre could help to solve in co-creation aspects of service design.

Some studies have been done in applying improvisation theatre in design, however not many. These studies have shown that the improvisation theatre can have a big impact on the brainstorming and ideation processes in design, and these studies have shown a big success in the application of improvisation theatre in these design processes. Resources also have shown improvisation usage in business setting, to improve skills, such as, adapting quickly and generating new ideas.

No studies have examined the impact of improvisation theatre in service design. The lack of this research drives this thesis to examine this area and provide useful research to the service design community.

Another aspect, that could be improved by applying improvisation theatre, apart from idea generation and adapting quick, could be improving the group dynamics.

According to Van Mechelen (2016) and Toseland, et.al. (2004), terms free-riding and other, are often used in terms of challenging group dynamics. Challenging group dynamics is something the facilitator has to keep in account, when facilitating co-creation workshops. Examples include, not working together due to individual approach, unequal status, free riding and others.

Inspired by the "status" exercises, it can be assumed that improvisation theatre could enhance the group dynamics, in terms of participant status, to assure more equality among the participants. The improvisation theatre also offers a wide variety of collaboration games, that promote the improvisation mindset to collaborate with fellow actors, in order to create a scene together. These exercises could be beneficial, in order to improve the collaboration and samegoal vision for the co-creation participants.

In summary, there hasn't been done enough research in literature in regards to improvisation theatre in service design and there are several areas of improvement according to literature, in co-creation aspects of service design.

# 2.2. Prelimenary research through expert interviews.

It was decided to conduct expert interviews, in order to gain insights from experts regarding the themes of service design and improvisation theatre.

Two target groups were chosen for the expert interviews - senior service designers and improve theatre teachers. A decision to make these interviews was made, in order to first start, by gaining a deeper understanding of the research area and firstly seek the potential in this research area, by interviewing experts, due to lack in research literature about this subject.

All of the interviews were non-structured, it was clear what themes would be beneficial to discover, but the questipons themselves weren't prepared in a list. These interviews were meant for a explorative purpose.

All the interviews were conducted digitally, using video call.

## 2.2.1. Senior service designers.

This target group was chosen, because of the experience, that senior designers have. Therefore, it was decided to explore if senior designers have used improvisation theatre, or heard about it in regards to design, throughout their several years of experience in service design.

It also was considered beneficial to touch upon any challenges they have faced while facilitating co-creative acticities, regards to group dynamics, or anything particular, that they have faced as a challenge from facilitators point of view, throughout the years. This was asked, with the goal, to possibly later investigate how improvisation theatre could mend these challenges, in order, to contribute to the service design community.

Five designers were recruited, using the platform Mega Mentor. (Mega Mentor, n.d.) The designers were located in different countries, to gain a wide perspective.

The interviews revealed, that some designers have tried or encountered improvisation theatre in their design practice. Two out of five interviewiees shared their experiences, where they have applied improv in service design co-creation activities. When talking about improv, one of them described a case of using improv role-playing in a project and the big success of it. The case was of a medical topic, and they asked the participants, who were medical professionals to role-play their experiences with patients. They set a scenario and then

asked the participants to improvise it. In this way they were getting bigger insights into the medical professionals interactions with participants. The interviewee shared how it was a big success, and they have used such approach later in other cases.

Another interviewee, who had experience with using improv, had participated in some improvisation trainings and shared books about improvisation theatre. She spoke about a broader approach of applying improvisation theatre into service design and more spoke about the collaborative, and "yes, and" approach, that she has tried to apply from improvisation in service design.

The other three interviewees didn't have experience with using improv in their design practice, but they, among the others, shared insights, mainly regarding group-dynamics in co-design facilitation.

There were some themes, that often came up in regards to challenges in co-creation activities, they're listed below:

- Hierarchy at work.
- Lack of participants speaking up/feeling heard.
  - Different cultures.
  - General skepticism about the workshops.

Certainly, "know your audience", "know the difference in cultures", were big topics in regards to areas were challenges from facilitators point of view might arise.

The clusters from the interviews, of the challenges, that they have faced during co-creation, can be found in Appendix 1.

The insights, that were gained from the interviews, showed that two out of five senior designers have tried applying improvisation theatre in their service design practice, which is a relatively high number and shows that these senior service designers are interested in applying theatre in order to improve their service design practice and have achieved positive outcomes.

In regards to challenges, they highlighted some of the areas, that potentially improvisation theatre might help to solve, such as status(hierarchy at work, cultures) and making sure that all participants speak up and feel heard.

## 2.2.2. Improvisation theatre teachers.

Two interviews with improvisation theatre teachers were conducted. Both of them are improvisation theatre teachers in Copenhagen. I recruited them using my personal network, I had worked with both of these teachers before in theatre groups. One of the interviewee has had a large experience doing business improvisation theatre, which is a particular improvisation theatre segment, that focuses on teaching improvisation theatre for enterprise companies. Business improv exercises are structured for a corporate setting. That represented a different, new perspective.

Both interviewees have had expansive experience into teaching improvisation theatre to people, who join improv groups as a hobby at ICC(Improv Comedy Copenhagen).

The interviewee, with an experience in teaching business improv shared a lot of insights from this experience. He shared, how for companies one workshop is not enough, and that improv is a reprogramming of a mind. He shared different exercises, that he is using in his practice to make people open up, for example, ask them to share something they are passionate about and in this way participants can bond with other people. He also mentioned how it can be a pleasent surprise, when also the cynical participants join in and let go.

The other interview participant shared his personal experiences with improvisation theatre, as well as experiences as being an improv teacher. He emphasized how ever since he has trained in improvisation theatre, it has helped him to develop the skills to express his ideas more confidentally in his workplace. He explained, how "yes, and" mindset has changed how he perceives other's ideas, and that he has observed how other people in his workplace tend to be more negative towards other's ideas. He emphasized how he enjoys improvisation theatre exercises, that allows people to be themselves. He gave an example of a park bench exercise, where participants have to imagine they sit on a bench in a park, and have a conversation. He mentioned he enjoys a particular framework of doing improvisation theatre, that he is teaching to his students. It is called base reality+unusual thing, which is an organized way of building up improv scenes.

I asked them both, what is the most important skill to learn in improv, here's quotes of their answers to this question:

Most important skill to learn from improvbe a great collaborator. Great collaborator: good listener, supporter,

11

Improv is 70% listening. Shutting up can be challenging.
Learn to swallow your idea and accept others idea, it takes time, discipline
and ego.

Improv - being creative in a systematic, analytical way.

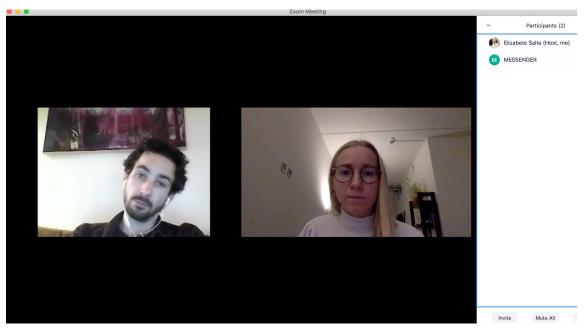


Figure 4: Interview with one of the improvisation theatre teachers.

## 2.2.3. Expert interview insights.

Interviews with both target groups provided insights in regards to the potential thesis research area and that the research could provide valuable insights for the design community. It was beneficial to gain insights from both chosen target groups, to see if improvisation theatre could be potentially implemented in service design and to see if there is an actual need for it from the designers perspective.

The interviews provided the necessary information to understand, if the research in this area is actually needed and if there is a potential to do it.

The interviews with senior service designers provided deep insight into their practice of co-creation, and if they have applied improvisation theatre in their practice, which proved to be true, as two out of five interviewees, had practiced it.

Interviews with improvisation teachers gave a perspective, in their every day life teaching improvisation theatre. It was beneficial to learn, how they teach improvisation both for businesses and every-day people. The business adaptation of improvisation gave insights in how improvisation theatre can be applied to a business and corporate setting and how it can be used, in order to enhance work performance, and skills that are crucial for a good work performance, such as, presentation skills and communication.

The interviews with improvisation teachers also provided insight into the different frameworks and techniques that are used for improvisation theatre practice, and the structure that they follow to teach improvisation theatre and foster creativity. These exercises are designed to develop different skills in the actors, to help them think fast, make fast decisions, let go, leadership skills, associations and others.

The interviews with improvisation teachers also showed their perspective, of what is the biggest value that improvisation theatre can bring, such as being a great collaborator.

Overall, the insights from both interviews proved that improvisation theatre could be implemented in service design and that there is a need for it from the service design community.

#### 2.3. Research scope.

Literature showed some research regarding improvisation theatre usage in design processes, such, as brainstorming. However, there was a lack in literature research in regards of describing these processes in detail, emphasizing the improvements by applying improvisation techniques.

There was a lack in the literature in terms of improvisation theatre in service design.

The interviews with the experts provided valuable insights, that service designers have applied improvisation theatre already in some cases, and are interested in the potential to apply it more, or start applying it.

The interviews with service designers also showed the different challenges that they are facing in co-creation sessions, which were very similar to the ones represented in literature, such as unequal status, problems with collaboration. The interviews with the improvisation theatre teachers provided the necessary

insights into the different ways they teach improvisation theatre and how it is used as a tool to foster several qualities in people they teach it to, such as creativity and collaboration. The interviews also provided insight, that improvisation theatre could be applied to service design smoothly, as it has been done in business improv classes.

The insights both from literature, and the expert interviews, served as an inspiration, to set in the direction of research more in depth about applying improvisation tecnihques in service design processes.

The aim of the research stemmed, as a wish to improve the co-creation aspects of service design, however being aware, that the outcome can be unpredictable, it was chosen to explore more in depth if improvisation theatre can have any effect on service design - either good, or bad.

Therefore, from there stemmed the research question:

# How can improvisation theatre affect the co-creational aspects of service design?

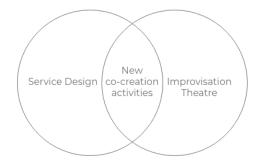


Figure 5: Sservice Design+Improvsiation Theatre.

# 3. Methodology.

This chapter introduces to the underlying methodology for this thesis. Themethodology for both - case study and research question is represented.

- 3.1 Methodology for the service design process related to the case study.
- 3.1.1 Double diamond.
- 3.2 Methodology to address the research question.
- 3.2.1 Expert interviews.
- 3.2.2 Design experiments and related survey.
- 3.3 Timeline.

# 3.1. Methodology for the service design processes related to the case study.

#### 3.1.1. Double diamond.

Over the past decades an extensive amount of different design thinking models and frameworks have been developed. (Elsbach & Stigliani, 2018).

For this thesis case study, it was decided to apply the double diamond (Design Council, 2015) methodology, that has been widely used in service design practice.

The double diamond diagram was created based on in-house research by the Design Council in 2005. (Design Council, 2015).

The double diamond's main aspect is its focus on "divergent" and "convergent" thinking that are used throughout the double diamond phases.

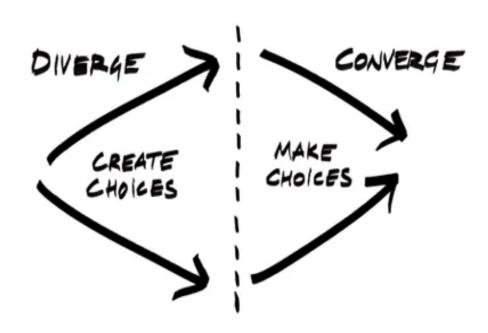


Figure 6: Converge vs diverge. (Convergent Thinking vs. Divergent Thinking, 2018)

Double diamond consists of 4 phases: discover, define, develop and deliver. Each phase represents divergent and convergent stages of the design process. Both "discover" and "develop" represent the divergent design phases. The divergent phases are charactarised by developing a lot of ideas, brainstorming, explorative mindset, having diversity in ideas. The convergent thinking is in double diamond is represented in the "define" and "deliver" phases, where the focus is on narrowing down ideas, creating clusters, analyzing ideas, assesing good/bad. (Möller, 2015)

- 1. In the discovery phase it is important to learn more about the problem area. The discovery phase often includes user research, market research, which brings a lot of data. It is crucial to know how to organize and manage such amounts of data.
- 2. The definition phase stands for filtering all the data from the first stage and elaborating on it. This stage sets the context for the project development.
- 3. In the development phase, designing different ideas/prototypes can start. It can be done by applying different methods, such as brainstorming, making different scenarious, etc. In a company setting in this phase different departments usually are involved, for example, engineers, developers, designers. Continues testing and feedback is common in this stage.
- 4. The delivery phase stands for testing the final product/prototype and launching of it. Last testing means, making sure, there are no issues or short-comings with the product.

For this project it was decided to use co-creation in the both divergent phases of the design process - discover and develop, as it was found to be the most suitable to apply co-creation activities in the more explorative phases.

After each convergent phase, it was decided to take time to synthesize data and diverge the findings.

In the figure 8, you can see the different tools and activities applied throughout this thesis case study in the double design thinking phases. As represented in the illustration, the two workshops are also planned as a part of the design process.

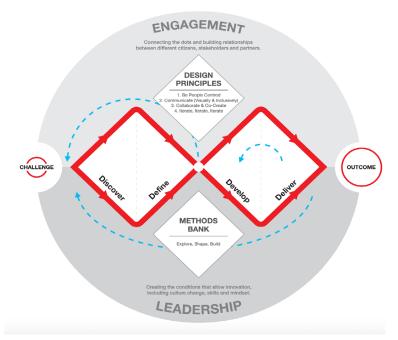


Figure 7: Double Diamond Model, (Design Council, 2019)

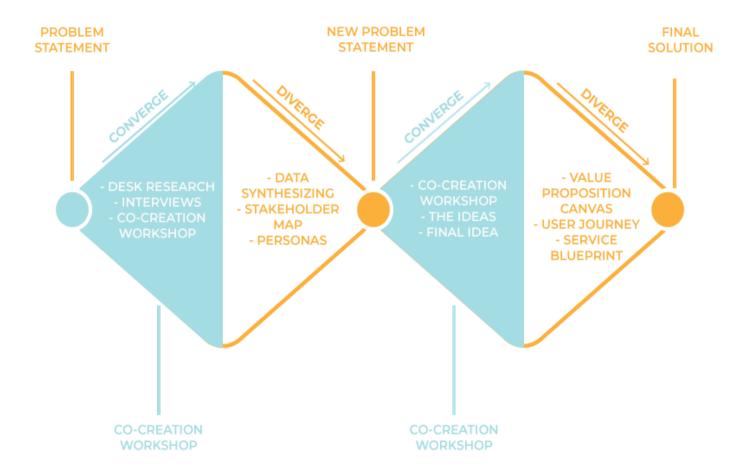


Figure 8: Tools and activities during the case study.

# 3.2. Methodology to address the research question.

## 3.2.1. Expert interviews.

As a part of the prelimenary research for the research question, it was chosen to conduct expert interviews with experts, as a research method.

After reviewing the literature, and realizing that there is a big lack of research in the area of service design and improvisation theatre, a decision to conduct expert interviews, in order to gain more insights was made.

According to Bogner, Littig and Menz (2009) conducting expert interviews has been popular in social research, and there are several reasons for this methods large popularity. They argue that it is more efficent to talk to experts in the first phases of project, rather then surveys, for example. Conducting interviews can be time-saving data gathering process, compared to other methods. It is a quick way to obtain quality results. (Bogner, Alexander & Littig, Beate & Menz, Wolfgang. 2009) Because of the explorative nature of this thesis, it was decided that it will be beneficial to first gain some insights from experts regarding the research area and question, as it was assumed will be bring a great benefit to the next steps in the project.

# 3.2.2. Design experiments and related survey.

In order to execute the research part of this thesis, it was decided to design several design experiments. According to Frænkel and Wallen(2006) the underlying idea behing all experimental research is to try something by conducting experiments and then observe what happens.

An experiment is a method of data collection designed to test hypotheses

under controlled conditions.

- (Mauldin, 2020)

Main purpose of this research is to see, if improvisation theatre can enhance the co-creation activities in service design projects. Design experimentation has been commonly used for the past forty years. (Cross, 2007) By applying design experiments, it is possible to support both theory building, theory testing, while also providing flexible research approach. Usage of design experiments was decided for this thesis, in order to find answers to the research question. In order to assess the impact of the research, it was decided to design a survey,

for the participants of the design experiments. Surveys is a commonly used method, to collect feedback after workshops and measure the feedback. It is crucial to determine what needs to be measured and keep open-ended questions. (Sufi et al., 2018) The survey was chosen as an anomymous tool, that help assess the design experiments outcomes.

#### 3.3. Timeline.

A timeline consisting of the double diamond model was created. In the timeline the double diamond 4 stages have been displayed, accompanied by the different activities and tools that took place in each stage. As the project emphasis is on co-creation, the 2 co-creation workshops have been highlighted. Each workshop took place in the convergent design phases - discover and develop.



Figure 9: Thesis timeline.

# 4. Description of the case.

This chapter introduced to the design case of the thesis.

4.1. Artillerihuset.

4.1.1. Why Artillerihuset?

4.1.2. FSB.

4.2. Problem statement.

#### 4.1. Artillerihuset.

The case study scope is co-living, and citizen involvement into communcal aspect improvement. In the thesis the focus will be on on a newly built student and family accomodation - Artillerihuset, that lies in Copenhagen, Amager. Artillerihuset is owned by a housing company FSB, and freshly built, it was open for new inhabitants in November 2020. As many new buildings, it also faces different shortcomings and problems regarding the spatial aspects. However, as dormitories fall in the category of co-living hubs, they also have the big aspect of social life and co-living with other inhabitants, which can also create other challenges. As all the inhabitants are new, and there aren't many rules or guidance from FSB, some major challenges have arose.

My goal is to help solving these challenges, by involving the inhabitants in co-creative design activities. Later on the findings or possible proposals can be presented to FSB, depending on the outcomes.



Figure 10: Artillerihuset. (s.dk,n.d.)

## 4.1.1. Why Artillerihuset?

Artillerihuset was chosen as an interesting case to investigate, from all the other co-living hubs in Copenhagen due to it's co-living nature, as well as the aspect, that the housing is newly built, which means, it is fresh and needs established co-living guidances.

I was lucky enough, to find out about some of the problems in the housing by

some of the residents, before choosing it to be the main focus area of the case study, which pointed out to do more investigation. From there stemmed the decision to dedicate the thesis case study to Artillerihuset co-living and find ways to improve the housing environment by applying Service Design approach.

As there was an interest from the housing residents in order to improve the co-living aspects, I decided to step in as a service designer to bridge the gap between the housing residents and FSB, in order to provide FSB with useful insights into new services or service improvements in order to fulfill their slogan - "more than a home".

Artillerihuset is situated close to DR Byen metro station and was ready for the first new residents in 2020. The first inhabitants moved in the building on 1. November 2020.

#### Completely newly built youth housing not many meters from the DR Byen

#### and the University of Copenhagen, KUA

- (s.dk, n.d.).

The apartments for students, were offered on a student housing portal s.dk. On the other hand, the family apartments in the building were offered from internal FSB housing list. What makes Artillerihuset different from other youth homes, is the fact that they share the house also with family residents.

In the building, there are 128 apartments, out of which 4 are for families. Each of the apartments has their own kitchen and bathroom, toilet as well as a storage room. On one side of the building there are apartments, and the other side consists of large corridors, that serve as a living space. In regards, to areas for social life and community building, here is also a big rooftop terrace, and every two floors share a communal kitchen. (Artillerihuset, n.d.)

#### 4.1.2. FSB.

FSB stands for: Foreningen Socialt Boligbyggeri, which in translation means: association of social housing.

FSB is a public housing organization, that owns around 13,000 elderly, family and student apartments in Copenhagen. FSB was founded in 1933., by a lawyer Rasmus Nielsen. In their website FSB states their slogan "more than a home", and explains, the meaning behind it - to create an inviting atmosphere for people to build a community in their housing. (Københavns Største Almene Boligorganisation, n.d.)

#### 4.2. Problem statement.

In order, to involve the residents of the co-living hub Artillerihuset, in the process of improving their home surroundings, by applying service design, a problem statement was formed.

The case study will focus and investigate how inhabitant experiences could be improved in a co-living setting, by involving the inhabitants throughout the design process.

From there stemmed the following problem statement for the case study:

How might we improve the resident co-living experience in Artillerihuset?

## 5. Discover.

This stage was used to immerse in the project scope deeper and to discover the problem areas from resident perspective.

- 5.1. Co-living.
- 5.2. Arising challenges in Artillerihuset.
- 5.3. Interviews.
- 5.4. Workshop.
- 5.4.1. Designing the workshop.
- 5.4.1.1. Design activities.
- 5.4.1.2. Improvisation theatre activities.
- 5.4.1.2. Safety pre-cautions.
- 5.4.2. Warm-up.
- 5.4.3. Discussion: note down likes/dislikes.
- 5.4.4. Journey maps.
- 5.4.5. Zip-zap-zop.
- 5.4.6. Moodboard.
- 5.5. Workshop reflection.
- 5.5.1. Survey results.
- 5.5.2. Facilitator observations.
- 5.6. Discover conclusion.

#### 5.1. Co-living.

In order, to get more familiar with the case topic, desk research about co-living was made. Desk research is commonly known to be the starting point for any research process. (Stickdorn&Schneider, 2018) For the purpose of getting familiar with co-living, information from research literature was used.

Concept of co-living, is relatively old, however it has gained large popularity in the recent years. (Edmund Tie&Company. 2018)

Co-living is people cohibitation, where they have access to private or shared rooms for living, with an access to shared living areas, such as, kitchen, living room. There are different types of housing, that fall into the co-living category.

Some of them are multi-family living, where several families live in a shared housing. It is becoming more common, to build senior homes as co-living hubs. It is common to have co-living housing for working millenials, companies like LifeX focuses particulary on this target audience. Student dormitories also fall into the co-living category, and in this project the focus will be on this category.

Community building is a large part of co-living. Goal of such housing, is to encourage social engagement, by providing social spaces and organising events. Another co-living aspect is that the inhibitants might share common interests or occupation, for example students, young professionals, etc. (Edmund Tie&Company. 2018)

Some of the key stakeholders in co-living housing are: landlords, tenants, consultants, technology providers. (The Housemonk, 2019)

According to Birkjær, an analyst at Happines Research Institute(HRI) in Denmark, social engagement and co-living can have a huge impact on wellbeing. However, Palti, an architect and founder of Conscios Cities Movement, argues that co-living can also cause distress. He argues, that there are both opportunities, as well as challenges. There is a possibility to create new, exciting social connections, in co-living settings, which is great for the mental health, but a lack of privacy, or disagreements with co-dwellers might cause distress. (Can Shared Living Improve Our Mental Health and Wellbeing?, 2019)

#### 5.2. Arising challenges in Artillerihuset.

In order, to gain insights about the challenges the community is facing, desk research about Artillerihuset was done. Few online sources that were relevant were chosen: FSB website, Artillerihuset Facebook Group. FSB website helped to gain insights in how FSB communicated to the inhabitants, or generally about the building. On the flipside, the Artillerihuset Facebook Group, that has been created by the residents helped to gain insights into the inhabitant perspective and views, problems.

By looking at these online sources, it was possible to become familiar with some of the challenges that have arised, in the community, as well as the overall communication inside the building and outside of it.

Below, in figure 11 some of the main challenges, based on desk research, have been represented.



Figure 11: Challenges in Artillerihuset.

As seen in figure 11, as many new buildings, also Artillerihuset has already faced consequences of some short comings, that many new buildings can face by unteranticipating some physical issues.

Research showed, that around 128 people were moving in the Artillerihuset on the same day, FSB didn't calculate how much paper waste there will be from people, who are just moving in. The small paper containers couldn't hold all the paper and cardboard waste from newly moved in residents. A reminder to "sort waste" was placed on the FSB website, after the carbdoard containers were overflown with cardboard waste. FSB had communicated to the inhabitants, to remember sort the waste, and not overflow the containers. They also recommended to put the waste inside the stairway on the website, instead of placing the waste right next to the containers, where they shouldplace the cardboards originally - before they're full. (Husk at Sortere Dit Affald, 2020)

Another challenge, that was mentioned in the resources, was that soon after moving in, the fire alarms started getting triggered by small amount of smoke, which caused the Firefighters to visit the Artillerihuset. It costs around 7,500 DKK to pay for a false fire alarm, therefore FSB placed on their website a suggestion to turn on the hood 5 minutes before using the kitchen, as well as open the window, when cooking. (Madlavning Og Udluftning i Lejlighederne, 2020) However, on the facebook group people were complaining, how the kitchen hoots aren't working properly. (Artillerihuset Facebook, 2020)

This research provided some insights in the residents lives and the challenges they have to face on daily basis. It appeared that most challenges are regards to the building. In figure 11 biggest challenges have been represented. Other challenges included, for example, figuring out how bathroom floor switch works, and other smaller inconviniences that some residents had expressed in the facebook group.

#### 5.3. Interviews.

It was decided to interview some of the inhabitants in the building, to start gaining insights about the inhabitants, as well as recruit them for a workshop session.

6 structured interviews were conducted. (Interview transcripts are in Appendix 2.)

There are different range of approaches, when conducting interviews. The range varies from unstructured interviews, where the interview participant can talk about anything, to structured, where there are specific questions prepared.

It was chosen to use structured interviews, to get responses to specific questions, that had been prepared. In structured, and semi structured as well as unstructured interviews it is important to keep the questions open-ended to let the interview participant answer the questions freely and without leading them in any opinioted direction. 4 open-ended questions were prepared and it was decided to conduct the interviews face-to-face, in Artillerihuset - the environment where, the participants feel comfortable. In this way they also could point to objects in the physical environment, if they mentioned them. For example, the kitchen, or doors. The interviews were conducted individually with each interview participant. They were recruited on the spot, by sitting in the lobby and offering them free coffee from a termo-cup. It is often beneficial to offer something to the participants in return for their time, such as coffee or a snack.

The insights showed interesting themes, and showed the big diversity of people living in this co-living setting.

There were many insights regarding the problems in the building, such as leaking water from the ceiling, or drilling and theft. It seemed that every single interview participant has faced some sort of shortcoming, while living in Artillerihuset. However, the biggest theme that appeared during the interviews, was the bad communciation with FSB - the housing organization, that owns the building. Participants anticipated, that it is very hard to get in touch with FSB. Not only that, but also that FSB communicates quite badly - they often leave a printed paper in front of the door - that they will come by to fix something, for example, as a way of communication. There also is the internal FSB portal, but it is difficult to find anything on it. FSB also had a week, where they would come by to fix any issues in the apartments, and they would come unannounced the whole week - as well as the inhabitants had to provide a key to the FSB, that they weren't sure when they would get back.

On the other side, participants seemed very happy about the social life in the building. Many of them mentioned that they are organizing different social events, where they can spend time with others. They also said, it is a great way to spend time with others even though there is a lock-down, so you don't feel lonely and isolated.

Participants also highlited, that there are different apps that they have to use for the services in the building, such as washing clothes or parking their car. Some of them highlighted, that it is too many apps for living here and sometimes there isn't a good communication from FSB regarding these apps - more precisely, the inhabitants aren't made aware that they have to download these 2 apps.

During the interviews, some of the participants were recruited for a co-creative workshop.



Figure 12: Interviews in Artillerihuset.

#### 5.4. Workshop.

On 10.03.2021 a co-creative workshop was held in Artillerihuset. Co-creation workshops are commonly used practice in Service Design.

If service design is a truly co-creative activity,

then facilitation must be the key tool of any practitioner (Stickdorn&Schneider, 2018)

Four residents participated in different design activities. They were recruited from the qualitative interviews, thathad been conducted previously. The aim was to recruit people with different backgrounds, and who live in different locations across the building, to gain the most valuable insights.

The workshop had an explorative nature, to explore what are the challenges that the inhabitants are facing, while living in Artillerihuset. The workshop consisted of several activities and warm-ups, as well as focused on impro inspired activities. The workshop was facilitated in the Artillerihuset, one of the common kitchens on the 7.floor.

#### 5.4.1. Designing the workshop.

In order to design the workshop, goals and expected outcomes were firstly assessed.

#### Goals:

- Explore what challenges the Artillerihuset residents are facing.
- Explore what aspects the Artillerihuset residents enjoy about living in the building.
- Explore how the residents envision their life in Artillerihuset.
- Explore what particular experiences have been challenging for the residents.
- Explore how improvisation theatre exercises improve the participant performance during the workshop.

#### **Expected outcomes:**

- Data in regards to challenges and favorable aspects in Artillerihuset.
- Enough data to help define the exact challenge.
- Observations, later delivered survey to assess the impact of improvisation theatre during the workshop.

Different goals and outcomes were assesed - regarding the case study and

exploring the challenge, as well as assessing the improvisation aspect, that was planned to be introduced throughout the workshop.

The next preparatory step was to plan the workshop agenda, in order to achieve the expected goals and outcomes.

A research was done, to design the workshop in a best way possible. The workshop included both design and improvisation exercises, that were both carefully selected.

## 5.4.1.1. The design activities.

This research was done carefully for each phase. First - it was decided, to include a focus group discussion for the first phase of workshop to start the session flowing. (Focus Groups, n.d.) Focus groups is a classic approach in the service design research phase of the project. The facilitator often asks a question, and then lets the discussion flow, by observing the conversation. That was planned as the first exercise to touch upon the participant experiences about living in Artillerihuset. To follow that, it was decided to note down the things they have discussed in the previous phase. In this way, engaging the participants, as well as gathering valuable data and good overview of it. The third exercise for this explorative phase was decided to be experience map - for which, a template was designed, to guide the participants into mapping their good and bad experiences in Artillerihuset, to gain a deeper insight into their experiences.

In order, to prepare participants for this phase, it was assessed what skills they should possess in order to be successful participants.

Discussion generally include active and careful listening, in order to be successful and collaboration. An important factor also was, that the participants weren't familiar with each other, so to ease them in, it would be helpful to help them get to know each other.

#### Workshop agenda:

- Warm up: 2 exercises
- Discussion what do you hate/love about living here?
- Let's note it down
- Experience map tell a story...
- Fun activity
- Moodboard how you envision living here?

#### 5.4.1.2. Improvisation theatre activities.

To help foster the active listening, empathy skills in participants, it was decided to include improvisation theatre inspired activities: 2 truths 1 lie, and "last word". They were designed, by doing a research into different improvisation theatre exercises, from sources on the internet, such as dramanotebook(dramanotebook, n.d.), improvdobest(improvdobest, n.d.). According to dramanotebook, 2 truths 1 lie, is a great bonding activity. After looking at it more carefully, it also engages participants in active listening, since they have to listen carefully to each participant.

The next improvisation exercise, that was selected, was "last word", which was inspired by a youtube channel - Improv Games. (Improv games, n.d.), where several experienced professionals share different improv games. Barbara Tint - a consultant and psychologist, introduces in one of her videos games for active listening and empathy, one of them being "last word."



Figure 13: Video about improvisation games. (Games, 2020)

The "last word" exercise was selected, as it could foster collaboration, active listening and collaboration in the participants - skills, that are needed to participate in the design activities, that have been described earlier.

In order, to achieve one of the goals: exploring how participants envision their life in Artillerihuset, it was decided to use mood boards. It was inspired by the vision exercise that is described by participatory planning. (Vision Exercise, Participatory planning, n.d.) Participatoryplanning is a platform, that combines different co-design activities particularly for citizen and community involvement. It was decided to ask participants work together on this task.

To prepare participants for this activity, it was decided to use improvisation exercise: zip-zap-zop. Zip-zap-zop is a commonly used exercise, that I have previously used also a lot during my improvisation training. This activity is more active, then the previous ones and focuses on keeping participant sharpness, attention as well as collaboration and inclusivity.

Zip, Zap, Zop is about focus and energy.(...) The activity also provides an

opportunity to explore pace, specificity of choice, "energy" and sequence. (Zip-zap-zop,Drama-Based Instruction, n.d.)

#### 5.4.1.3. Safety pre-cautions.

As during the workshop, Denmark was under a lockdown, due to COVID-19, it was obligatory to follow safety precautions and follow the government guidelines in regards to the amount of participants.

At the time, it was allowed to have no more then 5 people at the same time in the same room, therefore the participant amount was limited to 4, so with the facilitator it totals 5. The participants were encouraged to take a covid-test before participation and participate, if it's negative. At the location hand sanitizer was provided, in order to desinfect hands.

#### 5.4.2. Workshop warm up.

In order, to warm-up the participants, 2 exercises were facilitated "2 truths and 1 lie", and "The last word".

As the participants weren't familiar with each other, aim was to introduce them with each other. To achieve that into a fun way, and taking into account the next activities were related to sharing their experiences, goal was also to enhance active listening and acceptance in the participants.

Therefore 2 improv inspired exercises, were facilitated, with the purpose to enhance empathy, team-building and active listening in the participants. Both of these exercises are relatively similar, in the sense that they enhance participant skill to listen carefully to each other. "2 truths and 1 lie" is a great exercise to get to know new people. This exercise is quite simple. Each participant has to come up with 2 truths and 1 lie, then tell it, and others have to guess which is the lie. It also develops careful listening in others, or at least that was the purpose to introduce this improv exercise. "Last word" exercise similarly helps with active listening. First participant has to say a sentence(any sentence) and the next one starts their sentence, with previous participant's last word. This improv exercise helps with active listening, empathy and imagination.

# 2 truths 1 lie Ask participants to think of 2 truths and 1 lie about themselves. Then one by one each participant shares their 2 truths and 1 lie. The others have to guess what is the lie. Benefits: Active listening Get to know Creativity Bonding Empathy Participants: 2 - unlimitied (recommend max 5)

Figure 14: 2 truths 1 lie.

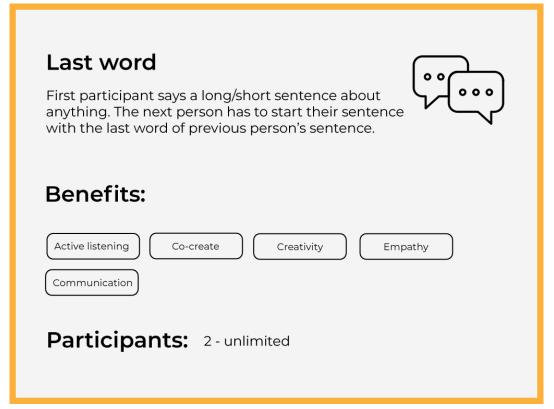


Figure 15: Last word.

#### 5.4.3. Discussion: Note down likes/dislikes.

The second exercise was started with a short focus group discussion, where the partcipants could share what they like/dislike about living in Artillerihuset. Shortly after that, they were asked to write down their insights on post-its and stick them on the paper, by diving the insights in two columns - likes and dislikes about living in Artillerihuset. Without giving specific names, like "hate", "dislike", "love", "like", the columns were divived with two smileys. (See Appendix 3 for details)

The exercise purpose was to gain wide insights into what the inhabitants like and dislike about living in the building. These insights could help to find the main problem area.







#### 5.4.4. Journey maps.

The next exercise consisted of two experience journey maps, that the participants had to fill out. (See Appendix 3, for all journey maps) They had to describe and map out a positive and a negative experience they have had, while living in Artillerihuset.

Each participant received two pre-designed forms, one for a good experience and one for a bad experience in Artillerihuset. They had to write first with their own words about the experience, and then below divide the experience in stages - create a journey map. Instead of asking them to map also an emotion map, additional emoji smileys were provided, that they could add in a journey part, if they felt like it. The emojis waried from sad, to happy. The exercise purpose, was to gain deeper insights into the experiences of the inhabitants in Artillerihuset.

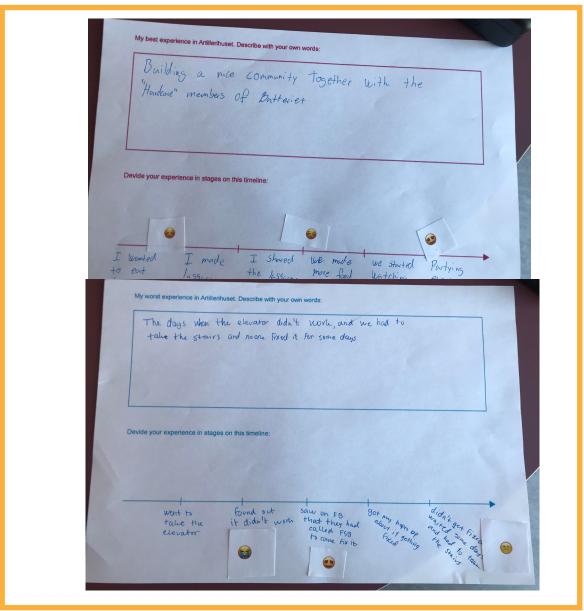


Figure 17: 2 Journey maps.

#### 5.4.5. Zip-zap-zop.

The next exercise was purposelly an active one. It was an improv inspired exercise called Zip-Zap-Zop. This exercise is played, by participants standing in a circle and passing zip-zap-zop to each other. The first participant says zip - while claping in a direction of another participant and looking them in the eyes. The following participant has to do the same, only by saying "zap", the next one does same by saying "zop" and then it starts all over. This exercise was chosen, as a way to make the participants focused and "on the same page", mainly, because the previous exercises were focused on their individual experiences, but from now on, it was planned in the next exercise that they collaborate and create something together with other participants. Soit was important, that now they would be able to connect in the moment, as well as to train their attention span, and feel connected to everyone and including everyone.



Figure 18: Zip-zap-zop.

#### 5.4.6. Moodboard.

The last exercise was a moodboard. The four participants were split in two pairs, and each pair were provided with a paper, glue stick and several small images, that were printed out. The images were of different variety, and they were a lot more, then the space on the paper, so the participants had to select images that they found the most suiting. The task was to create a moodboard of how they envision their life in Artillerihuset. As they were split into pairs, so each pair had to create one moodboard together. This exercise could help to gain insights in the target group - residents and what are they wishes, future visions of their life in Artillerihuset. Moodboards, or vision boards are known to enhance the participant feeling of having an ownership of the project. (Vision Exercise, Participatory Planning, n.d.)

They were provided with markers, and they were encouraged to add text or drawings if they wish to. Afterwards they were asked to present the mood-boards to others and me.



Figure 19: Moodboards.

#### 5.5. Workshop Reflection.

#### 5.5.1. Survey results.

After the workshop a survey was sent to the participants, where they were asked to rate their experiences and share their feedback.

The reflection was based also on reflections during the workshop from facilitator perspective. Notes with observations were made during the workshop. Based on survey data, exercise 2 truths and 1 lie was rated with 3,25 stars. Last word exercise was rated with 4,25 stars. In the survey it was asked to participants to mark how they felt after these 2 exercises. Results in figure 20.

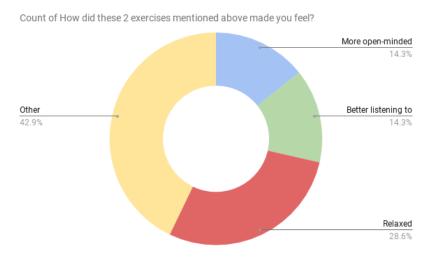


Figure 20:Survey results.

There was also an option to add their own response, which in this figure is marked as "Other" in yellow. Participants had added following responses in "Other": "Funny", "Awake/On the spot", "Confident to start doing more difficult stuff".

Writing bad/good experiences and experience map received 4,5 stars on average. Zip-zap-zop exercise received rating 3,5 stars. Participants feedback showed, that after the exercise they felt:

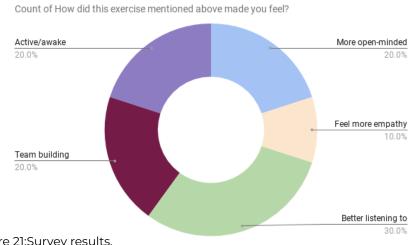


Figure 21:Survey results.

Moodboard received the highest rating - 5 stars.

Focusing on the improv exercise ratings, the varied a lot on some of the exercises, and participants were forced from their comfort zone, and some people of course are more comfortable with it, some less. However, the rating in how the improv exercises made participants feel, showed, that the exercises fulfilled their purpose and helped open participants mind and make them more connected.

Overall impressions were really good. The workshop lasted for around 2 hours, and after it also oral feedback was received from one of the participants, that the workshop exercises made the participant also think more about other inhibitants in the building, in a good way.

The insights and data from the workshop was good, and reflecting on the choice of exercises, it is safe to assume that they worked well for the explorative phase of the project, where the main goal is to gather as many insights and data as possible from different target group individuals. The workshop helped to interact with the participants and get the sense of how they see their life in the Artillerihuset.

For exercises similar to moodboard where the participants could create something with images, or similar, could be applied more, as everyone seemed very immersed and enjoyed the process of it, and it produced also valuable insights. Unfortunately, in this phase it was not possible to include role-play exercises, from improv perspective, as it would be too early for this stage, and the main focus of the project was not clear yet. However, the other improv exercises that were used in the project, seemed to be successful to foster creativity, listening, empathy in people, who come from different backgrounds.

#### 5.5.2. Facilitator observations.

In order to assess the success of the integration of improvisation theatre and the workshop, an integral part of assessment was the facilitator observations during the workshop. As a facilitator I observed the participants and took notes throughout the exercises.

The observation signified overall good results. The improvisation exercises helped creating a safe, non-judgement environment, in order for the participants to feel safe, to share their vulnerable experiences.

During the first exercise - 2 truths 1 lie, one of the participants could not come up with anything in regards to 2 truths 1 lie, which shows that in some cases maybe this exercise can be challenging for some. However, all the other par-

ticipants could come up with 2 truths 1 lie, and seemed comfortable with it. Later on, based on observations the participant seemed more at ease and took active part in all other exercises.

Throughout the next exercise - Last word, participants were quick to react and follow the previous persons sentence, that showed such skills, as active listening, empathy.

After the 2 exercises the participants took part in the discussion, where all the participants expressed themselves, without interrupting each other or speaking over each other.

They showed skills of good listening, and taking their time to form an opinion, as well as listening to others and adding upon other's statements, which may have been a result from taking part in the previous improvisation theatre exercises - 2 truths 1 lie and Last word.

Later on, the survey results, as shown in section 5.5.1., have proven the impact that the participants felt after the exercises, which correlates with the facilitator observation.

The zip-zap-zop activity seemed to be very favored by participants - maybe because, the rest of the activities were more calm, and this activity on the contrary asks for participants to stand up and move, as well as have a sharp attention.

The participants included everyone in the activity and could keep a good eye contact, as well as clapping. Everyone was included and the activity also raised a few moments of laughter, when someone accidentally messed up the flow, which created a good atmosphere.

The Zip-zap-zop exercise focuses on participant eye contact, which creates a good connection between participants. It was chosen as an exercise, in order to build connection before the next following design exercise.

After the Zip-zap-zop exercise, the participants looked very happy to engage in the mood board exercise, where they were expected to collaborate together.

Overall impression was that the participants were pleasantly surprised of the different improvisation activities, in addition to the design activities, and from a facilitator point of view, it was beneficial to see the success that the improvisation exercises brought to the workshop, by engaging the participants and fostering the necessary skills in them for the design exercises, that followed.

#### 5.5. Discover conclusion.

In the discover phase both desk and field research was conducted, in order to gain all possible insights and perspectives on the case, to discover the problem area and become familiar with the building and its residents.

At first, insights about co-living and Artillerihuset were gathered, in form of desk research, to gain a deep understanding of the case from materials online, and perspective that's been represented online of Artillerihuset. The topic of co-living was explored, in order to gain a deep understanding of the co-living topic, which is relevant for the case, that explores improvement of a co-living hub.

After that, field research was conducted, that provided deep insights in the Artillerihuset residents lives and challenges they are facing, while living in the newly built building. Interviews were the first step to building a relationship with the residents, to make them feel heard and to familiarize with them. Interviews were conducted to gain insights from the residents, in regards to their occupation, age, when they moved to Artillerihuset but also about their experiences in the building - good and bad.

Throughout the interviews some residents were recruited for a workshop, which was the next step of the discover phase.

The workshop in the discover stage consisted of several intertangled activities - both improvisation theatre activities, as well as design activities. The improvisation theatre activities complimented the design activities, and based on survey results, as well as facilitator observations proved to help foster the necessary skills in the participants in order to successfully participate in the design activities.

The improvisation exercises uncovered such skills, as collaboration, active listening, confidence, team building, empathy. Those are crucial skills, when taking part in co-creative activities. These exercises helped to gain great results and insights from the workshop, it was the first stage, where participants together could uncover their feelings about their home environment and co-living.

The participants, who were from separate parts in the building showed their collaboration skills - that were fostered with help of improvisation exercises, to together take part in making their co-living environment better.

In this stage, of this workshop main goal was to uncover the challenges the residents are facing. Such topics sometimes can be painful to discuss and uncover, therefore as a facilitator, it was important to create safe space, where the participants feel comfortable to be open and vulnerable about their experienc-

es. That's where improvsiation theatre exercises came in play, as they helped to create an atmosphere of honesty, non-judgement and open communciation, listening.

In the discover phase the biggest impact was from the workshop, as it helped the participants to share vulnerably their experiences, especially in the Experience journey mapping exercise, where they had to map I good and I bad experience. Sometimes, it can be difficult to share your bad experience, but in this workshop they were encouraged to do so.

The workshop findings, together with interview findings and desk research provided crucial findings for the project. The first step was accomplished, in order to find best ways to improve the resident experiences - the data and insights were collected in wast amounts, and now it was time for the next step - define, to synthesize all the findings together, to find patterns and directions for the next design processes.

# 6. Define.

This chapter represents the reflection and synthesis of the gathered data and insights from previous phase.

- 6.1. Data synthesizing.
- 6.2. Stakeholder map.
- 6.3. Personas.
- 6.4. Identified problem area.

#### 6.1. Data synthesizing.

In order to synthesize all the data gathered so far from the discover phase, a research wall was created. As there was a lot of material from the workshop, which already was split into different insights, that made the synthesizing process easier. Interview findings were added to the research wall in a similar way, split into good and bad experiences in the building. Key insights from interviews were written on post-its and added on the research wall, for example from each interview, the interview participant's each good and bad experiences were written down on post-its. Each experience had it's own post-it. There were two main goals for the data synthesizing. One, was to explore the main problem area, and for that all relevant data was split into 2 clusters - bad and good inhabitant experiences.

The bad experiences could point to the problem area, and the good experiences could give a deeper insight in the target group's expectations and life in Artillerihuset.

Clustering the data helped to gain an easy overview of all the gathered data. The experience maps from workshop helped to gain deeper insight in the inhabitants bad and good experiences.

The second goal of the data synthesizing was to gain a deep understanding of the target group. The interview findings were clustered to see the average age, occupation of the inhabitants. It showed a wide variety of inhabitant profile.



Figure 22: Research Wall.

# 6.2. Stakeholder map.

Based on the insights gained in the discover phase, both desk research, as well as field research, a stakeholder map was created to gain a holistic overview of the stakeholders involved in Artillerihuset. Quite soon, when starting the research, it appeared obvios that the stakeholders involved in Artillerihuset are more then just one and actually there is a complicated stakeholder network involved in sustaining this co-living housing. The stakeholder relationships also play an important role in the housing, therefore it was decided, to map those as well. The creation of stakeholder map helped to gain deeper understanding of how all the stakeholders are interconnected and creating a complicated network. Also, several seperated, external services are involved in the housing, that are mandatory to use for the inhabitants, if they wish, for example, to was their clothes.

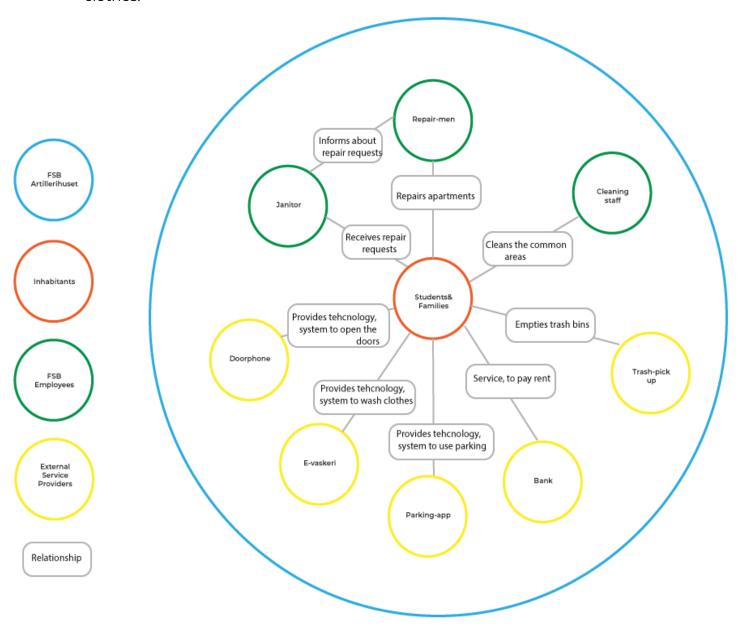


Figure 23: Stakeholder Map.

#### 6.3. Personas.

Based on the gathered data, that was synthesized, engaging personas were created. The purpose of using personas in this project was to get a closer sense of the inhabitants, by creating archetypes of the "average" Artillerihuset inhabitant, based on the findings. The personas was an integral part of this phase, was they could be used in the future concept developments, if a need for a resident archetype would come up.

#### Liss, 23.

Nationality: Danish Studying: KU, medicine Personality: Calm, friendly

**Hobbies:** Cooking

Expectations from new

home: Silence, wants to study in peace, doesn't want social

life

Frustrations in the new

home: Leakage in room, loud

housemates



"I had the worst Friday two months ago. I was in my apartment studying, reading a book for my next exam and suddenly I see water dripping in my apartment! So I instantly reached FSB. I sent an email, but as it was Friday no one was responding. Therefore, I called the janitor. He came over and put some buckets underneath the leakage. On the same day the leakage started, there was a loud party, so I had to go upstairs to the common area in my pyjamas, to ask people to be more silent, as no one reacted to my Facebook post. On top of that, only this week the leakage was completely fixed. FSB was so slow to respond to my emails. I feel like they generally don't care about our problems here."

Figure 24: Persona 1.

Lucas, 28.

Nationality: Faroese

**Studying:** CBS, International

**Business** 

Personality: Social, friendly Hobbies: Hanging out with

other residents

Expectations from new home: Social life, parties Frustrations in the new home: Theft, elevator not

working



"I love the social life here! However, there was a christmas dinner, and someone stole my speaker, after everyone had left the event. I still haven't gotten it back. I went to look on all the other floors, had to take the stairs, as of course, the elevator was broken again. Luckily, they usually fix it, after you call or email them. Think it breaks every second week, as it is the only elevator in the building and everybody uses it. Will be fun, when we get our next fire alarm(they're also a common occurrence, due to the weak hoots) and the elevator is broken."

Figure 25: Persona 2.

## 6.4. Identified problem area.

Through the data synthesis four main problem areas were discovered. It was chosen, to split these problem areas into primary and secondary.

#### Primary problem areas:





Figure 26: Primary problem area.

Two of the primary problem areas were discovered: Bad communication form FSB, as well as internal misunderstandings between the residents. Both of these problems fall under the same category - bad communication.

#### Secondary problem areas:





Figure 27: Secondary problem area.

As the secondary problem areas, were discovered physical problems in the building, as well as theft. It was decided to focus on the primary problem areas, however keep in mind also the secondary problems.

On the contrary, based on the data synthesis there 2 common themes for the resident positive experiences in the building were discovered:





Figure 28: Positive aspects.

The problem area was discovered based on desk research, as well as field research. Desk research reflected on the different problem areas about the building, based on FSB website as well as facebook group source. The desk research helped to familiarize with several issues in the building, that were mainly physical aspects, such as, weekly fire alarm triggering, due to weak kitchen hoots, that causes an expensive firefighter visit to the building.

Field research consisted of interviews, as well as co-creative workshop, where participants also performed different improvisation theatre exercises. The improvisation exercises and involvement had helped the participants to open up and share their vulnerable experiences in the building, which provided valuable data insights, such as, in regards to theft, or communication issues.

The overall data synthesis had pointed towards 2 problem areas, which were both considered as strongly affecting the resident lifes. However, the main problem area reflected to be the communication aspects - both between the residents themselves, as well as between residents and FSB.

Therefore, after, the research synthesis and reflecting on the problem areas, it was decided to continue the project with a new, redefined problem statement.

How might we improve the communication in Artillerihuset?

1.With Fsb?

2.With internal residents?

# 7. Develop.

This chapter represents the develop phase in the project, where new service concepts, ideas have been developed in a co-creative setting.

- 7.1. Workshop.
- 7.1.1. Designing the workshop.
- 7.1.1.1. Design activities.
- 7.1.1.2. Improvisation theatre activities.
- 7.1.1.3. Safety pre-cautions.
- 7.1.2. Warm-up.
- 7.1.3. Brainwriting.
- 7.1.4. Storyboard.
- 7.1.5. Role-play.
- 7.2. Workshop reflection,
- 7.2.1. Survey results.
- 7.2.2. Facilitator observations.
- 7.3. Ideas.
- 7.4. Final idea.

#### 7.1. Workshop.

For the next convergent state in the double diamond model, that has been used for this project, it was decided to facilitate the second co-creation workshop on 01.04.2021. The purpose of this workshop was to involve the residents into coming up with different ideas, on how to solve the problem area. Again, it had been planned to involve different improvisation theatre activities in the workshop process.

This time, in order to invite different participants, a Facebook post on the Artillerihuset Facebook Group, was created, in order to reach out to the residents.

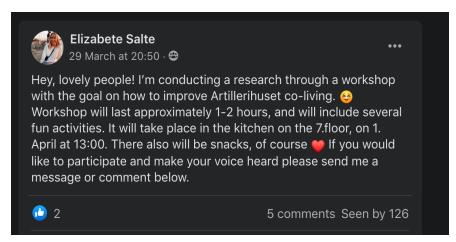


Figure 29: Workshop invitation.

Three Artillerihuset residents were recruited for the develop phase workshop.

#### 7.1.1. Designing the workshop.

In order to design the workshop, firdt the goals and expected outcomes were predefined.

#### Goals:

- Come up with lots of different ideas.
- Involve everyone in the ideation process.
- Facilitate good ideation process, by including different improvisation theatre activities.

#### **Expected outcomes:**

- Ideas.
- Observations and later delivered survey to assess the impact of improvisation theatre during the workshop.

Different goals and outcomes were predefined, in order to assess the workshop flow in the right direction.

In order, to design the workshop flow and activities, firstly an agenda for the workshop was created.

#### Workshop agenda:

- Warm up: 2 exercises
- Introduction to problem areas.
- Ideation Brainwriting
- Storyboards.
- Fun Acitivity
- Role-Play

The agenda was created, with the flow of different events. The next step, was to choose the right exercises for each of the workshop phases.

It was decided, to first warm-up the participants with improvisation exercises and afte that introduce them to the research that has been done so far.

# 7.1.1.1. Design activities.

As the workshop focus was ideation, that was decided to be followed, by ideation exercise - brainwriting. This exercise is a commonly used ideation exercise, that is commonly used in ideation sessions. This exercise allowes everyone's ideas to be expressed, and allows to systematically build upon other's ideas. (Stickdorn, Schneider, 2018) As the focus also was on making all the participants feel safe, to express their ideas, brainwriting exercise was chosen.

A storyboard exercise was included, in order to gain a deeper understanding of the participant's ideas, and that will later be used as the base for a role-play scene. Storyboards help to visualize quickly services, new ideas. (Stickdorn, Schenider, 2018)

After the design activities were chosen, it was important to analyze the necessary skills that the participants will need for successful participation in the workshops and choosing the right improvisation exercises, in order to foster these skills.

# 7.1.1.2. Improvisation theatre activities.

As the main design activity was planned to be ideation - it was important to find the right ways to prepare participants for a successfull ideation process.

Some of the most important skills that were chosen in order to have a succesfull ideation were: ability to built on other's ideas, collaboration, creativity.

In order to achieve that, a research into different improvisation theatre exercises was done, that would help to foster these qualities in the participants. It was chosen to use 2 exercises for the first part of the workshop: "yes, and" and "one mark at a time". "Yes, and" was chosen, to foster the skill that is often used in improvisation scenes - where the improvisation actors have to build on other's ideas, by applying "yes, and" type of mindset - where they accept the previous idea/action and build on it. By preparing the participants with a "yes, and" exercise, the goal was to foster active listening and ability to accept and build upon other's ideas.

The next exercise was chosen "one mark at a time" in order to foster co-creation in the participants. (improvdobest, n.d.)

After that, the next step in agenda was to introduce the participants with the findings from the previous phases and the design challenge.

After the storyboard design exercise, in order, to prepare participants for a roleplay exercise, a more active improvisation exercise was included - zip-zap-zop. It was used already in the previous co-creation workshop, to build connection between participants, as it focuses on eye contact, and inclusivity.

# 7.1.1.3. Safety pre-cautions.

After the agenda and workshop plan had been carefully prepared, it was also important to prepare in regards to the safety measures.

As the workshop was taken place during a Covid-19 Pandemic, it was important to follow the health authorities guidelines. Not more, then 5 people could be in the same room, therefore only 3 participants were invited. Hand sanitizer was provided, as well as encouragement to the participants to take a covid-19 test, and participate if they receive a negative result.

## 7.1.2. Warm-up.

Following the first step of the workshop agenda, in order to warm up the participants and prepare them for the actual tasks - ideation, two improvisation exercises were facilitated.

The first one, to set the theme and positive mindset was "Yes, and", which teaches the main idea behind improv - to build on other ideas and embrace creativity. It was chosen as a suitable exercise for the setting of this workshop, which was ideation. As the participants later had to come up with different ideas, it was chosen to use this exercise to prepare their mindset for the next stage. "Yes, and" exercise usually consists of planning an activity together, for example a party. The first person starts with a simple sentence, for example "Let's have a party on Friday", and the next person has to continue planning, by starting their sentence with "Yes, and". And so, each person has to start their sentence with "Yes, and", and build on previous person's idea.

The next exercise with the purpose to warm up the workshop participants, was "One mark at a time". This exercise is a drawing activity. I paper for the participants was provided, and each participant got a pen. Then, it was asked from them to create a collective drawing, but each participant can add only one mark or line at a time, before they pass the drawing to the next person. The exercise is done in silence, and the participants have to stop drawing when they collectively agree (in silence) that the drawing is finished. This type of exercise was chosen with again the purpose of building on other people's ideas, and building something together, only instead of words, we were using a drawing technique.



Figure 30: Warm-up exercise.

# Yes, and Plan a party. First person starts a sentence, next one continues by starting with Yes, AND and building on first person's sentence. Example: - We should have a holiday party that's northpole themed. - Yes, and we should have snow all over the office. - Yes, and we should bring some polar bears. Benefits: Positive mindset Co-create Creativity Acceptance Participants: 2 - unlimited

Figure 31: Yes, and.

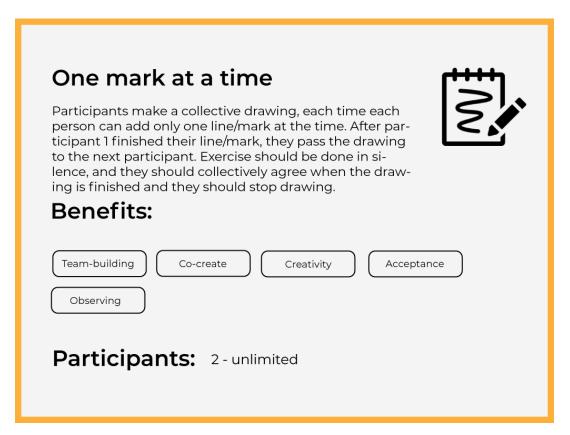


Figure 32: One mark at a time.

# 7.1.3. Brainwriting.

After the 2 warm-up exercises, the participants were introduced to the problem areas in Artillerihuset, that have been found based on the previous research. Then, the participants were introduced to the challenge, they have to solve: How might we improve the communication in Artillerihuset? 1.With Fsb?

2. With internal residents?

And then, participants where introduced to the brainwriting exercise. Brainwriting exercise is a commonly used ideation exercise, that is used to generate as many ideas as possible. Brainwriting exercise opposite to brainstorming, is a relatively silent exercise, as the participants write their ideas down first, before expressing them out loud. This type of exercise can help to empower more silent participants, and therefore get everyone's ideas on paper. (Stickdorn, Schneider, 2018) The exercise starts with participants each writing down 3 ideas on paper. Often, time limit is used in this exercise, for this workshop it was chosen to have a time limit of 5 minutes. After participants have written down their ideas in timeframe of 5 minutes, they pass the paper to the next participant. Then, each participant reads the existing ideas on the paper, and after that, the participants have to write new ideas, using the existing ideas for inspiration, or build on the existing ideas. Again, the time limit for this workshop was set 5 minutes, to write the new ideas. In the workshop 3 rounds of new ideas were done. After that, the participants were asked to read out loud the best idea on their paper. A pre-made template was created for this exercise, which helped the participants to grasp the exercise rules faster.

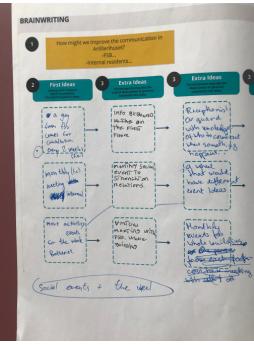


Figure 33: Brainwriting

The 3 ideas, that the participants represented were, as follows:

- 1. A FSB chat bot, that would answer frequently asked questions.
- 2. An FSB app for contacting FSB, as well as for internal residents.
- 3. Idea-wheel, for internal events for the residents, to organize and participate in events together.



Figure 34: Second workshop.

# 7.1.4. Storyboard.

After the participants had presented to the group the best idea, they were asked to draw a storyboard for the idea they just had presented. Storyboards are commonly used to visually represent story of particular situations. (Stickdorn, Schenider, 2018) Again, participants were provided with a pre-made template, which consisted of 6 squares, where they had to draw out the storyboard.

Figure 35 representes one of the storyboards, that was later on role-played. See Appendix 4 for more details.



Figure 35: One of the storyboards.

# 7.1.5. Role-play.

Before the next stage - which was role-play, an activity was introduced. It was same activity Zip - Zap - Zop, that was performed in the first workshop. After the Zip - Zap - Zop activity, role-play exercise was introduced as the final exercise of the workshop. The participants were asked to pick I storyboard and role-play it in life. Participants chose to role-play the idea number 3 - the idea-wheel, where Artillerihuset residents would drop different event/party ideas in a wheel, and each month or week one idea would be picked, and then they would organize that particular event.

Role play activity was also inspired by improvisation theatre. Role play has been used in design widely, however after looking into different videos regarding the usage of it, it was found that there was little to no participant preparation for it. For example, improvisation actors usually do at least 1-3 warm-up exercises, before starting a scene. Therefore, the Zip-zap-zop activity was used, beforehand.

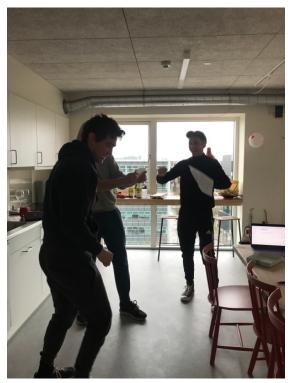


Figure 36: Role Play during workshop.

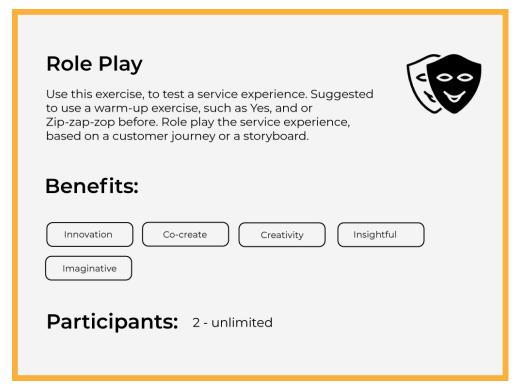


Figure 37: Role Play.

# 7.2. Workshop reflection.

# 7.2.1. Survey results.

After the workshop, a survey was sent to the participants to gain feedback for the workshop.

Similarly to the previous workshop survey, participants were asked to rate the exercises 1-5. For the improv exercises, participants were asked to provide more in depth information, of how they felt after they finished the exercise.

The exercise Yes, and received 4,3 stars. One mark at a time exercise received rating of 4,2 stars. As both exercises served for a similar purpose - to prepare participants for building on other's ideas, in the survey they were asked to mark how they felt after these two exercises, to find out if the exrcise purpose was fulfilled. Wast majority of participants voted that the two exercises made them feel to work together, second most voted answer was "build on other's ideas", and then equal count of responses received "positive mindset", "team building" and "make room for other's ideas". After looking at the participant responses, it is safe to say that the exercises fulfilled their main purpose and enabled participants to prepare for ideation session's next exercise - brainwriting.



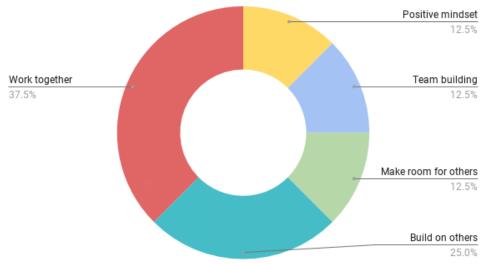


Figure 38: Survey results.

Brainwriting exercise received rating of 4,6 and storyboard exercise received rating 4. Zip-zap-zop exercise received rating 4 as well. Even though, zip-zap-zop exercise was used also in the previous workshop, it was decided to use it also in the next workshop and also ask for the participant opinions on the exercise in the survey, in order to compare the results. In the first workshop there were different participants, then the first, therefore it was expected that the results might differ. In the previous workshop participants rated zip-zap-zop with 3,5 stars. Majority of participants voted for "active/awake" in question how the exercise made them feel. Then equal votes received "more open-minded", "better listening to others" and "team building". Responses in the previous



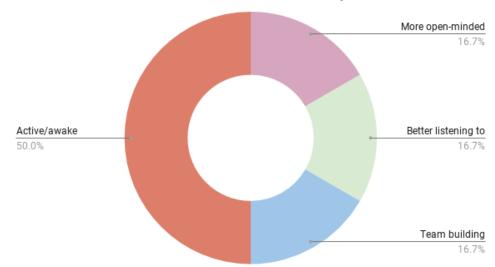


Figure 39: Survey results.

Exercise zip-zap-zop was used as a small preparatory exercise for the role play exercise. Zip-zap-zop was used to raise the energy and focus of participants, that they will need in the role play exercise. Role play exercise was rated with 3,3 stars. Two participants had rated the exercise with 4 and 5 stars and one participant had rated it with 1 star. It was expected that this exercise might raise different feelings in the participants - as it can truly ask to step out of the comfort zone, if participants aren't used to such exercises. Participants rated that they felt more creative after the exercise. Then equal votes received "feel more imaginative", "feel more open-minded", "helps imagine the real situation" and "nothing". Overall a lot of the expected outcomes were reached and only 16,7% was rated "nothing", therefore this exercise is still perceived as success in this case.

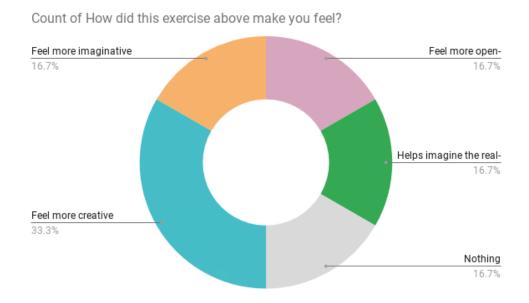


Figure 40: Survey results.

## 7.2.1. Facilitator observations.

In order to assess the success of implementing improvsiation theatre activities in the workshop, facilitator observations were performed during the workshop.

The overall impression was that the improvisation exercises really helped to support and foster the creativity and ideation process. They helped to foster strong collaboration between the participants, which is very crucial, when working together on ideation processes. The participants showed strong skills

and wishes in working together on the ideas and expressing themselves.

One of the observations was, that one participant expressed at the start of the workshop how they don't feel creative at all. However, after the improvisation theatre exercises the participant didn't express that they don't feel creative and showed great skills of creativity in the workshop process. That showed a great proof, of how the improvisation exercise helped to make the participant tap into their creative potential and empower them to be creative, and expressive.

The improvisation exercises at the start had created a good build-up, for the brainwriting exercise. It was especially interesting to observe the "one mark at a time" exercise, to see the participants collaborate in absolute silence and try to make sense of the previous person's mark or line, and to see the "bigger picture". Afterwards, the participants commented on what they thought the drawing will be - one was trying to draw a chariette, whilst the other was aiming to draw a person. Those were some interesting reflections, and showed how everyone has a different perspective. This type of more "fun" exercise could imitate the challenges that might be faced in the brainwriting exercise, and prepare participants for different possible viewpoints.

In regards, to zip-zap-zop exercise, it seemed to make the participants more awake and sharp - which is great, as that was the goal to prepare them for the role-play exercise.

Overall, the workshop had created great ideas and insights. It was safe to believe that improvisation theatre exercises helped foster creativity and collaboration in the participants, that was crucial for this stage in the project.

#### 7.3. Ideas.

The ideation workshop was facilitated with the purpose, to find ideas that could solve the following issue:

How might we improve the communication in Artillerihuset? 1.With Fsb?

2.With internal residents?

It was decided to move forward with 2 of the ideas, that could solve the problem.

## Idea nr.1 Chatbot



A FSB Chatbot, that answers general questions, such as, who to contact for electricity problems. For more complicated issues the chatbot will connect you with a person, who will be responsible to solve them.

Figure 41: 1.Idea.

#### Pros:

- Simple to use.
- Quick response rate.

#### Cons:

- Limited possibilities.
- Doesn't save/remember customer information.
- No progress update on a request.
- No list of FAQ, for example have to ask for each issue seperately.
- Limited information/Needs external services to work, such as website, to forward for more information.
- Need a smart device to use.

# Idea nr.2 An app



A FSB app, where communication between FSB and residents take place. As a resident, you can submit your issue and track the progress of how fast it will be solved. Also library of FAQ.

Figure 42: 2.Idea.

#### Pros:

- Easy to use.
- A lot of features.
- List of FAQ accessable.
- Can track progress.
- Remembers customer information.
- Can be used both for internal and external communication.

#### Cons:

- Need a smart device to use.

## 7.4. Final idea.

After comparing both pros and cons of both ideas, it was decided to move forward with the idea nr. 2 - app idea, as it was considered to give more freedom of possible features. Looking at the design process findings of all the previous phases, it seems, that the residents could benefit from a tool that has more features then a chat feature.

For example, some of the secondary issues in the building were also: theft, phsyical problems in the building. And the other primary problem were: internal misunderstandings between the residents.

With implementing an app solution, it could be possible to cover most of the residents problem areas, and suit for the different residents individual needs.

When looking at the stakeholder map, it also provided information, that FSB currently provides residents with the need to download several external apps to use the services inside the building, such as laundry app, or parking app.

There could be a potential, to combine all these services in one app, in the future, if the vast majority residents would like that. Currently, the first version of the app, that is the focus of this project in the current stage, will be focused on solving the communication issues between the residents and FSB.

Considering the complexity of the resident problems, and the lack of digital solutions, the idea nr.2. was considered as the best possible solution, to solve all the uncovered problems, that the residents have.

It was easy to see, how the app could add a great value to the resident experiences, especially in terms of external and internal communication.

# 8. Deliver.

The deliver chapter represents the new service proposal.

- 8.1. Service description.
- 8.2. Stakeholder map.
- 8.3. Customer journey.
- 8.4 Service blueprint.
- 8.5. Value proposition canvas.
- 8.6. Feedback from FSB.

# 8.1. Service description.



Figure 43: FSB Connect.

"FSB Connect - an easy way to connect with your neighbours, FSB and

housing services."
- FSB Connect value proposition

**FSB Connect** is a proposal for an app, that is accessable on a mobile phone, as well as desktop. FSB Connect is the perfect companion for anyone living in Artillerihuset.

Disclaimer: the app proposal is created based on research that has been conducted in one of the FSB housing - Artillerihuset, therefore it is suited to the Artillerihuset residents needs. In order to suit it to all FSB residents needs, there needs to be done a broader research in other FSB housings.

**FSB Connect** is the perfect app, that lets Artillerihuset residents connect with each other, to assure the perfect co-living atmosphere - do you feel like cooking on Wednesday with your neighbours? Post it in the app's forum! Do you feel like one of your neighbours has been drilling all day long - but you have an exam? Feel free to post it on apps forum. Do you miss salt or sugar - go ahead and ask on apps forum if anyone can borrow it to you!

**The app** also helps to connect with FSB - which is one of the main driver's behind the research of the apps creation. Is your ceiling leaking? Don't worry, make a problem request on the app - that will connect with the right FSB employee automatically, who will look at your request! The app will inform you, when will the FSB employee come to fix it, as well as when it is fixed!

**The app** also connects residents to the external services that are crucial for living in the building - car parking and clothes washing.

**FSB Connect**, has many features, that make resident's lives in Artillerihuset easier and enhance the experience of living in Artillerihuset.

# 8.2. Stakeholder map.



Figure 44: FSB Connect stakeholder map.

The stakeholder map was created as a representation of the stakeholders involved in the FSB Connect service. This map gives an overview of the involved stakeholders and below is a description of the role.

If you look at the previous stakeholder map with an overview of all the stakeholders involved in Artillerihuset eco system, you will recognize some of the stakeholders. A decision based on the research was made, to involve certain stakeholders in the new FSB Connect service, to make the Artillerihuset resident lives better. The new service connects stakeholders, where there was a disconnect.

# 8.3. Customer journey.

The customer journey is a representation of customer's journey while using the new FSB service - FSB Connect. For the customer journey one of the previously presented personas(see 7.3.), is used as the customer. First, a scenario of the customer courney is represented. The customer journey follows customer's actions, that are categorized into different steps. For each step and set of actions customer journey also follows the customer's emotions and thoughts. In this case at the start of the customer journey Luca is unsatisfied. By the end, when he has discovered and used the service he is satisfied and feels the need to share with others his good experience with the service.

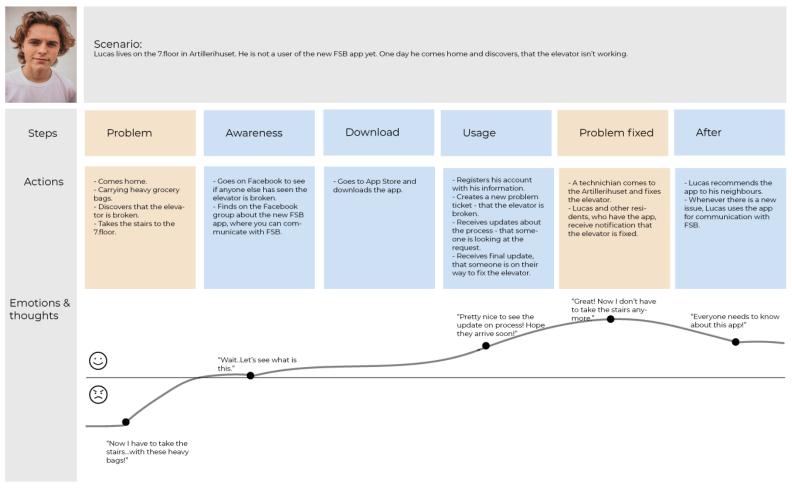


Figure 45: FSB Connect customer journey.

# 8.4. Service blueprint.

The service blueprint represents the service from both backstage and frontstage. In the frontstage the service interactions that are visible to the customer are represented and in the backstage, the backstage interactions that aren't visible to the customer are represented.

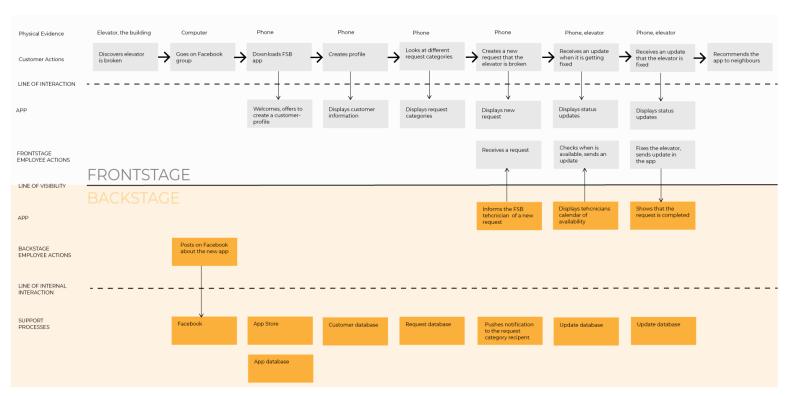


Figure 46: FSB Connect service blueprint

# 8.5. Value proposition canvas.

The value proposition canvas showcases two segments: the service and the customer. The service segment is to the left, and the customer segment is to the right. Each segment has different sections. The sections represented in the customer's segment showcase the customer's point of view: the pains, that the customer has, the gains - things that the customer expects to receive from a service and that could motivate the customer to get the service, and customer jobs - the things, that customer hopes to achieve.

The service segment represents how the service can ease customer's pains, how the service can create the gains for the customer and what is the service that is provided.

Above these segments, there is a value proposition that sums up the service offering, and the customer segment defined.

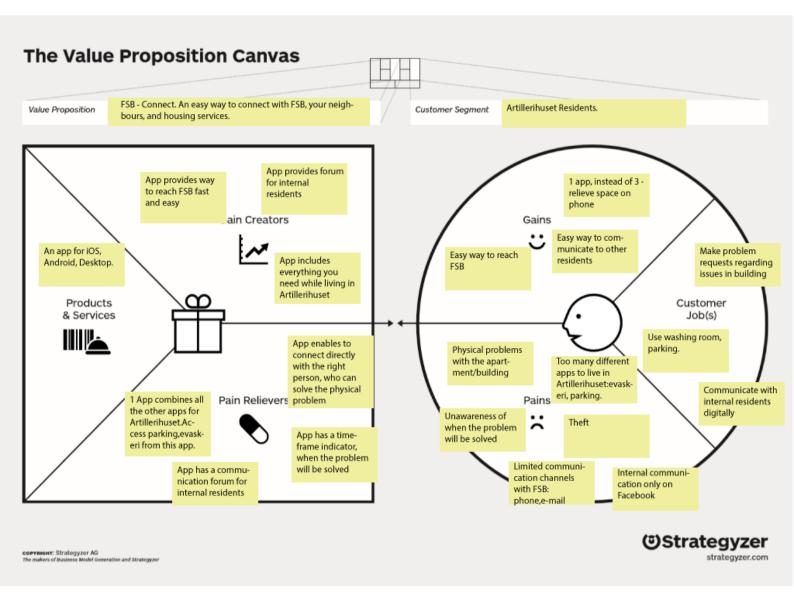


Figure 47: FSB Connect value proposition canvas.

## 8.6. Feedback from FSB.

On 20.05.2021, e-mail to FSB was sent with the findings and new service proposal (See Apendix 5). The communication was going through e-mail, due to covid-precautions.

Soon after reaching out to them, FSB responded with an e-mail, that they will look into the proposal and might take it up in their next meeting in regards to Artillerihuset.

As this is a new building for FSB, they are constantly trying to find ways on how to improve it, therefore the findings is something they might want to consider in the future development of Artillerihuset.

It was a pleasure to see, how as a service designer I can empower the residents, in order to be heard in the co-living housing sector, in order to enhance their experiences.

Looking forward to hear more from FSB, in regards to a possible implementation of the service.

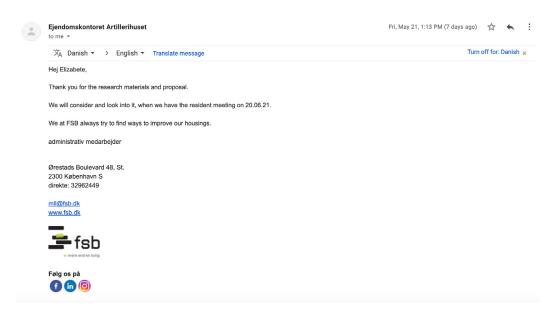


Figure 48: FSB e-mail

# 9. Discussion.

This chapter discusses the research question, and findings based on the case study, as well as general reflections.

- 9.1. Reflection on the research question.
- 9.2. Reflections on the case study.
- 9.3. Reflections on the learning objectives.
- 9.3.1. Official learning objectives.
- 9.3.2. Personal learning objectives.

# 9.1. Reflections on the research question.

The research question explored in this thesis was:

# How can improvisation theatre affect the co-creational aspects of Service Design?

Soon it was discovered that there was a lack of research literature regarding this area, which was a great motivation to research this topic and provide findings to the service design community.

The expert interviews proved, that there is an interest in the design community for this research, and interviews with improvisation theatre teachers showed the possibility of implementing improvisation theatre in service design.

The process to research this area, was exploratory by nature. Several design experiments were conducted. The experiments were inspired by improvisation theatre.

The research process showed the great impacts that improvisation theatre can provide to service design, by helping to foster different qualities in the participants, that are necessary for design processes, such as, communication, creativity, collaboration.

It was great to see, how even the most un-creative participant, could open up more, after practicing the improvisation exercises, such as, "one mark at a time".

That proves the big potential that the improvisation theatre field can offer to service design.

By applying the improvisation theatre exercises, not only creativity and collaboration were enhanced in the participants, but also the ability to provide a safe environment, in order to share their vulnerable experiences. As designers, we have the responsibility to make the participants share their experiences, and feel safe, when doing so. The research has proven, that by applying improvisation theatre exercises, it is possible to provide safe and non-judgemental environment, where the participants can share their experiences.

Due to my personal experience and interest in Service Design, as well as Improvisation Theatre, it has been an interesting and exciting journey to research this area and how one can benefit from the other. Overall, it has been exciting and inspirational to research an untackled area and to find out positive affects of improvisation theatre in service design through this research.

Improvisation theatre has proven a lot to offer to the design community, by showing the frameworks and exercises that improvisation teachers and actors use, in order to foster certain skills, such as collaboration, empathy.

The research has shown, that improvisation main idealogy is to collaborate, react, and be creative in a systematic way. These skills can be crucial, in co-creative workshops, where a lot of different participants need to create something toegther.

Improvisation theatre exercises can bring different people, with different backgrounds together, and that is something, that we as, service designers also have to face in our daily practice.

By applying improvisation theatre exercises we - designers, can empower ourselves and the participants, in order to achieve great results from co-creative activities.

It has been a pleasure to take part in this research and gain positive outcomes.

## 9.2. Reflections on the case study.

Co-living is an emerging trend, and we are seeing more and more this type of housing in big cities. However, as community plays such a big part in this type of housing, it is important to be aware of how to assure the residents have the best experiences, and that they feel empowered to express their opinions and reflections about the housing.

Therefore, it has been a pleasure to play such a big part of helping of improving the resident experiences in a particular co-living hub - Artillerihuset.

As a service designer, it has been great to see how service design can empower and enhance the resident experiences in a co-living setting. Co-living is such an emerging field, and it is beneficial to be aware of the great impacts that service design can provide to improve the resident experiences. The case study has shown the impact and change that service design can bring in communities and people's homes.

As in a co-living setting the residents aspects of building a home and community together play such a big part, it seems almost crucial to apply service design in such a setting. Service design and particularly co-creation, can empower residents to play a big role in how their home can be shaped and improved.

It has been a pleasure to investigate Artillerihuset co-living hub for the case study, as it has been an exciting journey to help residents in a newly built home to feel empowered and heard.

The building - Artillerihuset and community is brand new, however the residents have already faced several painful challenges and obstacles in regards to living in the building.

The housing agency - FSB, has the power to help enhance the experiences, but they have to know how exactly - and this is the part, where I stepped in as a service designer, to bridge the gap between the housing company FSB and the Artillerihuset residents.

The case study has helped to empower the residents and make them feel heard and valued. I am looking forward to the improvements, that FSB can implement in the housing, based on the research that has been conducted throughout the process of this thesis.

# 9.3. Reflections on the learning objectives.

# 9.3.1. Official learning objectives.

This master thesis has been focused on a case study, where I had the opportunity to contribute with co-living hub residents - Artillerihuset.

The case study gave me the opportunity to apply my service design knowledge and skillset in order to solve complex design challenges. The process followed design methodologies, in order to design product-service system, that has been presented as the outcome of the case study process.

The work on this thesis, has strengthened my capabilities to work independently and find solutions to complex problems. This thesis also has strengthened my capabilities to form professional collaborations, and facilitate design processes.

# 9.3.2. Personal learning objectives.

The main personal objective of this thesis was to create a contribution to design community, by researching an untackled area, with special focus to co-creational aspects of the service design practice and how to improve them by applying improvisation theatre.

The objective was achieved by performing research in the area throughout the thesis process.

Other personal objectives included applying service design knowledge from studies, which was fulfilled throughout applying my knowledge in the process. Anotjer objectice, was to improve my personal knowledge about aspects of service design and particularly co-creation. By extensively focusing on this area throughout the thesis, the objective has been fulfilled and I have improved my knowledge and skills in the co-creation area.

# 10. Conclusion.

This chapter finalises the thesis, with key findings and potential future research.

10.1. Key findings.

10.2. Limitations.

10.3. Future research.

# 10.1. Key findings.

The research question explored in this thesis was:

# How can improvisation theatre affect the co-creational aspects of service design?

In order to explore this research question, several improvisation theatre inspired design experiments were conducted throughout the case study service design process. The experiments were designed with particular goals, to foster certain skills in the participants, based on improvisation exercises. The improvisation exercises normally are used in the training of improvisation actors, in order to prepare them for performing improvisation theatre on the stage.

Throughout research, it was found, that improvisors use different frameworks and exercises to have a more systematic approach towards creativity and these exercises help them prepare for collaboration with other improvisors.

After the design experiments, feedback from the participants was gathered. The outcome of these experiments was based on the gathered feedback, as well as facilitator observations.

Based on the outcomes of these design experiments, improvisation theatre can enhance co-creational aspects of service design, by improving several aspects of participants experience during the workshop. The research has shown, that by applying different improvinspired exercises, they can help foster creativity, team building, better listening to others, and others. Fostering these skills can also help to create safe environment, where the participants feel safe to share their vulnerable experiences and pain-points.

The case study uncovered several problems in the resident experiences, with the help of improvisation theatre exercises.

The exercises helped to create a safe space for sharing the resident experiences, which is important in design practice.

The improvisation exercises have shown the benefits of fostering creativity also in participants, who don't consider themselves creative.

These skills are crucial, when taking part in a co-creational activity, in order to gain good outcomes. The improv exercises are a great way to ease-in or prepare participants for other design activities.

#### 10.2. Limitations.

The thesis research outcomes have been based on one case study, which presents limited insights, unfortunately, as well as insights from impacts on a certain age group.

Certain limitations unfortunately took place during the time, of work on this thesis. Unfortunately, this thesis work took place during a pandemic -COVID-19, which affected certain aspects of this thesis.

There were strict limitations, that had to be followed - following the authorities, it was not allowed to gather more then 5 people at the time indoors, which affected how many participants I was able to invite to the workshops.

Of course, it was decided to follow the safety measures and by using hand sanitizers, and due to the nature of the thesis that was tackling co-living aspects, I was still able to facilitate workshops in person, because of the participants living together in the same facility. However, if COVID-19 wasn't present, there would be a potential to facilitate workshop with higher amount of participants, in this way gathering more feedback and different perspectives.

Another limitation has been time. Due to time limitation, I was not able to facilitate another workshop, that would be the same in nature, but where, for example, there would be no improvisation inspired exercises.

In this way it would be possible to compare and assess - if the workshop with improvisation exercises was more successful then the one without. However, I would have to involve then another set of participants, in order not to get biased perspectives, which also wouldn't be as safe due to COVID-19.

#### 10.3. Future research.

As mentioned in the previous paragraph, the research outcomes were limited due to the research taking place in one case study. A potential for future research, could be to apply improvisation exercises to another or several more case studies. In this way, it would be possible to assess if the exercises were successful also in other environments and with different age groups.

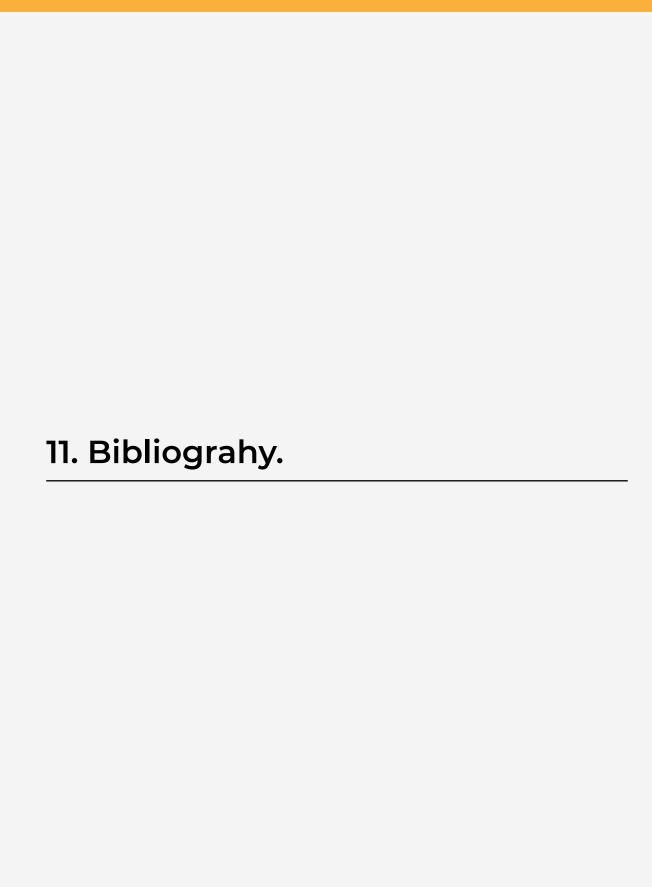
Another aspect, that could be beneficial to research in the future are the different improvisation exercises. It could be beneficial to continue the research about the different exercises and classify them into different categories, similarly, like it has been done in this thesis.

The potential that has been uncovered in the research so far, shows the great impacts improvosation theatre can have on service design. It would be beneficial to explore more, in regards to fostering creativity in non-creative people, as the research uncovered one participant's skills enhanced drastically, after the improvisation exercises in terms of creativity.

I believe that the research done in this thesis in regards to improvisation exercises, that can foster particular skills in participants can work as the first milestone in the journey of implementing improvisation theatre exercises in service design, for the benefit of fostering certain skills in participants, such as, collaboration, creativity and others.

It could be beneficial to create a resourceful toolbox for designers particularly with improvisation exercises and provide this tool box as an online source, for example or physical cards. That would ease the service designers work of implementing improvisation theatre exercises throughout their practice.

Such research would be beneficial and long-lasting for the whole service design community and service design practitioners in the future.



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## 12. Appendix.

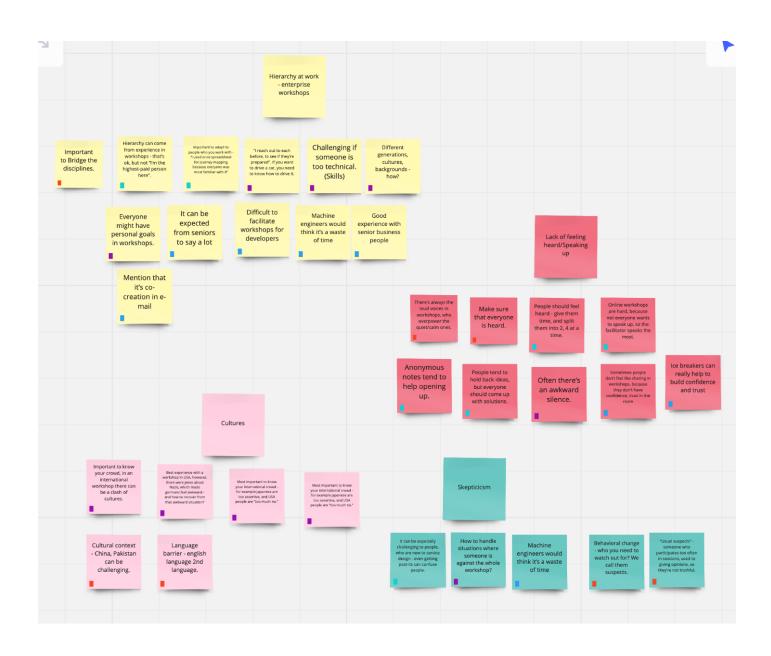
Appendix 1: Expert interviews with service designers.

Appendix 2: Resident interviews transcrips.

Appendix 3: First workshop.

Appendix 4: Second workshop.

# Appendix 1: Expert Interviews with service designers.



## Appendix 2: Resident interviews transcripts.

#### **Interview questions:**

- 1. Tell me about yourself? What do you study, what is your age? What hobbies? Where you're from?
- 2. When did you move in Artillerihuset?
- 3. How do you feel about living at Artillerihuset?
- 4. What do you think is the best, worst about living here, what could be improved?

#### Interview 1:

1. Tell me about yourself? What do you study, what is your age? What hobbies? Where you're from?

My name is Marin, I am 22, from Faroe Islands. I am studying Pharmacy at KU. I enjoy cooking together with my kitchen-mates, and going for walks.. There's really not much to do these days because of the lockdown sadly!

2. When did you move in Artillerihuset?

I moved here on 1.November.

3. How do you feel about living at Artillerihuset?

I really enjoy the community here! We have a good relation with our neighbours, a lot of social events, parties. You never feel alone here.

4. What do you think is the best, worst about living here, what could be improved?

Definitely the community is the best. Worst.. Well I think there are some problems in the apartments... Like the cold air is all the time blowing in my room from the ventilation, as well as I can see the light from the corridor from my apartment, because the apartment door isn't well sealed. And then I feel like when I write to FSB, they respond very slowly.. Once I wrote about a problem I had, and someone else had the same problem that they asked FSB about.. And they got a response, while I didn't get a response. Do they think if they respond I person they will just tell everyone? There's also no frequently asked questions on the FSB website.. A lot of confusion. And then also there was this week, where they would just come unannounced to everyone's apartment, to "fix" stuff in the apartment. Don't think people were happy about it.. As it was always in the morning hours. We also had to provide FSB one of our 3 keys, for this, that we weren't sure when we will get back!

#### Interview 2:

1. Tell me about yourself? What do you study, what is your age? What hobbies? Where you're from?

Hi, I am Nikoline! I study Nutrition and I am 24 years old. I love everything about food, especially vegan food. (Health freak) I also have an Instagram where I share recipes in my free time. Also do yoga, go for long walks every day when the weather is good. Oh and I'm from Odense.

2. When did you move in Artillerihuset? On 1. November.

3. How do you feel about living at Artillerihuset?

I love my neighbours and that we can always do something together. We have organised several fællespisning, where we cook together and have dinner together. Also we've had Julefrokost and other events.. I don't like that people aren't cleaning up after themselves in the communal kitchen. Even though we have a cleaning schedule, people aren't good with following it, or cleaning after themselves.

4. What do you think is the best, worst about living here, what could be improved?

The community is the best part, and the worst.. Well I think this is a newly built building, so there are always some issues. Like, there was a water leakage in front of my door, but eventually it got fixed. I just think it's a bit annoying. Also I was going away to Odense for a week and gave my neighbour one of my keys, to water plants in my flat. But then the key wasn't working anymore.. Turned out, she had to re-activate it in the washing room, which is super random. Didn't know about it, as FSB never communicated about it.

#### Interview 3:

1.Tell me about yourself? What do you study, what is your age? What hobbies? Where you're from?

I'm Rasmus and I'm 30, from Denmark. I am studying Chinese at KU! I like sharing a drink with my friends in the free time, also enjoy reading a lot and different cultures.

2. When did you move in Artillerihuset? Sometime at the start of November.

3. How do you feel about living at Artillerihuset?

I like it a lot! It's fun living with so many young people it's great fun.

4. What do you think is the best, worst about living here, what could be improved?

Hmm, let me see.. I really like the social part, as I said, but sometimes the parties gets too loud, as I am living right under the kitchen. Then it's annoying that I have to go up in the middle of the night in my underwear to tell people to be more quiet, as I am trying to sleep. I also don't like the bicycle parking, and some FSB lady just moved my bicycle from where it was parked - I run into her, as she was doing it. Also I am tired of hearing drilling all the time, everyone is drilling, as the apartments are new and people want to attach stuff to their walls.

#### Interview 4:

1. Tell me about yourself? What do you study, what is your age? What hobbies? Where you're from?

I am Silvia, and I am 30 years old. I currently work at Normal, in Amager - center. I come from Aarhus.

2. When did you move in Artillerihuset?

I moved in the middle of November here.

3. How do you feel about living at Artillerihuset?

I like it a lot. I live with my boyfriend in one of the family apartments. It is a really nice location, and the Ice cream store is right in front of us, as well as netto. And it's well connected with the public transport.

4. What do you think is the best, worst about living here, what could be improved?

As I said, the location is great. However, there are some problems with the doorphone and parking. Or there was.. Like, I couldn't get the doorphone to work. And FSB wasn't helping at all. Eventually they got back to me, when I sent them an e-mail about it, and I figured how to make it work. Poorly communicated... I live on 3.floor and every time for the first 3 months, I had to go down to let someone in, or if I ordered something.. One time also I ordered a bedframe at the start, and GLS tried to "deliver" it 3 times, and it never worked, as they only tried to use the doorphone, and not call me. Doorphone didn't work, therefore in the end I had to pick up the package myself at their store.. Also the parking is a nightmare. Now we have to install a new app for it, we already have an app for washing or clothes... too many apps on my phone for just living here! And there's also a football field on the parking lot - don't know what they thought when painting that on top..doesn't make sense.

#### Interview 5:

1. Tell me about yourself? What do you study, what is your age? What hobbies? Where you're from?

I'm Marek, I come from Chezch republic! I study International Business at CBS. I love playing hockey, or I used to. Now I'm just hanging out with my friends, exploring Denmark when I can..

2. When did you move in Artillerihuset?

I moved 1.of November!

3. How do you feel about living at Artillerihuset?

I like it living here. It's really nice. Love the social aspect, there's always something happening. Also I've made a lot of friends here. And love the rooftop!

4. What do you think is the best, worst about living here, what could be improved?

Best is definitely the community, love living here. Worst.. Well where do I start.. There was this huge leakage in my apartment, water was just coming out of the ceiling! So I had to call janitor, they came to "fix" it, they just put a buck-

et under it. Then eventually they found the problem, that it's coming from Frederikkes apartment, girl who lives above me. Now the ceiling is still ruined and don't know if I get my deposit back.. Also I am afraid my bike will get stolen, as I heard some people's bikes got stolen, so I keep it in the stairway, but they always remove it. Also, the fire alarm goes off every time, there's a little bit of smoke. Once I was just toasting some bread, and it went off... Then the firefighters have to come. It happens like every week, due to bad hoots we have in kitchens. Also the washing app sometimes is lagging. We have to use it to wash our clothes.

#### Interview 6:

1.Tell me about yourself? What do you study, what is your age? What hobbies? Where you're from?

Elias, 22 years old. I study Russian, at KU. I like to work out, daily, and I enjoy reading Russian literature. I grew up in Vesterbro.

2.When did you move in Artillerihuset?

1. November, as probably most people.

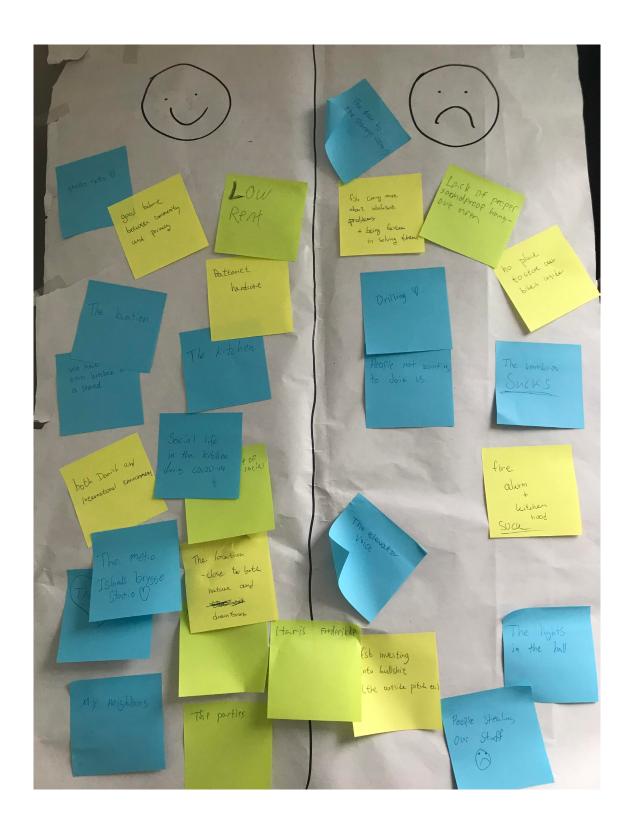
3. How do you feel about living at Artillerihuset?

I enjoy the parties and the people here.

4. What do you think is the best, worst about living here, what could be improved?

I like that it's a good balance between having your own space, and interacting with others. Like, we have our own kitchen and bathroom but also we share some common areas with others. Well, what I don't like.. I recently had an "accident" where I had left my speaker up in the common kitchen, and the next day it was gone - someone had stolen it. We can't lock up our kitchen's so apparently someone just had walked in and stolen it. I wrote on the big Facebook group about it, but no one committed their crime. That's quite upsetting.

### Appendix 3: First workshop.

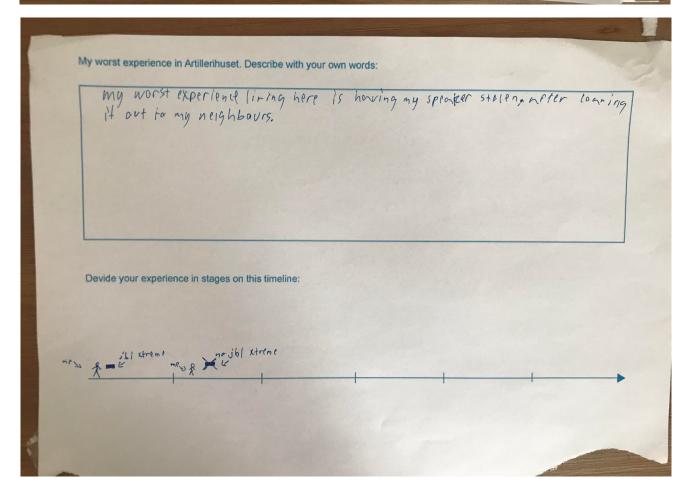


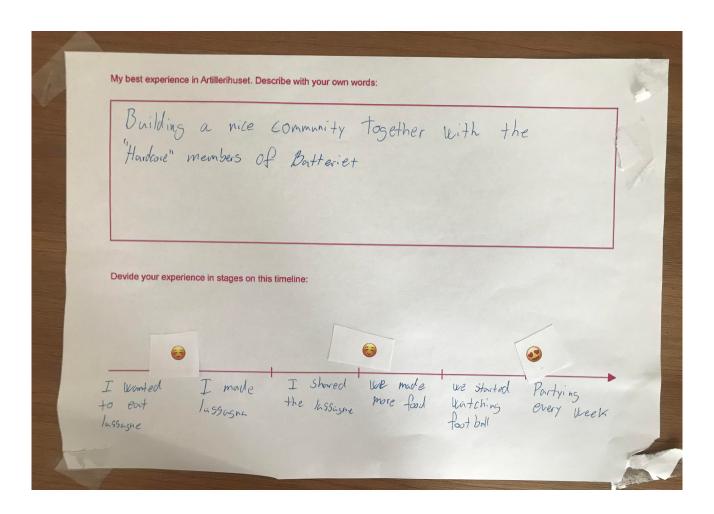
My worst experience in Artillerihuset. Describe with your own words:

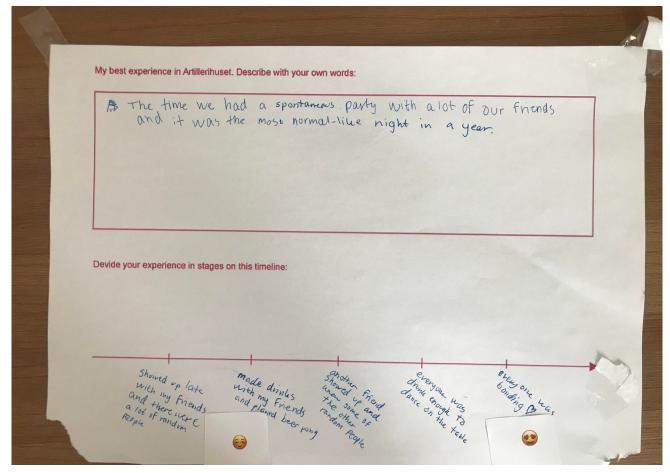
When water stocked rando mly pouring out of my ceiling. And it took 2 maints to get all the lanage repaire of.

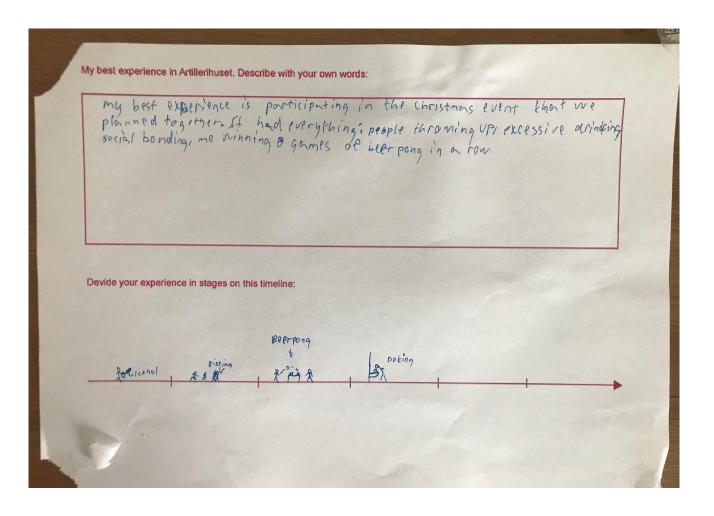
Devide your experience in stages on this timeline:

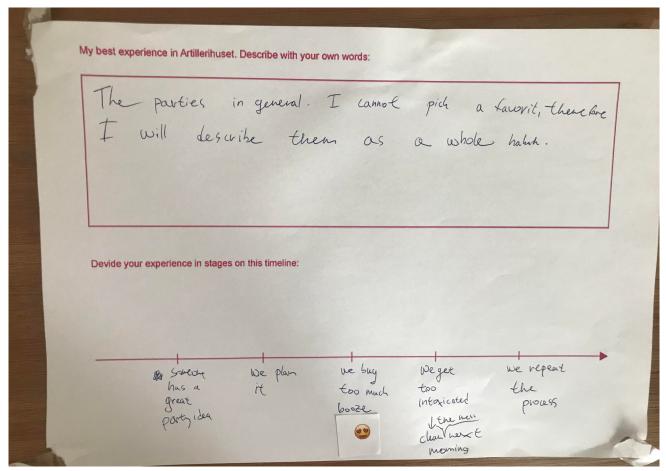
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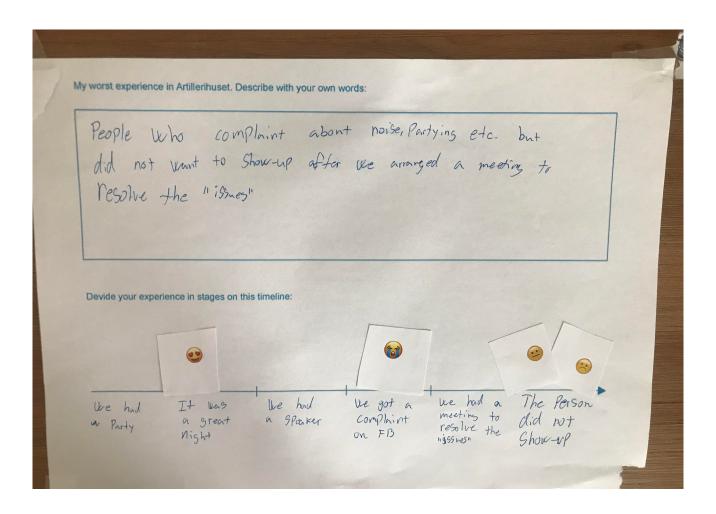


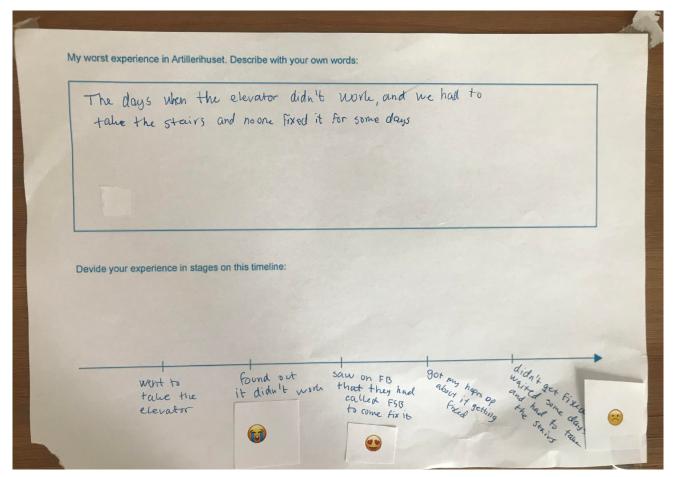












## Appendix 4: Second workshop.

