

# Managing participants in co-design

A case study investigating empowerment, ownership and power dynamics in a design consultancy.

Carl Westin Ludwig Salén

Supervisor: Johan Blomkvist Examiner: Stefan Holmlid



Linköping university SE-581 83 Linköping 013-28 10 00, www.liu.se

## Copyright

The publishers will keep this document online on the Internet – or its possible replacement – for a period of 25 years starting from the date of publication barring exceptional circumstances.

The online availability of the document implies permanent permission for anyone to read, to download, or to print out single copies for his/hers own use and to use it unchanged for non-commercial research and educational purpose. Subsequent transfers of copyright cannot revoke this permission. All other uses of the document are conditional upon the consent of the copyright owner. The publisher has taken technical and administrative measures to assure authenticity, security and accessibility.

According to intellectual property law the author has the right to be mentioned when his/her work is accessed as described above and to be protected against infringement.

For additional information about the Linköping University Electronic Press and its procedures for publication and for assurance of document integrity, please refer to its www home page: <a href="http://www.ep.liu.se/">http://www.ep.liu.se/</a>.

© Ludwig Salén, Carl Westin

"In science, when human behavi	our enters the equation, things go r is easy and Sociology is hard."	onlinear. That's why Physics
	-Neil deGrasse Tyson	

## **Abstract**

This case study provides new insights on the designer role in co-design processes. Co-design has shifted the designer role into a facilitator, which requires a new skillset. In this thesis, this new role is investigated through the three psychological constructs; empowerment, ownership and power dynamics. The process consists of two main parts: pre-study and case study. In the pre-study, designers with different roles are interviewed about co-design. In the case study, three co-design sessions are observed and the facilitators interviewed in retrospect.

Several strategies and actions are identified for empowering participants, some for the participants to feel ownership and almost none for balancing out power dynamics. The identified strategies include using straightforward methods and having a selfless mindset. However, there are indications that long term relationships are prioritized over actual outputs. This notion might be explained by the fact that the case companies are consultants. The need to always satisfy the clients makes the facilitators disregard some of the power differences in the room.

# **Table of content**

Introduction	1
About Idean	2
Purpose and goals	3
Research question	3
Theoretical framework	5
Co-design	5
Roles in co-design	7
Psychological constructs	9
Empowerment	15
Ownership	15
Power dynamics	15
Method theory	17
Case study approach	17
Observations	18
Interviews	19
Process description	21
Pre study	23
Pre-study research	23
Pilot study	25
Case study	29
Case 1 - The redesign session	29
Case 2 - Concept testing	34
Case 3- Reference case	38
Discussion	45
Empowerment	45
Ownership	47
Power dynamics	47
Wider discussions on co-design	48
Conclusions	49
Empowerment	49

Ownership	49
Power dynamics	50
Future studies	51
References	53

# **List of figures**

Figure 1:The three motives of ownership created by Wang et al. (2006) in the design process described	
by Rijn & Stappers (2008).	10
Figure 2: The three components of psychological empowerment as described by Zimmerman (1995).	12
Figure 3: A figure over when the psychological constructs appear in relation to the design session.	15
Figure 4: Schematic picture over the process.	21
List of tables	
Table 1: Describes the respondents, their roles at Idean, interview length and experience.	23
Table 2: The questions the designers at Idean were asked.	24
Table 3: The actions taken by the facilitator during the session in order to manage the constructs.	26
Table 4: A display of all the people involved in the case 1 session.	29
Table 5: The questions the facilitator was asked.	31
Table 6: The questions the facilitator was asked.	36
Table 7: A display of all the people involved in the session.	39
Table 8: The questions the facilitator was asked.	41

## **Nomenclature**

This section aims to define some words that are important to understand in order to grasp the content of this thesis.

Client: A person or company that orders the co-design services of a design agency.

Epic: An epic in SCRUM methodology, is described as a big chunk of work with a common objective.

Facilitator: The person who plans, conducts and facilitates the co-design process.

**Outcome:** Intangible results from the co-design process, for instance further knowledge and experience on how to conduct design practise.

**Output:** Tangible result from the co-design process, for instance a wireframe prototype.

**Participant:** A person who partakes in a co-design session, besides the facilitator.

**SCRUM:** A framework for agile product development aimed to solve complex problems while continuously deliver value.

**Session:** A time period devoted to a design activity.

**Stakeholder:** A person with a vested interest in the project whom is involved in the co-design process.

**User:** A person who is meant to use the output of the co-design session.

## Introduction

Creativity is a trait that has characterised many great innovators, artists and scientists throughout history. These remarkable people have been described as special; many have tried to understand how they managed to come up with their ground-breaking ideas. For a long time, the general understanding was that some people simply are more creative than others. However, in the late 1900's, researchers started to question the fact that a selected few are blessed with creativity, but rather that creativity can be evoked within all people under the right circumstances by using certain methods and tools. These ideas are the foundation of the many ways of collaborative design work used today. The contemporary designer wants to involve people with different perspectives and backgrounds in their design process in order to create purposeful and creative results. (Hämäläinen & Rill, 2018)

Today, there is an ocean of concepts for collaborative practises and one of the most popular is called co-creation. The term was popularized by the marketers Prahalad & Ramaswamy (2004). Prahalad & Ramaswamy (2004) defined co-creation as the "joint creation of value by the company and the customer." Even though the term stems from marketing, the concept is well established in other practices, such as organizational development and design (Hämäläinen & Rill, 2018).

Design practices have a long legacy of tapping into the users' feelings and utilizing them as an asset in the creation of new products and services. Today, collaborative workways are frequently used in many design disciplines. The gap between a user and designer have been shrinking, as the collaborative practices have found its way into consultancies, enterprises, start-ups, NGOs and even governments (Sanders & Stappers; 2008; Hämäläinen & Rill, 2018; "Gov-Design," 2019). The collaborative practises have been described in academia in two closely related schools. Firstly, the human centered approach which historically has been described as the American way. Secondly, the participatory design approach, led by the Northern Europeans (Sanders & Stappers, 2008). According to Sanders & Stappers (2008), the two ways are now converging and influenced by one another.

The terms co-creation, co-design and participatory design are often used in a similar manner inconsistently, and therefore confuses people (Sanders & Stappers, 2008). The focus area within this thesis is co-design, as defined by Sanders & Stappers (2008):

"By co-design we refer to the creativity of designers and people not trained in design working together in the design development process."

With the use of co-design processes, the traditional roles of designers, users and researchers have shifted (Sleeswijk, Stappers, van der Lugt, & Sanders, 2005). Brandt (2006) argues that staging the design process so that it involves external people is the foundation of participatory design and co-design. In this new setting, it is not only the designer role that has gone through a

transformation. The user has gone from a passive object to a co-designer. As a result, the co-design process shifts the power from designers to the process and maintains the balance, rights and freedom between the participants (Bradwell & Marr, 2008). Furthermore, Sanders & Stappers (2008) argues that all people are creative. As a consequence of the inclusion of non-designers in the process, there is still a need for designers with abilities to think visually, conduct creative processes and to find missing information. Co-design requires someone who takes final design decisions and facilitates the process. (Sanders & Stappers, 2008)

A major part of facilitating co-design is to guide the participants. Firstly, the participants must feel empowered and motivated to contribute to the process (Hämäläinen & Rill, 2018). Secondly, empowered participants will create an emotional bond to the outputs, which is called ownership (Rijn & Stappers, 2008). Lastly, people will have different degrees of power in co-design as a result of their background, role etc. It is the facilitators responsibility to understand these power dynamics and manage them in order for everybody to participate under the same conditions (Lee et al., 2018).

In co-design literature, few researchers have described the facilitators' management of participants in co-design. In this thesis, the focus is to understand the management through investigating three psychological constructs: empowerment, ownership and power dynamics. The three constructs are described as relevant in co-design by both researchers and practitioners. Furthermore, this thesis aims to understand facilitation of co-design in a design consultancy context. This is done through a case study at the design agency Idean based in Stockholm. The case study investigates the company's co-design work together with clients and users, specifically looking at how the facilitator manages the psychological constructs. Idean offer their clients co-design sessions and design sprints, involving stakeholders as well as users during different phases of their projects. The company carries out their work together with multiple clients, both in the private as well as public sector, nationally and abroad. In this thesis, different types of co-design performed by Idean are explored and analysed.

#### **About Idean**

Idean is a strategic and digital design agency. The company is a part of Capgemini Invent and has over 700 employees located in 25 major cities around the globe. In Sweden, Idean has three offices - Stockholm, Gothenburg and Malmö (Capgemini, 2019). Idean offers design as a service on an operational level, as helping the client to create new products and services. In addition to operational level design, Idean offer strategic design, for instance to implement design thinking in an entire organisation. For Idean to be able to offer these services, they have a diverse team of designers. The team consists of business-, service-, user experience-, user interface- designers and more. (Idean, 2019)

The Idean methodology is deeply rooted in Design thinking formulated by Tim Brown and David Kelley at IDEO and MIT (Brown & Katz, 2011). Janhagen (2019) describes how Idean defines design thinking as:

"Design Thinking is an approach to creatively solving problems for and with people. In short, design thinking helps you accurately define the problem you're trying to solve, before defining how to solve it."

According to Janhagen (2019) the designers at Idean use a wide range of collaborative methods for research, ideation and testing. Co-design is also widely spread throughout the organisation, which is displayed by the Idean design guide. The guide proposes a number of different methods and exercises for collaborative work together with non-designers (Janhagen, 2019).

## Purpose and goals

The purpose of this thesis is to understand the facilitator role and engagement in co-design processes.

The goals with this thesis are to:

- Explore and analyse facilitator actions and strategies connected to empowerment, ownership and power dynamics of participants in a co-design context.
- Deliver insights to Idean in order to improve their facilitation of co-design processes.

## Research question

In this thesis, the following question is treated in order to understand the facilitator role in codesign processes:

 How do facilitators manage empowerment, ownership and power dynamics in codesign?

## Theoretical framework

This chapter contains the theoretical framework for the study. It includes theory on co-design, the different roles in co-design and on the psychological constructs ownership, empowerment and power dynamics. Further, the psychological constructs are placed in relation to the co-design session in the last section.

## Co-design

Co-design is defined by Sanders & Stappers (2008) as "...creativity of designers and people not trained in design working together in the design development process." The concept is explained as a process involving researchers, designers and users (Sanders & Stappers, 2008). However, in contemporary co-design, there are other disciplines involved more than just the traditional designers, researchers and users. The co-design process now includes all types of disciplines including developers, managers and other stakeholders (Steen, Manschot, & Koning, 2011). Choosing the right participants is important in order to achieve a successful co-design process. There are a number of parameters that the facilitator needs to consider before inviting people to the process. The background of the participants matters, since prior engagements shapes the participants associative ability. Sleeswijk et al (2005) have found that having a participant with strong associative ability encourages other participants to reflect upon their own experiences. However, bringing too many associative thinkers creates a distraction and the participants tend to discuss abstractions rather than focusing on the task at hand (Sleeswijk et al, 2005). A participant with too much technological knowledge will constrain the ideation process and limit the innovativeness of the ideas (Kristensson & Magnusson, 2010). To involve a person with a creative job is seen as something positive. However, putting primarily designers together will make the atmosphere too problem-solution focused, rather than focused on the actual experiences. A recommendation is to involve one person with a creative profession. This person could be a graphic designer, architect or another creative professional. A group session is best conducted with four to six participants. For participants to be able to build upon each other's ideas, three is too few. When the group is larger than six it is hard for the participants to keep track of every individual involved. (Sleeswijk et al, 2005)

Co-design blurs the line between design and research (Sanders & Stappers, 2008). The process has its roots in the ideation phase. However, mutual value between designers and non-designers emerges in research and testing as well (Meinel & Leifer, 2012). Holmlid (2009) describes how the involvement of users in co-design can take on many different forms depending on the context and purpose. The purpose can range from role-playing for empathizing with users, co-designing prototypes for solving problems to prototyping cooperatively (Ehn & Kyng, 1992; Grønbæk, 1991).

Today, co-design is part of every contemporary designer's toolbox (Bradwell & Marr, 2008). The approach is widely spread, but some researchers believe there is a lack of proof of the actual value in user involvement (Kristensson & Magnusson, 2010). Another issue voiced in the research of

collaborative design is, politics of design. The distribution of power in the workplace is depicted as an obstacle for collaborative design to take place (Kensing & Blomberg, 1998). Even though there is doubt, some attempts of proving the value of co-design have been made. Steen, Manschot, & Koning (2011) showed the benefits of co-design in service design through a case study. The study showed that co-design contributes to an improved creative process, development of service definitions and the organisation of the project. It ties the companies service offering together with the user needs which leads to higher satisfaction. The process forces the company to focus on users and disciplines not usually cooperating, to work together. As a matter of fact, this composition paves the way for a bigger enthusiasm for innovation (Steen, Manschot, & Koning, 2011). Another attempt at showing the value of co-design was carried out by Bradwell & Marr (2008) where the authors conducted a survey about co-design in public services. The result of the survey showed that co-design allows new voices to influence services affecting their own life. The process also redistributes power back to the user and increases social capital (Bradwell & Marr, 2008). Mitchel, Ross, Sims & Parker (2016) argues that an outcome of co-design is a larger amount of ideas generated in comparison to traditional methods. The ideas are equally innovative. However, a larger amount of ideas increases the likelihood for one idea with high innovation level. Hence, making co-design a useful tool in innovation projects (Mitchell, Ross, May, Sims, & Parker, 2016).

Another perspective on the value of co-design is described by Sutton & Hargadon (1996), the authors describe how the design consultancy IDEO benefits from co-design. IDEO uses the co-creative way of working as a means to impress clients. IDEO encourages the participants to always act in a positive way during the session. The authors describe that if one of the participants happens to be negative, the facilitator will kindly remind them to stay positive. Creating a positive environment is argued as being very important. Co-design has the potential of evoking positive feelings within the clients, which is expressed as a way of hooking the client for long term projects. Being able to hook clients for longer time provides the consultancy of a secure stream of profit. The authors describe that clients are less reluctant to pay for co-design activities opposed to other design work, even though co-design, is described by IDEO, as inefficient in comparison to individual work. (Sutton & Hargadon, 1996)

To summarize, our impression is that co-design is a creative process where a group of people, designers and non-designers alike, design together towards a common goal, all lead by a facilitator. There is not one true form of co-design. The process is context specific and all cases of co-design are different. However different the process, there are some proven benefits. Co-design gives the users and stakeholders a platform to express their needs, which shifts power back to the people who will ultimately use the solution. Co-design also bridges the gap between different disciplines and gives them a natural space to collaborate. Another benefit is the increased amount of ideas in contrast to traditional design processes, which leads to better prerequisites for innovation.

## Roles in co-design

In co-design, there are typically two main roles. Firstly, the participants who are invited to be involved in the process. They can be managers, researchers, designers, users, clients or basically anyone with relevance to the process. Secondly, the facilitator. This is typically a designer or researcher who leads the group through the collaborative process. In most cases, this is also the person responsible for planning the process.

#### The participant role

The design process should consist of living knowledge (Lee, 2008). This is achieved by inviting participants to become co-designers (Sanders & Stappers, 2008). Hence, becoming the expert of his/her own experience (Sleeswijk et al, 2005). The co-design process can involve different types of participants depending on the context. The facilitator might involve users, designers, developers, managers and other stakeholders in the process to reach the desired outcome (Sanders & Stappers, 2008; Bradwell & Marr, 2008). Furthermore, the participants take different roles in the co-design process. Barcellini, Prost, & Cerf (2015) identified the participants as either champions, boundary spanners, super-experts, project leaders or users. The champion is a significant contributor in the co-design process, both in the task specific work and in the actual design work, often a designer. The boundary spanner is described as having a central role in the interactions. He/she transfers knowledge from users in order to support design decisions. The boundary spanner might be a design researcher or a person within the company with a lot of knowledge about the user. The role aims to support the champion. The super-experts have a regulatory role in the discussions and decisions. They represent a specific knowledge related to his/her role in the company, which is identified as relevant to the the co-design process. The project leader is often the person who initiated the project. The role has decision making authority and is some kind of manager within the company. Last but not least is the user role, the person who will use the output of the co-design process. (Barcellini, Prost, & Cerf, 2015)

Our interpretation is that the participant role in the co-design process can take on many forms. The traditional co-design context of Sanders & Stappers (2008) with a designer, researcher and user is changing. In fact, the participators in co-design (besides the facilitator) can be designers, managers, developers, users or basically anyone that might be relevant in order to reach the desired outcome. These participants take on different roles, depending on their background and knowledge levels. The authority to decide who is relevant for the process ultimately falls on the facilitator.

#### The facilitator role

Lee (2008) defined the role of the design facilitator as a person who is "designing with people to transfer design knowledge to emancipate people to improve their lives." Wada & Napier (2015) explains that the facilitating designer must now be able to empower and facilitate others,

designers as well as non-designers. The facilitator leads a group through a collaborative design process, where the output is a future state. The future state does not yet exist and is better in the eyes of multiple stakeholders (Body et al., 2008). Apart from the guiding of the participants through the process, the facilitator needs to understand how to turn tacit knowledge from the participants into explicit knowledge (Wada & Napier, 2015). This concept is called knowledge externalization and was first introduced by Donnerly & Everson (2011).

With a deeper understanding of what a design facilitator does, it is time to understand what the facilitator role needs in terms of knowledge and skills. Wada & Napier (2015) have formulated mindsets, skills and characteristics a design facilitator should possess. The mindset is based around having a focus on empathy, objectivity and process orientation.

Lawson & Dorst (2005) define the facilitator skills as: Formulate, Represent, Move, Evaluate and Manage.

#### Formulate

This skill regards the identification and problem framing in the design process. The facilitator needs to have the skills to organise and restructure complex problems, but also know how to view and encounter problems and opportunities.

#### Represent

This skill regards the externalisation and visualisation of ideas and solutions. The facilitator needs to know how to communicate through a number of visual medias.

#### Move

This skill regards the actual designing that the facilitator conducts. Move is a set of design activities in which the facilitator needs to be able to move forward in the project despite ambiguous and imperfect data.

#### Evaluate

This skill regards the facilitator's awareness of the design decisions that are made. The facilitator needs the skill of setting up criteria for the selection as well as conducting the process of deliberation. The facilitator must be able to do objective and subjective judgements but also know when to suspend judgement. In collaborative contexts, the participants might judge their ideas prematurely. The facilitator must know when to instil freedom of judgement in the participants in order for the process to have its way.

#### Manage

This skill regards the concept of reflection-on-action. Reflection-on-action is described as a combination of the skills formulate, move and evaluate. The facilitator needs to continuously reflect upon the contemporary problem space and validity of the solutions that are made. This skill requires the facilitator to take a step back from the process.

This skill framework is suggested by Wada & Napier (2015) to be used regarding characteristics as well in the following way. When formulating activities, the designer needs to navigate

complexity and be open-minded. While representing activities, the facilitator needs to communicate in an engaging way, both verbally as well as visually in a personal way. The authors also propose, while moving, that the facilitator must be flexible and nimble in their thinking. During the evaluation the facilitator needs to practise humility. In the last step, managing, the facilitator needs to be reflective. (Wada & Napier, 2015)

To summarize, our interpretation of the theory is that the co-design process is not a straight line. However, there are ways to control and lead the process on the right path, and that is why the facilitator has a central role in the process. The facilitator is the director of the session, hence having the responsibility to understand the problem space while leading the session and empowering the participants. There are some traits that a facilitator needs in order to conduct a successful session. The facilitator needs to be able to navigate complex problems while being open-minded and communicate in an engaging and understandable way. We think that the facilitator should also be flexible because of the context specific practice of co-design. Yet humble and reflective in order to adapt to the people in the room and create an empowering setting. Ultimately, facilitation is all about managing the groups potential to reach a desired outcome, while adapting to influencing factors.

## Psychological constructs

In this section, the constructs of ownership, empowerment and power dynamics are described theoretically. Furthermore, the section also describes the constructs in relation to the co-design process.

## Ownership

Beggan (1992) describes ownership as the psychological association between a person and an object. This feeling emerges when an owner treats their object as a social entity. In other words, a person creates an emotional bond to the object and considers the object theirs. Pierce, Kostova, & Dirks (2001) describes three levels of ownership; The legal ownership (my book), shared ownership (my seat at the bus) and abstract ownership (my idea, my city). To understand how ownership occurs, one must understand the motives and routes that leads to ownership. Why a person wants to own a product are described as motives and the person's actions to obtain the product are described as routes (Pierce, Kostova, & Dirks, 2001). However, the feeling of ownership is evoked through aligning the attributes of a product with the person's motives (Shu & Peck, 2011). If the attributes and motives do not converge, the feeling of ownership will not be evoked. McCracken (1986) puts it as if the person does not find meaning in the product's symbolic attributes, no feeling of ownership will occur.

Wang et al. (2006) describes three types of motives for people to feel ownership: instrumental, perceptive and symbolic. The ownership motives in relation to the co-design process can be seen in Figure 1. Firstly, participants can be encouraged to express themselves through different tools

and techniques, defined as the instrumental motive (Wang et al., 2006). The aim of the instrumental motive is to encourage the participants expressions, which is carried out in co-design sessions by intentionally using ambiguous material. The ambiguity of the tools allows the participants to have greater control of their expressions in the design of the artefacts (Rijn & Stappers, 2008). Secondly, participants receive an authorship when their expressions and contributions are embodied in the final output, defined as the perceptive motive (Wang et al., 2006). The aim of the perceptive motive is to retain the participants expressions. Ownership occurs when participants can see their expressions visually. This type of immediate outputs from the session, containing the participants personal expressions, will be perceived as their belongings and thereby evoking ownership (Rijn & Stappers, 2008). Lastly, the designer needs to display understanding of the participants' opinions, feelings and dreams during the session in the output, defined as the symbolic motive (Wang et al., 2006). The aim of the symbolic motive is to acknowledge the participants message. If the participants' inputs are manifested in the outputs, the participants feel listened to and thereby evoke ownership (Rijn & Stappers, 2008).

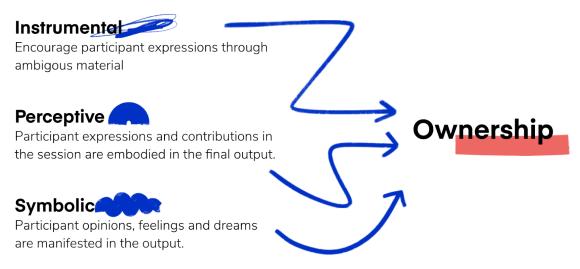


Figure 1:The three motives of ownership created by Wang et al. (2006) in the design process described by Rijn & Stappers (2008).

Another way of evoking ownership is through self-investment. Self-investment is described as the buy-in from a client in the form of money, time, physical or psychological effort. The result of this buy-in is a sense of ownership of the output (Baxter, Aurisicchio, & Childs, 2015). This notion has been described as "labour of love" or the IKEA-effect. The co-design effort makes the client grow a special bond to the output (Norton, Mochon, & Ariely, 2012).

The co-design process not only involves the designer's clients but also users. To grasp the complete context of ownership, user motives has to be understood. Rijn & Stappers (2008) argues that users might have intrinsic motives to be part of the co-design. These motives might be the user wanting to use the future product, enhance their own reputation or just tell their fellow users

about the experience (Seybold, 2009). Other motives are described as the user wanting to improve his/her current situation. The facilitator plays an important role in paving the way for the users to express themselves. A discouraged user is less motivated to partake in the session, hence feel less ownership of the output (Rijn & Stappers, 2008).

It is our interpretation that ownership is the emotional bond that links a person to a product, service or other manifestation of a solution to a problem. Ownership is evoked through aligning the products characteristics with the users' and clients' motives. These motives can be achieved in a number of ways. The facilitator can encourage the participants to express themselves through materials and methods. Encouraged participants will have a higher tendency to feel ownership. Another aspect that the facilitator needs to handle, is how the participants are represented in the outputs of the session. Both the artefacts created in the session and the opinions voiced by the participants needs to be visualized and embodied in the output to evoke ownership. An additional way to evoke ownership is through participant buy-in. If a participant put in their time and effort during the session, ownership is more likely to occur. Lastly, we believe that the notion of ownership is individual and that the motives differ from one person to the next.

#### **Empowerment**

To make people participants of the design process is not useful in itself. It is useful because of their potential of adding value to the process, outputs and outcomes. In order to succeed, the participants must feel empowered. Empowerment is a process where organizations, communities and people get influence over issues they perceive as concerns. It is important to distinguish empowering processes from empowering outcomes. The first one refers to a process in which people feel empowered and the latter to the consequences of the process. Empowering outcomes can be that participants gain more confidence in their abilities by taking part in the design process. Results from the process (products or services) that can contribute to improve people's lives, are also viewed as empowering outcomes. There are different types of empowerment. In this thesis, the relevant type is psychological empowerment, described by Zimmerman (1995):

"Psychological empowerment [...] includes beliefs that goals can be achieved, awareness about resources and factors that hinder or enhance one's effort to achieve those goals, and efforts to fulfil the goals. "

Psychological empowerment is not a static quality an individual possesses. Instead, every individual has the potential of experiencing both empowering and disempowering processes. As a facilitator, the perceptions, skills and actions for empowering people in design processes depend on parameters such as a person's age, socioeconomic status, gender, etc. Co-design projects are not in themselves empowering. They can be empowering as well as disempowering depending how the participants are treated and included. It is the facilitators responsibility to find methods that fit with the skills and competence of the participants. (Hussain, 2010)

Psychological empowerment can be broken-down into three components: intrapersonal, interactional and behavioural (see Figure 2). All three components must be considered when evaluating psychological empowerment. Firstly, the intrapersonal component is how people think about themselves. In co-design, it can be translated into the participants' confidence to communicate their own ideas, believing that they are valuable to the process. Secondly, the interactional component refers to the participants' awareness of what is needed in order to achieve the goals. This means, in co-design, that participants understand contextual factors influencing the design. It also means that participants learn the necessary design methods and skills, adapted to their own knowledge level. Lastly, the behavioural component refers to actions that address needs in a specific context. In a co-design process, this would imply that participants contribute to developing solutions that are useful for themselves as well as others in their situation. (Zimmerman, 1995; Hussain, 2010) One might confuse empowerment with power, but these are two separate phenomenon. Zimmerman (1995) explains how psychological empowerment and power differ: "Power suggests authority, whereas psychological empowerment is a feeling of control, a critical awareness of one's environment, and an active engagement in it."

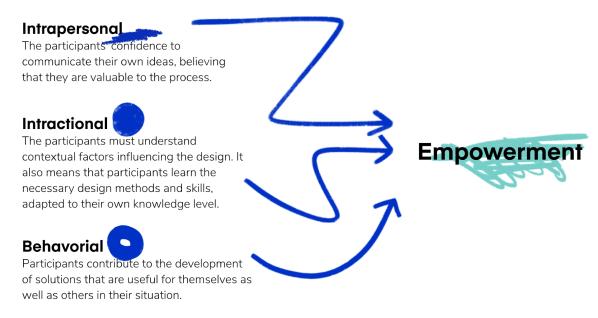


Figure 2: The three components of psychological empowerment as described by Zimmerman (1995).

Another aspect of psychological empowerment is that it is context-dependent. Empowerment does not mean the same thing for all people, everywhere, at any given time (Zimmerman, 1995). This means that, in each project, the facilitator has to decide on how to evaluate changes in psychological empowerment. (Hussain, 2010)

Many authors have described that the empowerment of participants is of great importance in codesign. Hämäläinen & Rill (2018) describes mutual empowerment as an experiential goal central to all co-design processes. As a facilitator, your co-design process is only as good as your ability

to empower others. By empowering people, they will most often support the process even if they personally do not agree with every decision. Empowerment leads to more engagement in initiatives, increasing their likelihood of success and impact. (Hämäläinen & Rill, 2018)

There are many strategies and methods for the facilitator to use when trying to empower participants. To have a selfless mindset is central in co-design. This means that the facilitator thinks thoughts like "What can I do to support the creativity of my shy team member" rather than "What can I do to show how creative I am?". The selfless mindset makes it a lot more likely that the participants feel valued and empowered. Another important trait the facilitator should possess is authenticity. If the participants perceive the facilitator as honest, they are more likely to develop trust. In the beginning of the co-design process, the facilitator has to make the purpose clear to all participants. In other words, explain what the goals are and why the participants are there. It is hard to motivate the participants when they do not understand the reasons to why they are present and how they can contribute. A poor explanation of the co-design process purpose will result in a loss of interest. Another aspect is that all participants should feel empowered. It is not enough to convince the management if the other participants are left out. (Hämäläinen & Rill, 2018)

To summarize, it is our understanding that empowered participants are important to any successful co-design process. Without empowerment, the participants will feel less motivated to express themselves and to contribute in the process. Empowering outcomes are crucial to the co-design process. We believe that people are more likely to participate in the future if they have a positive recollection to the process and the outcomes from it. To achieve empowerment is very contextual, which puts great demands on the facilitator's abilities. Ultimately, it is about letting the participants know their opinions matter and provide them with the means needed to express themselves and contribute to the process.

## Power dynamics

For a long time, there has been resistance from companies against co-design. Sanders and Stappers (2008) lists a number of reasons for this, one of them being the existing power structures in companies who are built on hierarchy and control. Co-design threatens the existing power structures by requiring that more power and control should be given to the users. It can be especially difficult for those who have been successful while being in control to imagine that a new way of doing things also can be successful.

Bradwell & Marr (2008) explains how the original motive for co-design was to let people affected by the results be a part of the design process and, consequently, democratize the process. Co-design shifts power from the designer and the individual participants to the process. Inputs from all participants are supposed to be treated equally, whether it implies a small- or large-scale

change. This means, for the facilitating designer, to retract power from those who usually have a lot. Also, to give more power to the people in less powerful positions. (Bradwell & Marr, 2008)

In co-design projects, participants always have different degrees of power. Different knowledge levels, interests, roles, societal and organizational backgrounds are some of the aspects contributing to this difference (Lee et al., 2018). This phenomenon of power dynamics in collaborative design disciplines is nothing new. During the early participatory design movement in Scandinavian factories, power issues were identified and led to several principles and tools regarding participation and power. The interests of management and workers were assumed to be opposites. As a further matter, workers were seen as being in a weaker, even oppressed, position only to be balanced out through collective power from trade unions. This approach was called the conflict perspective. During the actual sessions, a lot of emphasis was laid on ensuring all participants got to express their thoughts. Tools and means for enabling worker's influence was invented to reduce the imbalance in power. (Ehn, 1992)

Today, many co-design processes are carried out on commercial companies and involves their users. These projects differ a lot from the early participatory design movement, but there is still relevance to some parts of the concepts concerning power dynamic applicable even in contemporary co-design projects. Primarily, there is still great importance of tools and means for enabling people in a weaker position to influence the design. Another, still relevant factor is the potential vulnerability of the user. A commercial company often possess superior resources and power in comparison to any one individual user. Sampsa & Lehankari (2002) states that, without a formal agreement between the company and the user, there is a great risk that the user could be excluded from the decision-making. (Sampsa & Lehenkari, 2002)

Power dynamics are not only present between the user and the company. It also exists between the designers who facilitate co-design and the participants who have less expertise in the design activities (Lee et al., 2018). Lee et al. (2018) explain how the facilitators' power varies depending on the goal and the complexity in stakeholder relationships. The facilitator can either take a neutral role and only facilitate the session or an active collaborator role where the facilitator is still facilitating but also participating in the session. The latter can be useful to take in situations where the participants struggle to come up with ideas and think out-of-box. Some researchers call this role creative secretary (Kankainen, Vaajakallio, Kantola, & Mattelmäki, 2012). The participants must be given the means necessary for idea generation and visualization in order to take an equal role in the co-design process. (Lee et al., 2018)

To summarize, our interpretation of the theory is that power dynamics are unavoidable in codesign. People will always come into the process with different levels of expertise, roles interest etc. which will influence the power dynamics. Co-design as a process aims to flatten out this imbalance in power by shifting more power to the process and provide the tools and means necessary for every participant to express themselves. Depending on the project, the facilitator also has to understand his/her power situation in relation to the participants. In order for all participants to have equal roles and influence in the process, it is up to the facilitator to provide the tools and methods necessary.

#### Constructs in relation to co-design sessions

Our understanding is that the psychological constructs are present during different parts of the co-design session (see Figure 3). Power dynamics are present before and throughout the session, empowerment during the session and ownership during the later part and after the session.

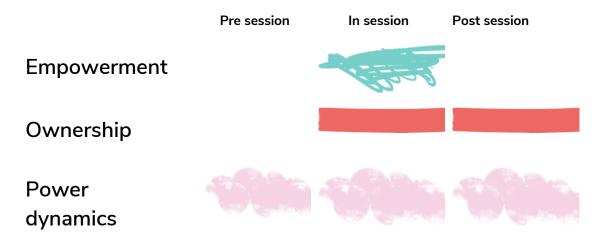


Figure 3: A figure over when the psychological constructs appear in relation to the design session.

Empowerment is a temporal construct, only present during the actual co-design session (Hussain, 2010). During the session, the participants can experience empowerment as well as disempowerment. The feeling of empowerment will be dynamic during the session and how empowered the participants feel has got a lot to do with how the session is conducted (Hämäläinen & Rill, 2018). In order to empower the participants, the facilitator needs to make them understand the methods and why they are involved in the co-design context. Furthermore, the participants also need to see that their contributions are embodied in the co-design output (Zimmerman, 1995; Hussain, 2010). Ownership is evoked in the same way. The participants need tools and methods to express themselves in order to create ownership. Similar to the concept of empowerment, ownership is evoked when the participant's inputs and contributions are manifested in the output (Rijn & Stappers, 2008).

Our understanding is that empowerment breeds ownership. If the participants in the co-design sessions feel empowered, a sense of ownership will likely be evoked. However, ownership is evoked throughout the co-design session, a feeling that becomes stronger and stronger as the work proceeds. The feeling of empowerment is something that is present during the session but lost shortly after. Ownership on the other hand is felt after the session as the feeling is linked to the result.

Power dynamics are always present in design processes. However, co-design is a way to shift the power from the participants to the process. The facilitator needs to make sure that all inputs from the participants are equal, which means that the people usually with a lot of power needs to make space for people usually with less (Bradwell & Marr, 2008). In a well-executed case of facilitation, the power dynamics will decrease during the co-design session. However, what happens after the session is out of the facilitator's control.

Figure 3 serves as a foundation in the case study observations and interviews. Actions aimed towards power dynamics will be of focus before and early on in the sessions. In the same way, actions aimed towards empowerment will be of focus during the sessions and actions towards ownership in the later part and after the sessions. Of course, it is just a pointer of where the actions are most likely to occur. It does not mean that unexpected actions will be overseen.

## **Method theory**

This chapter contains theoretical descriptions of the research approach and the methodology used to answer the research questions. The chosen research approach is a case study, which has relevance in this thesis for two main reasons stated: The researchers have little to no control of how the co-design cases are conducted and the psychological constructs are contemporary (Yin, 2014). Furthermore, the goal of the thesis is to provide an in-depth picture over the psychological constructs and for this, a qualitative research approach is believed to be the most suitable. Additionally, to collect data, observations and interviews are used for this qualitative case study.

## Case study approach

A case study is a qualitative research approach commonly used in social science research. Yin (2014) states that a case study is a preferred method when:

- 1. The main research questions have "how" and "why" formulations.
- 2. The researcher has little or no control over behavioural events.
- 3. The focus of the study is a contemporary phenomenon, as opposed to historical.

The definition is in the name, a case study investigates a contemporary phenomenon in a real-world context over time (case) (Yin, 2014). The investigation of the case consists of detailed, indepth data collection involving multiple sources of information (e.g. observations, interviews, audio material, visual material, reports and documents) (Creswell, 2013). There are traditionally two types of case studies – single case study or multiple case study. In the single case study, one case is examined while multiple case studies, covers more than one case. The multiple case study often includes a cross case analysis, something that cannot be made in a single case study. The focus of the study is either the case as a whole (holistic) or specific issue within the case (embedded). (Yin, 2014)

There are several procedures for conducting case studies. The one in this thesis is based on Yin's (2014) approach.

- 1. Determine if a case study approach is appropriate for studying the research problem. It is suitable when the cases are clearly identifiable with boundaries and the researcher aims to gain an in-depth understanding of the cases or a comparison of several cases.
- 2. Identify case or cases for the study. It is recommended that the researchers first decide what type of case study is most useful. The cases may involve one individual, several individuals, a program, an event or an activity. It can be single or multiple, focused on a case or an issue. When selecting cases, an array of possibilities for sampling is possible. The researchers can select cases that show different perspectives of the same problem or event that is portrayed, or they can select ordinary, accessible or unusual cases.

- 3. Collect data. Yin (2014) recommends six types of information to collect during a case study: documents, archival records, interviews, direct observations, participant observations and physical artefacts.
- 4. Perform data analysis. The analysis can be either holistic of the whole case or embedded of a specific aspect of the case. Through the data collection, a detailed description will emerge. After this description, the researcher might focus on a few key issues of the case in order to understand the complexity. When the study is multiple, a common way is to first do a detailed analysis within each case before comparing them in a cross-case analysis.
- 5. Interpret the findings. In the last phase it is time to report the meaning of the case. This meaning can come from learnings from the case as a whole or about a specific aspect, depending on what approach the researcher has chosen. (Yin, 2014)

Creswell (2013) indicates some challenges in conducting case studies. The researcher has to choose a case, which might be broad or narrow in scope. Further, it must be decided which bounded system to study, and if an issue or the whole case should be studied. Sometimes, the beginning and the end of the case are fuzzy, and the researcher will need to set boundaries that surrounds the case. It must also be decided if a single case or multiple should be studied. By choosing multiple cases it might dilute the overall analysis providing less depth. The author describes how the motive for researchers to choose many cases is generalizability, which holds little meaning in most qualitative research when contexts differ. Another challenging part of case studies is to establish a rationale for purposeful sampling of information. (Creswell, 2013)

#### **Observations**

Observations play a central role in the universe of qualitative studies, Angrosino (2007) describes it as the act of noting a phenomenon through the observers five senses. The observer often uses different instruments in order to document the subject area. How the research observations should be conducted depends on the purpose and what questions that should be answered. Aspects to consider when observing might be physical setting, participants, activities, interactions, conversations and the observers own behaviours. To record the phenomena, the observer needs to use all of the senses. However, it is important to recall that one cannot write everything down, focus should be on the research questions even though the observation can start broadly. (Angrosino, 2007)

During the study, there are multiple ways that the observer can be involved. There are four observational techniques that might be utilized. They stem from the two forms of engagement – participating and observing. The techniques are complete participant, participant as observer, non-participant observer and complete observer. (Angrosino, 2007)

#### Complete participant

The researchers only mission is to partake in the activities that are under observation. This approach will make the researcher gain insider information regarding the participants opinions and feelings.

#### Participant as observer

The researcher takes part in the activities. The researcher record data along the way. However, the main focus should be to participate in the activities. This approach allows the research to gain insider views while documenting important data.

#### Non-participant observer

In this approach the researcher is watching the activities as an outsider. This way of observation lets the researcher to record data without any engagement in the activity.

#### Complete observer

The researcher is not visual by the participants. Just like in the previous technique, the researcher is allowed to document data without any involvement in the activity.

Creswell (2013) describes observations in a series of steps. The first objective is to decide what site to observe and gain the proper permits to conduct the study. At the site, identify who or what to observe as well as how long the observation will be. With the site set, decide what observation technique that should be used by the researcher. The next step is to design the protocol for how to take notes during the observation. Creswell (2013) describes the importance of including both descriptive as well as reflective notes. The notes might record the general experience, hunches and other insights. However, aspects as the physical setting, events and information about the informants could also be included (Bogdan & Knopp Biklen, 2019). For the first session, it is important to just observe, do not take too many notes and focus on what happens in the room. When the observation is finished, the first thing to do is to prepare the full notes. Describe the people observed and what happened. (Creswell, 2013)

A vital part in the observation study is to prepare the protocol. The protocol is meant to help the researcher during the observation, but also aid structure and organization of the notes. Creswell (2013) recommends a researcher to include a header describing the activity observed. Include two columns, one to the left named descriptive notes and one on the right named reflective notes. In the descriptive notes, the observer summarizes the activities in chronological order. The reflective notes are supposed to handle reflections of the activities and the process, the observer can also use this space to write summarizing conclusions. (Creswell, 2013)

#### Interviews

Interviewing is a data collection method frequently used in qualitative research. It can be viewed as a series of steps in a procedure. Many researchers have refined the required steps used to conduct qualitative interviews. Kvale & Brinkmann (2009) propose seven stages in a logical sequence reaching from thematising the inquiry, designing the study, interviewing, transcribing, analysing the data, verifying the validity, reliability and generalisability of the findings, and finally

to reporting the study. This approach to interviews treats many of the stages of research studies, from choice of topic to writing the study. Interviews can also be described as just a data collection method, isolated from the whole process. This is done by Creswell (2013) who provides steps for interviewing, focusing on the data collection phase:

- 1. Decide on the research questions to be answered by the interviews. They should be openended and focused on the phenomenon central to the study.
- 2. Identify the respondents who can best answer to the questions.
- 3. Decide what type of interview that is practical and will give the most information in order to answer the research questions. It can be telephone interviews, focus group interviews or one-on-one interviews, depending on the situation. If there is no direct access to individuals, a telephone interview can be a valid option. The downside is that the researcher loose informal communication. A focus group interview can be a valid option if there is time constraints, if the interesting information comes from interaction between people and if the respondents may hesitate to express themselves individually. In focus group interviews it is also important to encourage all participants to talk. In one-on-one interviews, the researcher has to make sure the location is suitable and needs respondents not hesitant to speak.
- 4. Use audio equipment to record interviews.
- 5. Design and use an interview protocol, with space for answers. The questions are often sub questions to the research questions, explained so that the respondents can understand. These could be seen as the core to the protocol with inviting questions before and a closing question in the end.
- **6.** Pilot test the interview questions in order to further improve them and to refine data collection plans. The pilot tests could be selected based on convenience and access.
- **7.** Set a place for conducting the interviews. This should ideally be a quiet place away from distractions.
- **8.** When arriving at the interview site, obtain consent from the respondents to participate in the study.
- 9. When interviewing, use good procedures. Stay to the questions, complete the interviews within the intended time frame, be respectful and polite. One more important thing to think about is to be a good listener rather than a frequent talker. Let the respondents answer the questions.

## **Process description**

The process consists of two main phases: a pre-study and a case study. These phases are displayed together with their containing parts in Figure 4 below. Firstly, the authors needed to gain a better understanding of the subject, hence carrying out a pre-study research. To gain insights about co-design in general and from Idean's perspective, interviews were carried out in conjunction with an investigation of co-design literature. Additionally, a pilot case was carried out in order to test the observation protocol before the actual case study. The case study consisted of three different cases, each one including both observations and interviews.

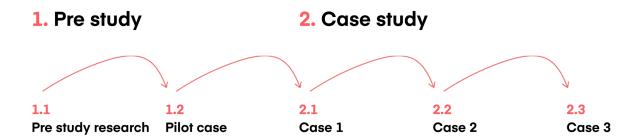


Figure 4: Schematic picture over the process.

## Pre study

This chapter describes the methods and results from the Pre-study. It is divided into two parts: Pre-study research and Pilot case. The pre-study research consisted of interviews with designers at Idean and the pilot case was conducted at a service design session hosted by Idean.

## Pre-study research

In addition to the collection of theory on co-design, the research consisted of interviews with designers employed at Idean. The purpose was to understand how the designers at Idean work with co-design and what they believe are important traits for a co-design facilitator.

#### Designer interviews

Five interviews were carried out with designers working at Idean Stockholm and Idean Malmö. The respondents were either service- or- ux-designers, with different experience levels of facilitating co-design sessions. The purpose of the interviews was to understand how the designers at Idean work with co-design, especially with facilitation of co-design sessions. Another, additional purpose, was to understand how the designers picture a good facilitator. What characteristics a facilitator should have, what strategies that can be used and how the facilitator should support participants in order to get the most out of the session. The interviews varied in length between 23 and 52 minutes and information about the interviews are presented in Table 1.

Table 1: Describes the respondents, their roles at Idean, interview length and experience.

Respondents	Role	Interview length	Experience
R1	UX Designer	39 min	1-5 years
R2	Service Designer	32 min	5-10 years
R3	Senior UX Designer	52 min	5-10 years
R4	Senior Service Designer	45 min	10+ years
R5	Service Designer	23 min	1-5 years

All respondents were asked the same eight questions (see Table 2). In the interviews, the word co-creation was used instead of co-design since it was a more familiar word for the designers at Idean. The interviews were performed by both authors via video call and everything was documented in audio recordings (see Appendix 1).

Table 2: The questions the designers at Idean were asked.

#### Question

- Q1 Can you tell us a little about yourself and your role at Idean?
- Q2 How would you define co-creation?
- Q3 Do you use co-creation in your job?
  - Why?
  - Why not?
- Q4 How does the process look like for you when planning and conducting co-creation?
- Q5 Do you get any training in facilitation by Idean?
- Q6 What do you think of being a facilitator?
- Q7 What do you think is important to think about when facilitating?
- Q8 Can you give us any example of when you have worked with co-creation and facilitation?

#### Results

All respondents expressed similarities in their definitions of co-creation when asked Q2. Everyone mentioned that it is about creating together with people concerned by the result. The respondents mentioned users, clients and stakeholders as people who could be a part of the process. There were also some differences in the answers. R1 and R4 mentioned that co-creation should take place throughout the entire design process, whereas the others did not mention anything about when it can take place. R4 also expressed that the users are the most important people in the co-creation process, since they are the ones primarily affected by the implemented results.

When asked if they use co-creation in Q3, all respondents said that Idean work with co-creation. According to R2, R3 and R4 co-creation should be used to understand the user and stakeholder needs and to make sure you are moving in the right direction. R1 and R5 both mentioned that co-creation is a shortcut in which you can test solutions before launching them. Additionally, R3 mentioned the outcomes of co-creation as an essential part and that the main motive for some companies hiring them for co-creation is to learn new workways. R5 also said co-creation is about creating ownership through listening to the participants and letting them express themselves.

In response to Q4, all respondents expressed that thorough preparations are important to all cocreation processes. The context, problem and market were things they mentioned as important to understand beforehand. All respondents also said that they enjoy facilitating in response to Q6.

To explain the purpose, goals and rules for the co-creation session in the beginning was something all respondents answered to Q7. Things like explaining why the participants are there and why

specific methods are used were things they mentioned as important. R5 and R4 both answered that to be a good facilitator is all about understanding the people in the room. Both R4 and R3 said a big part of being a facilitator is to be able to understand the energy in the room. In a long session, energy levels will vary and that is something you have to be aware of as a facilitator and also to make your participants aware of. R3 also said that a big part of being a facilitator is to make the participants trust you and the process. According to R2, a way to make the participants trust the process is to show previous results of successful co-creation processes. Another answer related to the facilitator role came from R5, who said the ending of the session is equally important as the beginning. The people in the room should know how the work will proceed.

The interviews gave some additional results, outside the scope of the questionnaire. The respondents mentioned how some clients are reluctant to include users into their co-creation processes. In those cases, they said it is crucial to still empathize with the user.

## Designer interviews summary

The takeaways from the interviews performed during the pre-study are:

- The respondents at Idean have a similar view of co-creation and use it in their work.
- Some of the respondents said users are essential to co-creation while some did not.
- To understand needs, secure the right direction, test solutions and to create long term outcomes were the motives for using co-creation mentioned in the interviews.
- All respondents said thorough preparations are essential to all co-creation processes.
- To explain the purpose in the beginning, understand and listen to the participants, understand and handle energy levels and to build trust are important traits for a facilitator according to the respondents.

# Pilot study

This section aims to describe the pilot study, through a description of the case, how the observations were carried out and what takeaways were made. The purpose was to evaluate whether the constructs actually were present in a real-world case, if observations was a suitable data collection method and to estimate the amount of data a session could generate.

# Pilot description

The pilot study was conducted at Idean's Malmö office during the event, Global Service Jam. It was a two-day event with 15 participants and one main facilitator. The aim of the event was for the participants to learn more about service design and service design methods. The event had a global theme, which was BLUE. It was up to the participants to interpret the theme, frame a problem and solve the problem by using service design methods. The participants worked in teams and were guided by Idean designers.

## Observation

During the event, the facilitator was observed in a collective brainstorm on how to interpret the theme, lasting approximately 30 minutes. The focus of the observation was on the facilitator's actions. Both authors observed and documented the observations on a premade template inspired by Creswell (2013), including one column for descriptive notes and one column for reflective notes. The notes were also categorised into three groups, one for each construct. This categorisation was made by using highlighting markers with different colours, where each construct was represented by a colour. The observation technique used was non-participant observer as both observers did not partake in the brainstorm but were visible in the room (Angrosino, 2007).

## Pilot study results

During the observation, a few actions were identified to empower the participants but also to eliminate power dynamics. They ranged from subtle things as nods and looking the person speaking in eyes, to more obvious actions like placing the participants in a circle. The actions and which constructs they connect to is listed chronologically in Table 3 below.

Table 3: The actions taken by the facilitator during the session in order to manage the constructs.

Actions by the facilitator	Constructs
Place the participants in a circle	Power dynamics
Facilitator starts off by giving his take	Empowerment
Facilitator summarizes the input verbally to make sure he understood it correctly	Empowerment
Facilitator writes down all ideas on the whiteboard	Empowerment Power dynamics
Nods and comments positively on all ideas	Empowerment
Facilitator comments: "Interesting interpretations"	Empowerment
Facilitator interacts less as more participants joins the conversation	Empowerment
Facilitator feeds ideas as the intensity of the conversation drops	Empowerment
Facilitator says "You should all agree on one theme"	Power dynamics

To better understand the table above, it is necessary to get a brief understanding on how the session played out. In the beginning, all participants hesitated to talk, and the facilitator started the conversation. As the session progressed, more people got involved in the conversation. However, approximately half of the participants did not speak at all. The participants ideas and

interpretations of the theme were diverse, but all were written down by the facilitator on a whiteboard.

# Pilot study summary

The takeaways from the pilot study are:

- The observation technique selected was successful.
- The amount of data was large even though the session only lasted for 30 minutes.
- There was no problem linking the actions of the facilitator to the constructs.
- Actions to manage the construct ownership could not clearly be identified during the session.
- Because of the complex nature of the constructs, it will be difficult to identify all actions that manages empowerment, ownership and power dynamics.

# Case study

In this chapter, the cases are presented. It includes three cases, all with different facilitators and participants. The cases differ in their scope and structure, from an all-day co-design session to a one day user test. Each case contains the sections; description, findings and summary. Two of the cases are sessions facilitated by Idean and one case is a session facilitated by a reference company.

# Case 1 - The redesign session

Case 1 was conducted at a telecom company, from here on called TelCo. The company website has recently been featured in an annual web ranking, were the site lost its previous position in the top three. TelCo wants to regain a podium spot and that is why they have acquired the services of Idean and Capgemini. The mission was to create a new backlog in their SCRUM structure as well as a proposal for the redesign.

As a first step in the redesign process, a session was held to frame the problem and to create an initial backlog. The people who attended the session were from the companies Idean, Capgemini and TelCo (see Table 4).

Table 4: A display of all the people involved in the case 1 session.

Names	Company	Position at company	Role in the session
D1	ldean	Head of agency	Project manager, passive role, supported the facilitator
F	ldean	Senior UX designer	Facilitator of the session
D2	ldean	UX designer	In charge of time keeping and support to the facilitator
IT	Capgemini	EPI Server Expert	Technological knowledge
P1	TelCo	Head of group online channels	Decision maker with a lot of knowledge about the website
P2	TelCo	Project coordinator	Knowledge about marketing
P3	TelCo	Web manager	Knowledge about the website, both editorial and development aspects

The session was conducted at the TelCo headquarters in Stockholm. It started at nine and ended at four, with a lunch break at noon. The session was held in a conference room with a large table, two whiteboards and one projector screen.

As a preparation before the session, Idean read through the web ranking report and picked out the evaluation criteria that could up the score. The session was divided into five focus areas: Investor relations, Careers, Governance, About us and Features and functionalities. Each focus area consisted of a number of topics. For instance, within the Careers focus area, there were eight topics. Each one of these topics contained a number of criteria that should be fulfilled in order to score high in the ranking. The topics and criteria which already had high scores were left out, the focus was mainly on the ones where TelCo scored low.

The structure of the session was repeated for each focus area and the process consisted of five steps:

## 1. Breaking down [Time: 20 min]

The facilitator started the first step by asking all the participants to gather around the whiteboard. Each criterion was read out loud by the facilitator and then pasted on the whiteboard by the participants, using poster putty. If any of the criteria had any similarities, they were clustered. All the criteria were read out loud and clustered on the whiteboard before moving on to the next step.

## 2. Organising [Time: 15 min]

After going through and grouping the criteria, epics for each cluster was created. The name of the epic was written down on an orange post-it and placed together with the cluster.

#### 3. Assigning [Time: 10 min]

When the epics were created, each of the participants were appointed a role. The three roles, Design, Editorial and Development represented what job that needed to be done. Each role got a marker pen, Design was red, Editorial was black, and Development was green. With all the roles and makers handed out, the participants were asked to put a dot with the marker on each criterion where their job would be needed. After the dots where placed, all the participants were asked to explain why they placed the dots as they did and, in that way, find out if any dots were misplaced or if any criterion were missing a dot. The result from this step was the mapping of what jobs were needed for each criterion to be completed.

## 4. Wrap up [Time: 5 min]

The last step of the process was a summary of the focus area. Questions like, "were any aspects overlooked in the process?" were asked and a group discussion regarding the outputs followed.

#### Paus [Time: 10 min]

The wrap up was followed by a short coffee break. A longer, one hour, lunch break followed the second focus area and, in the afternoon, a longer, 25 minutes sugar break, followed the fourth focus area.

## Case observations

The observations were conducted by one of the authors throughout the whole session, with a focus on the facilitator's actions and behaviour towards the participants. Everything was documented on a premade template, including one column for descriptive notes and one column for reflective notes (see Appendix 2). As in the pilot study, the observation technique used was non-participant observer (Angrosino, 2007). Further, the notes were categorized in the same way as in the pilot study using different coloured markers for each construct.

## Facilitator interview

Three days after the session, an interview was held with the main facilitator. The purpose of the interview was to understand how the facilitator was thinking and what planned strategies might have been used. The questions are displayed in Table 5 and recordings of the interview can be found in Appendix 1.

Table 5: The questions the facilitator was asked.

### Question

- Q1 How do you think the session went?
  - Why is that?
- Q2 Was it something in the session you are displeased with?
- Q3 Did you get the results you expected?
- Q4 What was the thought process behind the selection of the methods?
- Q5 How did you pick the people who participated?
- Q6 Do you feel that all the participants were part of the session?
  - If not, why do you think that happened?
  - Did you do anything to handle that?

# Case findings

This section presents the case findings, which consists of collected data connected to the literature. The strategies found are divided into two categories, planned and spontaneous. Strategies that were planned before the session, for instance the method setup are considered planned strategies. Strategies connected to the actions during the session, for instance how the facilitator treated the participants are considered spontaneous strategies. This categorization was based on occurring patterns while performing the data analysis.

## Planned strategies

The facilitator and designers had prepared for three days before the session. According to the interview with the facilitator, this time frame was too short, but they had to adapt to the circumstances. The facilitator described that they managed to do some research, picked a method that they had previous experience from as well as set an agenda for the day. Another reason why they chose the specific method was its simplicity and repetitive structure. The facilitator said in the interview that they wanted a method in which the participants could learn quickly since they only had one day for the session. The understanding of the methods and tools needed to achieve the goals is a part of the interactional component of empowerment (Zimmerman, 1995).

The facilitator started the session by explaining the agenda, method, purpose and limitations of the session. According to Hämäläinen & Rill (2018) this introductory explanation is essential in order to empower the participants. All people in the room also introduced themselves to each other. The facilitator and designers had prepared paper notes containing every criterion for the participants to place on the whiteboard and to easily move them around. The idea was to make it easy for anyone to do it. They also remodelled the room beforehand so that it would be natural to stand up during every focus area. In the interview, this was something the facilitator meant was important to activate the participants and to keep the energy levels high throughout the day.

After going through the introduction, the designers and participants started to work with the first focus area. The facilitator started off by demonstrating how to place and organise the notes before handing them over to the participants so that they could take over. The distribution of responsibility was a conscious strategy from the facilitator, explained in the interview. By first showing how to perform the actions before giving the participants the tools is a way to empower participants (Zimmerman, 1995). Another strategy the facilitator used to activate and empower the participants was to assign the participants a unique role. The participants were given one marker pen each to mark the different criteria with the competences needed in order to make the changes. Additionally, the participants got to motivate why they placed the markings as they did. It was clear when observing that all participants got more engaged during this part of the session, in every focus area. The process was the same for each focus area and the participants seemed to get more confident as the sessions proceeded, taking more responsibility. This strategy of giving the participants responsibility triggers all components of empowerment. The participants are trusted by the facilitator, given the means to interact and encouraged to express themselves while empathising with the people involved in the development. (Zimmerman, 1995)

Overall, the facilitator expressed satisfaction with the session during the interview. The method worked as planned, the participants understood the structure quickly and were able to perform all tasks. One negative thing with the method, mentioned in the interview, was that its repetitive structure made it somewhat boring towards the end. The facilitator said that if they knew the participants a little bit better and had more time for preparation, they could have incorporated

some ideation exercises to make it a bit more engaging and dynamic. Another thing that did not go as planned, was the creation of user stories. The goal was to create user stories for each epic, but the facilitator chose to leave it with just epics and for Idean to create the user stories retroactively. As a result, the IT-expert became redundant during the session. The facilitator said during the interview that they wanted to investigate the technical aspects but did not have the opportunity or time.

## Spontaneous strategies

In this case several strategies for guiding the participants through the session have been identified. Firstly, a cornerstone to successfully guiding the participants is to encourage them to partake, in other words to empower them. Hämäläinen & Rill (2018) describes a strategy to empower the participants as having a selfless mindset. The facilitator practised this strategy through looking the participant in the eyes when they were talking and repeatedly nodding in agreement. The selfless mindset makes the participants feel valued and empowered in the session (Hämäläinen & Rill, 2018).

A participant in the co-design process can be empowered through the three components of empowerment: intra-personal, interactional and behavioural (Zimmerman, 1995). Actions aimed towards the intra- personal component were observed when the facilitator helped the participants when they were stuck. The facilitator chose to either pitch new ideas or build upon ideas suggested by the participants. This strategy was used for the participants to regain the confidence to continue the work.

The role used by the facilitator in this case is called active collaborator. By being partly participant and partly facilitator, the facilitator strives to eradicate the power dynamics between herself and the participants (Kankainen et al, 2012). This way of directing the session allows the facilitator to take a step back and let the participants work independently and then step in when they are in need of help. In order to be able to carry out the active collaborator- strategy in a good way, a cofacilitator is essential. The facilitator talked about the importance of being two facilitators during the interview. Idean strive to always have a main facilitator and a co-facilitator who has the responsibility to keep the time, document the session and to fill in if the main facilitator misses something. The active collaborator strategy was identified multiple times during the observation. Actions aimed towards the third component of empowerment described by Zimmerman (1995), the behavioural component, were also observed during the session. The participants were encouraged to share their experiences of the focus areas. The facilitator made sure that the participants opinions and experiences were represented in the results by asking questions such as "Does this look right to you?" and "Is something missing?". These actions resulted in a constant confirmation that the participants views were represented in the output of each step.

The facilitator described, in the interview, that there were mainly two participants who were active during the session, which also was noted by the observer. Furthermore, one of the participants

had the most power and was used to be in charge. The participant was speaking the most and sometimes interrupted the others. The facilitator commented this fact in the interview as "It's always people who are more dominant than others and affects the other people's decisions." The facilitator was aware of the power dynamics, however, did not do anything to manage the differences. Another proof of the presence of power dynamics was when one of the participants said jokingly "Now it's our turn to take over when the bosses are not around". Even though it was a joke, it might confirm that the other participants felt less confident to voice their opinions. A reason for the passive attitude from the facilitator might be the fact that Idean only had two days to prepare the session. The facilitator said that the preparation work usually includes reading up on the participants. When doing so, it is easier to ask specific questions to a participant with a specific background. However, in this case the preparation did not include research regarding the participants.

## Case summary

Case one was carried out at a telecom company. The observation was conducted on a full day session at the client's headquarters. Three persons were present from Idean, one person from Capgemini and three from TelCo.

The session was observed, and the data was complemented through an interview with the main facilitator. During the session, the facilitator managed the psychological constructs. Firstly, the facilitator had several planned and spontaneous strategies to handle empowerment, which was the most visible psychological construct. The planned strategies identified, even though Idean had a short time to prepare, revolves around the chosen method. Identified actions were; remodelling of the room, a thorough introduction, teaching the participants the method, giving the participants responsibility through markers and roles and constantly giving feedback. As a support to the method, the facilitator carried out some spontaneous strategies as having selfless mindset and acting as an active collaborator. Secondly, power dynamics were present during the session. The participant with the most power was the most active and the facilitator did not try to even out the power dynamics.

# Case 2 - Concept testing

The second case was a project Idean did for a large delivery and logistics company, from here on called DelivCo. DelivCo had developed three concepts of new services and needed help to evaluate if possible users' needs correspond with them. DelivCo hired Idean to gather insights on the concepts in order for DelivCo to know whether or not to develop the concepts further. This was done through concept evaluation interviews.

The designers who conducted the interviews were; a Senior service designer and a UX and Service designer. They took turns interviewing and taking notes. The interviews were interceptive and conducted at Stockholm Central Station. People were stopped and invited to partake in the

evaluation. The interviews were carried out during a three-day period, where one concept was evaluated each day.

The interviews were divided into two parts. The first part was a screening part, similar for all three concepts. It contained demographic questions and questions regarding the user's current postal habits. The second part was specific for each concept with the purpose to understand if the concept solves a problem, what the respondent thinks about the concept and how they would use it. Furthermore, the interviewer asked how the concept could be improved. A digital prototype had been developed by DelivCo for each concept. The prototype was supposed to clarify the concept if verbal explanations proved to be insufficient.

## Case observations

The observations were performed solely during the first day of three and seven interviews were observed. Both authors observed, and focus was on the interviewers' actions and behaviour towards the participant. Documentation was carried out on a premade template, which includes one column for descriptive notes and one column for reflective notes (see Appendix 2). As in the first case, the observation technique used was non-participant observer (Angrosino, 2007). Further, the notes were categorized in the same way as in the pilot study and case one using different coloured markers for each construct. What differentiated this observation to the others was the setting. In this case, the interviewers talked to participants at Stockholm Central Station waiting hall and cafes.

## Facilitator interview

Two days after the observations, an interview was held via video chat with the project lead from Idean. The primary aim of the interview was to understand how the case was co-creative, from the project lead's point of view. Additional desired information was on how he thought the case went. Five questions were asked in the interview (see Table 6). Recordings of the interview can be found in Appendix 1.

Table 6: The questions the facilitator was asked.

#### Question

Q1 How do you think the work went?
- Why is that?

Q2 Was it something in the work you are displeased with?

Q3 Did you get the results you expected?

Q4 What was the thought process behind the selection of the methods?

Q5 How would you say that this method is co-creative?

## Case findings

This section presents the case findings, which consists of collected data connected to the literature. The strategies found are divided into two categories, planned and spontaneous. Strategies that were planned before the session, for instance the method setup are considered planned strategies. Strategies connected to the actions during the session, for instance how the facilitator treated the participants are considered spontaneous strategies. This categorization was based on occurring patterns while performing the data analysis.

## Planned strategies

In the interview, the project lead explained why the test-like intercept interviews were chosen as the method. The primary reason was time limitations set by DelivCo. To recruit people and to make time for one-on-one interviews would have taken too much time, even though it was described as the best option for gathering profound insight. The project lead also mentioned how a focus group was never an option since he thinks people have strong influence on each other and it therefore becomes artificial. Therefore, intercept interviews were the best possible option.

When trying to recruit, the designers approached people and told everyone the same things: Who they are, what they do and why they would like the person's participation. It worked in a majority of the cases. This display of confidence and their will to contribute might suggest that the participants experienced the intrapersonal component of empowerment (Zimmerman, 1995).

The Idean designers chose to explain the concept verbally, instead of letting the participant click through the digital prototype. It was a conscious decision made by the designers lead beforehand. Since the aim of the work was to test the concepts and not the product, the designers thought it would be more suitable to tell the participants instead of showing them a polished prototype. They believed letting the participant click through the prototype would test the interface rather than the concept. However, the interviewer explained most of the concept verbally, they had chosen a few screens from the prototype supposed to aid the explanation process. When showing the screens,

some participants clearly got more engaged than they were with just the verbal explanations. It seemed as if they had not fully understood the concept before they got to see the screens.

When asked about the interview's connection to co-creation, the project lead explained how it is about viewing the participants co-producers. He believed that asking the participants questions about how they would like to develop the service further, is a way to evoke these kinds of thoughts in the participants. This was something the designers did during the interviews. However, they did not provide any contextual information, tools or methods for expressing their thoughts in any other way except verbally. This suggests that the participants would have a hard time to experience the interactional component of empowerment (Zimmerman, 1995). However, by allowing the participants to voice their opinions from their own perspective empowers them through the behavioural component of empowerment. Since they help to solve a problem oriented in their own context.

## Spontaneous strategies

Hämäläinen & Rill (2018) describes one way as a facilitator to make the participants feel valued and empowered is to have a selfless mindset. The designers in this case left their previous prejudice and beliefs behind, listened to the participants and their opinions without questioning them. The selfless mindset was practised by sitting down on the same level as the participant, listening carefully to their opinions and nodding empathically. The selfless mindset leads to the interviewer gaining the trust of the participant, hence getting honest answers to the questions (Hämäläinen & Rill, 2018). This phenomenon was observed, and it was also mentioned in the interview with the project lead that the answers from the participants was regarded as honest.

The fact that the participants were confident shows that the intrapersonal component of empowerment was achieved (Zimmerman, 1995). Additional actions towards the intrapersonal components was observed when the interviewer handed over responsibility to the participant. The interviewer was observed to do this on several occasions. One example of this was when a participator asked: "How will this work?". Instead of explaining how it is supposed to work, the interviewer answered: "How would you like it to work?", which showed the participants that it is their opinion that matters.

Furthermore, there was a power relationship present between the Idean designers. The designer with more experience helped the one with less experience by filling in with further questions, not the other way around. This phenomenon occurred when the less experienced designer was hesitating and while the participants was not talking.

# Case summary

The second case was a project Idean did for a Swedish logistics company. Idean were hired to evaluate concepts. The observed activities were intercept interviews on Stockholm Central Station

with seven random people, taking place during a full day. Idean had two designers carry out this project, switching between interviewing and taking notes. The observations were complemented through an interview with the project lead.

During the observation, a number of empowering strategies were observed. The designers showed to have a selfless mindset throughout all interviews by showing equal interest and never interrupting the participant's answers. They also managed to recruit a majority of the people they approached, which suggests they managed to empower them. Additionally, the participants showed an increased level of engagement when given access to digital prototypes of the concept.

## Case 3- Reference case

The reference case was conducted at a strategic design agency, from now on called Refco. It was a two-hour long session with two facilitators and ten participants. The participants came from different state and municipal organisations, all displayed in Table 7. The project is a joint effort from the organisations where they are working towards a future healthcare in which they all take part. It is funded by the governmental innovation agency, Vinnova. The main goal of the session was to decide on how the work should proceed. Another aim was to ideate and discuss about the resources needed from the organisations and external actors in order for the project to succeed.

The session was held at Refco's office. It started at 2pm and ended at 4pm with no break. The room was a large meeting room with a TV-screen for presentations and a large whiteboard covering two of the walls.

Table 7: A display of all the people involved in the session.

Names	Company	Position at company	Roles
F1	Refco	Design strategist	Main facilitator
F2	Refco	Service designer	Co-facilitator
P1	Region 1	Chief physician, project lead "The future hospital"	
P2	Region 1	E- healthcare strategist	
P3	Municipality 2	Head of Social services	
P4	Municipality 2	Medically Responsible Rehab ("MAR")	
P5	Municipality 3	Medically Responsible Nurse ("MAS")	
P6	Region 1	Healthcare strategist with emphasis on E-healthcare	
P7	Municipality 2	Medically Responsible Nurse ("MAS")	
P8	Municipality 1	Project lead "Better health for the patient"	Project lead
P9	Municipality 1	Head of Unit-Home care	
P10	Municipality 4	Head of Social services	

The structure of the session was planned beforehand by the facilitators. It was packed with a lot of information and exercises for the participants to voice their opinions and expectations on the project. The session was divided into four major steps:

## 1. Framing [Time 45 min]

The work started off with the main facilitator conducting a visualisation exercise. The participants were asked to close their eyes as the facilitator read them a story building a scenario around themselves as a multi ill person. After the short exercise, the participants were asked to write down their reflections on post its individually. The post its were then placed on a premade A0-group canvas with "YOU" in the centre. The next step was to write down actors/processes with a direct influence of your condition. The actors/processes were written on post its individually then placed on the canvas collectively. After the post its were placed on the canvas, the participants wrote down the actors/processes with indirect influence on post its as in the prior step. The first canvas was now filled with post its and it was time to move on to the next canvas. This canvas had one difference from the first one, it originates from the project/process instead of "YOU".

## 2. Expectations and Fears [Time 10 min]

The next step was to individually fill out an "Expectations and Fears"- paper. The first thing to fill out was your expectations for this project and the second thing to fill out your fears. The next step was to flip the paper over and to fill in "Who needs to do what in order to make the expectation come true?" and "Who needs to do what in order to prevent the fears?".

## 3. The next step [Time 25 min]

The next step was to make a plan forward. The facilitators had prepared two alternative plans which they described and then let the participants decide upon. The participants had a discussion and one of the plans were chosen, collectively. The facilitators then spoke about the next step of the process and a discussion was held regarding what was needed to proceed.

## 4. What are my takeaways from today [Time 10 min]

The last step was for the participants to speak about their takeaways from the session.

## Case observations

The observation was conducted by both authors throughout the whole session with a focus on the facilitator's actions. Everything was documented on a premade template, including one column for descriptive notes and one column for reflective notes (see Appendix 2). As in the other cases, the observation technique used was non-participant observer and the notes were categorized in the same way using different coloured markers for each construct.

### Facilitator interview

A few weeks after the observations, an interview was held with one of the facilitators from RefCo. The purpose of the interview was to understand the facilitator's thoughts regarding the session and what intentional strategies had been used. Eight questions were asked in the interviews (see Table 8). Recordings of the interview can be found in Appendix 1.

Table 8: The questions the facilitator was asked.

#### Question

Q1 How do you think the session went? Q2 Was it something in the work you were displeased with? Did you get the results you expected? Q3 Q4 What was the thought process behind the selection of the methods? Q5 Did you feel like everyone was involved during the session? If not, what did you do? Q6 Did you perceive it like any participants were speaking more than others? Q7 What was the reason for your facilitator roles? Q8 How much did you want to be apart and affect the output?

## Case findings

This section presents the case findings, which consists of collected data connected to the literature. The strategies found are divided into two categories, planned and spontaneous. Strategies that were planned before the session, for instance the method setup are considered planned strategies. Strategies connected to the actions during the session, for instance how the facilitator treated the participants are considered spontaneous strategies. This categorization was based on occurring patterns while performing the data analysis.

## Planned strategies

In the interview, the facilitator said that the workshop consisted of three main methods the facilitators knew previously. It was described that RefCo usually use similar methods for their sessions, however they tweak the methods depending on the purpose.

Both facilitators greeted the participants by shaking their hands and introducing themselves. As the participants arrived they were split into two groups. The facilitators had prepared the groups and made sure people from the same organisations were separated. The session started with an introduction round where all people got to introduce themselves with name and job. F1 explained the agenda briefly before P8, who is the project leader, held an introduction to the project while the facilitators stood in the background. When P8 was finished, F1 explained the purpose of the session which is essential for participants to feel empowered (Hämäläinen & Rill, 2018). F1 then asked: "How many of you have been a part of a design process before?". There were three participants who raised their hands, all from the same organisation. F1 then gave an introduction to design.

During the first exercise, F1 asked the participants to close their eyes and imagine themselves in a future scenario where they are the users. The storytelling was graphical and aimed to make the participants aware of the situation they are designing for. To understand the context in which a solution should be implemented is a part of the behavioural component of empowerment (Zimmerman, 1995). When opening their eyes, the participants got an explanation to the next exercise. They were asked to first write down their thoughts on post-its individually before explaining them to each other in groups. No one seemed to have a problem understanding the method and everyone gave each other space to speak their mind. After finishing the first canvas, they got an introduction to the second one. The participants also got to stand up at the whiteboard instead of sitting down as they did completing the previous canvas.

With the expectations and fears mapped out, the next step for the participants was to decide in what direction the project would continue in the near future. The facilitators let the participants speak their mind on how they wanted to proceed and then ultimately choosing one of the directions. The facilitator mentioned in the interview that the aim of the session was to revive the project and to make the participants excited to continue the work ahead. By letting the participants decide on the way forward, the facilitators did create ownership in the form of self-investment (Baxter, Aurisicchio & Childs, 2015). While speaking about the jam, one of the participants asked: "who should be part of the jam?". F1 answered that: "...it is up to you; you are the core of the team". F1 handed over the responsibility to the participants, hence showing them that they are valuable to the process. This action triggers the intrapersonal component of empowerment. The action also allowed the participants to get an authorship of the process and, therefore, possibly feel ownership over it (Wang et al., 2006).

The last step of the process was for the participants to speak about their takeaways from the work carried out in the session. F1 said "... I will not facilitate for this step" and then let anyone of the participants to jump in and speak on their takeaways. However, no one of the participants wanted to begin. After a while the facilitator said "This might be a little bit scary..." and as an answer P1 said "Do you want me to start?". The fact that no one started speaking when they were asked to imply that the participants might not have been as empowered as they needed to be. P1 was one of three people mainly speaking, these three shared their reflections and held a discussion. The facilitator did not intervene to ask what the rest of the group felt about the exercises.

## Spontaneous strategies

In the reference case, some strategies for empowering the participants have been identified. Hämäläinen & Rill (2018) describes a way to empower the participants as adopting a selfless mindset. The Refco- facilitators carried out this strategy through looking the participant in the eyes when they were talking and repeatedly nod their heads in agreement. The facilitator also practised this strategy through encouraging the participants when they asked questions with responses like

"Very good question!". The selfless mindset makes the participants feel valued and empowered in the session (Hämäläinen & Rill, 2018).

Another way to empower the participants is by managing the three components of empowerment (Zimmerman, 1995). In the interview, F2 said that they did not want to disturb the participants when they were working. This strategy allowed the participants to work independently, however also lead to some confusion among participants. F2 also mentioned that they wanted to keep out of the participant's conversations as much as possible, in order for them to work more closely together. This action might lower or raise the confidence of a participant. It was observed that the freedom gave some of the participants confidence, but some became quiet and inactive.

This role, taken in by the facilitators in this case, has been described by Lee et al. (2018) as a neutral role. They did not actively collaborate with the participants and did not intervene when the participants diverged from the method. This resulted in some of the tasks not being completed. However, the facilitators were still guiding the participants through the session. An example of the facilitator actively guiding and empowering the participants was when F1 moved around some of the post its on the canvas showing the participants what to do. F1 then explained the next step, told the participants about the time frame and told them to "Pour out their ideas!".

Different types of power dynamics were present during the session. First off, the participants had different power. During the observations it was obvious that the participants who had high positions at their organisations were speaking the most and most keen on taking the stage. This is completely normal as Sanders and Stappers (2008) have stated, however the facilitators did not take any action on flattening out the power dynamics. F2 said in the interview that they managed to even out the power dynamics. She argued that the group was aware of the power structures and that the people with the most power hesitated to talk.

Lee et al. (2018) describes a different kind of power structure, between the facilitators and the participants. This power relationship was observed when the participants only talked to the facilitators as they were present. When the facilitators were present, the participants tended to talk to them rather than to continue the conversation in the group. F2 mentioned in the interview that they were aware of this and that it was a reason for their choice of facilitation role.

# Case summary

Case three was carried out at a design agency. It was a two-hour session with the mission to plan future cooperation between different municipal and state organisations in a joint project concerning healthcare. RefCo had two designers present and ten people from the different organisations were attending.

The session was observed, and the data was complemented through an interview with one of the facilitators. Management of the constructs was visible during the session, both as planned and spontaneous strategies. Planned strategies identified to handle empowerment were; a straightforward method, a clear explanation of the purpose and a vision exercise supposed to place them in the users' situation. The spontaneous strategies that were identified to handle empowerment were; a selfless mindset and neutral facilitator role. The power dynamics construct was present during this session, there were mainly three participants talking and nothing was done to manage this. It was also observed that the participants wanted to please the facilitator by talking more when they were around.

# **Discussion**

In this chapter, the results from the study are discussed. The psychological constructs are discussed under separate sections. Additionally, the chapter includes a wider discussion on codesign.

# **Empowerment**

A number of different actions and strategies for handling empowerment have been identified throughout all cases. The first strategy, present in both case one and case three, is the choice of a straightforward method. To learn the necessary method and tools, is mentioned by Zimmerman (1995) as a part of the interactional component of empowerment. In both cases one and three, the facilitators had previous experience of the chosen methods. They used their previous experience, in combination with a limited time frame, as motivation for their choice. Regardless if the methods were consciously chosen to empower participants, or because of previous experience and a limited timeframe, it is necessary to make the participants learn the needed methods and skills in order to empower them.

The methods seemed easy to understand in both case one and case three, at least in the sense that the participants could work independently. However, the participants did not complete all the exercises as intended in any of the two cases and none of the facilitators made any effort to steer them in the intended direction. This cautious behaviour from the facilitators also appeared in both cases when parallel discussions started to emerge. In these moments, the facilitators did not intervene, and no efforts were made to make the participants to regain focus. These actions, or lack thereof, leads to some questions. Could it be the outcomes and the positive atmosphere that is the main objective in the sessions? Or do the facilitators put faith in the participants' ability to solve the exercises on their own? The interviewed facilitator from case three put it as "The usefulness of co-creation is in the relations being built". The same facilitator also said that "The details are relatively unimportant if it works overall". These quotes indicate that the direct outputs from the sessions are not always the top priority. On this topic, Sutton & Hargadon (1996) describes how the design consultancy IDEO uses co-design as a means to impress clients. That the positive atmosphere of co-design has the potential to promote long lasting relationships between IDEO and their customers, and thereby create a secure stream of income. Idean and RefCo are both consultancies, just like IDEO, and one can assume they also value long lasting relationships with their customers.

Another way to look at this is to take the goal of the session into account. In case three, the goals were to kick-start the project, decide on a future path and to let the participants build relations. This could have influenced the facilitators' actions. If the goal would have focused on the actual output of the session, the facilitation might look different. On the other hand, there was more focus on the output in case one, but the participants were still allowed to deviate from the exercises. However, the facilitator roles had many other differences.

There are different approaches on how to interact with the participants during a co-design session. Lee et al (2018) describes the roles of the neutral facilitator and the active collaborator. The role of the neutral facilitator was adopted by the facilitators in case three and the facilitator in the first case was an active collaborator. The active collaborator in case one worked closer to the participants. Having an active role allowed the facilitator to initially show how the methods work and thereby manage the interactional component of empowerment. On another note, by giving the participants the freedom to complete the exercises on their own might also evoke confidence, hence the intrapersonal component of empowerment, as long as the participants know what to do (Zimmerman, 1995). Further, in case one where the facilitator had an active collaborator role, the participants moved through the exercises within the time frame. One participant expressed astonishment over the work they managed to complete by saying "It is always surprising how much work that is done when you (Idean) are here!". In case three, the facilitators were neutral, and the participants carried out their exercises but repeatedly finished before the intended time limit and were left with nothing to do. In these moments, the facilitators did not intervene or give them any additional things to do. The facilitator stated in the interview that "You do not want to disturb the groups (participants) too much". A reason to why they finished the exercises early might be the fact that seven out of ten participants had never been part of a design process before. In this case, the strategy of the active collaborator could have been more suiting in order to empower and encourage the less experienced participants.

The facilitator in case one describes that it is easier to extract information from the participants if you have the time to get to know them, almost becoming friends. Creating that close connection to the participants is a strategy to empower them by gaining their trust. If the facilitator manages to gain the trust of the participants, they are empowered (Hämäläinen & Rill, 2018). The facilitator also mentioned that Idean usually try to conduct research regarding the participants beforehand. However, they did not have the time to do this in this particular case. The research is usually made so the facilitator can ask questions regarding the participants different areas of expertise. This strategy allows the facilitator to empower the participants by making them feel valued in the process (Zimmerman, 1995; Hussain, 2010).

Another strategy for empowerment used by all facilitators throughout all cases is the selfless mindset, described by Hämäläinen & Rill (2018). None of the facilitators showed any need to display their own ability, but rather to make the participants comfortable in using their creativity. Listening while looking at the participants in the eyes, nodding and building upon the participant's ideas are just some of the small actions the facilitators used. Another interesting action which occurred in both case two and case three was when the facilitators redirected questions from the participants. Instead of answering, the facilitator asked the participants what their view was and thereby showed that their opinions are valuable to the process.

# Ownership

Throughout all cases, there were few observed signs of ownership. According to the literature, this is no surprise if you take the layout and timing of the session into account. All cases took place early in the design process before any ideas of products or services had been generated. In order to feel ownership, the participant's opinions and contributions have to be manifested in the results (Wang et al., 2006). In these three cases, the focus was on problem framing and research rather than ideation. Therefore, the absence of ownership was no surprise.

In theory, ownership and empowerment share many of the same components, or motives. The participants have to be provided with the necessary tools and have confidence in order to express their opinions and ideas. In these cases, there was no evidence of ownership, but of empowerment. This does not mean that the similarities from the theory are false, but neither does it prove they are true.

# Power dynamics

Power dynamics had a clear presence in case one and three, both facilitators said in the interviews that they were aware of it. The facilitator in case one said, "It is always people that are more dominant than others affecting their decisions". Even though the facilitators were aware of the power imbalances, few actions were observed aimed at flattening them out. Participants with a power advantage were observed to speak the most in both cases. The facilitator of the third case mentioned that the participants with power were aware of it and allowed others to speak before themselves. This was not quite what was observed. The most active participants were the ones described to have the most experience of design with the most power in the project. Even though these participants were aware of their power, they were the ones who answered all questions. On one occasion, one participant waited for others to answer but, after a long moment of silence, asked the facilitator if he should answer. This implies that if one participant's power is decreased, it does not necessarily mean that the power of another is increased.

The literature argues that co-design as a process flattens out the power dynamics by democratization. However, power dynamics were present in both case one and three. So, what is the reason for the contradicting display of power? Both facilitators mentioned in the interviews that power dynamics were present in the sessions and that is just the way it is. This notion was also confirmed in the observations where participants normally with power were speaking the most. Our belief is that co-design methods in themselves are supposed to function as a level playing field where everyone plays an equally important role. However, when humans enter the session, they bring power structures. This is why the facilitator needs to be aware of the power dynamics and actively take actions towards flattening them out. In both cases, the facilitators were aware of the power dynamics but did not take action. How might that be?

In an ideal co-design session, all the participants are there for a reason and should be chosen carefully (Sleeswijk et al, 2005). Perspectives will likely be missed if only a few participants contribute. Since all perspectives are needed in order to achieve the best possible output, neglected power dynamics will likely affect the session in a negative way. Therefore, if the facilitators are aware of the power dynamics but chose not to flatten them out, it might indicate that something else is more important than the output. Just as Sutton & Hargadon (1996) describes how IDEO uses co-design as a way to build long term relationships, this might always be the case for Idean and RefCo. To disempower a person with a lot of power in the project might affect the relationship between the consultancy and the client. Hence, making that decision might be a bad business move.

# Wider discussions on co-design

Sanders & Stappers (2008) define co-design as "...creativity of designers and people not trained in design working together in the design development process." All interviewees during the prestudy referred to co-design as a process where designers create together with people concerned with the result, which fits well into the definition. However, the layout of the cases varied and whether or not all of them can be called co-design justifies a discussion. In case one and three, there were multiple participants not trained in design working together guided by a designer. These sessions fall under the definition formulated by Sanders & Stappers (2008).

The layout, setting and execution of the method was very different in case two. The method was an interview where the designers asked questions regarding a concept. There was only one participant interviewed at a time and they were chosen randomly. Whether or not this is co-design is worth challenging. The project lead said in the interview that he thinks it is co-design since they viewed the participants as co-producers by asking questions about how they would prefer the concept. The participants only had their verbal ability to rely upon when trying to explain their ideas. It was not all participants who seemed empowered enough to voice their opinions. Our interpretation is that this could have been co-design if the participants would have been provided with the tools and means necessary to display their ideas.

# **Conclusions**

Several strategies have been identified for management of the psychological constructs. A majority of the findings concerns strategies for managing empowerment, hence making it the most present construct. Manifestations of ownership have barely been observed; however, ownership and empowerment share many of the same motives and components. Literature argues how ownership is evoked during ideation and none of the sessions in this study are concerned ideation sessions. Power dynamics on the other hand was present throughout the study and the facilitators mentioned that they were aware of the power dynamics. In contrast to the literature findings, the facilitators took no actions to flatten out the apparent power dynamics. This notion makes power dynamics an interesting factor in the session.

# **Empowerment**

### Selfless mindset

The facilitators abstained to display their own creative abilities. The focus was solely on the participants. Actions like looking the participants in their eyes, nodding and building upon the participants ideas were identified. All these small actions sum up to the strategy, selfless mindset.

## Straightforward method

The facilitators chose straightforward methods for the sessions. To give the participants the means and tools necessary to reach the desired goals is a clear strategy for empowerment. Additional observed actions to this strategy are clear explanations of the method and purpose.

### Different facilitation role

How a facilitator acts in the session is individual, however two facilitator roles have been identified. The active collaborator empowers the participants by switching between facilitating and collaborating, constantly being present to guide the participants. The neutral facilitator on the other hand gives more of the responsibility to the participants. The independence might encourage the participants but it might also lead to confusion.

#### Participant research

To be aware of the individual participant's skills was mentioned by one facilitator as a strategy to empower them. If the facilitator knows the strengths of the participants beforehand, targeted questions can be asked to engage them during the session. In the observed cases, the facilitators did not choose the participants and did not get the opportunity to understand their skills. Therefore, this strategy was not observed but mentioned in an interview.

# Ownership

## Ownership and empowerment have many similarities

A hypothesis, based on theory, is that ownership and empowerment share many strategies and actions. Actions to empower participants was observed. However, no manifestations of ownership were identified which do not prove nor discards the hypothesis.

# Power dynamics

## Sometimes it is better to do nothing

During two of the cases, the facilitators were aware of the unequal power structures. However, no actions or strategies towards flattening out the power were identified. This led to participants with a lot of power interrupting others and speaking the most. A reason to the left-out actions from the facilitators might be that the people with the most power is the purchaser of the design service. Disempowering this person might be counterproductive for the design consultancy as a whole as a happy client tends to come back for more business. Therefore, it seems to be a conscious choice from the facilitator to prioritise the client's satisfaction rather than striving towards an equal playing field.

# **Future studies**

There are several findings in this thesis that might be interesting to investigate further. Firstly, additional studies are needed to verify or discard the results. More sessions need to be investigated to find out both if ownership is present and how it is managed. Additional sessions are also needed in order to find out if other facilitators manage power differences and how.

Secondly, the identified gap between academia and consultancies could be interesting to investigate further. The findings suggest there is a priority on long lasting relationships over actual outputs, not mentioned in co-design literature. In order to understand this phenomenon further, additional studies are needed.

To fully grasp how facilitators act in co-design, the scope needs to be wider and not limited to looking only at design consultancies. In-house co-design sessions needs to be investigated to see if there are differences in perspectives.

# References

- Angrosino, M. (2007). Doing Ethnographic and Observational Research. Retrieved from https://books.google.se/books?id=XEDKGQencScC
- 2. Barcellini, F., Prost, L., & Cerf, M. (2015). Designers' and users' roles in participatory design: What is actually co-designed by participants? Applied Ergonomics, 50, 31–40. https://doi.org/10.1016/j.apergo.2015.02.005
- 3. Baxter, W. L., Aurisicchio, M., & Childs, P. R. N. (2015). A psychological ownership approach to designing object attachment. *Journal of Engineering Design*, 26(4–6), 140–156. https://doi.org/10.1080/09544828.2015.1030371
- Beggan, J. K. (1992). On the social nature of nonsocial perception: The mere ownership effect. Journal of Personality and Social Psychology, 62(2), 229–237. <a href="https://doi.org/10.1037/0022-3514.62.2.229">https://doi.org/10.1037/0022-3514.62.2.229</a>
- Body, J. (2008). Design facilitation as an emerging Design skill: A Practical Approach. Retrieved February 15, 2019, from ResearchGate website: <a href="https://www.researchgate.net/publication/265524170\_Design\_facilitation\_as\_an\_emerging\_Design\_skill\_A\_Practical\_Approach">https://www.researchgate.net/publication/265524170\_Design\_facilitation\_as\_an\_emerging\_Design\_skill\_A\_Practical\_Approach</a>
- 6. Bradwell, P., & Marr, S. (2008). Making the most of collaboration: an international survey of public service co-design. London, Demos/ Price Waterhouse Coopers. https://doi.org/10.1081/DDC-120025866
- **7.** Brandt, E. (2006). Designing Exploratory Design Games: A Framework for Participation in Participatory Design? 10.
- 8. Brown, T., & Katz, B. (2011). Change by Design. Journal of Product Innovation Management, 28(3), 381–383. <a href="https://doi.org/10.1111/j.1540-5885.2011.00806.x">https://doi.org/10.1111/j.1540-5885.2011.00806.x</a>
- 9. Capgemini. (2019). Backelite blir Idean Capgemini Sweden. Retrieved from <a href="https://www.capgemini.com/se-en/news/backelite-blir-idean/">https://www.capgemini.com/se-en/news/backelite-blir-idean/</a>
- **10.** Creswell, J. W. (2013). Qualitative Inquiry and Research Design: Choosing Among Five Approaches. Retrieved from <a href="https://books.google.se/books?id=Ykruxor10cYC">https://books.google.se/books?id=Ykruxor10cYC</a>
- **11.** Donnerly, H., & Evenson, S. (n.d.). Design as Learning—or "Knowledge Creation"—the SECI Model. Retrieved February 14, 2019, from <a href="http://www.dubberly.com/articles/design-as-learning.html">http://www.dubberly.com/articles/design-as-learning.html</a>
- **12.** Ehn, P. (1992). Scandinavian design: on participation and skill, in Usability: turning technologies into tools. Oxford University Press, 96–132.
- **13.** Ehn, P., & Kyng, M. (1987). The Collective Resource Approach to Systems Design. In G. Bjerknes, P. Ehn, & M. Kyng (Eds.), Computers and Democracy a Scandinavian Challenge (pp. 17–58). Gower Publishing.
- 14. Ehn, P., & Kyng, M. (1992). Cardboard Computers: Mocking-it-up or Hands-on the Future. In J. Greenbaum & M. Kyng (Eds.), Design at work (pp. 169–196). Retrieved from <a href="http://dl.acm.org/citation.cfm?id=125470.125488">http://dl.acm.org/citation.cfm?id=125470.125488</a>
- **15.** Gov-Design. (2019). Retrieved March 11, 2019, from #GOVDESIGN website: <a href="http://gov-design.com/">http://gov-design.com/</a>

- **16.** Grønbæk, K. (1991). PROTOTYPING AND ACTIVE USER INVOLVEMENT IN SYSTEM DEVELOPMENT: TOWARDS A COOPERATIVE PROTOTYPING APPROACH. 69.
- 17. Hämäläinen, M., & Rill, B. (2018). The art of co-creation. Palgrave Macmillan.
- **18.** Holmlid, S. (2009). Participative, co-operative, emancipatory: From participatory design to service design. 14.
- 19. Hussain, S. (2010). Empowering marginalised children in developing countries through participatory design processes. CoDesign, 6(2), 99–117. https://doi.org/10.1080/15710882.2010.499467
- **20.** Idean. (2019). Services | Idean. Retrieved March 28, 2019, from Design-led transformation starts here. website: <a href="https://www.idean.com/services">https://www.idean.com/services</a>
- 21. Janhagen, V. (2019). Long live design thinking. Idean.
- 22. Kankainen, A., Vaajakallio, K., Kantola, V., & Mattelmäki, T. (2012). Storytelling Group a codesign method for service design. Behaviour & Information Technology, 31(3), 221–230. https://doi.org/10.1080/0144929X.2011.563794
- 23. Kensing, F., & Blomberg, J. (1998). Participatory Design: Issues and Concerns. Computer Supported Cooperative Work (CSCW), 7(3–4), 167–185. <a href="https://doi.org/10.1023/A:1008689307411">https://doi.org/10.1023/A:1008689307411</a>
- 24. Kristensson, P., & Magnusson, P. R. (2010). Tuning Users' Innovativeness During Ideation. Creativity and Innovation Management, 19(2), 147–159. <a href="https://doi.org/10.1111/j.1467-8691.2010.00552.x">https://doi.org/10.1111/j.1467-8691.2010.00552.x</a>
- **25.** Kvale, S., & Brinkmann, S. (2009). InterViews: Learning the Craft of Qualitative Research Interviewing. Retrieved from https://books.google.se/books?id=bZGvwsP1BRwC
- 26. Lawson, B., & Dorst, K. (2008). Acquiring Design Expertise. 19.
- 27. Lee, J. J., Jaatinen, M., Salmi, A., Mattelmäki, T., Smeds, R., & Holopainen, M. (2018). Design choices framework for co-creation projects. International Journal of Design. https://doi.org/10.3233/978-1-60750-031-5-2264
- 28. Lee, Y. (2008). Design participation tactics: the challenges and new roles for designers in the co-design process. CoDesign, 4(1), 31–50. <a href="https://doi.org/10.1080/15710880701875613">https://doi.org/10.1080/15710880701875613</a>
- 29. McCracken, G. (1986). Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods. Journal of Consumer Research, 13(1), 71–84. Retrieved from <a href="https://www.jstor.org/stable/2489287">https://www.jstor.org/stable/2489287</a>
- Meinel, C., & Leifer, L. (2012). Design Thinking Research. In H. Plattner, C. Meinel, & L. Leifer (Eds.), Design Thinking Research: Studying Co-Creation in Practice (pp. 1–11). https://doi.org/10.1007/978-3-642-21643-5\_1
- **31.** Mitchell, V., Ross, T., May, A., Sims, R., & Parker, C. (2016). Empirical investigation of the impact of using co-design methods when generating proposals for sustainable travel solutions. CoDesign, 12(4), 205–220. <a href="https://doi.org/10.1080/15710882.2015.1091894">https://doi.org/10.1080/15710882.2015.1091894</a>
- **32.** Norton, M. I., Mochon, D., & Ariely, D. (2012). The IKEA effect: When labor leads to love. Journal of Consumer Psychology, 22(3), 453–460. <a href="https://doi.org/10.1016/j.jcps.2011.08.002">https://doi.org/10.1016/j.jcps.2011.08.002</a>

- 33. Pierce, J. L., Kostova, T., & Dirks, K. T. (2001). Toward a Theory of Psychological Ownership in Organizations. Academy of Management Review, 26(2), 298–310. https://doi.org/10.5465/amr.2001.4378028
- **34.** Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. Journal of Interactive Marketing. <a href="https://doi.org/10.1002/dir.20015">https://doi.org/10.1002/dir.20015</a>
- **35.** Rijn, H. van, & Stappers, P. (2008). Expressions of Ownership: Motivating users in a co-design process. PDC '08 Proceedings of the Tenth Anniversary Conference on Participatory Design. <a href="https://doi.org/10.1152/japplphysiol.00505.2010">https://doi.org/10.1152/japplphysiol.00505.2010</a>
- 36. Sampsa, H., & Lehenkari, J. (2002). Contextualizing Power in a Collaborative Design.
- **37.** Sanders, E. B.-N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. CoDesign, 4(1), 5–18. <a href="https://doi.org/10.1080/15710880701875068">https://doi.org/10.1080/15710880701875068</a>
- **38.** Shu, S. B., & Peck, J. (2011). Psychological ownership and affective reaction: Emotional attachment process variables and the endowment effect. Journal of Consumer Psychology, 21(4), 439–452. <a href="https://doi.org/10.1016/j.jcps.2011.01.002">https://doi.org/10.1016/j.jcps.2011.01.002</a>
- **39.** Sleeswijk, F. V., Stappers, P. J., van der Lugt, R., & Sanders, E. B.-N. (2005). Contextmapping: experiences from practice. CoDesign, 1(2), 119–149. <a href="https://doi.org/10.1080/15710880500135987">https://doi.org/10.1080/15710880500135987</a>
- **40.** Steen, M., Manschot, M., & Koning, N. D. (2011). Benefits of Co-design in Service Design Projects. 8.
- 41. Sutton, R. I., & Hargadon, A. (1996). Brainstorming Groups in Context: Effectiveness in a Product Design Firm. Administrative Science Quarterly, 41(4), 685. <a href="https://doi.org/10.2307/2393872">https://doi.org/10.2307/2393872</a>
- 42. Wada, T., & Napier, P. (2015). Design Facilitation: Training the designer of today. Cumulus: Virtuous Circle. Retrieved from <a href="https://www.academia.edu/15681348/Design\_Facilitation\_Training\_the\_designer\_of\_today">https://www.academia.edu/15681348/Design\_Facilitation\_Training\_the\_designer\_of\_today</a>
- 43. Wang, Q., Battocchi, A., Graziola, I., Pianesi, F., Tomasini, D., Zancanaro, M., & Nass, C. (2006). The role of psychological ownership and ownership markers in collaborative working environment. Proceedings of the 8th International Conference on Multimodal Interfaces ICMI 06. <a href="https://doi.org/10.1145/1180995.1181041">https://doi.org/10.1145/1180995.1181041</a>
- 44. Yin, R. K. (2014). Case study research: design and methods (Fifth edition). Los Angeles: SAGE.
- **45.** Zimmerman, M. (1995). Psychological Empowerment: Issues and Illustrations (Vol. 23). https://doi.org/10.1007/BF02506983

# **Appendix 1 - Interviews**

# Designer interviews

Respondents	Role	Interview length	Link to mp3- file
R1	UX Designer	39 min	
R2	Service Designer	32 min	
R3	Senior UX Designer	52 min	
R4	Senior Service Designer	45 min	
R5	Service Designer	23 min	

# Facilitator interviews

Respondents	Role	Interview length	Link to mp3- file
R6	Facilitator Case 1	24 min	
R7	Project lead Case 2	26 min	
R8	Facilitator Case 3	20 min	

# **Appendix 2 - Observation protocols**

# Case 1 - The redesign workshop

Names	Company	Position at company	Role in the workshop
D1	Idean	Head of agency	Project manager, passive role, supported the facilitator
F	ldean	Senior UX designer	Facilitator of the workshop
D2	ldean	UX designer	In charge of time keeping and support to the facilitator
IT	Capgemini	EPI Server Expert	Technological knowledge
P1	Company one	Head of group online channels	Decision maker with a lot of knowledge about the website
P2	Company one	Project coordinator	Knowledge about marketing
P3	Company one	Web manager	Knowledge about the website, both editorial and development aspects

Color coding		
Empowerment	🔲 - Ownership	Power dynamics

# Descriptive notes

# The designers remodelled the room to create more space at the white board.

# Reflective notes

Make space in front of the white board in order for all the participants to stand up, hence allowing them to be active.

D1 greats everyone and starts to go through the schedule for the day.

Shows the participants a picture of the check in tag, it was exactly three years ago since D1 helped the company to launch its existing website.

D1 describe the goal of the workshop.

D1 invites everyone to introduce themselves. Everyone introduce themselves, what their names are and their relevance to the workshop.

F goes through the purpose of the workshop and what exercises will be carried out.

F informs that today's workshop not will be about ideation. F shows the participants that a parking list have been created on the white board for interesting ideas and takeaways.

### The first focus area: Investor relations

F shows the time frame for each of the steps for this focus area.

F invites all participants and designers to stand up at the white board.

Everyone stands up and moves to the white board.

P1 gives background to the focus area while the designers listens closely, looking P1 in the eyes and nodding.

F reads through the first of the criteria out loud and places it on the white board for clustering.

Show the long lasting relationship and show to the participants that Idean and Company one have a prior connection.

An aware participant is an empowered participant. They now know why they are there which evokes empowerment.

Inviting every person to speak on the same terms. The fact that every person knows who each other are is a cornerstone to be able to communicate throughout the workshop.

A participant who is aware of the purpose and what will happen is more likely to feel empowered.

The creation of a physical space to store the ideas allows participants to store ideas, hence not disregard the ideas.

An aware participant is more likely to be empowered.

Makes the participants active and close to the whiteboard in order for them to partake in the physical work.

Giving the participants room to speak and give their take. The designers showing that they actually listens to the participant.

P1 interrupts P3 in the middle of a sentence.

The participants started to speak about solutions, F interrupts and tells the participants to write down the idea on a post-it and place it in the parking list.

P2 have not said anything during the workshop so far.

The participants don't know what to do. Both F and D2 guides back to do what they are supposed to.

P2 and P3 goes away to rebook the room of the workshop. P1 continues to work with F.

F asks if anything is missing, P3 answers. F repeats what P3 said and writes it down on a post it.

P2 is still on the computer fixing the booking of the room.

## Breaking down finished - Organising starts

F asks all participants to stand by the whiteboard again.

F goes through the purpose of the next step and what to do.

F: "Do you follow?" Participants: "mmm!"



Mostly P1 that speaks for Company one, she is the boss and used to lead the group.

Should the facilitator interviene?

Reminds the participants of the purpose and the rules of the workshop can make them more confident moving forward

Do P2 need to be asked to partake by the facilitator?

The facilitators are alert and helps the participants to feel secure in the process once more

F do not make a recap of what is done while P2 and P3 were gone. Are they not as important to the session as P1?

Allowing the participants to contribute with their own knowledge.

Is she doing something else? Is she really empowered?

Now the participants know what to do.

F makes sure that all the participants understand what to do.

Might this separation between designers and participants be disempowering?

Clear separation between Idean designers and Participants.

P1 is once more taking the stage.

Mostly P1 talking. P2 stands a little bit behind being unengaged, she still haven't talked.

The participants starts to drift off and F reminds the participants about the time.

The participants are hesitating so F steps in and moves some stuff around on the board.
F asks if "Does this feel right?"
P1 responds: "Yes!"

F tells participants to move closer to take a look. F moves some more notes around and asks P3 if it looks alright.

The timer rings. A little bit of confusion from the facilitators.

# Organising finished - Assigning starts

F explains what to do this next step. Only talking to P1 and P3.

P1, P2 and P3 are assigned a role and are handed a marker pen from F.

Participants are engaged, placing dots.

The participants feel done with dotting, becomes a little bit confused. F jumps in and guides them. Participants start discussion and places some more dots.

All the participants are told to one by one motivate why they placed the dots.

# Organising finished - Wrap Up starts

Always P1 that do the talking, should the facilitator ask some of the other participants to answer?

F asks someone else than P1. Could make P3 more empowered than before.

Does this affect the trust from participants?

Now P1 and P3 know what to do. However, P2 was left out.

Everyone becomes active when they have their own responsibility. And the pen manifests their role. Ambiguous material creates ownership?

Participants feel encouraged to partake in the exercise and they partake actively.

When participants don't know what to do are F there to help them.

Everyone gets to speak their mind.

F describes some stuff that have been overlooked but says that is is fine. D1 and D2 fills in.

#### 10 minute break

#### The second focus area: Careers

Everyone gathers around the white board.

F goes through the next focus area, tells the participants that the process is the same as before.

F starts reading criterias and gives the piece of paper to the participants for clustering.

P2 is now active and partaking in the work.

F keeps on reading criterias out loud, reads primarily to P1.

Participants discuss solutions, F is passive.

# Breaking down finished - Organising starts

F moves in the epics written in the previous Focus area and tells the participants to place the groups under the epic or to create new ones if needed.

Participants are stuck, F suggests a user story. P1 suggests a rephrase. F responds "Really good!"

F encourages the participants to "tidy up" on the white board to make the groups more clear.

Participants stuck, F is there to help "Do we need to create a new epic or do this user story fit in any of the existing ones?"

F listens to the input provided by participants and build upon their idea.

The participants know what to do

Giving the piece of paper to the participant encourages them to be active.

Does she feel more empowered or is this focus area more in line with her knowledge?

Diempowers P2 and P3?

Strengthens power dynamics rather then taking them away

Letting them do the work can make them more empowered

F always tells the participants to do the work. When they move forward and start working, F takes a step back.

F helps the participants to go forward, lets them build of F's suggestion and encourages them when they do.

F lets the participants to do the work.

F constantly checks if the participants are stuck and leads them forward.

Original idea from participant

Mostly P1 talking now, P2 and P3 are not invited to join the conversation.

# Should F intervene?

## Organising finished - Assigning starts

Participants are assigned the same roles as before and are handed markers.

F is always standing close to the whiteboard.

All participants become active when they get a roll and a marker.

Always referencing to criteria, user stories or epic when talking by pointing. This position also allows F to quickly write down ideas on post its and place them on the board.

## Organising finished - Wrap Up starts

Barely no wrap up, everyone is hungry.

#### Lunch

Hamburger and french fries for lunch.

Is this a good choice of lunch?

# The third focus area: Governance

P1 was not in the room. P3 jokes just before the session starts: "Now it's our turn to take over when the bosses are gone."

F starts to read criteria out loud like the previous turns. Hands the pieces of paper to the participants.

Participants cluster criterias, it goes really smooth now when the participants know what to do.

#### Breaking down finished - Organising starts

F moves in the epics to the working area on the white board. F talks and points to the whiteboard while talking.

Participants move the criteria around under each epic, like before. F restructures some of the groups to make the overview clear.

# Organising finished - Assigning starts

Even though it's an obvious joke, does it stem from the fact that power dynamics are present?

They know what to do, and don't hesitate to do it.

Participants are assigned roles and are given makers.

Knows what to do, just like previous rounds are all participants now active when assigned a role and given a marker.

No summary of how the participants were thinking.

Not empowering or creating ownership

# Organising finished - Wrap Up starts

No wrap up, just cleans the white board and moves to the next focus area.

Stressed or does it feel unnecessary?

#### The fourth focus area: About us

F just moves directly to reading the criteria, the participants clusters like before.

P1 is the most active participant. P2 is back to being passive.

Participants discussing ideas, F takes notes on post its and places them in the clusters.

The tempo is slowing down,  $\frac{2}{3}$  participants sit down on chairs by the white board. Slower discussions and some yawns.

F tells all the participants stand up.

The boss is used to lead and talks the most.

Writing down all ideas, not questioning any ideas.

Might not have been an optimal lunch. Should F call a break?

Handling the slow tempo.

## Breaking down finished - Organising starts

Participants are not content with the names of the epics. Switches names without a doubt.

P1 decides the new names. Neither P2 or P3 was asked.

# Organising finished - Assigning starts

Participants get roles and markers

# Easy to kill your darlings, little ownership of their creation

P1 is usually the decision maker, should the facilitator ask what all participants think?

The participants knows what to do and get active, starts placing dots.

# Assigning finished - Wrap Up starts

No wrap up, just cleans the white board and moves

to the next focus area.

# 20 minutes sugar break

Good vibes during the break. All participants and designers get candy and cinnamon buns.

#### The fifth focus area: Features and functionalities

F reads criteria and hands to participants. Everyone is excited and energy levels are back up after the break.

The participants knows what to do by now and completes the exercise without much guidance.

No control by F. They have been fast, so might be

because there is spare time.

## Breaking down finished - Organising starts

Epics are moved into active area. Participants start to move around groups. Several parallel conversations, it's messy.

This time is most of the grouping in the epics made by IT and the designers. P1, P2 and P3 sits by the table and have a parallel conversation.

Organising finished - Assigning starts

Participants get roles and markers

The participants knows what to do and get active, starts placing dots.

The participants are not asked to join, not empowering.

# Assigning finished - Wrap Up starts

No wrap up, just cleans the white board and moves to the next focus area.

The sixth focus area: General UX

F goes through general UX-findings on the company website not mentioned in the report. The participants discuss some of the findings.

## Wrap up

F: "How do you feel after today's work?"

Letting the participants to speak their mind

F tells how the work will proceed and what expectations there are from Idean towards company one.

F recaps the aim of the day and what they managed to do.

Knows what will happen and that what they have created will make a difference

# Case 2- Concept Evaluation Case

Participant 3

# Color coding - Ownership - Empowerment - Power dynamics Reflective notes **Descriptive notes** Participant 1 Clear description of what they are about to do The participant seems to understand The two facilitators sits down as well as the Calming. No obvious power dynamics participant Participant seems to have a hard time Explains that it is only about DelivCo, the participant seem to have negative attitude towards DelivCo. understanding what the concept is about "What would your dream service look like?" The participant regain energy and start to talk about ideas right away. F nods and agrees The participant keep on talking intensely Empowered participant P: "How will this work?" Empower the participant by giving away responsibility F: "How would you like it to work?" F: "Do you have any last thoughts?" Lets the participant end the session. The participant keep on talking. Participant 2 F talks about how she also visits Lund, where P Establishes a connection and shows herself as a person, lives, and how much she likes it. not just a professional. Makes sure P understands she is listened to Nods and smiles approvingly

	Participant are very secure and makes jokes, lightening the mood
S interrupts F and asks a question. F agrees and smiles, "Very good question!"	One of the facilitators are more dominant and interrupts the other while it is not the other way around.
F asks what would be important for you in a service like this	P is confused and quiet
P: "If I were to quit Autogiro, can I do it here?" S: "Would you like to be able to?"	S don't answer the question but rather ask another question. Keeps the conversation going. Happens several times during the interview
S continues to explain the concept.	Is it confusing that S takes over?
P: "How about newspapers?"	It's apparent that P feels safe
P: "I don't understand how this works…"	No reaction from F or S
P: "Was I clear enough?"	P is still confident
P starts to talk about DelivCo's reputation, off topic	F let P talk, do not interrupt
F and S switches back and forth asking questions	Does not seem to confuse P
P: "Why did you choose me?" S: "Because you looked nice!"	
P: "Do I look like a victim?!"	
Participant 4	
F listens carefully while looking P in the eyes	Makes it clear what P says is noted
F lose track for a bit which confuses P, but S saves the situation and asks the question	Helping each other out to not lose P. Maybe the switch of interviewer can be confusing
F and S laughs as P jokes	Encouraging in some way

S starts to take command and is now the one asking questions, but F soon takes over again.

Unclear who is facilitating, but P seems to be equally engaged anyway and talks a lot

F asks "What would you like to be different with the service and how" and P has a lot of input P seems really empowered and does not hesitate at all before talking freely about his ideas

#### Participant 5

P always get to speak her mind.

F never interrupts

P speaks to both F and S

F: "I agree"

Makes P confident

#### Participant 6

Describes the concept to P multiple times in order for him to understand.

Might be disempowering if someone has to explain something multiple times for you

Explains the purpose clearly

Does this for every participants. Part of empowerment

Does not make it clear who facilitates/interviews and who takes notes. This was common for all tests/interviews

Seemed like they had not decided who talks

Hands P the Ipad

Gets more engaged when he sees the concept

# Participant 7

P don't understand the concept

F don't explain the concept further

F: "I agree!"

Gives P confidence

S presents the iPad with the prototype. P stands up and interacts with the iPad.

P immediately becomes active and engaged when the iPad is presented

# Case 3 - The redesign workshop

Names	Company	Position at company	Role in the workshop
F1	Refco	Design strategist	Main facilitator
F2	Refco	Service designer	Co-facilitator
P1	Region 1	Chief physician, project lead "Framtidens US"	Expert health care
P2	Region 1	E- healthcare strategist	
P3	Municipality 2	Head of Social services	Representative from LGVO
P4	Municipality 2	Medically Responsible Rehab ("MAR")	
P5	Municipality 3	Medically Responsible Nurse ("MAS")	
P6	Region 1	Healthcare strategist with emphasis E- healthcare	Technical background?
P7	Municipality 2	Medically Responsible Nurse ("MAS")	
P8	Municipality 1	Project lead "Bättre hälsa med patienten"	Responsible for the whole project
P9	Municipality 1	Home care personnel	
P10	Municipality 4	Head of Social services	Representative from LGVO

Color coding  - Empowerment	🔲 - Ownership	Power dynamics
Descriptive note	S	Reflective notes
F1 shakes everybody's har	nds and introduce herself	They understand who she is right away and she understands who is who
Places P in groups as they	arrive.	F1 mixes the municipal representatives from the same municipality in different groups. F wants to create diversity.
F1 starts the session		Starts the session without one of the participants who is in the hallway
Introduction round, with na they represent	nme and what municipality	Makes sure everybody knows who is who and what roles they have
F1 briefly goes through the computer a lot.	e agenda. F1 looks at the	Insecure?
"How many of you have he	eard about this project?"	
"How many have been par before?"	t of a design process	Did not say anything to comfort the people new to it, might be disempowering? Four out of ten have been part of a design process. It was clear one organisation had the most experience
F1 explains how a design p	orocess might look.	Focuses a lot on the human and ownership over the process. Does she want to evoke ownership with the participants?
Wraps up talk about the de		Keeps the participants in the loop, encourages them to speak. However, no one asks a question.

Project leader introduces the project

F1 takes over again.

Everyone sits down and it's very dark in the room.

This intro is very long and it's easy to lose focus

People gets tired.

F1 points out one of the participants and highlights what his occupation is and his knowledge on the area.

Does this empower everyone or just that person? Does it strengthen the power dynamics?

## Vision trip exercise

Is it good to place a meditation exercise after a long intro in a dark room. Participants might get sleepy. Good exercise to create empathy with the user

F1 asks all the participants to close their eyes.

Participants do as they are told. There's no explanation of the purpose but it seems to work just fine.

F1 reads the story

- Puts them in a future scenario where they are sick and in need of help

Reads passionately and it is clear F1 have done this before.

F1 tells participants to individually describe how they visioned themselves as multi ill in the future on post its

Encourage everyone to speak their mind when doing individual exercises.

F2 have not yet taken any active part in the session and just stands in the background.

Are they sure what her purpose is?

Participants writes post its in silence

#### Canvas 1 - YOU in the centre

Good exercise, aimed to create empathy with the users

F1 describes the exercise

Uses difficult language which might be hard to understand if you are a non designer. No information about the time frame of the exercise. F1 interrupts the exercise abruptly.

Participants are told to share their reflections within the groups

Everyone gets to speak and understand each others perspectives

P1 only talks to P2 and the facilitators does not intervene or maybe doesn't even see it.

They know each other from before. Insecurity or power?

**G1:** P6 "Should I place the post it here?"

P6 did not understand the exercise.

Facilitators switches between the tables a lot

Do the participants feel like they are listening?

**G1:** Participant places the post it incorrectly, F1 F1 guides the participants when they don't know jumps in "Place the post it over there please." what to do Facilitators switches tables. F2 switches back, one table without facilitator for a while. G2: F1 listens to one of the participants talking and Feels like a disempowering move, but the nods but leaves in the middle of the sentence. participant might not notice. **G2**: F1 moves around the notes and places them in Makes the participant comfortable in the exercise the middle and at the same time explaining the next and encouraged to create step. Sets time frame "Pour out ideas. No idea is bad." G1: F1 comes back, explains the next step. The Informs the participants so that they know what to purpose and what is supposed to be done. do. G1: P6 asks a question. F1 responds "Very good Encourages the participants to ask questions. question!" Participants writes new post its in silence G1: F1 leaves the table for a while, comes back and F1 never tells the participants the time frames of says "You can start to discuss the post its when you the exercises. want" P6 starts off the conversation. P6 is speaking the G1: Participants starts to discuss. most and taking initiatives. Participants speak to F1, do they want to please G1: Discussion dies down. F1 comes back. Participants starts to discuss again her? F1 listens empathically G1: F1 walks around the table, listens and let the Not the strategy of creative secretary. participants talk. Distracting? This also leads to unrelated discussion Both facilitators puts up the new canvas on the

in **G2** even though they are not supposed to talk. Feels like they need the facilitators support in order to stick to the subject.

**G2:** F2 comes back and explains the next step and They now know what to do

whiteboard during the exercise.

gives them permission to talk.

<b>G2:</b> F2 listen to the participants as they discuss and the discussion somewhat derails from the subject without F2 making any effort to steer them back.	Should she try to make them stick to the subject?
<b>G2:</b> One participants comments to another: "You sweat a lot, are you nervous?" F1 hears, doesn't laugh but at the same time doesn't intervene.	Was it a power move? Seemed like the participants knew each other but they did not know the other group members.
<b>G2:</b> F1 comments on the ideas and says it's excellent	Encouraging and confirmation that they are on the right track.
<b>G1:</b> F1 explains the next step and what is expected from the participants.	
<b>G1:</b> Participants continued the work independently.	
<b>G1:</b> Participants are discussing the placement of the post its.	They are not connecting the post its with lines. Should the facilitator intervene and tell the participants to do the actual task.
Canvas 2 - PROJECT in the center	This exercise shifted the focus to the process instead of the user
<b>G1:</b> F1 explains the next step and the purpose of that exercise.	Informs the participants so that they know what to do.
The participants got to stand up	Showed new energy and engagement
The lights are switched on	The mood was pretty gloomy before.
F1 gives an exempel on how they can think and says "I will not give you more clues"	Encouraging them to work themselves
<b>G1:</b> Participants places some post its on the canvas.	
<b>G2:</b> Starts to talk in small groups within the group but the facilitators does not intervene	Do they recognize it?
Facilitators taking a step back, watching the participants over their shoulders	
F1 prepares the next exercise. Places templates on the tables.	Does this action shift the focus of the participants from the current exercise.

<b>G2:</b> F2 builds upon the participants ideas	Feeds them with new energy
<b>G1:</b> Participants get stuck. Decides to have a fika break	Should the facilitator intervene and guide the participants?
<b>G1:</b> The group sits by the table eating sandwiches and talks about other stuff rather than the exercise at hand.	Are they done already? Should the facilitator intervene?
F1 reminds the participants to look at the previous canvas so they don't forget anything important	Does not give any real effect. No one goes back and looks.
F2 tells all participants that it is time to sum up this exercise.	
<b>G1:</b> P6 puts up some additional post its. The rest of the participants sits by the table.	Do they know what to do or are they disempowered?
<b>G1:</b> Sits quietly	Do they know what to do?
F2 complements all participants and tells them they are doing great	Clearly encouraging
Expectations and fears - exercise	
F2 explains the next exercise	Informs the participants so that they know what to
<b>G1:</b> The group fills in their templates	Knows what to do!
The facilitators talks to each other very quietly	Maybe they don't want to disturb? Or show that they are not 100% on what to do next?
Both facilitator reads on the canvas during the exercise	To understand or to show that they are interested
	To understand or to show that they are interested Is she done with the template or disempowered?
exercise	
exercise  G1: P8 is on her phone.  G1: The participants seems to be done filling out the	Is she done with the template or disempowered?  Looking to facilitators for a reaction. No reaction

F2: "Two minutes to go" with a calming, not stressful, voice.	Lets the participants know there is still time
F2 tells the participants it's time to put up their papers on the whiteboard. She also invites them to look at each others paper and "be inspired"	Encouraging them to trust each other and reminds hem that they are in this together.
The participants puts up their papers on the whiteboard. They take a quick glance at the papers, returning to their seats having a parallel discussion.	Do the participants know what to do next?
F2 also reads the papers while F1 observes from a distance	
F2 asks if there is something that surprises them?  - No answers at first but when they start talking it more participants partake	The same 3 participants talking, facilitator doesn't take action to invite the ones that are not speaking
F1 takes notes on the whiteboard	Writes everything down
F2 asks them what they feel strongly for	Encourages them to express emotions surrounding the theme
F2: "Any last reflections before we move on?"	Signals that it is time to move on
F2 makes a joke about money	Relieving some of the tension
F1 describes the next step	
F1: "I will not facilitate you in this step" F1: " I have great trust in you now"	Lets them know that they are the ones with the knowledge and the responsibility. Also makes them know she trust them
F1 invites the participants to speak. No one takes the stage	Are the participants encouraged to speak?
After a while F1: "This might be a little bit scary"	Lures the participants out
P1: "Do you want me to start?". P1 starts to talk	The one person who have been initiating previous conversations.
F1: "Does anyone have more thoughts on the way forward?"	Signals that it is time to move on

Mainly the same people that have been speaking for the session. These are people with power

Makes it clear that their work in the session is useful for the future and that the work will continue

Disempowered?

They want the participants to take responsibility and own the project

Tries to show that the work they have done during the session is important and useful

Shows them that they are important

Expectations?

Reflections and a way for them to make sure they remember the outputs and outcomes

Same people as before are talking

F1 invites P8 to share her reflections

F2 takes over after P8 is done. F2 talks about the way forward

P10 on the phone

The facilitator gets a question on who they want to be a part of their future work

Answers that it's they, the participants, who decides.

F1 points to the previous exercise and explains that they have already written down who they think are important for the process

F1: "Ofcourse, you are the core team in this"

Explains what has to be done before the next big meeting

F1 describes the finishing exercise: "What are your takeaways from today?"

F1 let's the participants think for a bit, however, one P takes the stage quickly.

F1 takes notes on the whiteboard

The facilitators says thank you for their engagement and says they will be in touch