Design-driven development in business strategy

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"When I am working on a problem, I never think about beauty. I only think about how to solve the problem. But when I have finished, if the solution is not beautiful, I know it is wrong." — Buckminster Fuller

Acknowledgements

Abstract

With rapidly changing markets and ultrafast technology development – a business model can be outdated before the ink is dry. The ability to shift and adapt as a business has become more crucial than ever. We see huge, international and well-established companies succumb when failing to keep pace and only a small fraction of new start-ups live to see their 5th birthday. To avoid "future shock" in an organisation, developing a business model that accounts for these dynamics is important not only to succeed, but to survive.

Through a Design Science framework and the Grounded Theory, performing semi-structured interviews with design experts, I have developed a comprehensive analysis and understanding of the research problem. In-depth interviews with open-ended questions provided the expert data that defined the overall concepts, their subordinate attributes and advocated the importance of using design-driven approaches to developing business strategies.

This resulted in the D.I.S.C. (Design, Innovation, Success and Company Culture) artifact, in form of a low-fidelity model and illuminating guidelines which are simple, clear and actionable as put forward by here presented research and literature.
It recommends a design-driven approach to developing a business strategy, that equips an organisation for the dynamic, unpredictable future.

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1 Introduction

Start-up companies fail at a large scale and established businesses go bankrupt after several decades in the market. This thesis will research design-oriented development strategies by going through existing theories and doing interviews with experts in the field. The goal of this thesis is to refine the terms design, innovation and success and to create an artifact consisting of guidelines and a model for forming a business strategy. This was based on data collection from expert interviews and relevant literature.

Whereas traditional development methods focus on not re-inventing the wheel and not fixing what is not broken, Design Driven Development (DDD) [1] advocates that good design needs innovation, and innovation is about re-inventing and experimenting. DDD also believes there is no ideal design it is rather «improve or die». The latter statement will be the mantra for this thesis.

This thesis looked at business at different size and stage of development to better explore what design, innovation and process and integrating these into their daily business meant. Norway has made it a priority to focus on innovation and sustainability as one of the leading national organisation is supporting companies to develop competitive advantage and to enhance innovation. They provide a broad business support system as well as financial means. They assist Norwegian businesses grow and find new markets and secure local presence [2].

1.1 Research questions

Research Questions (RQ) that will be answered during this research project:

RQ1: *What is design as a method in design-driven development?*

RQ2: *What is innovation in context of design-driven development?*

RQ3: *What is success in business strategy?*

RQ4: *How does company culture affect design-driven development of strategies?*

RQ5: *Why do design-driven approaches better facilitate for innovation and success in business strategies?*

1.2   This thesis as a design project

This thesis has in many ways been formed as a design process in itself. My initial intention was to:

1. Create an artifact on how to form a design-driven business strategy, based on the information from innovative and successful companies.
2. Argue why design-driven business strategies makes for a more innovative and viable organisation.

I wanted to create an artifact formed on success stories from innovative businesses. This should have been done based on interviewing innovative company leaders and doing observations and surveys with the respective companies. With the entrance of Covid-19 and the following shut-downs in March 2020, it became clear that observations and surveys would not be possible in the near future. The data collection had to be exclusively interviewing company leaders on Zoom /Teams, with the intent to use this information in creating the artifact. A few things became obvious rather quickly:

1. Objective innovation principles does not exist. Definitions are plentiful, and personal perceptions crack in every which way. Hence, there is no fixed way of grading innovation in a company on a general basis.
2. The companies I talked to were not fully aware of how "design" or "innovation" methods relate to their practice.
3. Success is largely defined upon red or green numbers.

These discoveries would later be supported in my expert interviews. I had to mobilize and take a new perspective. Firstly, I would need to establish some basic perceptions of the concepts "design", "innovation" and "success". There seems to be about as many definitions of these words as there are people. I therefore shifted the interviews to experts on design methods to establish some qualified perceptions of these words, before attempting to make an artifact. My aim was still to create an artifact on how to form a design-driven business strategy, but now from the assumption that no such thing exists, nor did I have a pre-existing perception of what it would be.

1.3 Outline of research project

Chapter 1: **Introduction** and research questions.

Chapter 2: **Background material** presents history and background for this thesis.

Chapter 3: **Literature review** summarises the literature and research relevant to this project.

Chapter 4: Methods and Methodologies outlines the methods and methodologies used in this thesis and their contributions.

Chapter 5: **Design experts** Gives an introduction of the design experts that has provided the data collection.

Chapter 6: **Analysis** presents the results from the data collection.

Chapter 7: **Artifact** that is created based on the research in this thesis.

Chapter 8: **Discussion**

Chapter 9: **Conclusion and further work**

2 Background

This chapter will give a brief summary of the history of design methods, and review numbers and theories related to design-driven businesses, start-ups and business failure.

2.1 History of design as a method

Traditional software development methods date back to the 1950s [3], with the first formal description of the waterfall method in Winston W. Royce's article "Managing the Development of Large Software Systems" from 1970 [4]. Although conventional procedures of design, such as drawing, can be regarded as design methods, design methodologies were generally regarded launched as a subject or field during the Conference on Design Methods, held in London in September 1962 [5]. Following this, new approaches to design were developing and Tomas Maldonado integrated design with science (including social science) in his teaching, introducing new fields of study such as cybernetics, systems theory and semiotics into design education [6]. In the 1970s, fundamental issues were raised by Rittel, who characterised design and planning problems as "wicked problems", un-amenable to the techniques of science and engineering, which deal with "tame" problems [7]. The criticisms turned some in the movement away from rationalised approaches to design problem solving and towards "argumentative", participatory processes in which designers worked in partnership with the problem stakeholders (clients, customers, users, the community). This led to participatory design, user centered design and the role of design thinking as a creative process in problem solving and innovation. [8] The interest in systematic and rational design kept developing during the 1980s and has led to design science and design science methodology in engineering and computer science. In 2004, Dubberly Design Office in San Francisco published a compendium of 80 design process models, but this is not an exhaustive list. Within these process models there are numerous design methods that can be applied [9]. Many design methods still currently in use that originated in the design methods movement of the 1960s and 70s, adapted to modern design practices. Recent developments have seen the introduction of more qualitative techniques, including ethnographic methods such as cultural probes and situated methods [10]. Increasingly, the intersections of design methods with business and government through the application of design thinking have been championed by numerous consultancies within the design profession. Wide influence has also come through Christopher Alexander's pattern language method [11], originally developed for architectural and urban design, which has been adopted in software design, interaction

design, pedagogical design and other domains [12]. Today, IDEO consultancy that uses design methods extensively, are perhaps what most people think about when talking about design methods.

2.2   The value of design

According to Design Management Institute (DMI), the most innovative companies in the world share one thing in common. They use design as an integrative resource to innovate more efficiently and successfully. Yet many businesses do not make it a priority to invest in design - often because the value of design is hard to measure and define as a business strategy. Results show that over a 10-year period (2003-2013), design-led companies had maintained significant stock market advantage, outperforming the S&P by an extraordinary 228% (Figure 1) [13] . This report is from 2014. The S&P rating is a credit score that describes the general creditworthiness of a company, city, or country that issues debt [14].
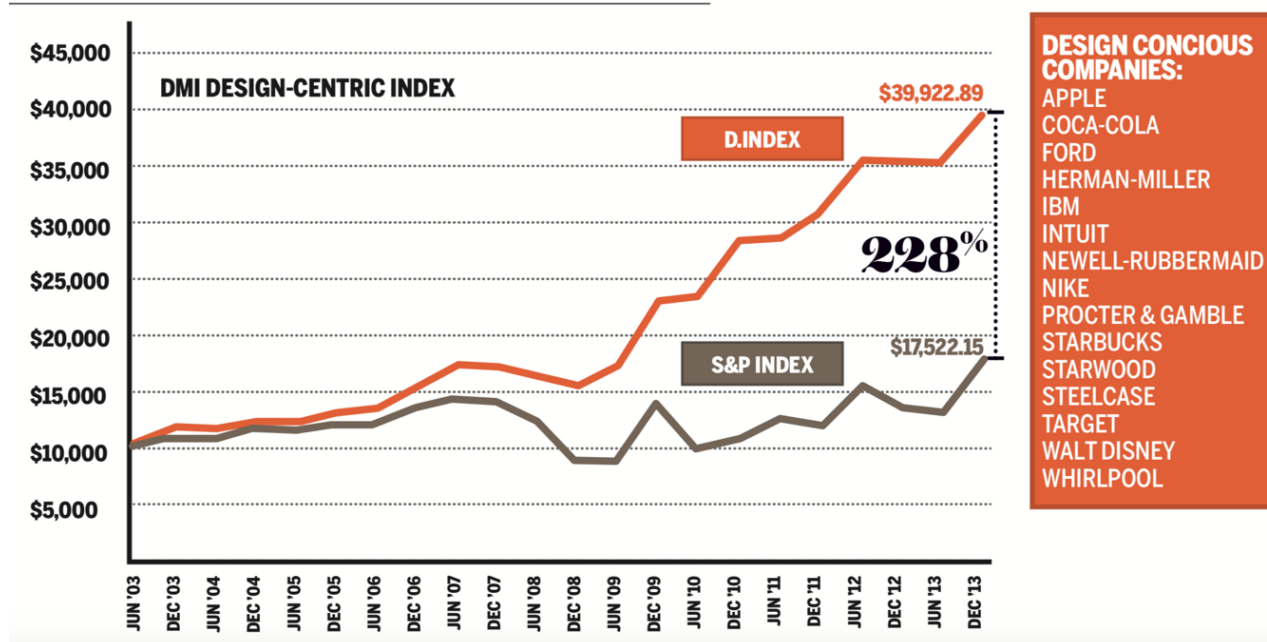
Figure 1 – Design-Centric Index by DMI 2014 [13].

2.3 Start-ups

According to Innovation Norway, 75 out of 100 new start-ups dies within the first five years. Of the remaining 25 that succeed, 17 will have to change their course and only 8 will be successful with their initial idea (Figure 2) [2].

Figure 2 – 8/100 start-ups succeed. Innovation Norway [2]

The three primary reasons for failure are: Not meeting market needs (42%), Running out of funding (29%) and Poorly composed team (23%). These are numbers for Norwegian start-ups (Figure 3) [2].

Figure 3 – Top three reasons why start-ups fail. Innovation Norway [2].

2.4   When innovation fails

Huge international businesses like Nokia and Kodak have lost their significant place in market or had to declare bankruptcy over the past ten years. These are companies who at their peak years had a substantial market share with Nokia 49.4% in 2007 [15], and Kodak 2/3 of the global marked in 1996 [16]. What these two companies have in common is that they go way back, founded in 1865 and 1888. *What caused these companies to survive for more than a hundred year, only to completely collapse within a decade?*

2.4.1   Nokia

Nokia was for a long time the world's largest mobile phone manufacturer and was in fact one of the pioneers of the smartphone. Throughout the 1990s and early 2000s, the Finnish company was regarded as the leading player in the global mobile technology market — with an assortment of mobile phone models powered by cutting edge technology and innovation [17]. Although not bankrupt yet, it is a diminishing force; smaller, less profitable and with fewer assets. There is some sort of agreement among many commentators that poor strategy and inability to adapt to change were at the root of the company's misfortune. Besides, many observers have noted that complacency was at the root of Nokia's problems. As a market leader for over a decade, Nokia seemed to rest on its laurels and play safe by relying on the approach that helped it achieve its success. Meanwhile, the consumer transition from traditional mobile phones to smartphones was dramatic and caught Nokia off-guard. Nokia's failure to act swiftly when the trend towards smartphones was beginning to emerge is an important starting point in the discussion of the company's subsequent decline [17]. Several analysts acknowledge that although Nokia produce high quality hardware, they struggled with issues related to its software. Even more so, the company failed to understand that people did not want a phone but rather a way to manage their lives. Occasionally, a genuinely "disruptive" technology might come along and wipe out an entire industry. However, this was not the case for Nokia. A failure to implement technologies that have already been developed, a disregard for changing customer demands and preferences, a complacent attitude towards emerging competitors, and a general failure to keep pace with the changing mobile phone market [17]. These missteps suggest an intolerance of failure and an aversion to risk taking that effectively sealed the company's fate. The bigger and more successful Nokia became, the more risk-averse it became, since the executives came to expect that all of the company's

innovative new products and services would succeed [17]. These viewpoints can also be found again in the interview with Tarald Trønnes (Appendix L) who used to work for Nokia.

2.4.2 Kodak

Kodak's business model was to sell cameras at affordable prices with a small margin for profit, and then sell the consumables such as films, printing sheets and other accessories at a high-profit margin. As technology progressed, the use of film and printing sheets declined, due to the digital cameras introduced in 1975 [18]. Kodak ignored digital cameras because the business of films and paper was very profitable at that time, and if these items were no longer required for photography, Kodak would be subjected to huge losses and end up closing down the factories which manufactured these items. The digital cameras were implemented by the Japanese Fuji Films, and many other companies followed. Kodak's ignorance of new technology and not adapting to the changing market dynamics initiated Kodaks downfall [18]. Kodak kept holding on to the idea that people loved the touch and feel of a printed image and completely ignored the feedback from the media and the market. Kodak failed to realise that its strategy, once effective, was depriving them of further success. Rapidly changing technology and market needs negated the strategy [18]. When Kodak finally understood and started the sales and production of digital cameras, it was too late. Many big companies had already established themselves in the market and Kodak could not keep pace. In 2012 Kodak declared bankruptcy, a downfall led by the ignorance of new technology and not adapting to changing markets [18].

Although Nokia and Kodak are huge international companies, technological innovation, market dynamics and user needs are universal aspects, and their reasons for failing are transferable to any business, anywhere.

3   Literature review

This chapter presents a review of relevant literature used in this thesis. First it presents two well-established views on Design Science from Buckminister Fuller and Herbert Simon, respectively. Then it gives an overview of theories and definitions related to the terms design, innovation and success. For comparison reasons, all the terms are first looked up on Merriam-Webster dictionary, Wikipedia and Google, then presented with a more in-depth review of the terms. Lastly it reviews some concepts related to company culture and social movements.

3.1   Design science

The concept of Design Science (as the scientific study of design) was introduced by Buckminister Fuller in 1957 [19] who defined design as a systematic form. "However, the comprehensive anticipatory design science does by its very name represent an activity in which there is some hope that the exploring and experimenting and the formulating may be successful in the organizing of our resources in such a manner that some clay the evolving pattern of man's needs may suddenly discover that the results of the anticipatory design science have been worthwhile; and that is what is taking place over a period of a great many months and years is exactly what is needed" [19]. Herbert Simon motivated further development of systematic and formalised design methodologies in book The Science of the Artificial from 1969 [20]. Simon's ideas about the science of design also encouraged the development of design research and the scientific study of designing [21].

3.1.1   Design Science according to Buckminister Fuller

The 1960s was heralded as the 'design science decade' by the radical technologist Buckminster Fuller, who called for a 'design science revolution' based on science, technology and rationalism to overcome the human and environmental problems that he believed could not be solved by politics and economics [22]. He called it 'anticipatory design science', which he defined as human practice that would align men and women to the conscious design of our total environment, making Earth's finite resources meet the needs of humanity without disrupting the ecological processes of the planet [22]. Fuller said in his lectures "Everything I know" from 1975 « Design as against that which is happening to you: it is that which you do deliberately. Using principles, then, employing order, we try to anticipate the needs of humanity, anticipate the needs of nature in general, try to anticipate the accommodation of the total intercomplementarity, using those principles then to actually begin to participate in the

evolutionary formulations of nature, so we don't just have to wait and take it for granted that someone else is going to provide this thing for us, and leave it up to them. Each one of us then, has an increasing intuition and an obligation to employ these principles in an effective manner on behalf of all humanity, and on behalf of the Total Integrity of Universe Itself - in its eternal regeneration.» [23]. Fuller was the first person to use design thinking for planetary sustainability, a topic more searing than ever before. The core of this approach was a concern with the whole: the whole Earth, the entire history of the planet, all of humanity—both those living now and those yet to be born. His approach, as he would later codify it, was:

- **Comprehensive,** starting from the whole system and working back to the special case, dealing with all facets of a problem, including the larger system the problem was a part of;
- **Anticipatory,** in that it sought to recognize the threats coming down the pike before they arrived full blown on an unsuspecting or ill-prepared society, as well as to deal with the way things were going to be when the solution was going to be implemented, not the way things were in the present;
- **A design strategy,** in contradistinction to a political, or let's pass-a-law-and-change-human-behaviour approach, it sought to change the larger system of which the specific problem was a part;
- **A science-based methodology** that used the latest advances of science to benefit humanity [24].

3.1.2 Design Science according to Herbert Simon

According to Herbert Simon, design consists of the activity of making changes to a given system or transforming situations to achieve improvements. The activity of making changes is performed by a human being who applies the knowledge to create (i.e., develop) artifacts that do not yet exist. For Simon, the sciences of the artificial should be concerned with how things should be to achieve particular goals, by either solving a known problem or designing something that does not yet exist. Hence, designing is a functional characteristic of the sciences of the artificial. Simon highlighted the importance of developing a science that is dedicated to the study of man-made artifacts, and also to the study of how to design these artifacts to produce satisfactory results: "The natural sciences are concerned with how things are [...]. Design, on the other hand, is concerned with how things ought to be, with devising artifacts to attain goals." [20]. Artifacts in this context can be understood as things that are

man-made, i.e., "artificial things can be characterized in terms of functions, goals, adaptation. Artificial things are often discussed, particularly when they are being designed, in terms of imperatives as well as descriptive." [20].

3.2   Design – the word and concept

Here we are looking at definitions of design as presented by well-established and often used web-sources.

Merriam-Webster Dictionary:
to create, fashion, execute, or construct according to plan [25].

Wikipedia:
- Design is a concept used to create an object (virtual or not).
- Design is picturing things using the imagination; as to using perception or memory [26].

Google offers 1 770 000 000 results when looking for "design methods". If you move to Google images, you will see spirals, squares, arrows, lines of dots, double diamonds and triple triangles.
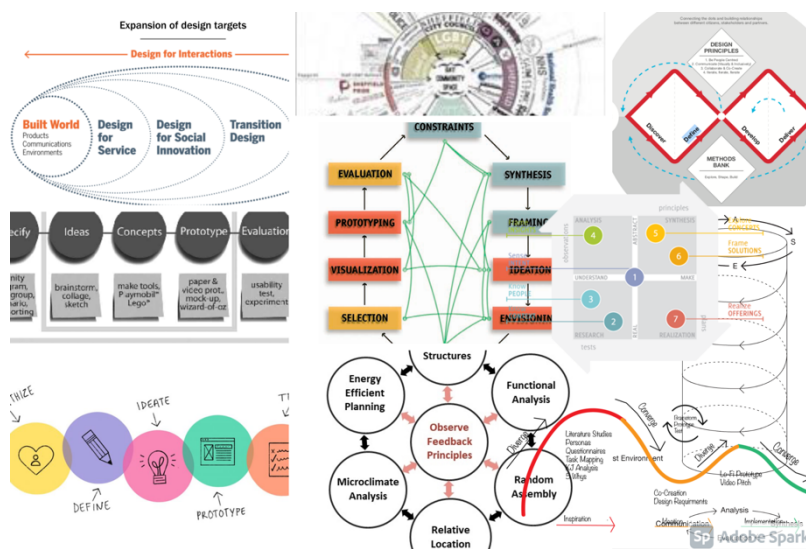
Figure 4 – Design method models from Google Images. May 2021

Kim Soko Schaefer sums up the purpose of design in an article on Medium with "The purpose of design is much more closely linked to strategy than aesthetics. Design is the process of intentionally creating something while simultaneously considering its objective (purpose), function, economics, sociocultural factors, AND aesthetics. Sometimes design is ugly (intentionally), and sometimes it's beautiful, but when done well, it's always on purpose." [27].

As presented in Chapter 2, there are numerous of design methods, which is summed up well by Kathie Shelly: "Design is unlike other disciplines with fixed, immutable processes. It's a field that allows and even encourages practitioners to constantly morph and adapt their methods." [28].

Design strategy is the term used to describe the nexus between corporate strategy and design methods. Corporate strategy is the traditional method that businesses and other similar entities use to identify, plan, and achieve their long-term objectives and goals. Design methods are methodologies that provide a solution- or problem-oriented approach to solving problems by engaging the users. In business, we need a way to put a strategy into effect, and that requires a methodology, a framework and a way of thinking. In order to implement a design strategy, it requires a strategic thinking mindset [29]. Strategic *planning* involves gathering data and deciding on a path that the business or project will take to achieve its goals. Strategic *thinking* involves everyone at all levels of the organisation consistently finding and contributing to activities that add to the organisation's success. To think strategically means to see and understand the bigger picture of where the team or organisation needs to go, and then take action. Everyone participates [29]. By bringing strategic design into the conversation at the beginning of a project or business strategy (when key decisions are made), wider and more comprehensive inputs can be used to help frame the problem accurately. This will improve communication with stakeholders and have a more substantial impact on "big picture" systemic challenges overall [30].

3.3   Innovation – the word and concept

Here we are looking at definitions of innovation as presented by well-established and often used web-sources.

Merriam-Webster Dictionary:
1: a new idea, method, or device. Related word: novelty (something new or unusual)
2: the introduction of something new [31].

Wikipedia: Innovation is the practical implementation of ideas that result in the introduction of new goods or services or improvement in offering goods or services. […] However, many scholars and governmental organizations have given their own definition of the concept. Some common element in the different definitions is a focus on newness, improvement and spread. It is also often viewed as taking place through the provision of more effective products, processes, services, technologies, art works or business models that innovators make available to markets, governments and society. Innovation is related to, but not the same as, invention. Innovation is more apt to involve the practical implementation of an invention (i.e. new/improved ability) to make a meaningful impact in a market or society and not all innovations require a new invention [32].

Google offers 1 050 000 000 results on the word innovation and thousands of definitions. Googles own definition is not exactly helpful either: "the action or process of innovating."

Innovation has become a buzzword which many people, and maybe designers and innovation experts especially, have a love-hate relationship with. Sharing this experience, Nick Skillicorn, decided to investigate the innovation definition in his article from 2016 – "What is innovation? 15 innovation experts give us their definition" [33]. He initiates his post with "I spoke to 15 of the world's leading innovation experts to get their definition of "innovation". The variety in their responses may surprise you." and concludes, after the 15 expert responses, with "The results surprised me. Even amongst the group of industry insiders here who teach and author books on innovation methodologies, case studies and thought leadership, there was a huge variety between the responses." [33]. His analysis of the most-cited aspects of innovation according to his interviewed experts are summed in the following Figure 5.
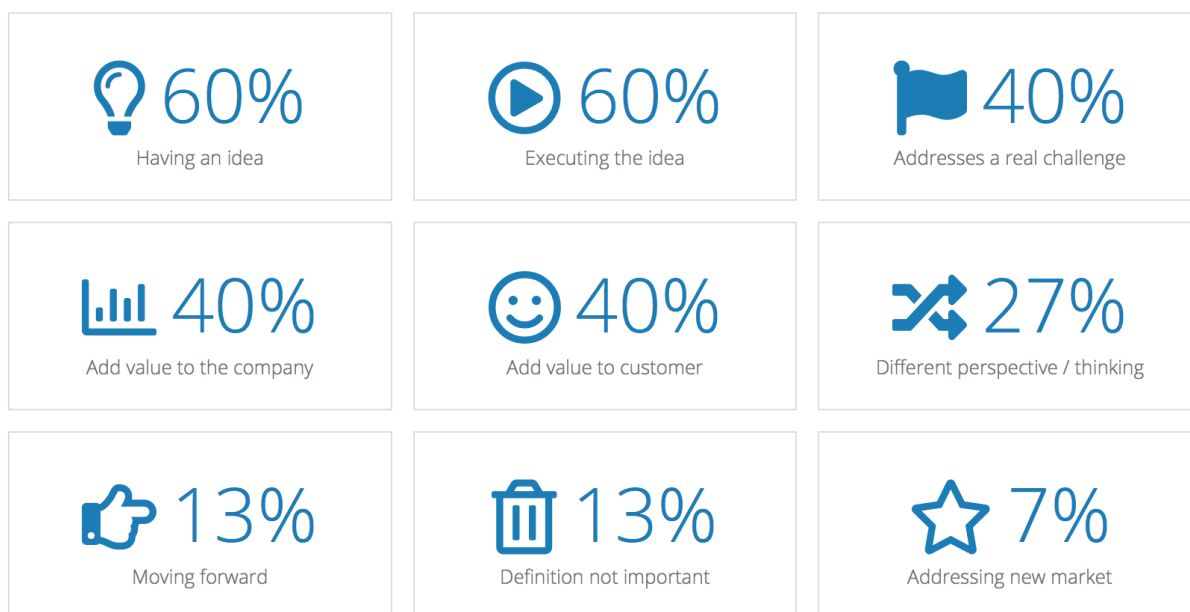
Figure 5 – Most-cited aspects of innovation. Nick Skillicorn 2016 [33].

In Harvard Business Review, Bansi Nagji and Geoff Tuff, talk about strategical innovation. They argue that companies with the strongest innovation track records do things differently: Rather than hoping that their future will emerge from a collection of ad hoc, stand-alone efforts that compete with one another for time, money, attention, and prestige, they manage for "total innovation" [34]. They have created a tool called "Innovation Ambition Matrix" (Figure 6), that is a refinement of a classical diagram devised by the mathematician H. Igor Ansoff [35]. The Innovation Matrix acknowledges that the novelty of a company's offerings (on the x axis) and the novelty of its customer markets (on the y axis) are a matter of degree. It is then dived into three categories. The company's "Core" innovation initiatives are the effort to make incremental changes to existing products. At the opposite corner are "Transformational" initiatives, designed to create new offers, or a whole new business to serve new markets and customer needs. In the middle, we find "Adjacent" which can share characteristics with core and transformational innovations [34]. Succeeding as a great innovator might mean investing in initiatives that tend toward the lower left, such as small extensions to existing product lines. A high-tech company might move toward the upper right, taking bigger risks on more audacious innovations for the chance of bigger payoffs. Although this may sound obvious, few organizations think about the best level of innovation to target, and fewer still manage to achieve it [34].
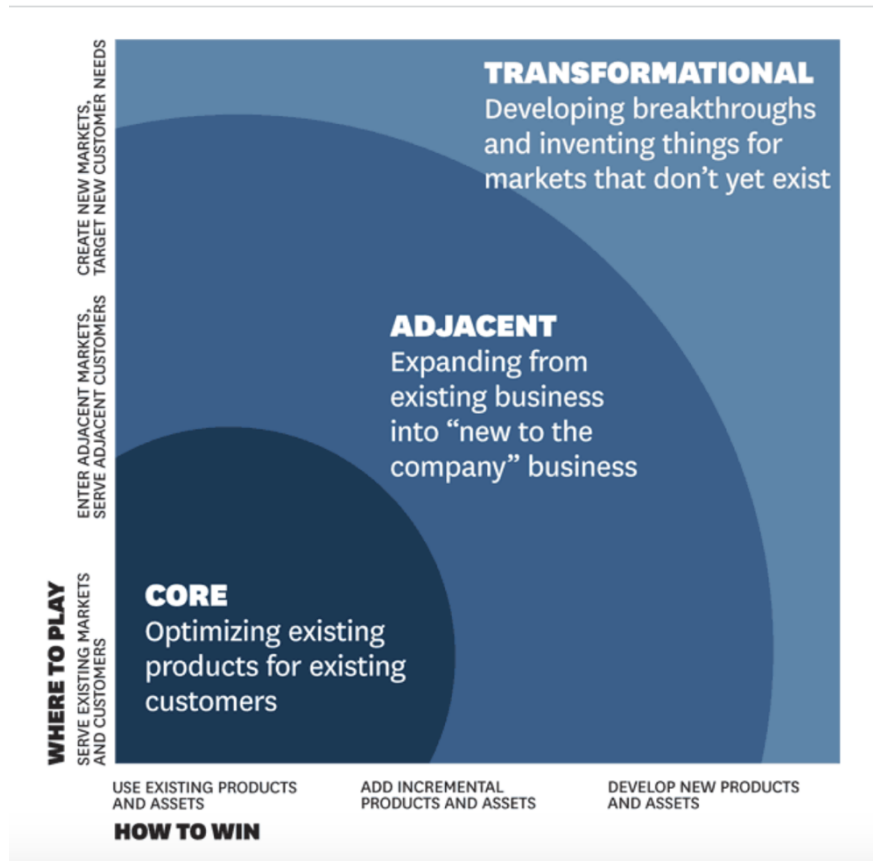
Figure 6 – Innovation Ambition Matrix. Harvard Business Review [34].

3.3.1 Innovation or invention?

The two terms seem to sometimes be used interchangeably but are in fact two different concepts.

Kim Bhasin in INSIDER sites Tom Gratsy from a column in MediaShift Idea Lab:

Invention is the "creation of a product or introduction of a process for the first time." Thomas Edison was therefore an inventor.

Innovation happens when someone "improves on or makes a significant contribution" to something that has already been invented. Steve Jobs was therefore an innovator [36]. This definition is also supported by Jacob Morgan in a Forbes article from 2015: "Invention creates an ability, but innovation takes that ability and allows it to scale and create some kind of a market impact" [37]. Bessant and Tidd have listed reasons that can cause innovation as shown in Figure 7.
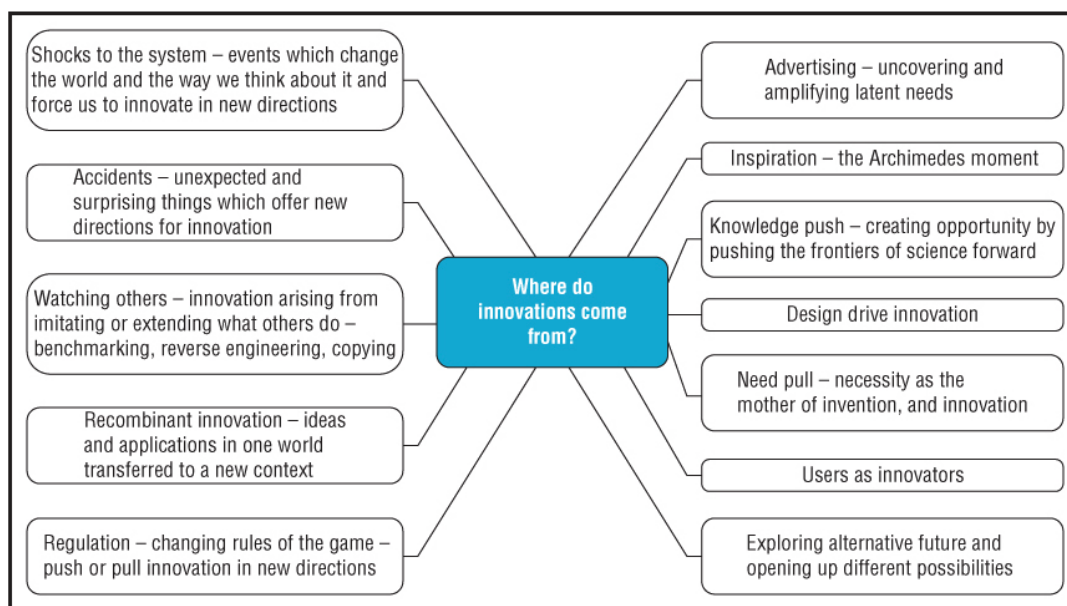
Figure 7 – Reasons for innovation. Bessant, Joe & Tidd, John (2018)

3.4 Technological innovation

"Cloud, Edge, Container, Quantum, Blockchain, AI, Deep Learning, Batch, Streaming, Database, Programming, Software Architecture, Web, App, Low Code, No Code." This is how Kamaruzzaman's article "21 Predictions about the Software Development Trends in 2021" from December 2020 starts [38]. He continues with the statement "One year is almost like a light-year in the Software Development industry." [38]. Technological innovation is rapid, extensive and brutal. His article goes in depth on the recent and most likely upcoming changes in Cloud, Coding, Quantum, AI, Real Time and everything in between. He also concludes that the software development industry is much bigger than his, rather extensive, predictions and that it is almost impossible to cover all important areas. This gives an idea of how large the field of technology is, and how fast things change within it.

3.5 Success – the word and concept

Here we are looking at definitions of success as presented by well-established and often used web-sources.

Merriam-Webster Dictionary:

1 a: degree or measure of succeeding

   b: favourable or desired outcome [39].

Wikipedia: Success (the concept) is the state or condition of meeting a defined range of expectations. It may be viewed as the opposite of failure. The criteria for success depend on context and may be relative to a particular observer or belief system [40].

Google offers 1 360 000 000 hits when searching for "what is business success".

As with design and innovation, success is also a word and concept with lots of definitions and variations. Although success will be relative to the business or project, Business News Daily has collected some general viewpoints from business owners [41].

Hope Wilson says "Success is running a profitable firm that conducts business with honesty and integrity, makes meaningful contributions to the communities it serves and nurtures high-quality, balanced lives for its employees."

Brendan Lyle continues "As an entrepreneur and business owner, my success is built around my staff. My company will only be successful if I have the right team with me, and to make sure that happens, I ensure that my staff is happy. My ultimate success is making sure I can pay my staff as much as I can and making sure they love getting out of bed every morning and coming to work because they really enjoy what they do." [41].

Since every business is different, the key is to create your own business success strategy, based on your own definition of success. It is also important to measure your success and understand how to map and achieve your goals. Further the article includes a step-by-step model on how to create such a strategy [41].

3.6   Company culture

As Aristotle put it "We are what we repeatedly do". Unlike design and innovation, company culture seems to be lacking a formal definition. While there is universal agreement that (1) it exists, and (2) that it plays a crucial role in shaping behavior in organisations. Not having a clear definition can cause issues towards understanding how it influences behavior and whether it is something that can be changed. It also challenges the possibility to develop good approaches to analyse, preserve and transform culture [42]. Various perceptions are posted in Michael Watkins article, where he initiated a conversation about company culture on his LinkedIn profile. Some of the answers he got were as following:

Culture is consistent, observable patterns of behavior in organizations.

In large part, culture is a product of compensation.

Organizational culture defines a jointly shared description of an organization from within.

Organizational culture is the sum of values and rituals which serve as 'glue' to integrate the members of the organization.

Organizational culture is civilization in the workplace.

Organizational culture [is shaped by] the main culture of the society we live in, albeit with greater emphasis on particular parts of it.

It oversimplifies the situation in large organizations to assume there is only one culture… and it's risky for new leaders to ignore the sub-cultures.

An organization [is] a living culture… that can adapt to the reality as fast as possible.

Culture is the organization's immune system.

In place of a formal definition, the sum-up could be that company culture is the behavior of the people who work there, based on their incentives to do what they do. It is the inside, sometimes implicit, agreement of "who we are", "what we do" and "why we do it". Watkins claims that company culture is also a social control system. It promotes and reinforces the "right" thinking and behaving, so call "behavioral norms" that must be upheld. Evolution is also shaping the culture and how existing norms has helped survival of the organisation in the past. He also notes that established cultures can become impediments to survival when substantial environmental changes arise [42]. As listed in the quotes from Watkins LinkedIn, if culture is shaped by the society we live in, it also implies that there should be more than one company culture. This is also supported by another view in his survey referring to sub-cultures within an organisation [42].

3.6.1   Changing company culture

Bryan Walker and Sarah A. Soule refer to company culture in a pictorial way: Culture is like the wind. It is invisible, yet its effect can be seen and felt. When it is blowing in your direction it makes for smooth sailing. When it is blowing against you, everything is more difficult [43]. They claim that for companies who wish to become more adaptive and innovative, culture change is often the most challenging part of the transformation. They also believe that changing company culture it not something that can be done through a top-down mandate. Change lies in

the collective hearts and habits of the people and their shared perception of "how things are done around here". The highlight that company change has to be done by a movement, not a mandate. They suggest starting by framing the issues in terms that stir emotion and incite action, then mobilise supporters and demonstrate "quick wins". Broadcasting these wins will create an even wider audience to keep this momentum going. One should always start with actions, rather than new mission statements, because real culture changes only happens when people take action. "Show people the change you want to see" [43].

4   Methods and Methodologies

This chapter discuss the methods and methodologies used to gather and analyse data, and to create the design artifact in this research project. The Grounded Theory is used as the scientific approach to the data collection and the analysis of it. Design Science Research (DSR) will provide the framework for creating the artifact. Finally, ethical evaluations and considerations will be presented.

4.1   The Grounded Theory

Grounded Theory (GT) is a research method developed by sociologists Glaser and Strauss in 1967 (Figure 8) [44]. In generating a theory, the GT researcher uncovers the main concern of the research participants and how they go about resolving it. The distinguishing feature of the GT method is the absence of a clear research problem or hypothesis up-front, rather the researcher tries to uncover the research problem as the main concern of the participants in the process [45]. In classic GT, Glaser recommends that the researcher should start right off with regular data collecting, coding and analysis without any preconceived problem, a methods chapter or an extensive review of (research) literature in the same substantive area. Glaser insists that "undertaking an extensive literature review before the emergence of the core category violates the basic premise of GT" [44].

When starting off with just three wide terms with unclear definitions and a goal of creating an artifact, GT was the natural starting point as a methodical approach to analyse the data. It allows to start with the data collection, coding it and then writing up a theory, framing the further literature review and forming the hypothesis and research questions.
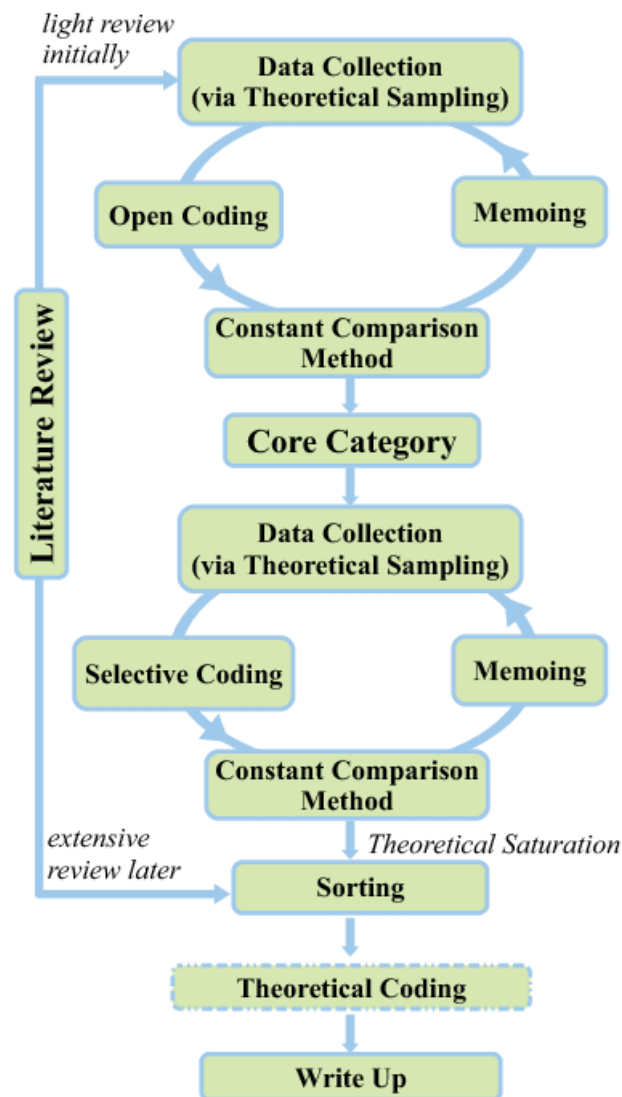
Figure 8 – The Grounded Theory method. Glaser and Strauss [44].

Data Collection: Theoretical Sampling

Having read some basic concepts in the area of interest, the researcher can move on to data collection. Data collection in GT is guided by a process called Theoretical Sampling: "Theoretical sampling is the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyses his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges" [46].

In this research the data collection was done by recruiting participants and conducting expert semi-structured interviews.

Recruiting participants

In "Qualitative Inquiry and Research Design: Choosing Among Five Approaches", John Creswell suggests a sample size of 20-30 participants when using Grounded Theory [47]. He does however not present any empirical arguments as to why he has chosen this number, or why GT requires more or less participants than other methodological approaches. Kristi Malterud et al. propose in "Sample Size in Qualitative Interview Studies: Guided by Information Power the concept" the term *information power* as a guide to adequate sample size for qualitative studies. Information power indicates that the more information the sample holds, relevant for the actual study, the lower number of participants is needed. They suggest that the size of a sample with sufficient information power depends on (a) the aim of the study, (b) sample specificity, (c) use of established theory, (d) quality of dialogue, and (e) analysis strategy [48].

The aim of the study was to collect expert definitions on three specific word and concepts: design, innovation and success (a). Although wide terms, this is a narrow aim which explores individual, expert recourses that are able to provide sufficient information to create hypotheses from a high level of information power (b). Since the field of study holds a very large number of theoretical perspectives, the need for a larger sample sizes decreases (c). The interviews were conducted as a private conversation on Zoom/Teams between 30 – 75 minutes long, with strong and clear communication, requiring fewer participants then a study with ambiguous and unfocused dialogs. The interviews have also been transcribed in its full, making it possible to review it as many times as needed (d). As this is an in-depth analysis, narratives or discourse details from a few, selected participants will offer sufficient information power, as oppose to an exploratory cross-case one (e).

Combined with the challenge to recruit participants solemnly through emails and the huge amount of data material from each expert, I therefore included 11 participants. They are from both private and public sector, pure design companies and individuals working as design experts in traditional businesses and by random chance, almost evenly distributed between men and women.

Interviews

The data was collected through Zoom/Teams by semi-structured interviews with design-experts, using open-ended questions. Conversations lasted between 30-75 minutes, depending on the experts wishes to elaborate on the topics, and their available time. The interviews were

voice-recorded and then transcribed. The interview transcriptions later became a fundamental part of the analysis. The constant comparison in data helped guide future interviews and kept feeding back to the emerging results. The semi-structured interview offered the possibility to explore each individual expert's personal experiences and knowledge, allowing them to talk about the main topics in an open way.

Data Analysis

Open coding

The data analysis, called coding in GT, began as soon as the data was collected. There are two types of codes in GT: Substantive Codes and Theoretical Codes. The substantive codes are "the categories and properties of the theory which emerges from, and conceptually images the substantive area being researched in contrast." The Theoretical codes "implicitly conceptualize how the substantive codes will relate to each other as a modelled, interrelated, multivariate set of hypotheses in accounting for resolving the main concern" [49].

I used open coding to analyse the interview transcripts in detail, collecting key or main viewpoints. The viewpoints that frequently appeared during the interviews were first noted down (substantive codes), then given a two- or three-lettered abbreviation. The connection and overlapping between these viewpoints helped form the core-categories. As many of the quotes could fit more than one category, the connection between them were demonstrated by noting all the other relevant categories as well. This became the sub-categories of the viewpoints (although not new categories), demonstrating the connection between the data and the overlapping data towards the main topics (theoretical codes). Main sub-category was noted in bold font, and other relevant categories were noted in regular font underneath.

Memoing

Memoing is the ongoing process of writing theoretical memos throughout the GT process. Memoes are "theoretical notes about the data and the conceptual connections between categories written down as they strike the researcher" [46]. This is a core-step in GT and consists of the researchers on-the-go ideas about the codes and the connections between them. Memoing is a very low-fidelity way of rapidly and continuously getting down ideas the researcher gets both during the interviews and when reviewing the transcriptions. This maintains all thoughts throughout the entire process, making the foundation of the "constant comparison" step.

Constant comparison

The viewpoints emerging from each interview were constantly compared and altered, grouping them together to produce a higher level of abstraction, called concepts in GT.

Core category

The end of open coding is the core-category. The core is the category that "accounts for a large portion of the variation in a pattern of behaviour" and is considered the "main theme" or "main concern or problem" for the participants [46]. Criteria for choosing a core category are as following: it must be central and related to several other categories and their properties; it must reoccur frequently in the data; it takes the longest to saturate; it relates meaningfully and easily with other categories." The main topics and core-categories where structured in diagrams and supported by a Wordcloud created from the interview transcripts. These are presented in the results in Chapter 6.

Selective coding

After the core categories are established, the researcher goes into selective coding. This process clarifies the viewpoints associated with each core category. "Only those variables that relate to the core variable in sufficiently significant ways as to produce a parsimonious theory" [46]. I found selective coding to be easier than open coding, as the umbrella-terms/core categories have been established and the constant comparison gave ideas of which viewpoints related to one another during the process.

Sorting

Sorting of the memoes creates the theoretical outline. The sorting "puts the fractured data back together" [46], and the sorting should be done conceptually rather than chronologically, resulting in an outline of the theory of the connection between the different categories and the core-categories. I found it helpful to draw out a flowchart, visualising the relationships between the categories. This also clarifies less important or irrelevant viewpoints in the chart.

Write-up

The last step in GT is writing up the theory. My research revolved around custom fitted definitions towards the terms "design", "innovation" and "success", relevant to the respective organisation. As the existing theories, definitions and perceptions vary greatly, it is necessary for each organisation to explicitly establish its own business internal perception of these terms and communicate them clearly to its organisation. Organisations able to do so could be more innovative and better equipped for the unpredictable future.

4.2   Design Science Research

Hevner et al.'s objective is to "describe the performance of design-science research in Information Systems via a concise conceptual framework and clear guidelines for understanding, executing, and evaluating the research. In the design-science paradigm, knowledge and understanding of a problem domain and its solution are achieved in the building and application of the designed artifact." [50]. It describes an embodiment of three closely related cycles of activities (Figure 9). *The Relevance Cycle* inputs requirements from the contextual environment into the research and introduces the research artifacts into environmental field testing. *The Rigor Cycle* provides grounding theories and methods along with domain experience and expertise from the foundation's knowledgebase into the research, and adds the new knowledge generated by the research to the growing knowledgebase. The central *Design Cycle* supports a tighter loop of research activity for the construction and evaluation of design artifacts and processes. The recognition of these three cycles in a research project clearly positions and differentiates Design Science from other research paradigms, the pragmatic nature of Design Science [51].

The *Relevance Cycle* in this thesis was using the main topics and core categories formed with GT based on the expert interviews. These was added to the *Rigor Cycle*, that combined these new acquired insights with already existing theories and research in the areas design, innovation, success and company culture, presented in Chapter 3 - Literature review. Together, these built the foundation of what the artifact with design guidelines and model was based upon. The *Design Cycle* was prototyping the artifact. The artifact was presented to the experts for comments and minor adjustments.
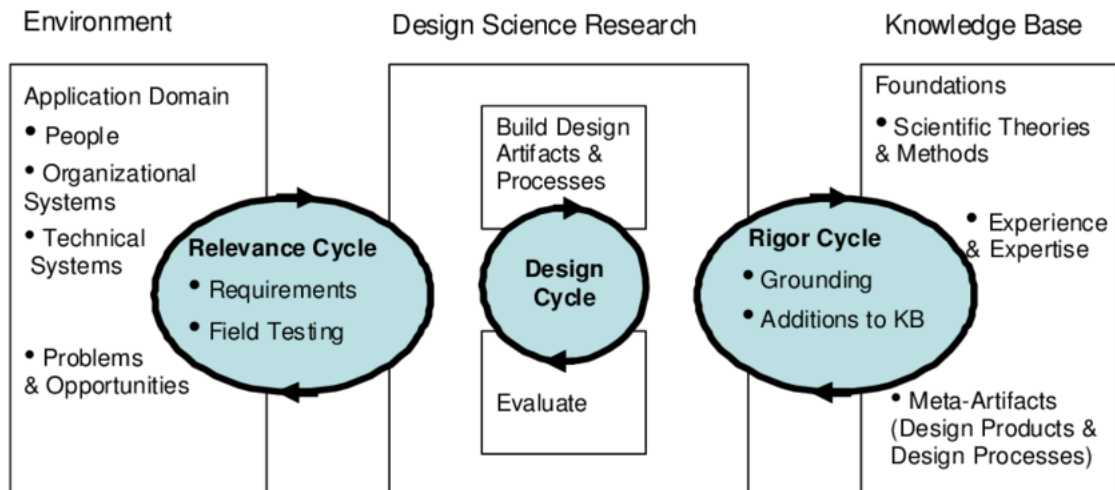
Figure 9 – Design Science Research Cycles. Alan Hevner [51].

4.3 Design Science Research and evaluation methods

To assist in Design Science Research, Hevner et al. defined seven criteria that should be considered by researchers (Figure 10) [50]. These criteria are essential because DSR demands the creation of a new artifact (criterion 1) for a specific problem (criterion 2). Once this artifact is proposed, its utility should be explained, and the artifact must be adequately evaluated (criterion 3). Design evaluation methods are listed in Figure 11. The research contributions should be clarified for professionals interested in solving organisational problems and for the academic community to increase knowledge of the area (criterion 4). To ensure the validity of the research and expose its reliability, it is essential that investigations are conducted with an appropriate amount of rigor to demonstrate that the constructed artifact is suitable for its proposed use and that it has satisfied the criteria for its development (criterion 5). To construct or evaluate the artifact, it is essential that the researcher conducts research to understand the problem and to obtain potential problem-solving methods (criterion 6). The research results should be properly communicated to all interested parties (criterion 7) [50].

Table 1. Design-Science Research Guidelines	
Guideline	**Description**
Guideline 1: Design as an Artifact	Design-science research must produce a viable artifact in the form of a construct, a model, a method, or an instantiation.
Guideline 2: Problem Relevance	The objective of design-science research is to develop technology-based solutions to important and relevant business problems.
Guideline 3: Design Evaluation	The utility, quality, and efficacy of a design artifact must be rigorously demonstrated via well-executed evaluation methods.
Guideline 4: Research Contributions	Effective design-science research must provide clear and verifiable contributions in the areas of the design artifact, design foundations, and/or design methodologies.
Guideline 5: Research Rigor	Design-science research relies upon the application of rigorous methods in both the construction and evaluation of the design artifact.
Guideline 6: Design as a Search Process	The search for an effective artifact requires utilizing available means to reach desired ends while satisfying laws in the problem environment.
Guideline 7: Communication of Research	Design-science research must be presented effectively both to technology-oriented as well as management-oriented audiences.

Figure 10 – Design Science Research Guidelines. Hevner et.al. [50]

Table 2. Design Evaluation Methods	
1. Observational	Case Study: Study artifact in depth in business environment
	Field Study: Monitor use of artifact in multiple projects
2. Analytical	Static Analysis: Examine structure of artifact for static qualities (e.g., complexity)
	Architecture Analysis: Study fit of artifact into technical IS architecture
	Optimization: Demonstrate inherent optimal properties of artifact or provide optimality bounds on artifact behavior
	Dynamic Analysis: Study artifact in use for dynamic qualities (e.g., performance)
3. Experimental	Controlled Experiment: Study artifact in controlled environment for qualities (e.g., usability)
	Simulation – Execute artifact with artificial data
4. Testing	Functional (Black Box) Testing: Execute artifact interfaces to discover failures and identify defects
	Structural (White Box) Testing: Perform coverage testing of some metric (e.g., execution paths) in the artifact implementation
5. Descriptive	Informed Argument: Use information from the knowledge base (e.g., relevant research) to build a convincing argument for the artifact's utility
	Scenarios: Construct detailed scenarios around the artifact to demonstrate its utility

Figure 11 – Design Evaluation Methods. Hevner et.al. [50]

Criterion 1: The artifact proposes guidelines and a visual model to suggest a design-driven and pragmatic approach to forming a business strategy.

Criterion 2: This to enhance innovative and iterative thinking in building a business model, ensuring the organisation's future in a dynamic market. It is not technology-based, but an artifact presented with written guidelines and a low-fidelity, visual model.

Criterion 3: The guidelines and model are pragmatic and easily changeable, suggesting a low-threshold attitude toward adjusting and fitting it to the relevant business. The artifact is based on extensive expert interviews which were categorised applying Grounded theory.

Criterion 4: The experts who provided the data for creating this artifact are presented in Chapter 5. Expert group comprised of a broad spectre of designers both from the private and public sector, with 6 men and 5 women. They represent a great variation in background, experiences, education and current positions, ensuring diverse professional background.

Criterion 6: The artifact was created from a combination of relevant literature, existing theories and theories formed from the analysis of the data collected.

Criterion 7: The designed artifact, although non-technological, should be relevant to any process where one wishes to focus on innovation and success. The guidelines prioritise universal attributes such as *user centred insight, human values, effect, adaption* and *readiness to change*. These are relevant to both technological processes as well as management processes.

4.4   Ethical considerations

Norwegian Social Science Data Services AS requires that a project should be reported when personal information is processed with computational devices. This ensures safe handling of the data and informed, transparent choices for the participants involved. This project was reported and approved (Appendix A). The project follows NDS guidelines for handling and storing of data, and the data has only been accessible to the student and advisor. Voice-recordings were conducted on an independent voice-recorder, not connected to the internet or any other devices. The recordings were deleted when the interviews were transcribed. The participants have signed the consent forms and have been given the opportunity to withdraw information from the transcript or the interview in its full. Third party information about names or smaller companies has been censured in the transcriptions. Informed consent form (Appendix B) and interview guide (Appendix C) can be found in appendixes.

5   Design Experts

This chapter presents the experts who have provided the data for this thesis. With a huge span in multiple educations and work-experiences, this presentation text has mainly been collected from the experts own LinkedIn-profiles or business webpages. For more comprehensive information, see the first questions in each respective interview in Appendix D-M where every expert has presented their professional background. The experts are listed in the chronological order of the interview given. Following are their brief presentations in their own words:

Lars Petter Aase – Strategic Director @Idean.

Experienced CEO with a demonstrated history of working in the advertising, media production industry and as consultant for growth strategy, innovation & transformation. Program Director for master program in Design Thinking - Strategic Design for Innovation for the academic institutions; NHH, UiB & HVL. Studies at master's level focused on Innovation and restructuring from NHH, Consulting from BI Norwegian Business School, Design Thinking from NHH, UiB & HVL.

Anita Steinstad – Service designer @Netlife.

Curious designer and advisor who loves solving real problems. During the last 20 years, I have worked with design, qualitative research, branding, strategy, business development and communication as a consultant and in organisations. This experience has given me an insight into the many challenges companies are facing. My main focus is to design better services and products for people and our planet.

Håvard Legreid – Art Director, design thinker and in-house artist @Bergen Public Library.

Håvard returned to his calling and profound love for art after completing a master's degree in media studies and television production in 2003. Autodidact graphic designer, illustrator and visual artist. In-house art director and advisor at Bergen Public Library. Freelancer in illustration, design and art under the "moniker leketoys." Specialties: Illustration, design, visual solutions, research, project management, teaching and presentations.

Hege Harreschou – UX Director @Finn.no – mulighetenes marked.

Two decades of experience in UX/CX. Mostly as a consultant with area of expertise in a broad set of aspects, from Strategy, Concept development and Service Design via Interaction design, UI design to Content. Now enjoying a position as UX Director @ FINN, Norway's largest and most lovable marketplace, where we aim at growing the most attractive UX dept. in Norway.

Jens Hauglum – VP Product @Finn.no – mulighetenes marked.

Passionate about innovation and product development! Long record of accomplishment in understanding and combining customer needs and technological possibilities.
My platform = Management + Product + Tech + Sales.

Kristin Breivik – Head of Product Development, Visual Stories @NRK

Design management, digital storytelling, concept development, game and play, data visualization, user/customer experience, interaction design, service design, information architecture, web strategy, communications, user research, usability testing.

Claus Gladyszak – Strategic Advisor | Business Model Innovation @Innovation Norway

"All Profitable Business Models are dependent on Natural and Social Resources." Industrial designer with more than 20 years of experience working with design, strategy and business modelling.

Tone Frederikke Mong Haug – Senior Advisor, Organisational development @TV 2

Teaching, coaching and leading cultural change and digital transformation! Kaospilot, facilitator and systemic thinker. Has ten years of experience with design-driven product development and leading interdisciplinary teams creating true customer value.

Kjersti Haukeland Eiken – Special advisor - Digitalisation and innovation group @Bergen Kommune.

Possibility advisor, innovator, motivator, experienced sales- and marketer and network builder. Spends time advising business leaders in and around Bergen and facilitates small and extensive workshops. Structured, dedicated and annoyingly positive towards interdisciplinarity and collective achievements.

Tarald Trønnes – Senior advisor Design @Design and architecture Norway DOGA

Passionate design leader with strong belief in the power of integrating design into organizations to improve business performance. Wide experience within design, brand management, strategic marketing, business to business and consumer sales and distribution and even technical support. A true enthusiast selling and building design capability into Norwegian companies. Frequent speaker and facilitator at large events. Hosted DOGA Market awards 2020 and Telenor Ignite events.

Eirik Solberg – Director Technology & Business Design @Capgemini Invent

Translator and "Peace Diplomat" between senior business leaders, developers and designers. Interested in people and changing culture, but by combining the human touch with Technology, Design and Business, you have outlined the "Sweet spot of tomorrow" which by far is the remedy for transforming today's business model. Design Led Transformation and Innovation - Transformation projects, Incubator and Beta. Business Design - Business Strategy, IT Architecture/tech and Design. Innovation structure – Agile, Scrum, Scaling Agile Framework, Lean Start-up and Design Thinking. Agile Coaching, Project Management and Product Ownership. IT Strategy - IT portfolio management and Test Management.

6 Analysis and results

This chapter presents the results based on the data collection and the applied Grounded Theory.

The following tables aim to group and categorise the viewpoints, experiences and opinions collected through the expert interviews. They are grouped into the main topics "Design", "Innovation", "Success" and "Company culture". Company culture was originally not a part of the interview guide but became an obvious category through the interviews. These four main topics have been refined into core-categories and sub-categories through the Grounded Theory method. The tables represent the core-categories. Every answer has been given sub-category(ies). These are listed in a ballpoint list underneath the table name (core-category), followed by a brief summary of the answers given by the experts. The left column states the initials of each respective expert. The viewpoints are listed in the same chronological order as the interviews were given. The centre column is the viewpoint given by the expert. These viewpoints are quotes and can be found in the respective appendixes (Appendix D-M) where the full interview transcription in Norwegian can be found. The quotes have been translated to the best of my ability. Some words are hard to translate directly, but I have strived to preserve the content and its meaning. The right column holds a two- or three lettered abbreviation referring to the sub-categories. Abbreviations of the main sub-category appears in bold font, whilst other relevant categories are listed in regular font underneath. Additional explanation of terms used by the experts is given in the dictionary (page 159).

6.1 Design

6.1.1 Design – the word & concept

This is a core-category describing Design – the word and concept as presented in Table 1.1. Relating to it are the following sub-categories:

- Visual communication (VC)
- Man-made (MM)
- Well-functioning (WF)
- Insight (IN)
- User oriented (UO)

1.1	Table 1.1 – Design – the word & concept	
AS	That is what design is. You can say that designing is creating something, but then you can just as well say that you are developing or creating something. Designing is something that has something to do with visual communication, in one way or another.	VC
HL	It's a slightly expanded concept of what design entails. It is really, as I look at it, everything that is created by humans. It is designed in a way. But often it is used more about things that are nice. That is a bit like imprecise.	MM
HL	"But can you not just make something nice?" That is not the point of what I do. Make nice things. I do that at home. Of course, I want it to be nice too, but I want it first and foremost to be good. So, I think that there are two different things, and that design methodology as such is with a focus on "good". And there are different parameters for what is good from project to project, so you also have to take that into account.	WF
HL	Because I am not a graduate from an institution of design, I think it's cool that design is not necessarily a subject. That it is more of a thing you do. And I like that. The educational intuition's clammy hand has not completely suffocated the content.	MM
HL	In a way, you can also be problematic, that visual slant. But that's where it comes from. Design as a word is from drawing. It is not a random construction. It has just become more. Renaissance artists did design. In other words, "disegno", which is the art of the Renaissance. Here there are some mixtures, and the business community has embraced design, and the society has embraced art. But it is to a large extent it is "man-made stuff".	MM
HL	My perspective is that: given that everything is designed, which I work with, it means that everything can be changed. It is made by a human, and then it can also be made again or made differently. I have such a starting point that the structures that are, they are also possible to do something with. It's just a matter of finding out: why is it like that, how can it be different and what do people really need?	MM
HL	Design can be confused with creativity and art, and then it is about my personal ideas and feelings. But design is not about that. There is a lot more focus on you collecting some impressions, and then you try to create something new out of it. It does not matter if I think it is nice. I must be able to make things that I myself would not have at home. It would be completely insane if I were to make rooms that I would live in. I have to make rooms that others will find attractive and want to be a part of. Then I have to leave my luggage and my preferences. But I think that in everyday language you do not distinguish between it, and then you think that a designer is a kind of "taste expert". That I know "the finest". I do not do that. That is the whole point.	WF
CG	And I use a quote from Jeff Bezos in Amazon. Do not know if you have seen it, but he says that: We are not concerned about our competitors. We care about our customers. We are "customer obsessed", he says. Because they are certainly sure that if they are concerned with doing the best for the customer, and we can of course discuss whether they do, but I like his perspective. Ignore your competitors, focus on the customer, and become customer centric. And that is something I recognize from design thinking when I graduated. Then I started with the user and had to really understand their needs. That is what you as a company should specialize in, that you understand customer needs. And what is the solution for the customer, it will vary.	UO
TT	And then I discovered service design. They explained to me what service design is. And then I realized: you know what? I have been doing the wrong thing for 10 years. Because then I realized that marketers are amateurs on this translation from finding customer insight and transferring it into products and services. It's design, after all. Which is the subject I have always been looking for.	IN
TT	And the reason I found it so captivating is that the design is complete. Marketing is not complete. It is just theory. While design, it is holistic. You have an ideology that is about starting with the customer first. Put in the customer in the centre. The marketers do that in a way too, but it is the money that is at the centre. Value creation is like giving money to the owners. While value creation in design, it is about providing value to the customer.	UO EfS
ES	But that is the thing with design - it must be experienced. You cannot describe it. That is the problem with design. It must be experienced.	

Short summery of the content is as follows: Legreid claims that design is everything man-made, and the beauty of something man-made is that it can be changed. You can always investigate why something is the way it is, how can it be different and what people need. He also points to the common perception that design is something pretty rather than something well-functioning and differentiates design from creativity and art. Design is about collecting impressions and creating something from it, were as creativity and art relates to ones' personal feelings. Steinstad argues that designing something distinct itself from creating or developing, by being visual communication. Important features of design are that it has to be visual, user oriented and based on real insight. It has to create value for someone and as Solberg describes, it has to be felt. This is one of designs disadvantages. It cannot be explained, it has to be experienced and felt.

6.1.2 Design – the method

This is a core-category describing Design – the method as presented in Table 1.2. Relating to it are the following sub-categories:

- Process (PRO)
- Organisational learning (OL)
- Observation (OB)
- Solution||Problem based (SP)

1.2	Table 1.2 – Design – the method	
LPA	The problem with design is that people are not quite able to distinguish between: design as a craft, or as a skill. It is one part. And then you have design as a process. That is something else. For me, it has always been the same. I have never designed anything without doing any research.	PRO
LPA	And that is why some environments, they managed to deliver insanely good work over and over again, even if people came and went, or stopped and started, right? Then some environments managed to still deliver very good quality. And it was about processes.	PRO
LPA	And then the business community started to see that: Ok, now we have had stable markets for a hundred years. They have been well-functioning, as long as you live in a democratic society, and that means that everyone can get the same commodities. Everyone can get the same raw materials, and the same people, everyone is competing. The same ingredients everyone has as a starting point. Then it was processes and culture that became important for the companies to compete on. Then they had to be able to do things faster, smarter, better, more differentiated. And then design became extremely important.	PRO
LPA	When "Design thinking" has become enormously widespread organisationally, it is because you have a positivist, learning, and curious form. Experimental form. It is about learning. **Organisational learning.**	OL

AS	But design as a strategy. If you think holistically, i.e. the design approach, then it is about the designers being trained in observation. For example, by being able to observe someone, or an action, or a situation without saying anything, or asking anything; you simply use your eyes and observe what you are learning. It is a very important part of design strategy.	**OB**
AS	Designers are problem solvers in the sense that you get a problem, and then you have to design a solution. And then it is a lot about being able to take what you have learned from observing, and eventually listening. It is the interview, the conversation and get to know the people you are going to help better. So, the combination of listening and observing, being able to visualise. It is very, very strong when it comes to working strategically. Then it is much easier to decode complicated things. Design new processes.	**SP** OB VC
AS	I have had a lot of discussions with engineers, for example. They also use the term design. And I have heard economists use it, that they also design. But I would say that what makes a difference between design strategy and a different type of strategy, or the difference between design process compared to other processes used by engineers, economists or other disciplines - common characteristic is that you use visual aids, you visualise. If I had read, for example, some business developers and economists who had written a long report and called it a design strategy, I would have said right away that it is not a design strategy. It must be visualised in some way.	**VC**
AS	So, I just think, simply put, we designers and economists have lagged a bit behind. And then we suddenly realized what the product designers have been doing for a very long time. Then we borrowed some from the social anthropologists and psychologists, and then thought that: Shit, they have quite a lot of knowledge about human behaviour that we do not use. And then we borrowed some from the industrial- and product designers, and then combined this in design processes and design methods. New strategies. Business developers realise that business development is not just about finance. It is simply a matter of borrowing from these other disciplines, in order to develop better products and services.	**PRO**
HL	Within "design thinking", it has happened that on one hand it has become organisational development. And on the other hand, it has become product development. It is about to split up so that you get specialisations. Some do innovation management and organisational development, and then some do product and service development. There are two camps.	**PRO**
CG	We believe it is important for companies to understand that restructuring is not a one-time thing. This is something that you should work on continuously. It is a continuous change that you have to work with. And that conversion takes time. Restructuring processes takes time.	**OL** ADA
JH	So, the fact that we are user-oriented, target-oriented, data-driven and iterative, these are really the principles that I believe characterise both our product development, our innovation, and to an extent also the design-driven approach.	**PRO** IN UO
HH	In a way, we use one methodology in Finn, mainly. As someone outside of Finn might call it design, while we call it a product development methodology.	**PRO**
HH	We have many regular checkpoints. We have a business plan review once a month, where we look at both financial indicators and health indicators on Finn. If you see a " dip " there, then it will be natural to take action. Otherwise, we also have very " low key " meetings once a week that we can call "troubleshooting", which is about responding to new changes.	**OL** PRO IN
KB	And I kind of have to write like this: this is what we can change, this we cannot change. And prep the designer and team leader who is going into that meeting and meet the editors who are dissatisfied. Where they ask: why have we not been allowed to participate in this process? No, it is because you signed out in December and said that the director can do this. And now we are sitting here because you are angry that we have not done what you want, while it was you who did not want to be part of the process. And then maybe it is our own fault, because I do not know anything about the process. I have not followed it. I lead 60 people, so the only thing I can say is that we have one day to adjust things.	**PRO**
KB	And then they came up with ideas for something they called "good defaults". We need to have some good defaults, which we can put some tweaks on top of. [...] And I think we probably have to do a lot more of that, and now we kind of got to see that through the corona. So, it is a little bit interesting that I could use it as an example of how maybe everything will go faster in the future. Now we must embrace it. But there is no doubt that it is difficult to run creative processes and "heart to heart" coffee machine chatter through Teams.	**PRO**

KHE	Because I think that when things go so fast, we must not stop and make " glossy slides". Then we fall so in love with these "glossy slides" that we dare not change them. Or we do not want to change them. Because we have spent so much power and time, and money and energy. We may even have used a design agency, and then just wasted many, many thousands because we just had to have this. And if someone then comes and pokes your shoulder and says: "Yes, but maybe we should?", "Are you sure about?", then we say no. We are not ready for change. We do not want change. Because we have spent so insanely much money on this now, and we want value for it. And then it not worth any of it.	**OL** FLX
KHE	There was one who said, on a brainstorming session once, brainstorming takes like four-ish hours. Then he said: This was very interesting. I would say that we have now done six months of work in four hours. Because there are so many meetings in the public sector. There are so many meetings that are in one hour, and you have them quite a few times. You spend half an hour putting everyone on board on what it is about, you have 20 minutes to discuss the first case or if you have an agenda of 1, 2, 3, 4. You do not get through the rest. And the last 10 minutes we are trying to find out when we will have the next meeting because we are so busy.	**OL**
KHE	So, there is something about this going fast, fast and crazy you might say, but there is always something left for it afterwards. And it hurts for many. Extroverts like you, we have no problem with this. But imagine being blue introverted, very analytical, and you would like to have everything to be in boxes all the time. You cannot relate to everything that happens. They struggle. But at the same time, they do not struggle more than they tend to come back after two or three times saying: I think this was absolutely awful at first, but now I see the point of it. Then it is a success.	**OL**
TT	So, the philosophy was the customer in the center, and you have to create value for the customer. Designers have a process that says: how do you get from here, to there. To a result, from something very indistinct. To a concrete result about what you are going to offer the customer and create of value. They have an absolutely fantastic toolbox, which is huge! And if there is no tool for what they intend to do, then they just make one. Then they have a new tool in their toolbox. And it is totally sick how many there are. And you have different varieties of it, depending on what you are going to make. Services or products, or what to make. It is huge. Marketers can only dream. As you have been working on this for years, this becomes a craft, which makes you better and better, and you understand more strategically how to use it.	**OL** PRO
TT	You run a business, but you are unable to pull these items in from another location. And this is also something designers are good at, because they learn it all the time. They just sweep in all the best practices that others do. Within this area, it is the standard procedure when starting a project. It is just to see what others are doing. Even then, the frame of reference has been set very high, and then you stretch up there. So, I searched for the magic of creating a new business, and I found it. And I know it is design.	**OL** PRO
TT	So, we have to work together. And then we have to change our processes so that the designers are the ones who decide what we are going to make. [...] And that collaboration, that's also why I believe in design, and design as a strategy. The only way to make this collaboration work is to let the designers run the processes and do it on an ongoing basis. Then get you to this cooperation.	**PRO** COO
TT	All the other fields focus only on one bit. While design is holistic. They want to look at all aspects, even if they are going to create value for the customer. They look at the opportunities that lie in technology, and they look at the opportunities that lie in the economy and in the market. And then they put all this together holistically, so that it fits. That is what we are looking for, right? And none of the others think that way. Should we not put our money on this spreadsheet? Everything we manage to draw from this spreadsheet, we decide on. But everything that is outside, we exclude. We make some business plans and business cases.	**OL** EfS ITD
TT	I spoke to someone who runs top management development in the public sector, in public enterprises, and she says: Top managers, high-level managers, are not interested in the process. They are only interested in results. So, process? How do you get there? Could not care less. And if you are not interested in process, then you will never see the beauty of the concept of design. For what is completely different – it is the process. How to get from A to Z. So, if you are not interested in the process, then design becomes just form and colour.	**OL** PRO
ES	We should always go through and understand: what is the underlying problem? We are not only going to digitise a whiteboard but look at the processes. There is something underlying here. Start digging. It is challenging, but we ended up being able to deliver our first app in 10 to 12 weeks. First	**SP** IN PRO

	version of it. Instead of spending 17 months solving a problem, which was already solved from the business itself with a Post-it. And then we came, 30 million later, with something they no longer needed.	
ES	We are very solution-oriented, but we need to become more problem-driven. What exactly is this process supposed to do? Do not just go in and "leanify".	**SP**

Short summery of the content is as follows: Design methods are all about processes. A process ensures that the organisation can deliver consistently regardless of people starting or leaving, according to Aase. In a democratic society where organisations have the same access to commodities, the processes and company culture becomes the foundation for competition. Aase claims that design processes have become popular due to its positive and curious focus, which corresponds well with being a **learning organisation.** Designers are, according to Steinstad, problem solvers who are trained in observation and visualisation, both key features in design methods. A design process can be solution oriented or problem-driven, depending on pre-existing knowledge. This is further explained in Table 1.2.1 – Design methodologies. Legreid splits design thinking into organisational development and product development. Within organisational development, Gladyszak underlines that the process is about adjustment and adaption, and that it takes time. And the bigger the organisation, the more important these organisational processes becomes according to Breivik's experiences. Hauglum, Harreschou and Eiken advocate the importance of creating easy changeable processes and uncomplicated development models. In a dynamic marked it is important to have frequent check-ins and low-threshold development models to ensure that you have direction and can easily adjust to shifts in user needs. Designers are, according to Trønnes, experts in extracting best practices from other areas and applying them to new areas. They prioritise real insight before business cases, which is also supported by Solberg and Haug. It is important to attend to the underlying problems and not just make assumptions.

6.1.2.1 Design methodologies

This is a core-category describing Design methodologies as presented in Table 1.2.1. There are no distinguished sub-categories here since it is mainly descriptions and explanations of the different methodologies content, intended use and philosophies.

1.2.1   Table 1.2.1 – Design method – Design methodologies

LPA	Some talk about radical, some talk about "lean start-up", some talk about "agile" and so on. The big difference is actually that service design is directed towards a process. It is very easy to map "as is" if you are buying infection control equipment right now. Which steps do you have to go through, which of these steps can we change or remove, or can be digitised. Find new shapes. That is service design. It is very effective. But that assumes you know something about what you are fixing.
LPA	While "design thinking" is more when you have a question. How do we buy insurance for 18 months? How will young people between the ages of 18 and 25 buy insurance for 2 years? We know very little about that, and then we have to make a lot of insight. Much more insight than one has to do in other, more limited areas.
LPA	The difference, purely academic, is that service design is hypothesis-driven. You have a hypothesis that this process here, we can fix it or improve or make easier or smarter or using technology etc. While design thinking is not hypothetical. You do not have a hypothesis. You have a problem, or you have a problem that you have to figure out before you can make a hypothesis.
LPA	So that is why we have the "double diamond ". (In design thinking. Editor's note.) Then you go out and seek insight broadly, and then you start to narrow down and build hypotheses. And then you start looking at solutions, and then you start refining the solutions and then end up with an idea or a concept or start prototyping.
LPA	And that is the thing with "design thinking". It is nothing new. It is common sense, systemised. Then it got called "design thinking". It was Tim Brown in IDEO, who came out of Stanford at the time, who came up with the term "design thinking". It has had many names: design management, design research...
LPA	When we are going to be a learning organization that is constantly learning something new, and constantly moving forward, sub-optimisation is dangerous. After all, "lean" has been such an intermediate step. "Lean" has said that: in this small sub-optimised part, there we can do incremental innovation.
LPA	The entire customer experience, both products and services, is experienced across the structure done in silo. And then someone has to look at: How can this work as a whole? How will it look good and be good? And how can each of these individual entities understand the overall context and improve it. That is in a way "design thinking's" part in the organisational. And how can we, instead of saying that we have been doing this for 10 years and we are very good at it and therefore we are going to do it even faster. We are going to make the wheels go a little bit faster. That is what «lean» answers to.
AS	You have design thinking which is one of these buzz words. But what many forget is that design thinking is actually a methodology. There are a lot of people who talk about design thinking in all sorts of contexts, and that is fine. In the sense "ok, you want to solve a challenge" or a problem, in an innovative way. I think someone says that or thinks that at least. And then there are those who think design thinking is more of an approach you should have towards people. You should design with people in the center, the people you are going to help. But then you have design thinking which is a methodology that has been developed at Stanford University [...] and that methodology I have tried, and it works very well. But you have to fail a lot to know why it works or does not work.
AS	And then you have, for example, "design sprint", which is something very, very concrete and proven. It works over a week. It is also a design method that works great. There you get interdisciplinary collaboration. They work very intensively with clear, concrete tasks throughout the week. Works very well.
AS	But the "business model canvas", it is a bit like, it works everywhere. In a way, it is very similar to many design methods that are used, it is just that you break it down a little differently. It has more concrete value propositions that you should focus on.
AS	You work very incrementally. And so agile. You are working on a challenge. You go out, you start with a challenge, you define, maybe pre-define the problem. You go out and test, ask questions, test some ideas for those you are going to help. Come back again, change the design a bit, go out again, test again. You keep going back and forth, right? In the past you waited a very long time before you launched something. Then you launched, and then that was in a way the first pilot test. Those days are over. I do not think there are many who work that way anymore or should not work that way.
HL	"Design thinking" focuses very much on "the unknown". The things you do not know that you do not know. And that is the crossroads between anthropology and the academic tradition. And I find it

	attractive and exciting. Whilst if you work "lean" or "agile", then you work with things you *know* you do not know. Then you come in with a kind of premise about where to look for those things. While I think my premise is that: I do not know anything. And then we will see what happens. There is a very big risk involved in doing so.
CG	We are so-called "first explores" on a tool called "Flourishing Business Canvas", which is an extended "Business Model Canvas", but with a triple bottom line. And where you work actively with all three layers. Not only the profit or economy part, but also the social dimension and environment.
HH	We are not the only example of someone who has started to work much more agile, our finance department, for example, has too. They work, or they call it "beyond budgeting". So, they do not do classic budgets anymore. They forecast and pay attention to how we are doing, and then adjust accordingly. So, I would say that the agile way of working permeates Finn almost no matter which department you belong to.
KHE	We only teach methodology. We teach the philosophy. We try to make some simple solutions, so that we can just make some sketches and easily say: We will make a new one. We will try again. "What did you say? That was smart". And then we implement that. So therefore, we are not so religiously concerned with lean, or design thinking, or sprint of any kind. We are just genuinely focused on what we can get of effects from anything that has anything to do with design-type thinking. We use it in the context we see that it is useful. And where it can be helpful and contributable.
ES	Agile ways working. I do not like that word, because it is about working purposely. Agile, design thinking, lean, whatever methodology - framework that you have with you in a toolbox that you must master and understand when you are going to use the different ones. Putting them against each other is completely meaningless. That is to say that a hammer is better than a saw or a screwdriver. It is not a valuable discussion.

Short summery of the content is as follows: Design thinking. Service Design. Lean. Agile. Scrum. Business Model Canvas. Design Sprint. Beyond budgeting. Product development. *Does it really matter what we call it?* The experts seem have different approaches. Eiken advocates that it does not matter what you call it, just do a little of this and a little of that, whichever makes sense in your organisation. Hauglum and Harreschou at Finn also have their own development model (Figure 12) created by their "Innovation & Presentation" department, fitted to their organisation. Aase and Steinstad underline that design methodologies are in fact different methodologies, with established methods and purposes of use. As a golden mean, Solberg claims that it is worthless discussing which method is better than the next, just use what is right for the relevant problem space. Overall, the methodologies seem to fall into one of two categories: *solution-oriented* (Figure 13) or *problem-oriented* (Figure 14). In the first category, there is a hypothesis. You know what the problem is and can therefore seek targeted insight to find a solution. In the second category, you have a problem area where you do not know what you do not know. Therefore, you will have to seek broad insights in order to narrow it down to a specific problem. This implies that the latter category is more complex, as one could need to apply a solution-oriented process after a problem-driven one. It may however result in a more solid solution, as broader insight is needed, and the insight step might need to be repeated.
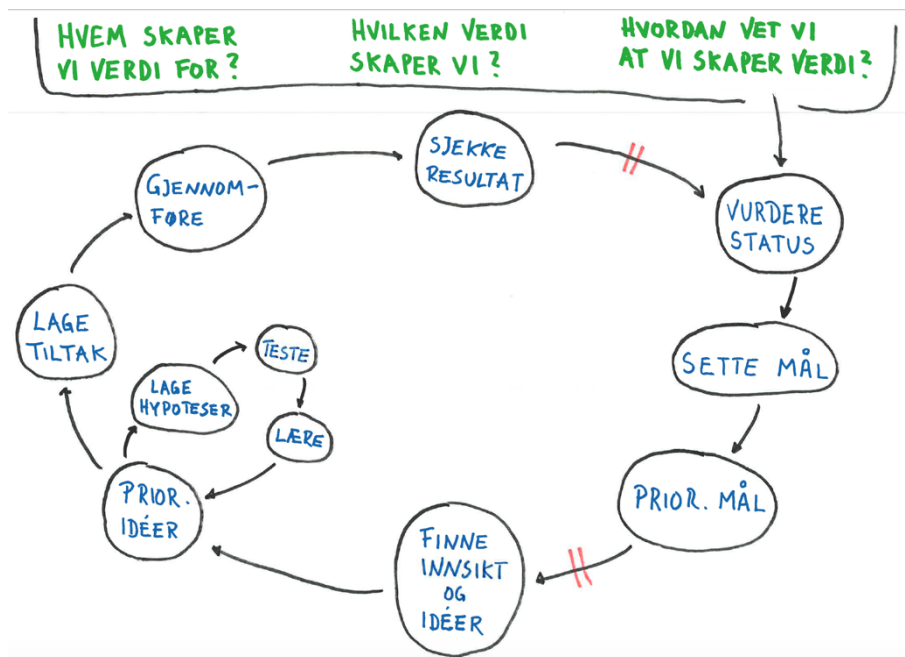
Figure 12 - FINNs product development model
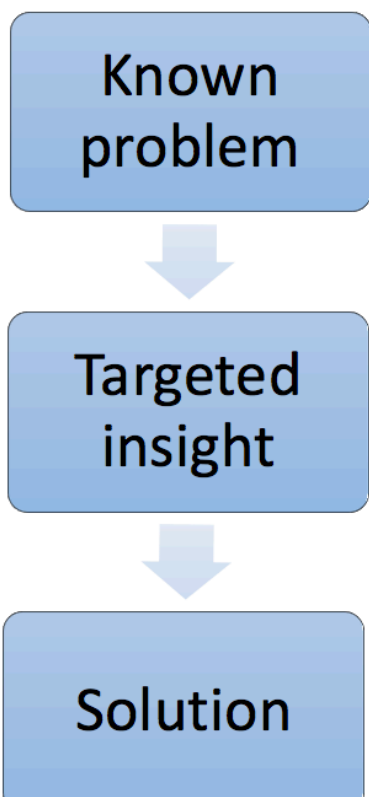
Figure 13 – Solution-oriented process
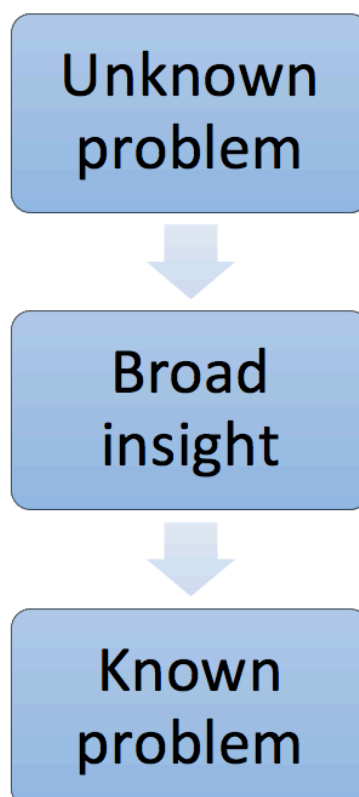
Figure 14 – Problem-driven process

6.1.3 Design – the strategy

This is a core-category describing Design – the strategy as presented in Table 1.3. Relating to it are the following sub-categories:

- Targeted (TRG)
- Opportunity (OPY)
- Flexibility (FLX)

1.3	Table 1.3 - Design – the strategy	
AS	But what I would rather hear them say was: "We want to learn from the people we deliver products and services to and find out what needs they actually have." And then we will look closely at our own strategy. Take a look: who do we want to be? What fits with our strategy and our values?	TRG IN
JH	I think the Finn brand is an important part of Finn's innovation history. The fact that we have created a brand that accommodates a lot of marketplaces. That the Finn name and everything that has been chosen as carriers of the brand: the cat, whatever it is, gives us plenty of room for new development. Without it necessarily inhibiting us. A banal example, but Biltema for example. Who now have to start communicating that the brand they have, is not really the one they want people to have associations to.	TRG FLX
JH	So we have probably been rather good, I think, at saying that our core competence is to build robust, digital marketplaces that are profitable. And then fortunately the marketplace concept is very broad, and there are more and more digital marketplaces. So for us it is almost an inexhaustible area of opportunity, just there. And there is plenty of room for innovation, large and small. But it is still marketplaces that are what we define innovation within for us, not completely different things like, for example, you do in Google.	OPY
JH	But Finn is a growth company. This is something that is said and expressed in our strategy, and which is clear to everyone - we are a growth company.	OPY
HH	And then it also says something about how we work with strategy, right? We say that we will update the strategy once a year, while in practice it happens continuously. Because the various marketplace directors, they will constantly monitor the competitive situation and new things that affect customers and users. Just like when corona struck last year. Everyone in Finn was ready to throw themselves around and answer that challenge in many different areas. So the strategy, it is alive. It is not something that is created every four years, or once a year, and then it is put in a drawer, and no one remembers it. It is used, I mean almost daily, in prioritising who should work with what, and which initiatives we should tackle first. Who is first in the queue of the various platform teams, and so on. Working agile at that level, that is perhaps the most important thing because it affects what our people work with all the time.	FLX PRO IN DM
HH	So yes, we have a strategy for how we do things today. But it is not certain that it will look like that in three months. Because if we see that: this meeting no longer provides any value, or: here we need more frequent follow-ups or: this part of the process does not work - then we change it. But I would say we are pretty neat. We have a system for a lot. And then we are also open to change them.	FLX PRO
KB	So what I am actually working on is getting that toolbox mindset in the TV side. It has never existed. They have made a rare flower for each and every environment. [...] They have been making art. And everyone has become accustomed to art. While what we are really working on is communication. And communication on TV can mean that everyone could have had the same closing credits, which could smell NRK, rather than smell something from the special program. [...] And that is a different way of thinking, than that each program is a rare flower and could have been anywhere. We are in the communications industry. We need to say that it was NRK.	TRG VC
KB	But this "template fatigue" is something we see. Even though Sporten has its own profile, there is always a desire to come up with a new program where exactly this one must be something else. It	TRG

	must be something else, and then you really mess up your own strength and your own brand, in that idea that everything should always be something else. So this understanding of what branding is, how important it is to use it, and then to use it over time.	
TT	Like "Lørenskog pipes", right? We supply pipes. When you call your company «Lørenskog pipes», you say: we work in Lørenskog, and we work with pipes. Like, say you work with bathrooms. With houses. Or construction. You limit yourself so badly. And there are so many possibilities. When you are standing there with the customers, you see that you can deliver «this» and «this». It's really just about being able to deliver it. Make choices and be ready to deliver. And that's what design does.	**OPY** FLX
TT	In a way, you have a long-term financial plan. That strategy is only financial. It is just numbers. We have an ambition to hit x-billion in a certain number of years. And then there is no plan of executing. There is no strategic direction on what is important to get there, which I believe should be in a strategy. And then everything becomes just a set of short-term, opportunistic decisions. [...] That is not strategy. You have to have a strategy anyway. And it must be long-term. Working agile is not a strategy. You still need to know what competencies you will need in 5 years. To reach them, you need to start building now. And you cannot do that on any short-term basis. It takes time to build strong, professional fields.	**TRG** PRO
TT	I believe that working strategically with design, is to build design into everything you do. Into the processes. Into the competence. Either that you have the expertise, or you buy the expertise. At such a solid financial level that it makes sense. That it shows in the budget. And that we work strategically with it. That you use it to select target groups. That you analyse and go out and do deep customer insight and create foundation there. Then we start talking about that way of working. That is what I mean by working strategically with design.	**TRG** PRO IN
TT	The strategy, and that is what any strategy should be about, should really only be about one thing: the value creation for the customer. How will the value creation for the customer take place in the years ahead? What is the target? What role should we have in the customer's life, in 5, 10, 25 years? And how do we position ourselves, as a company, to be able to create that value? And what can we then manage to collect of money? And not the other way around. How much money are we going to have in 5 years? And so, how do we do that? Because it does not work. Then you can make so much more money, if you think the other way around.	**TRG** EfS
ES	And then I think design also has a way to go in terms of getting more business-driven at times. When it comes to working with strategies, you cannot just work with the qualitative. Which some find very fun to work with. You have to mix the qualitative with the quantitative. Otherwise, you will not meet the decision-makers who owns the strategy. That is super important. And I am not saying that design does not do that, because they do, but that is where the trend of thinking a little more business design must come in. Strengthening the number crunching, the analytical parts with design - then it becomes very, very effective when you talk about strategy.	**TRG** EfS

Short summery of the content is as follows: When developing an organisation strategy founded on design principles, one should define "who do we wish to be" and "what fits with our values", according to Steinstad. This is supported by Hauglum and Trønnes who underline the importance of being conscious about branding your organisation, in order to avoid limitations and communicating the brand as something less or different than it is. The organisation strategy needs to be continuously updated and flexible enough to answer to the dynamic market and changes in user needs, Harreschou continues. Trønnes explains how design needs to be built into all aspects of the organisation's strategy. Into the budget, into the competence and focusing firstly and strongly on user needs. This perspective turns the common view on budgeting upside down. Rather than discussing how to achieve a specific financial goal, one seeks to build the best possible organisation based on user needs, assuming

the financial growth will follow. Solberg on his side claims design has improvement potential in becoming more financially oriented, that in turn could strengthen the quantitative analyses in a design-driven strategy and make it even more effective.

6.1.4 Design attributes

This is a core-category describing Design – attributes as presented in Tables 1.4.1 – 1.4.4. This is not an exhaustive list of design attributes, but rather the attributes that frequently reoccurs in the interviews. Relating to it are the following sub-categories:

- Information ≠ Insight (IN)
- Share ∞ Test (S&T)
- Visualize (VC)
- Interdisciplinarity (ITD)

1.4.1	Table 1.4.1 – Design attributes - *Information ≠ Insight*	
LPA	And then there is the fact that people do not know what they want. That is obvious. That is always the case. No one can tell us what to do. Then it would have been very easy. But what you get to know when you gain insight, that is what the problem is. What is the underlying, fundamental problem. You can do something with that. They cannot tell you what to do with it, but they can tell you what the problem is.	IN
LPA	No, they are not concerned about that. That is just one of 1000 other things for them. So you have to get control over "stakeholders". Who is affecting this problem and what can we do about it?	IN
LPA	The essence is to do good sampling. Understand a complex problem in a deep, profound way. That is what leads to change.	IN
LPA	We observe and see what they actually do. Everyone is lying. They say one thing, and then they do something else. So we observe and see: what are they really doing? And why do they do that? What rituals do they have? And then we have a conversation with them. Talk about why and how, and then we see: where are the discrepancies? Say one thing, do one thing. What is the truth, somehow. And then we might try things ourselves. How does this system work? How would it be for a new person to do this? Would it be easy or difficult, or what problems might occur? What should we fix? And then you can have a workshop. When you have a certain kind of insight in advance.	IN OB
KB	While in the media it is a bit difficult to know what success is. And the fact that you may have seen a video on social media, and then two days later you go back to the TV and press "I want to see more of that stuff". That link, that analysis, that insight, we do not really have it. We do not have sufficient data on that.	IN
KB	Then we are also more accurate, and that is the main point here. To reach those we try to reach. That is something we are actively working on. To get better processes. Whether it is innovation, or whether it will create innovation? It may open the eyes of both the editors and the designers if you actually put design in front of the audience. Sometimes you can think everything is good, and then suddenly "shit, they did not realise that it was NRK". They did not understand what the program was about. Then you get some eye-openers to work in other ways, to deliver better to the audience, I think.	IN PRO TRG

KB	While in the media it is a bit difficult to know what success is. And the fact that you may have seen a video on social media, and then two days later you go back to the TV and press "I want to see more of that stuff". That link, that analysis, that insight, we do not really have it. We do not have sufficient data on that.	**IN**
TFMH	I sometimes think that the insight work, when we think of numbers, quantitative insight, we end up shooting ourselves in the foot. Because we do not dare to follow the slightly larger visions. Do not dare to make bigger moves and be something completely different. And I think we have the opportunity since we have a completely different model, as NRK, a different economic model than the others.	**IN** OL
TFMH	We must create solutions that meet real needs. And always look for that, to reconcile with the perceptions and the worldview we have internally in the organisation. I think that is quite crucial. It is very difficult to get people to walk out the door and talk to people, to collect insight and such. We work via, via or hire an analysis agency that will sort of talk to 200 people on the phone. But I am like this: go out, pick up your phone, talk to users. What do they think? What are they watching? Make them talk about their boyfriend and who decides what they watch. It is really hard. So being curious, it is a good thing to have.	**IN**
TFMH	I see that we skip it when we create solutions, but when you are looking for: what is it young users are interested in, in the news? And if you ask them on the street, they will say: I like to stay up to date. But there are still many layers underneath as to why they are actually checking the news and what they are looking for. And again, in the context, they might be looking for social acceptance in the classroom or something like that. There are lots of underlying things that I find very interesting.	**IN**
TFMH	We call it: facts, insights, assumptions, and then the main focus. Top management prioritises these initiatives, but there is input from the organisation, from the bottom up. And then you use that framework to rationalise. What do the facts tell us? Cold data. 40% do this, 2 % ... What does the insight tell us? What do we think about that data? And what do we get from, for example, qualitative interviews? How do we support the data we see? And what assumptions do we have based on that? And then it leads to something like: ok, then this is what we should do. This is what we need to focus on. So then it goes all the way up to the top level in the strategy, in terms of insight and data.	**IN**
TT	People believe that information is insight. It is so misunderstood. And then they think that data is insight. Data is just information. They know what qualitative insight is, but they do not believe in it. If they get a customer who complains about something, then they think that it is only one customer. No! Because if you have a million customers, and one customer says so, then 100,000 customers think so. People are not that different.	**IN**
TT	But the problem with telecom - they have all the data. They know everything about the customers. But if you come up with something based on feelings, then they have no data. They do not have the numbers. And then they cannot find the customers. And then they cannot be bothered. Then it is not possible to operationalise it. That what they think. And that is just nonsense.	**IN**

Short summery of the content is as follows: While insight, both qualitative and quantitative are important attributes in design-driven development, qualitative insight clearly stands out as the most important. As Trønnes describes, information does not equal to insight. Information is quantitative data, and insight is qualitative data. This differentiation is crucial to determinate the most suitable design process fitted to an organisation or a project. Aase draws attention to the importance of getting an overview of your stakeholders and how doing good sampling is essential to understand a complex problem. Breivik and Haug explain how qualitative user insight is the main focus area in creating solutions that meet actual user needs.

1.4.2	Table 1.4.2 – Design attributes – *Share ∞ Test*	
LPA	What inspirations can I use to create something new? And it has been a personal process for a lot of designers for many years. Designers were a bit like: do not look at my screen. When I am done, I will show you. Do not want any input, the purest process possible, be completely alone about it. And when I have finished it, then I will come forward. Then I can show it. Never show anything unfinished. Gradually, people became more collective in their work. You work with others, share early, get feedback, make changes. It becomes so much better design, of course.	**S&T**
AS	It does not have to be perfect right away. You just have to be able to try an idea. Go out to different users. Test on extreme users. Preferably those who are not your typical customers. Test on someone who is extreme. Completely different.	**S&T**
JH	We want to develop products iteratively, so we do not sit in a dark room for three years, and then we launch something with fanfare, and then get feedback. We want to get feedback more continuously than that. Therefore, these great desires we have about what we will achieve in the future, we try to break them down into smaller pieces, so that we can get feedback from our users on what we deliver.	**S&T**
KB	And sometimes we have too short cycles. We are testing something now, and then it does not work, or they did not like it, and thus we leave it. Then we end up making things that cost effort to build, and then give up on it too soon.	**S&T**
TFMH	And it was all "hallelujah" when people could see their calendar. And then it turns out, in parallel with this, the registration of hours goes up. We eventually had 300 users. We started with 100 who used this in tests. And then there were several who came and asked if they could also start using it. And then we realised we had made something that works.	**S&T**
TFMH	If the users like it, and you can test along the way and see that the usage increases, then it gives security to the business side. Which they are not necessarily used to. They are used waiting a year before they get anything. [...] It goes faster, and it gives results. And then you do not have to argue with a team leader about whether it provides value or not.	**S&T** EfS
KHE	I say that: we gather, and share, and engage. These are the three keywords in Innolab that the Innolab methodology is based on. We gather perspectives [...] and then we share our truths, from our viewpoint. What happens then, when I say what I see, and ask questions, and you do the same - then we get closer to each other, so that in the end we stand shoulder to shoulder. And when we do, we broaden our perspectives, to each other. And then we see so much more.	**S&T**
KHE	Innolab is sort of in between all silos and are included in all of these. I say silos - they are city council departments. But I think it is very important that we have silos. Because then we can take these divers of ours, deep into the subject, and really get good at it. And then we try to tie this together. But we do not have to dive in the same place, 30 people, 30 parallel times. We can share what we find. And when we do, something happens in parallel.	**S&T** IN OL
ES	It's about thinking agile, and not sitting in the basement to code on a requirement specification that is 150 pages long. And does not really represent the real problem either. Maybe you just have something floating on the surface that some users know a little bit about. Or worse, thinking that maybe someone else knows a little bit about. Someone who has provided a requirements spec or a project description, which is quite far from the actual problem. And believe something on behalf of someone else. It is dangerous.	**S&T** IN

Short summery of the content is as follows: Designers used to be protective of their work, never displaying something unfinished, according to Aase. This mentality has shifted, and today fast delivery, sharing and testing sits in the core of a design process. This ensures more solid, relevant and targeted design, widely agreed upon by the experts. Haug shares an experience where testing of a successful product rapidly enrolled a lot more users, giving faster results and real-time feedback to the product owners and managers. Eiken argues how sharing gives a wider collection of perspectives and how it can prevent an organisation from

doing a lot of double work. When sharing your deep insights with other parts or outside of the organisation, it saves time and becomes more efficient.

Table 1.4.3 – Design attributes – *Visualise*

AS	You need to have some visual tools when you draw and sketch and break down and decode information. It helps a lot. So, I think that when I use the term "visual design", it helps me when I work with strategy and development methods. Then I use the tool as best I can. Whether it is digital or whether it is analog, paper or on the wall, or whiteboard or whatever. It helps to communicate better with other people, to use those tools.	VC
AS	If you have product design for example. It is an object that is designed, and it is visualized, whether it is physical or whether it is on paper. It is something that is visual, it is not just words and concepts used to be able to describe it, or mathematics to solve it. I would not say that a mathematician alone designs a solution, if it is not visualised at some point.	VC
AS	I still use visual tools to communicate and solve a task. For me, it is a very clear feature of a design process and design strategy.	VC PRO
KB	It is easier to consume something that has a large image and two lines of text. We have many examples of these types of stories. "The pursuit of climate change" for example. I have 1000 presentations, but I will try not to hold a presentation for you, but that you still have an idea of what we work with. Because these are visual stories. Visual things that I would like to show.	VC
KHE	I try to tell and explain that we have to make it simple. We have to sketch. We need to stop spending an entire day of work creating a PowerPoint. When we finish, we want to use it and move the whole congregation. But if there was something wrong on slide 18 or 53, then we have spent so much time on this, that we are not interested in changing it. Then we are in trouble.	VC FLX

Short summery of the content is as follows: Steinstad uses visual aids to decode information, and says it helps to communicate better with people. When designing a solution, it has to be something visual, separating design from i.e. mathematical or purely textual solutions. Eiken continues with how this visualisation has to be simple and unformal, lowering the threshold of altering it when needed.

Table 1.4.4 – Design attributes – *Interdisciplinarity*

AS	I think everyone benefits from working more with it, and it is not something special in terms of design strategy, but if you get the opportunity to work interdisciplinary. Work with people from different backgrounds, where you can challenge them and they can challenge you, with your own perspectives and point of views. This will result in better solutions.	ITD
AS	They must have clear guidelines from phase one, and until you finish testing or such. Clear guidelines and distribution of tasks, and they must know why they are in the team and why they should do what they are supposed to do. And why they, as an individual, bring of skillset to the team. That is very important. And then there is the fact that there must be a decision-maker in a process. If you work interdisciplinary for a large company, then it is important that the top management is aware of what you are working on, and that there is a mandate to work with it. That they are involved in the process and at least get to know what we have learned and approves.	ITD EfS P&M
AS	I would not exactly say that designers themselves are good at working with the financial framework. That is why they should work interdisciplinary with those who have that background.	ITD

HH	We are not talking about "design thinking" or design development processes, or anything like that. We are talking about "problem solving ". It is about solving these problems that our users and customers have. And that is about us working so interdisciplinary in Finn that we do not want to talk louder about design or talk louder about technology. We must be an interdisciplinary environment that works together. And it is a matter of choosing the right words as well, to make sure that we feel we are sitting together and working towards the same goals and ambitions.	ITD
JH	I also have the responsibility for a team that works with organisational development and methods across Finn. Not only product and technology, but also in sales. Assist Sales in establishing Scrum as a work form in sales teams, which may have been classically reserved for development teams. So they work across Finn, and try to strengthen the culture we shall have to work user-oriented, target-oriented and iterative.	ITD
KB	Putting developers and designers together, or animators, it creates some new opportunities. And I believe that working actively to put people together in new ways allows us to see new opportunities.	ITD
TFMH	And yes, interdisciplinarity - you have to have the right people. You must have time. The financial framework. I cannot speak for all Norwegian companies, but I do not think we are that good at it. We are pretty good at with interdisciplinarity. Service design, customer journeys, users' needs and so on. I think we are starting to get better at that.	ITD
TT	What is cool, with people who have done so many different things, is that these are people who have perspective. They know what is going on, and they ended up with this. I feel that these are people who need to be trusted. While those who have only been in one business filed, only worked in finance as a controller and became CFO and such. They do not trust anyone. They just have faith in these numbers. This excel sheet, and then they are completely paranoid about it.	ITD

Short summery of the content is as follows: Collecting insights broadens the perspective when designing, and as a continuation of that, interdisciplinarity within the organisation takes effect. Several of the experts describe how versatility in people, professional fields, competences and perspectives results in better solutions. Harreschou also argues how use of conscious and subject neutral language across different departments in the organisation, ensures unity and collectiveness towards the same goals and ambitions.

6.2 Innovation

6.2.1 Innovation – the word & concept

This is a core-category describing Innovation – the word and concept as presented in Table 2.1 Relating to it are the following sub-categories:

- Effect for stakeholders (EfS)
- Novel || Renewal (NoR)
- Relative innovation (RI)
- Invention ≠ Innovation (II)

	Table 2.1 – Innovation – the word & concept	
2.1		
LPA	I think innovation has even more definitions than design. There are probably hundreds, if you google it. But what is important for us, which I am concerned with and have discussed a lot, is that it must have some effect for the stakeholders. It does not have to be only the users. It can be organisations. It can be the owners. It can be the society. It can be the public. It can be anyone. Where is the value created? It must create some kind of value, for someone. That is essential.	**EfS**
AS	I have such a hate-love relationship with the word innovation for various reasons. I see that it is used in many different contexts. Very often it is used in tenders. The word innovation is often used in tenders, public tenders and private. Then the supplier asks for help with an innovation process. It is classic. For there to have been innovation, it must contribute to the creation of something new.	**NoR**
AS	In other words, if they are able to change their direction gradually by delivering new forms of products and services, then it is also innovation. Just that it is not that radical. I just do not believe in: now we will be something completely different than we have been for 50 years, and we will achieve it by 2022.	**NoR**
AS	Innovation. I would rather use innovative or other ways to describe it. Because innovation is nothing new.	**NoR**
HL	I have started to like the word innovation. But again, that is because I am working with it. Among my employees, it is a word that tastes of consultants who get paid far too well. Which is like: Oh no, now they are going to start innovating.	UC
HL	If you look at three related concepts: Imagination, creativity and innovation, then imagine that it is a kind of staircase. Then "fantasy" is the first level. To think of something that does not exist is fantasy. While creativity, is putting your imagination to work. And then there is innovation, which is putting creativity into practice. Artists, they are creative. They make things out of things they invent, which do not exist. While companies, they do innovation. They repeat. It is a scale in a way. Innovation is about scaling up. You make innovative or creative moves that are important to many. While creativity has a slightly more limited scope. [...] Then there are some who say that for something to be truly creative, it must generate value. You have to create some kind of value. I think it is a bit narrowed. I think there are a lot of things that are creative, that is a bit difficult to generate market value from. And that can be individual. But those who write about this, they distinguish a kind of "upper-letter Creativity" and a "lower-letter creativity". And innovation is putting this into a system. That is what I think. It is a way of relating to it, because the everyday meaning is innovative. But it is a bit imprecise. There are lots of things that can be innovative, but many of those things do not have value or significance for many.	**NoR**
HL	LS: And something can be innovative without being innovation? HL: Yes, it can. In English they say «novel». There are lots of things that are "novel". New. But they do not matter, or they do not generate value for many.	**NoR**
JH	I think it is a viable, new business concept. If one can say that that is something more clearly defined.	**NoR**
JH	When we say that we should spend 10% of our efforts on completely new things, then in the Google context that means self-driving cars. They go all in and say that: innovation for us is about moon landings. That is not the case in Finn. We still think that the 10% that we define as "new" is about marketplaces. That it is something in the marketplace concept, because that is what we can do.	**RI**
JH	But for us, it is probably fair to say that innovation is not what is defined as radical innovation, like the moon landing, necessarily. We strongly believe that innovation work for us is about the slightly smaller and more concrete things. And innovation is always a relative quantity. Is it new in Norway? Is it new compared to other competitors in the industry? Is it new globally?	**RI**
JH	And there are some developers with us who probably wish that we did innovation work similar to Google and made self-driving cars. There may well be someone in Finn who thinks we should have done that to call ourselves innovative. But that is not where we are. And we are clear on that. That it is not what the innovation space is. It is marketplaces.	**RI**
CG	At least we distinguish between, an invention for us is not innovation. Innovation is when you manage to do business on it. That is, that you manage to reach out. When it is utilized. That it is not just left as an idea in a drawer. Yes, our job is to do the hard work of commercialising good ideas. Do it with the help of innovation.	**II** EfS

TFMH	I think it is used more than it actually produces anything. Maybe I am hard on my own workplace, but it is really just that we do not work actively with innovation. [...] At the moment, we are working hard on continuous improvement. When you present new solutions in the products or platforms or what we are working on, it might be a path to something innovative. But often it is only improvements to already existing solutions, or things we know meet the needs of users.	**NoR**
TFMH	For me, personally, innovation is creativity with an output. Creativity leads to something that gives value to someone or helps to create change.	**EfS**
KHE	And then we can stop at innovation: yes, what is it? You have 30,000 different opinions about what it is. But we in Bergen municipality think that it is something new we can make use of.	**NoR** **EfS**
KHE	Innovation is simply daring to think a little differently or new, about something that may or may not work. I am on the "new" and "utilized" side. It must be meaningful. Otherwise, there is no point in it. For me, innovation is about being able to dare to use something others have done, in new contexts and new settings. And I think you do not have to come up with everything yourself. There are many who believe that innovation is about new, and then there is no innovation height at all. Because we have it. It is not entirely new. I do not believe that. I believe that if we manage to take our story as our starting point, and then find and see: what can we preserve and what can we do something further with? [...] Only then does something start to happen. That is innovation for me.	**II** **MF**
TT	My definition of innovation: you see something somewhere, and then you apply it to your own. That is my definition. No one invents something all by themselves. You take something that you find, and then you pull it into your own business, and then you create it there. And that creates something new for your business.	**NoR** **II**
TT	What one should talk about, instead of talking about innovation, is ambition. We are going to make something new, how good is it going to be? Because it says something about the height of innovation. What do you expect to get out of it. [...] And this is the way one should push back to leaders, who do not understand the deal. Because they often set the requirement up here, and the budget down here. They want the best stuff in the world, but they only want to spend 300,000 on it. And it does not correspond. Then one should take that discussion upfront, instead of getting this pain point somewhere in the project, and say: what are we going to make? I have started to use this in all areas. For example, work environment. I am the safety representative with us, and I asked the manager when I came to the first meeting: how good working environment should we have here? What is ambition? Then it became quiet, because they have not thought about that.	**NoR** **AMB** **P&M**
ES	A few years ago, it dawned on me that there is a difference between invention and innovation. And I think many people are not always aware of that. Invention is an "oppfinnelse" (Norwegian for invention). To me, the concept innovation, is that you take something that has already been done before, but in a different context, and put in a new context. And create value. Creates value. That it is not only nice, but you have to make a change. Lasting change. Behavior change. You can do an incredible number of cool things, which some companies tend to do, but then they fail to extract the effect of it. Or the behavioral change in humans. Then innovation has only been "something cool". Which has not provided value. By all means, you can learn from it. But I think we need to become better at translating it into real value. And that is perhaps the most difficult thing.	**II** **NoR** **EfS** **CCD**
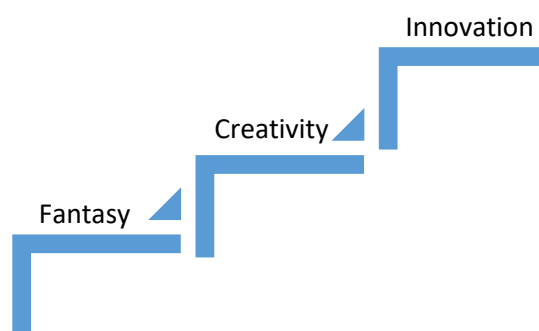
Figure 15 – Legreid's steps to innovation.

Step 1: Fantasy is to imagine something that does not yet exists.

Step 2: Creativity is putting your fantasy to work and making something from it.

Step 3. Innovation is upscaling your creativity to making value for many.

Short summery of the content is as follows: Legreid explains innovation with a three-step staircase (Figure 15). The first step is fantasy. This is imaging something that does not exists. Fantasy is not something reserved for designers, or even adults. It is something everyone has. The second step is creativity. This happens when you put your fantasy to work and create something out of it. The third step is innovation. That is when you are able to upscale your creativity enough so that it creates value for many. Legreid differentiates between novel and invention. Something can be completely new in the world, without creating value. Making something that creates value for many is broadly agreed upon amongst the experts as an adequate description of the term innovation. It can be stakeholders, society, municipality i.e. It is also consensus that innovation is relative to its context. Innovation does not have to be self-driving cars, moon landing or shifting your organisation into a completely new field. Innovation is taking something you see and apply it to your own organisation. This way it is new to you. No one comes up with something new in the world completely by themselves, according to Trønnes. He also thinks we should focus more on ambition rather than innovation, and let our ambitions define the possibilities within the innovation space, without calling it that. Gladyszak and Solberg also make a clear distinction between an invention and innovation.

6.2.2 Innovation – the method

This is a core-category describing Innovation – the method as presented in Table 2.2 Relating to it are the following sub-categories:

- Create-Capture-Deliver (CCD)
- Business Model Innovation (BMI)
- Future-oriented (FO)

2.2 Table 2.2 – Innovation – the method

LPA	[Innovation] It is "creating value", "capturing value" and "delivering value". Those are the three things. No matter what economists try to tell you, the business model is: Creating something. Capturing its value. And deliver this value.	**CCD**
LPA	You cannot sit with a set of resources and expect it to bring you into the future. You have to find something in the future that you are going to pull yourself towards. And design is also art. The desire to go into the unknown. A place no one has been before and create something new. There have not been very many other alternatives to this than design. It is a bit important to know why design has received such a big boost now. It is not because design has changed significantly, it is because society and competition owners have changed very much.	**FO** NoR
LPA	But what we often, and especially perhaps designers are a little naive in relation to this, is the business modeling that is about capturing value. And that is also what makes it visible whether this innovation has a right to life. If it does not generate any value and you are unable to capture that value, it just disappears.	**CCD** EfS
AS	Contributing to innovation is about working incrementally. It is so easy to be "wowed" by all these products and services that we say do innovation. Such as AirBnB, which is used very often in such contexts. Or Vipps. But you have to keep in mind that it is not something that just suddenly occurred. It was not like someone just got an idea, and then it worked very well after a year. It did not. They had a hypothesis to test something, an idea. It happened incrementally. It happened step by step. So for me, innovation is about having a process, i.e. you start with a challenge that you are willing to test. And learn to fail, often, in order to deliver a good service or product in the end.	**CCD** NoR S&T
AS	You are going to create something new. The radical way of think about innovation as: now the bank will stop being a bank, now the bank will suddenly become a tech company. That is not innovation, I would say. Then they jump straight to the solution, without really going through the steps. The incremental steps.	**CCD** NoR
AS	It is much easier for a start-up, a new company, to just work with something innovative. Because they are new in the first place. But if you have an established insurance company that has very strong associations and clear portfolio, products and services, which they have been selling to their customers for so and so many years – it is much harder to turn the ship around. To work more innovatively.	**BMI**
JH	They have also had periods where they have had a very tight shirt like: This is how we do it, and there are checklists on "this is good practice". And then we see that we lose something by being too stiff, because it is also process innovation, you could call it. There are ways of working which is also part of a robust innovation culture. It is not always be the product that needs to be innovated, but also working methods.	**BMI**
JH	It is not the methodology itself that is most important, but the fact that the teams themselves can have a certain freedom in how they work, within that framework, so that we can agree on some principles as a company. So we have tried different things and found that the latter works best, because then we can also get some creativity around the way of working, so it does not feel too cramped.	**BMI**
JH	I think that Finn is a flexible organisation. Then we still have things to do, but with the examples that we no longer have annual budgets, which I think is one of the biggest challenges that companies have in working agile. Because you limit yourself in saying you have to plan something on a man-made calendar year, right? And that is not necessarily how the world works. There may be things and decisions you need to make, that need to be completely freed from that annual budget. So I think we as a business are becoming more changeable. Ultimately, we get an innovative culture that strengthens and serves the business. Who manages to turn around, and who is not locked in promises like we did. When we did budgets before, we made the budget in October for the following year. So in September the following year, you rely on decisions you made in October almost two years before, without insight. It is crazy that someone still do that. 99% of Norwegian companies still do annual budgeting, which requires an enormous amount of work, and which is just guessing about the future, which limits you.	**BMI** FO FLX
JH	Bluntly, some companies struggle with the acquisition of ideas and others struggle with implementation. And some struggle with both. I think Finn, if we were to set the two up against each other, then it is probably more the implementation that is the challenge for us than the	**CCD** S&T

	acquisition of ideas. We have enormously creative people, as soon as we ask for input or hold workshops to come up with ideas, it overflows. So for us it is more of a challenge to get things tested quickly so that we know if this is something that is worth moving forward with.	
CG	**Doblin**, I think it is in Chicago or something, they are situated. They followed a bunch of innovation projects over a long period of time. 3000 projects over a ten-year period. And then they saw: where is the money spent when it was related to innovation, and what did they get back? And that was when they came up with these 10 different aspects you can innovate on. And they set up ROIs for them. And the one with the best ROI was the "profit model" or business model. So, that is the rationale for us to spend a lot of time on, and missionize, for thinking innovatively about business model.	**BMI**
CG	Doblin has defined 10 main ways you can innovate. And making an innovation in your product, that is perhaps the most common. You think you have to have an innovative product. But what we see, the companies that make an innovation in their business model, are the ones that often succeed and the one where you also have the best ROI on your innovation efforts.	**BMI**
CG	What we see, the Achilles' heel in Norwegian business, is that we are too focused on technology, and too little on the business part of it. We constantly see very good products and pilot projects, which ends. They cannot take it further. They do not have the Dane in them or the Swede in them, who are much more commercial in their way of thinking. They do not emphasise with the "soft" aspects of the project like: how will we be able to achieve a good relationship with our customers? How to maintain customer relationships? They are more concerned with the type of steel they have in their construction, to put it a little on edge. And thus, they do not succeed commercially.	**CCD** EfS
TT	There are 3 types of companies or organisations. There are the ones who do not innovate at all. They will be gone soon. They do not care about any of it. Like "Lørenskog pipes". And then you have those who talk about innovation. And then you have those who do innovation. And those who do innovate, they do not use the word. This is my hypothesis. [...] Those who talk about innovation, it is academia or academic types who work in the innovation department of companies that have such a department. And who stands around pointing fingers. Look there, Apple, they are innovative. And there is disruptive innovation, open innovation, and all of these labels that they put on different types of innovation. And then they talk about it. I am a part of several forums like that. Those who innovate, they do not talk about it. Apple does not say "we need to innovate". They are just talking about building something. Fixing something. Deliver something to their customers. That is what they are working on. They do not sit around saying: now we will have an innovation workshop. They say: now we will come up with some new products. What does customer insight say here? Now we will go out and dig.	**CCD** IN
ES	In order to have real power in the innovation in some companies, the architecture must reflect it. It does not help that the business sits on one side and is super exited and wants to work innovatively, puts a lot of money on. But then sits in a landscape that can make changes maximum once a month. Guess what? It will not work. So there is something in synchronising those two worlds.	**BMI**
ES	Traditional consulting, for me personally, is dead. That business model is not something I believe in, to be completely honest. It has not changed in 120 years or whatever it is. [...] And I think we are in a phase where consulting is no longer consulting. It is more innovation consultants, if we are to use that word. One sees that traditional consulting, which should be good at innovation, their way of thinking innovation is to find reference cases. Where everything has been done before. They already have the answers. Guess what? There is not much innovation in that.	**BMI**

Short summery of the content is as follows: Aase defines innovation in a three-step concept: To create value, to capture value and to deliver value. Both him, Hauglum and Gladyszak claim that the stumbling block in organisations often is the "capturing value" step. How to set an idea out to life, commercialise on it and how to empathise with the "soft" aspects of doing business. We tend to get too focused on technology and materials, according to Gladyszak. He also refers to studies done by **Doblin** who concluded that organisations who innovate on

their business model, had the best **return on investments (ROI)**. Steinstad reminds us that innovation is not something that just suddenly appears, but rather a result of an incremental processes with testing and failing. Trønnes has a theory that businesses who actually do innovation, are the ones not calling it that. They stay focused on building and delivering something to its users based on deep insight, rather than using labels and terminologies. Solberg suggests that traditional consulting is dead. Why should one trust consultants that rely on an old business model were everything has been done before and all the answers are pre-set and established? That has nothing do with innovation, he claims.

6.2.3 Innovation – Adjacent

This is a core-category describing Innovation – the word and concept as presented in Table 2.3 Relating to it are the following sub-categories:

- Ambidextrous (AX)
- Disruptive (DIS)
- Kill point (KP)

2.3	Table 2.3 – Innovation – Adjacent	
CG	You need to experiment with multiple business models in parallel. And then we try to point out that: the challenge for most companies is that in a way you have to work ambidextrous. One hand should be good at being operational and make sure you have a rational operation. That you make money. While the other hand should be concerned with looking for new business areas and new ways of delivering value, which are more future-oriented. And with that hand, you also have to risk that you will hit the wall sometimes. That you will make some mistakes. But that is all right. But it means there are two quite different cultures that will have to merge into one. So we focus on that, trying to underline that you have to be able to cultivate both. And that it is a challenge.	AX FO DIS
CG	But you can say, success is intoxicating. It is easy to stay where you are, if you are successful there. So the challenge is to stay hungry and to move on, and maybe dare to disrupt yourself.	DIS
HH	He (Hauglum) leads this A-part of our portfolio, which are these adjacent cases, meant to be long-term innovation. So we have separate whether things are "core", which is what Jens is talking about, which everyone associates with Finn. The big four: "Torget", "Eiendom", "Motor" and "Jobb". [...] Which would have been a disaster to lose. That, in a way, is our core. And there you do innovation in a different way. It is not correct to say that there are only small, incremental changes, because there can be quite large things happening there as well, but we already have a large user base there. And we have many famous products. So it is more about iterating on small, familiar things. While in these adjacent cases, it is about making out completely new concepts. So there are often a bit more long-term innovation processes there than are in the core, as we call it. It is two different ways of working with it.	AX FO II
JH	But then we have experimentation. We measure this at team level, on the number of initiatives. We think this is an important factor in knowing that we are able to acquire learning. Because if innovation is about something new, and we as an organisation do not know, which is usually what you do when there is something new, then you have to experiment. To learn about this new and	DIS OL S&T EfS

	what works and does not work. So we measure experimentation. And then we see how new initiatives contribute to turnover. A proportion of our turnover comes from new products, so we are able to see that we are creating something new. Which also creates user value, and value in the form of us capturing it by getting paid for it.	CCD
JH	I would say that Finn does quite well if we look on the "benchmark" on the things we stop. In the portfolio that I am responsible for, which started in March 2019, 60% have been closed down and 40% have moved on. And stopping things requires maturity, because people get frustrated. And you may be afraid that the good people will quit because what they are doing gets stopped. I guess that is probably the real acid test for an innovative business then. Not that you just launch new initiatives, but that you manage to stop and find out if something is worth further investment.	**KP**
JH	We have divided this work into this "adjacent" portfolio, and into the "new" portfolio with three main phases. We call it a "discovery phase" which is about finding out: Is this a real need? Is this a problem that is worth solving for the users? Then we should be very careful not to fall into the trap of thinking that we have the solution too soon. Or that we feel ourselves that "this is certainly a problem or need that is worth solving". We will have to find out if there is a need or a problem that is worth solving. And then we enter a "nail -it phase". Then it is more about: do we have a solution that we think we can deliver, to solve that need? Because there may be a need that is worth solving, but Finn does not have the prerequisites to make it happen. It may not fit with our brand, or it may be too expensive, or it may not suit us. And when we have found that link between need and solution in a " nail -it", then we are over in a "scale -it". And then it is time to turn up the volume switch and use marketing and everything that Finn has the opportunity to do, with all the millions of users who drop by every week. And then we have check points every three months to review them.	**AX** IN CCD PRO
JH	These initiatives only get three months at a time, really. And then they have to deliver on some assumption they have about how far they have come after three months. And then it is the management team in Finn that makes that decision every three months.	**KP** PRO
TT	So when the Asian trend built up, they sat in Finland and just said, "No, no, we know what we are doing". And you cannot afford that when you are so big. Then you have to follow all trends and be a part of them. It is a classic management strategy, really, of disruptive things. They completely missed it, and they had to buy two models from Sharp, which they re-branded to Nokia and sold as their own. That alone should have been a warning.	**DIS** FO
TT	But when they put together teams, in practice, how does that happen in project in a large organisation? "Here are some tasks to be solved, who is available?" He/she has some spare capacity and can be part of this project. Then you stack together about 20%, based on professional knowledge. Nothing like: have they worked together before? Do they work well together? I have never come across anyone has thought those thoughts, in all the years I have been involved in projects. Who is available? Here they are. You are the project manager. Spout and run. And when the project is finished, what happens then? Splits up again. When they finally, at the end of the project, have learned to work well together, deliver and work in the same direction. Split up, and then there are new projects and new people. So if you are going to work on this, and really make design work, then you need to create high-performance teams that work. Because it is hard to get that dynamic to work. And then you have to use engineering binary splitting where you divide the core in two, so that in the next project you divide this team in two, and then you have a critical mass in each team that understands how to work well together. And then you add on another two or three, so that they get into it. And then they continue to work, and next time you split into four, eight and sixteen, and eventually, you take over the whole company.	**BMI** AX
ES	Allocation. Instead of allocating your own investment funds, invest time, invest in change or innovation teams. Invest in a long-term, a continuity around this action, and understand that you also have to work in different horizons. You have horizon one, which is usually daily operations. It has to run normally. Level two is a little more, not radically, but change a little. Maybe take your capability into a new market. Then you have the third part, which is more radical innovation. Thinking ambidextrous. To make today's operation as good as possible, but also open up to disrupt yourself. Because there are many who are terrified of that. I think that has to do with politics.	**AX** BMI DIS P&M
ES	First, you must dare to challenge your own business model. Experiment and play with the exact opposite of what you do today. [...] Go to do the exact opposite. Look at Cutters and AirBnB. They took some established truths and then they went out and challenged them. "You always have to	**DIS** BIM FO

	wash your hair", or "Everyone wants to stay in a hotel". Challenging the established truths that lie in the market in which you operate is at least a good start. Dare to let go and set up an environment to test and verify. You have to stay alive. And that is what is difficult. How to set aside enough to sniff at the future. There may not be a definite answer to that, but you have to be curious. You have to dare to be curious. And you have to feed that curiosity with something. And then you have to create the strong learning and continuous learning to be able to pivot all the time. Constantly being able to adjust the course which you were on. It is about facilitating for experimentation and to a large extent, for new ideas.	
ES	I think we will see more and more niche, small companies, because there will be a larger ecosystem within certain industries. Where those who are able to navigate this ecosystem and put the puzzle pieces together, will get a pretty interesting position. [...] Here I think there are some crazy upsides. And the question is whether the big and established companies can innovate just as quickly. [...] How quickly do they manage to navigate a market that is constantly changing? Here I think you have to use ideas from the design and strategy side. Get some beta business on the outside that catches new trends out there and feeds it a bit in, to get learning in the organisation. It is a lot about the size of the organisation and " **Path Dependency** ". How stiff is the path dependency? How difficult is it to make changes in the company? Sometimes we see that it works better to establish something on the outside, which has its own identity, to operate with the new things. There you have different forms of experimentation.	**AX** OL BMI DIS
ES	You need to find the balance of how much new you are doing, right now. It may be that instead of working in horizon one to two, you should put even more in horizon three in some settings. Which makes you work on what is coming in two or three years, maybe. "Discover and deliver". [...] It is a bit like self-driving cars. Someone has had a thought: we are going to make self-driving cars, what do we need for that? Lots of sensors and data. So then they started with parking sensor. Someone is willing to pay for that. Then that innovation is sponsored. Then came the rear-view camera. Then you have managed to, incrementally, work with this big dream, which is a self-driving car, and managed to make money on it along the way. This is where many have something to learn. [...] How can you make money on a great idea, without having everything you need. It may take four, five or ten years. How do you manage to move towards that goal, and at the same time be viable and capitalise on parts of the idea, along the way.	**AX** FO CCD

Short summery of the content is as follows: One of the biggest challenges an organisation faces is how to facilitate for an ambidextrous business model. How to work operative and profitable with one hand and experiment with new business areas and markets in parallel. This to ensure the organisations viability in an unforeseen and dynamic market. Organisations can establish a beta business, an incubator or adjacent cases, either project based or permanent, inside or outside of the organisation. Solberg points to the importance of daring to challenge your own brand and to challenge established perceptions, even if it means disrupting your own organisation. He also suggests that sometimes it is easier to start something new on the outside, than trying to redeem the whole organisation at once. Both Solberg and Hauglum advocate the need to invest in targeted people, time and budgets for experimenting, which also have to account for a certain amount of failing. In addition, these adjacent cases need a decision maker and a kill point to ensure that only viable ideas are kept alive. Trønnes makes a strong point in how to put together teams for these adjacent cases or beta businesses. It is well known that new teams often get put together based on "who has

free time on their hands". Trønnes suggests starting with the two or three most engaged people, then use binary splitting in creating new teams or incubators, including solemnly those people who want to be there and make a difference.

6.3 Success

6.3.1 Success – the word & concept

This is a core-category describing Success – the word and concept as presented in Table 3.1 Relating to it are the following sub-categories:

- Add-on (AO)
- Human values (HV)
- Meaningful (MF)

3.1	Table 3.1 – Success – the word & concept	
LPA	And it must be felt. Not like: "Now - new and better", and then you notice no difference. It provides no qualitative change for anyone. There must be something that people can experience as a difference.	MF
HL	A successful business, then you have the ability to recognise if you are on a good "vibe". And then add. I think. That you add, recreate and milk it, to get the most out of it. It is harder if you are in the ditch. Then you need to reverse a trend. That is harder work. But there is also much greater potential for growth.	AO
HL	There are some values at the bottom: democracy, freedom of speech, public spaces, inclusion. Values. So if we stay in line with those values, and maybe they develop further. If we do things that corresponds with that, it is a success. And that society reasons and agrees with us that it is a good plan.	HV EfS
HL	And of course, you can turn a disaster into a success with language. You can just turn your values around and change the success criterion. If you had a project where no one came, then it is apparently a failure. But you can turn it around, and then you can say: yes, no one came to this, why not? And if you find out why this went wrong, then that is a success. Because then you have learned something.	MF OL
HH	I want to say that you work with insight, instead of ideas. That you all the time, and then I talk about both qualitative and quantitative insight, but that you have a data foundation for the decisions you make. I think that is very important.	IN
TFMH	The simplest form of success, it is banal, when you have succeeded in creating a service or product, or something that does something that makes sense to users. That it is a need you respond to that is so clear and hits so well - then you have succeeded.	MF HV UO
TFMH	I work in the commercial part, and there we have the "fight for budgets". It is the money that rules. And that is a false sense of security. We believe that if we get 80 million instead of 30 million in the budget next year, then we are saved. Then we have success. And that is just about believing that: the more money we have, the more fun things we are going to make. But it is not a given that we do more or fun things. Or that we do better. Or that we convert more users. And that is interesting.	MF
KHE	There are not any employees in Innolab. And that is the success criterion here. I refuse to hire anyone. Only I am employed, and I speak for many. He he. But that is about, the core of why, is	OL

	because we believe in transformation. It does not happen if you get someone to do it for you. It only happens if you participate in it yourself. So therefore, we teach methodology, tools and how to use them.	
ES	If you work to create a safe place for your employees, where you take care of the people, then you will go insanely far. That is the most important thing to me. Having a culture that is open, transparent. Which makes the employees want to go to work in the morning. And who are proud of what they do. Regardless of what industry they are in. That you have leaders around you who are more concerned with the people, their knowledge and well-being, and development. See them. [...] And I think, if you create that, then you have a foundation.	**HV**

Short summery of the content is as follows: The experts were asked to suggest success principles not related to profit or bottom line, and two things clearly stood out. A successful organisation creates value for humans, whether within or outside of the organisation and it does meaningful things. Success is creating a service or product that is meaningful to your users and that answers their needs, summed up by Haug. But as she also points out, this is not without conflict of interests. For example, the sales department in TV2 are responsible for selling advertisement as a main contributor to the company's income. On the other hand, it is well known that users are not particularly fond of advertisement. It is a matter of finding a balance.

6.3.1.1 Success – Relative Success

This is a core-category describing Success – relative success as presented in Table 3.2 This table does not have new sub-categories, as everything defined as a success by the experts is related to an already existing category.

3.2	Table 3.2 – Success – Relative success	
LPA	Optimisation has been very good for the production of commodities. That is, of goods. But not for services. And 70% that GDP in Norway is related to services. Still, it will make sense to optimise a factory. But that optimisation, it has made us extremely good at a tiny part of the value creation. Every single department, or something like that, has been very good at sub-optimising. Coordinate middle managers, coordinating parts between these sub-optimised units. This works very poorly when making something new.	BMI PRO OL
AS	But I still think that they can be successful and innovative without having very strong economic growth. The brand, building a brand, building a community, for example, repercussions in society. The factors there, the values , I think are at least as important. And in the long run, they will provide economic growth. But it may take a little longer.	TRG HV
HL	There are many things that have value. And that is something you have to adjust often in a project. Adjust: what is the success criterion? When can we pat ourselves on the back and say: this went great? And then it must be in relation to something. That can be very different from project to project.	MF FLX
HH	For example, we monitor customer satisfaction among professional salespeople. Recruiters, real estate agents and so on. Make sure they are happy. Make sure that we do not increase the prices so much that it goes on expense of the customer satisfaction. And then we try to follow the user	IN UO HV

	satisfaction and "top of mind" among the young users. Just to see the slightly softer side of it, i.e. the qualitative experience of Finn. Do they perceive Finn as a helping friend? Do they perceive Finn as pioneers? Is Finn one of the first things they think of when recommending a marketplace and so on. So that we do only think about money in the bank, but that we make sure we get our users and customers with us at the same time. There are many, many indicators that are connected and that will give us the overall picture.	
TFMH	It is very difficult when we talk about what is success. I am talking about our users wanting something we make. And there you have huge conflicts of interest, which is about, for example: we have a whole bunch that will work on advertising revenue. Selling advertising. They have to push as much advertising as they can, and make as many good agreements as they can, with all the major traders in Norway. Because then we bring in a lot of money. And we do. But then you have another bunch that aims to serve the user. And we know that many do not want advertising. We do not want to lose users, but one of our biggest incomes is advertising revenue.	IN UO
TT	If you are concerned about efficiency - forget to spend time on business cases. You have to decide: should we create value for these customers - yes or no? Shall we look for something out there that we can make money on - yes or no? We do want that. But you have to set the ambitions. Yes, but it must be at the 300 million level. Or 10 million level. Ambition level has to be asked about in the brief. Because it can help you filter out ideas, when you see what the potential is to hit "this" or "that".	IN UO AMB
TT	This concept «value creation». They do not understand it. They do not understand that value creation starts somewhere. And it does not start in the Excel sheet. It starts out there with the customer, and it creates value with the customer. Exactly what design is for. That is where it starts. Everything afterward is just about raising money. They believe that value creation happens inside the business, for the owners. And already there you have such a cultural crash, and such a gigantic gap.	HV UO
TT	The most important thing when we run a business is to create value for our customers. And as I said earlier, this is where the limitations of your results lie. You can never make more money than you can create value. In every customer's head you have «value for money». [...] Like this: Here you offer me something. Or your work that has value, and then I am willing to pay for it. That is the most important skill that you have. To understand the customers and add value.	HV UO
TT	If you look at companies that are having trouble with their results, it is because they are unable to create value. They have missed. They have fallen out of sync with their customers. And the value they create is disproportionate to what people pay, and then it starts to slip. And what the CFOs do then, they go into a large cost-cutting program, while what they really should have done was come up with a value creation program. To create value. Or else you just cut in what little value you produce. And then you cut in the value creation. Then you have to cut prices even more, because then customers are not willing to pay. And then you are just inside a vicious circle where it goes down. It is completely misunderstood.	HV UO CCD

Short summery of the content is as follows: As with innovation, success is also relative to context. There is an agreement that success has to be defined according to something. The most important word that stands out whilst talking about success, is value. Value for customers, value for employees, value for the organisation and its owners (Figure 16).
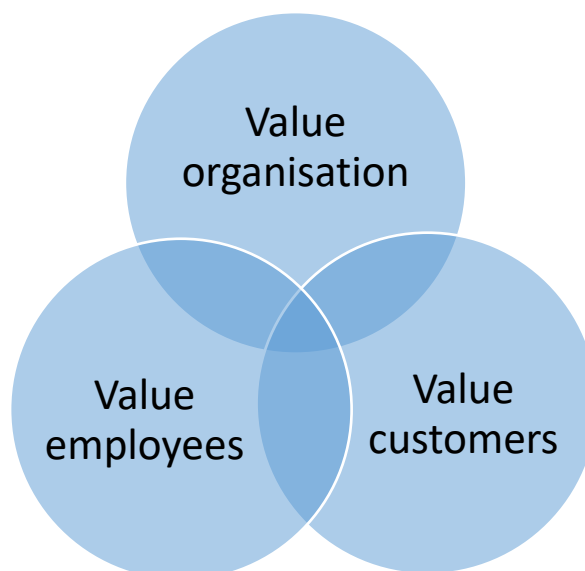
Figure 16 – Human values in business success

6.3.2 Success – Empathy

This is a core-category describing Success – Empathy as presented in Table 3.3. Relating to it are the following sub-categories:

- People (PPL)
- Planet (PLA)

3.3	Table 3.3 – Success – Empathy, people and planet	
HL	And then there is "design thinking". What separates is the human focus. A lean process has much more focus on the organisation, while a design thinking process has much more focus on the people. Either in the organisation or against the organisation. That is, the audience or something. That is two different way to focus. They can be used well both, but I prefer that I have to think more about people than computers and software.	**PPL** HV
HL	At least within the library, the focus is people. [...] We lend everything we have, to anyone. And then the point is to facilitate a place or a service that makes this as accessible and good as possible. And to do that, you have to find out what the present and perhaps the future needs are at any given time. It will be subject to change or alteration. In that sense, the work is never finished. Now that arena idea dominates. The fourth room, that I am talking about. A place that is not at home, but which is homely. And how to make these places. Area design.	**PPL** FLX FO
HH	And Finn is the first place where I have heard the CEOs constantly standing on the stage, the digital scene right now, talking about user journeys. We use it very actively in how we work, and it also means that the organisation can understand what we are doing. If they work with payment, let's say. You work with payment between two private individuals. Then it is not a technical thing. You understand that it is to help a user getting paid for the goods that he wants to get sent. In a way, it puts the work you do in a slightly larger context, which is easier to identify with.	**PPL** UO

CG	And what we see is that these things, this shift, is going much faster than you imagined just two years ago. The reason why the EU introduces the taxonomy is that they are very clear on where to steer the money. They see that: if we shall achieve what we want, then we have to partner with private capital. And thus, they work actively to bring the capital forces to join the shift. I think that is absolutely essential to make this happen. And we are already seeing examples of this, that investors are now starting to think long-term. What they are investing now, it will pay off several years later. So then they are not getting into sunset industries.	**PLA** FO
CG	The quintessence, as I see it, in design thinking, is about empathy. You need to empathise with some target audiences. And those who are good at it, they manage to stay within this area, for a long time.	**PPL** HV
KHE	I do not have a tech background. I am just interested in bridging the people who are going to work in digitisation or technology in one way or another, in the world. Or where we live. Where we work. Where we study. And then make it understandable. So that we in the municipality do not produce 1300 new apps, which we do not need. Because we already have 1500 apps that we do not use. So when I got there and had to build this, I actually pushed the brakes right away and said: Ok, we have tech. We have geek. We have all this we can build. All this we can commercialize. And then we have the people. What do we need? What do the citizens need?	**PPL** HV UO MF
ES	If people thrive at work, then they do a good job. Customers are happy. It has some insane ripple effects that make, for the most part, I think the bottom line will reflect that environment. It is my safest beth at least. It is all about the people.	PPL HV

Short summery of the content is as follows: The quintessence in design thinking is empathy, according to Gladyszak. If you are good at empathising with your target groups, you can stay in the market for a long time. Legreid also emphasises the focus on people as one of design thinking's strongest assets, as a contrast to a lean process were the focus is more on the organisation or on hardware. The increasing focus on climate change and the environment has also made the planet an aspect to consider when designing for the future. This is explained more in detail in Claus Gladyszak's interview (Appendix I).

6.3.3 Success – IFTT

This is a core-category describing Success – IFTT as presented in Table 3.4. Relating to it are the following sub-categories:

- Risk & Failure (R&F)
- Dynamic markets (DM)

3.4	**Table 3.4 – Success – If this, then that**	
LPA	We have used this on things that have not been a big risk. Things that may not have been important either. What is prior to having buy in at the top. Where one says: Okay, some of the most business-critical things we do, we actually have to look at them. We cannot just look at things that are empty and silly. Things that are not so important. We need to look at the core of the business. There we need to see what we can do in a better way. And until that happens, I do not think that organisations can fully embrace it.	**R&F** BMI
AS	And then there is always that humility towards: now we are going to try this. We may fail, but what we learn from failure makes us even clearer. Even better with this.	**R&F**
HL	The biggest mistakes, if we are to talk about mistakes as a contrast to success, is if something that does not work, persists. Then I see myself as personal failure. If I have been involved in making something that was obviously wrong, and somehow it manages to stay that way. It is just there, being bad.	**R&F**
JH	[...] We cannot define in Finn that the world should standstill. It does not, and we have seen that in the past year. And we see that in the competition. We have mostly international, large competitors. And there is an enormous dynamic in the market that we operate in. So we just have to acknowledge that that is gravity. An enormous amount of things are happening, and we must be able to pivot.	**DM** FLX
KB	Suddenly it should happen in no time. And it is quite obvious that we are not able to deliver on this. So then we had to make a standard template for everything.	**DM**
KB	And it also costs something to let go. Dare to release it and say: we have created this new format. We call it the visual deck. Welcome in, use it for anything. And dare to see that it is used for ugly things, because journalists do not always have the visual eye. But you must also know that there may be magic happening that you had never guessed.	**R&F**
CG	We have tried different things, but one of the things we have experimented with a bit, is scenario thinking. And there are some things about scenario thinking that are quite useful. It trains you to think different outcomes. Few, if any, had envisioned a scenario that would mean closing the country for a short time. So few had their plans ready: if that happens, then we have a plan lying in the drawer that we can come up with. Or at least thought through these issues. So we believe that boards must to a greater extent become better at being able to think in scenarios. Some "worst case", some "best case" and of course the most likely. And it is not that you have to make detailed plans. We do not have more faith in that than we had before. But it is just so that you have had some thoughts about: given that this happens, then we must at least have this and that in place. We have thought about it, and we have some form of preparedness for it. And I think we need to focus more on that, because the future is, as we have seen, unpredictable.	**DM** FO
TFMH	In our system today, we have not set aside enough focus, or enough weight. If you look at money distribution, or finance, or how you distribute the budget in a different way, in order to facilitate innovation. There is so much expected failure there. There is so much expected failure one must take into account, when entering into something that is completely unknown. Then you will most likely make a lot of mistakes, because that is a part of the learning. And then it also requires something from the budgeting and the financial framework. Who defines that sandbox? Not a sandbox for fooling around, but something that will lead to something. I think one might be a little reluctant to do that. And to actually take that risk. It is easy to talk about risk in continuous improvement, because there is not really that much risk.	**R&F** OL BMI
TFMH	One can still see quite a big urge to make business cases. The business developers, they will do research and then create business cases. But it also creates a false sense of security. It is just as false as what you do when you work design driven to take less risk. Learning fast is perhaps better than spending a very long time creating business cases, which we think says something and gives us the answers. It is fake comfort.	**R&F**

Short summery of the content is as follows: When designing for a successful business there are some factors that are outside of human control. As Hauglum states, we cannot define that

the world stands still. We have to embrace that and prepare ourselves for different scenarios, suggests Gladyszak. He recommends having thought trough "worst case", "best case" and "most likely" scenarios to prepare the organisation for the unpredictable future. With this, one also has to account for risk and failing. In both Aase and Haug's experiences, organisations have a tendency of playing it safe and concentrate more on improvement rather than to fully embrace that real innovation requires taking some risks. As Haug underlines, business cases are fake comfort and does not have any more real answers than risking and failing does.

6.4 Company culture

6.4.1 Company culture

This is a core-category describing Company Culture as presented in Table 4.1. Relating to it are the following sub-categories:

- We, as individuals (WaI)
- Cooperation (COO)
- Respect (R)

4.1	Table 4.1 – Company culture	
LPA	So you go from being an "all answers" organisation, which one was very focused about before, one brand, common values, everyone should do the same. Step in time. We must understand the same as the management team has understood. If we only understand that, then everything goes very well. Whilst now we are talking about sub-cultures. About contradictions. Professional conflict as something positive. Creating a certain kind of instability in the organisation, which constantly makes us learn something new.	**WaI** OL ITD
JH	Before I started in Finn, I worked for many years in the consulting industry and also in consulting with innovation as a focus. And I had lots of good meetings, but there was never any contracts. And I thought a lot about it, why was that? And some of it, after being in Finn for a few years, I think it makes a lot of sense not to bring in consultants. Because this is heavy work. This is cultural work. It is organisational work.	**OL** BMI
JH	If we need a product manager or a designer or a developer, then when it is possible to ask a little broadly, then we do that. And then people can sign up. So we should not have anyone who has that label all the time. We open up so it is something that everyone can participate in, for shorter or longer periods. I think that is important. Because there are companies that organise innovation work like someone who sits up in the fog loft and comes down once a year with ideas. And then the rest of the organisation will implement those ideas. It creates a huge distance. So I think we have succeeded in making this more, if not grassroot sports, then the vast majority can participate. Whether it is with ideas or implementation.	**WaI** ITD
KB	In a way, we have one triangle with the editorial at the top, and another triangle that has technology at the top. And then we sit on each of our tips and try to work towards common goals. And then we have common strategies and that but getting product development and	**COO** ITD

	technology to harmonise in processes together with what the editorial environment wants, it is really difficult.	
KB	There were a lot of political, internal political, processes there that just caused it to not work.	**COO** P&M
KB	But still I insisted on that NRK should be one hub. We have to sit together. We cannot just spread out, because then what should not happen, will happen. Then we make one picture gallery here and one picture gallery there, and then no one realise that we could have done that once.	**COO** PRO
KB	We have worked hard to say that: this should not be used for anything. Use it when you have good pictures that tell a visual story in the "feature template". And then it has been overused a lot. And then I say: let it happen. Try to convey what is good use of the tool instead. And we have done that by instead of saying "this good use", "this is bad use" and being a police officer, we have started to issue a "Net-experience of the Month" award, where we promote someone. It is not money or anything, we just make a diploma that we hand out on the intranet and thank those who have made nice, journalistic solutions with our tools. It is a way to point at good use.	**WaI** R&F
TFMH	And that traditional way of doing business, which is very hierarchically structured. Where decisions are made at the top, and then it goes down through the organisation, and then someone will get a message that they are going to do something. And then everyone sits on their own anthill. It does not work to get the power and speed you need. And that is exciting because then you are in the field where you start to challenge power. And attitudes.	**P&M** WaI
TFMH	Because you are looking for speed. You want speed. And you want more focus. And the reason we want more focus is that it provides faster value. Those who succeed, and at the same time have fun at work, and who manage to create that culture. I think culture is a very important element, which people forget when talking business and design, sometimes. But that you manage to create a way of working together that is motivating for people. So that they can work both quickly and agile, to adapt, that you are activated and that it makes sense, also for those who create the solutions. If you succeed with that, then I think you do quite well.	**COO** HV MF
KHE	It is, hold on, we are trying to transform the municipal brains. In this digital world. The digital tsunami has arrived. It is over us. And we are trying to surf the wave. So that we can get as many people as possible into this, in a useful and meaningful way. If we are going to succeed, then we must stop a little. We have to see direction. We have to see where we are going. And then we have to gather. We must have respect for each other's perspectives. What we have. What we see.	**R** MF
TT	I think innovation is really a word you should not use. When you work in a company, you should only talk about what you are going to do. It is like culture. You should not talk about culture. We should just talk about what we need to do. What we work with. How we work. What is okay to say to people and what is not okay to say to people.	**R**
TT	Så design er de eneste som har en helhetlig religion, som ikke nedvurderer de andre. Økonomene utnytter de andre, men de blir ikke fortalt at de skal samarbeide. Bare at de skal lede de andre. De skal lede dette. Og ingeniørene, de bare ber om å få en spec, sånn at de kan lage. Nå setter jeg det veldig på spissen, ellers blir det ikke noe gøy. [...] Og problemet er: det er kulturkræsj. Fullstendig. Snakker om forskjellige ting. Snakker om teknologi. Snakker om penger. Snakker om følelser. Og der står det. Det vanskelige er å få dette til å fungere sammen.	**OL** COO ITD
TT	How to make design successful in a company? Then you have to work with culture. There must be some leaders who are very clear that they demand cooperation. And demands respect. Respect between disciplines. If you do not have it in place, then you will never get cooperation. So these three religions. Just getting three religions to work together, creating a common culture for three religions. Try that. Just getting 3 religions to meet in the same room. Within the same religion, they quarrel because one believes that there are two prophets, while another believes that there is only one. And then there is heresy. And they talk past each other. There are different languages. So you have to demand cooperation, and be clear that this is going to work. It must work. You need to recruit people who can do this. And then you have to replace the people who do not understand it.	**R** COO
TT	You know what? If you want to increase collaboration in your business, you need to hire lots of designers. It is a tool for creating collaboration. They are visualising. They will create better discussions and challenge the organisation in the right way with: why, why, why? And then: shit, we are doing the wrong thing. Fine! Come on, now we are doing the right things. And then you are up and running. I believe that designers have very good leadership qualities. They have high	**COO** PPL WaI FO

	empathy. They have holistic thinking. To see the customer view. Looking ahead. Forward-looking. Just to cultivate these things, we are on the right path.	
ES	Politics and trust are often something that destroys the ability to interact and create the good business models. Part of the methodology is simply to throw the mental anchor insanely far ahead. Like: yes, we agree on that in 2050? And then we had to pull it back again to get that boomerang effect in radical innovation. To be able to have a common view and a mental model on which direction to go.	**P&M** FO Wal
ES	Have great ambitions and visions but break it down to some strategic objectives that are manageable within shorter periods. And then you have follow-up on it quarterly. And it is also about: do not measure the employees on how bold ambitions they set for themselves, and whether they reach them or not. Guess what? If your bonus depends on whether you reach your goal, then you will not bother to set that goal very high. Someone needs to understand that, sooner rather than later.	**P&M** BMI AMB

Short summery of the content is as follows: Company culture is changing. From being a business who knows everything, with leaders who have all the answers, we now embrace diversity, opposites and professional discourses, according to Aase. It creates an instability within the organisation that constantly pushes it to keep learning. In Breivik and Haug's experiences this is not something embraced within all organisations, were internal political processes can still be in the way of cooperation and innovation. Haug also points out that in many cases the decision maker is still sitting on top in the organisation, far away from the problem. This slows down and limits the progressiveness. But when this starts to change, we are challenging the power positions in the organisations, creating new and exciting dynamics, says Haug. Eiken and Trønnes draw attention to respect as an important factor in the company culture. Respect for each other's perspectives, and respect for each other's professional expertise. Trønnes talks about the three religions: economy, technology and design, and how it is challenging to get them to cooperate. Economists talk about money, technologist about specs and designers about feelings. And that is where it all comes to a full stop, in a big culture crash. Trønnes claims that leaders have to enforce cooperation and replace people unwilling to do so. Solberg also welcomes a shift in power distribution in the organisation and explains how traditional ways of measuring employees is limiting innovation and progress. If you measure employees on their ambitions and ability to reach them, then they are not going to set the ambitions particularly high. It is about time we acknowledge that, he says.

6.4.2 Company Culture – Change management

This is a core-category describing Company Culture – Change management as presented in Table 4.2. Relating to it are the following sub-categories:

- Internal pirates (IP)
- Adaption (ADA)
- Ambition (AMB)
- Power and management (P&M)

4.2	Table 4.2 – Company Culture – Change management	
JH	Og så det som er viktig og bra, er at vi har en kontinuerlig prioritering som gjør at vi når som helst, både fra ledergruppen og nedover til de ulike som prioriterer i Finn, som er definert: Hvem er det som kan sette ting på en prioriteringsliste? Det skjer kontinuerlig. Så det kan man i prinsippet endre når som helst. Og det tror jeg at til syvende og sist er veldig bra for å ha den smidige kulturen. Og så har du også en nedside. Jeg tror nok at det kan oppleves som det er veldig mye endringer som skjer, og mye behov for både endringsledelse, men også endringsvilje blant folk som jobber i Finn.	**P&M** ADA FLX
JH	Vi har systemer på plass som gjør at folk er vant til at det skal være endring. Det er ikke noe man kan klore seg fast i sånn, som plutselig gikk i oppløsning. Men det er noen nedsider også ved å jobbe på den smidige måten, fordi vi har jo behov for en viss grad av kontroll som individer. Og det er ikke alltid at man kanskje opplever at man har i Finn.	**ADA**
CG	Men det er veldig interessant å se er at dette skiftet skjer nå bare fortere og fortere, og bare det siste året har det skjedd mye. Men det sier også noe om endringshastigheten. For å ta det vestlandske næringslivet, det kommer til å bli passe brutalt for mange virksomheter. De har levd veldig godt, på veldig få kunder. De har kanskje hatt to-tre kunder som de har levd fett på, og plutselig så forsvinner hele det kundesegmentet ut. Og hva gjør du da? Så omstillingsbehovet, og omstillingskompetansebehovet, det tenker jeg er ganske stort.	**ADA** DM
CG	And around 2012, I picked up this thing called "Business Model Generation " with "Business Model Canvas" as you probably know? And thought that it was a way of thinking that should be relevant to us in Innovation Norway as well. So then I actually started as an internal pirate, and worked quite hard for it to be something we used in our customer communication and customer dialogue. But also that we recommended our customers to use that way of thinking, because it was a fairly new way of thinking. I knew it very well from the design world. First of all, it was a visual way of working that I recognised. But also working iteratively, right? That you had a slightly different type of approach to it than the long, planned approach.	**IP** BMI VC
KB	Everyone now in NRK has their own place. Maybe not the News, because there it is a lot of rotation. But otherwise, you have your own place. We may have to advocate for the possibility of creating an activity-based workplace. Because even though it is 60, we may only need to have room for 40 people. We reckon that someone is always in a meeting, home office, or something. And it is a bit difficult to go into a deal like that now that everyone has their permanent place.	**ADA**
KB	But when we ended up with home office, I had 5 team leaders. And when we receive inquiries, it is often the case that we have to put together teams across the teams we have. And it was easier to have meetings with the team leaders when we do not have to put on our winter jackets and go out. So I have a much better working environment. And the processes with the team leaders, who will, after all, run the teams and make change happen, have improved. Because we do not sit together usually. But if we had the same hub, the same coffee machine, it would probably have been much easier to run change management.	**ADA** PRO
KB	And there has been a lot of "Why do we not hire more people?", "Why are we not allowed to hire more, when we get more and more requests?". And I have to answer: We get more and more requests because we are free. But we cannot solve it by just adding more and more people. We have	**ADA** BMI

	to solve it in other ways. We have to think in new ways. We need tools. We need to look at what and how we should use the capacity we have.	
TFMH	And that is what we are trying to change in, for example, TV2. That culture. How do we manage to create that way of working? That way of thinking? The way of prioritising? So that those who really know something about it, those who are closest, get the freshest possible insight? That they have the best possible conditions to be able to present some hypotheses and test it. These are the ones we need to listen to. And it is not the top manager sitting there anymore. The man who has been sitting there for 30 years. And that, that is not something that happens overnight. Decisions must be made in a different way than what has been done before.	**ADA** P&M R
TFMH	And what we see, in order for us to have the opportunity to work more closely towards what are real needs and how things change, what users need at any given time, we must also look at how we set our ambitions. What is important for TV2? What is our strategy at all times? What we are working on right now, is that we will work with shorter intervals. That we break the strategy down into shorter perspectives. Like 12 to 18 months successes. And then we try to piece it up. What does this mean for the different teams? Can we put together new constellations that work focused on some initiatives?	**AMB** TRG BMI PRO ADA
TFMH	It is not always that difficult for people to identify what the challenge is. "We have to do something about this". What is often difficult is: How do we start? Who starts it? In large companies that are more than 200 people. Then it immediately becomes like: who does what? How do we rig ourselves? What do we have to put away? That it can sometimes be such a hindrance, just to get started.	**ADA** BMI PRO
TFMH	It is much easier to do change if people experience it themselves.	**ADA**
KHE	It is about us doing things so strongly facilitated, and it is uncomfortable. But it has to be uncomfortable. We are going out of our conformity. Because we have that in Norway. We earn enough. We have had the oil for far too many years for us to become so compliant that we get a little lazy. And if there is someone who then pushes us, then we become a little negative. And then we get like "I do not like this". But when we train ourselves to do it time and time again, it is only then when we get a movement. This is insight. And the training that gives movement in the end. Then we transform. And that is the point. That is the goal of doing this.	**ADA**
TT	And design is disruptive. The way of working is disruptive compared to the way the company works. Then you challenge everything that the company does, what is right and wrong, who has made decisions before and who will make them now. If you say that: it should be design-driven now, then the technologists will be completely "we will lose all power". Since it is all about the power. Designers are not concerned with power. They are just concerned with doing the right things. It is the others who are concerned with power, and who decides what. The designers just: we do not decide, it is the customer who decides. It is just an idea. It does not matter who got it. It hangs up there on the board, and then we get 10 more ideas. And then we get 12. And then we have 12 ideas, and then we go out to 20 customers and we test these 12 ideas. And then we find out. It is not me who decides what is good or bad, we find out what is good or bad when we talk to these customers. And then we take it to the production and say: which of these can we make? And then we only have 3 ideas left. Then we can start talking about power, if that is the point. It is all these things about power that get in the way of creating what is good for the customers.	**P&M** DIS UO
TT	Top managers, or managers at a certain level, that there is someone there who understands it and can begin to influence across the management team. And on top. To at least get a workspace to hire and do the things that are needed. Work with processes. If you are going to succeed in design, and that is why so few are good, it must be incorporated into the whole way you work. It does not do with that one project. It must be the entire workspace.	**ADA** BMI OL
ES	What we see, using the rearview mirror to find out what happens in the future? Good luck. Then you get a Kodak moment anytime. To realise that this exponential power that lies within technology, and also with the Flynn effect - that we become 1% smarter every decade, it comes back to the humans. How can we as humans take into account that technology is just running wild. Runs from us. [...] It is about culture, and it is a lot about leadership. Where you have previously had very hierarchical models, you have to work a lot with organisational changes. Turning that pyramid and getting empowerment into the organisation, for those closest to the problem to own it. If you see it, you own it.	**P&M** DM OL FO
ES	Change in itself is insanely scary. This is neuroscience. Our connections in the brain towards change. This is extra work, is it not? I do not want this. It is quite inherited in us. And to understand:	**WaI** OL

	how many changes a person cope with? As an individual and as a group, in a department and in the organisation. There are many fall flat on their faces.	ADA
ES	Not having to change all employees, necessarily, to become change agents. There is a balance there. It is about finding those in the organisation who are willing to take part in the changes and take that side river. Pick your battles, simply. When working on innovation and invention, do not strive to save everyone. You cannot do that. Find that balance. How many do you need to bring with you? And «show not tell». Get some early wins, then you get a pull effect, instead of pushing.	**IP** ADA
ES	The leader is always the one who has the answers, right? That is how it was before. He is the best in the field, it is always the boss. Ask him. As long as you go high enough, you will find the answer. This is not the case in modern companies today. Leading knowledge work is something completely different. I think that change there, in the management mindset, is perhaps one of the most important things to look at and be aware of.	**P&M**

Short summery of the content is as follows: As mentioned in Table 4.1 – Company Culture, when trying to shift direction and do innovation in the organisation, always aim for the most engaged people. This is what Gladyszak refers to as "inhouse pirates", and his view is supported by Trønnes and Solberg. Changing the company culture is hard work and Solberg recommends picking your battles wisely and focusing on the few who are eager to see change. This will create what he refers to as the pull-, instead of push-effect. Haug also argues that change is something that needs to be felt in organisation. The experts agree that change must start from the top. Out with the old hierarchy were leaders and decision makers sit on top, far away from the problem. Empowerment needs to be spread out in the organisation and to the people sitting closes to it. If you see it, you own it, as Solberg says. Hauglum points out that it can be demanding working in an environment that requires a lot of adaption and capacity to change, often and fast. This view is supported by Trønnes and Eiken (Figure 17). The ability to change and adapt is avoidable when working in a constantly changing market and unpredictable future.

Figure 17 – Leadership, culture and competence in binary sea. Kjersti H. Eiken

6.5 Overview of main topics, core- and sub-categories.

This chapter presents a visual overview of the main topics, core- and sub-categories that emerged from the Grounded Theory.

DESIGN

Word and Consept		Method	
	Visual communication		Process
	Man-made		Organisational learning
	Well functioning		Observation
	Translation of insight		Visualisation
	User oriented		Solution || Problem based

Strategy		Attributes	
	Targeted		Information ≠ Insight
	Opportunity		Share ∞ Test
	Flexible		Visualise
			Interdisciplinarity

Innovation

Word and Consept	
	Effect for stakeholders
	Novel || Renewal?
	Relative innovation
	Invention ≠ Innovation

Method	
	Create-Capture-Deliever
	Business Model Innovation
	Future-oriented

Adjacent	
	Ambidextrous
	Disruptive
	Kill point

Success

Word and Consept

Add-on

Human Values

Meaningful

IFTT

Risk & failing

Dynamic markets

Empathy

People

Planet

Company culture

Company Culture	We, as individuals
	Cooperation
	Respect

Change management	Internal pirates
	Adaption
	Ambition
	Power and management

6.5.1 Categorisation abbreviations

This paragraph lists all the sub-categories and their abbreviations, grouped per main topics.

They are also appearing in the previous tables (pages 68-71).

Design	Innovation	Success	Company Culture
• Visual communication - VC	• Effect for stakeholders - EfS	• Add-on - AO	• We, as individuals - WaI
• Man-made - MM	• Novel || Renewal - NoR	• Human values - HV	• Cooperation - COO
• Well functioning - WF	• Realative innovation - RI	• Meaningful - MF	• Respect - R
• Translation of insight - TI	• Invention ≠ Innovation - II	• People - PPL	• Internal pirates - IP
• User oriented - UO	• Create-Catch-Deliver - CCD	• Planet PLA	• Adaption - ADA
• Process - PRO	• Business Model Innovation - BMI	• Risk and failing - R&F	• Ambition - AMB
• Organisational learning - OL	• Future-oriented - FO	• Dynamic markets - DM	• Power and management - P&M
• Observation - OB	• Ambidextrous - AX		
• Solution || Problem based - SoP	• Disruptive - DIS		
• Visualisation - VC	• Kill point - KP		
• Targeted - TRG			
• Opportunity - OPY			
• Flexibility - FLX			
• Information ≠ Insight - IN			
• Share ∞ Test - S&T			
• Visualise - VC			
• Interdiciplinarity - ITD			

6.5.2 Quantification of categories

The following table (Figure 18) and its diagram (Figure 19) show the number of times the abbreviations have appeared in the interview tables. This goal was to rank and visualise the most frequently mentioned viewpoints in the interviews. This may be an indicator of how to prioritise focus areas when forming a design-driven strategy. "Low priority" does not necessarily mean less important, just that it has had fewer specific mentions in the interviews, also reflecting my categorisation. "Visual communication" and "Visualise" and "Insight" and "Information ≠ Insight" have the same abbreviations and has therefore been zeroed in the graph to avoid double registration.

The following classification was adopted for this presentation:

- ≥ 15 mentions = high priority
- 10 – 14 mentions = medium priority
- ≤ 9 = low priority

Consequently, the sub-categories are grouped like:

High priority:
Insight (and Information ≠ Insight), Process, Organisational Learning, Effect for Stakeholders, Business Model Innovation and Adaption.

Medium priority:
Visual communication (and Visualise), Targeted, Flexibility, Share ∞ Test, Interdisciplinary, Novel ‖ Renewal, Create-Capture-Deliver, Future-oriented, Human Values and Power & Management.

Low priority:
Man-made, Well-functioning, User-oriented, Observation, Solution ‖ Problem based, Opportunity, Relative innovation, Invention ≠ Innovation, Ambidextrous, Disruptive, Kill-point, Add-on, Meaningful, People, Planet, Risk & Failure, Dynamic markets, We, as Individuals, Cooperation, Respect, Internal pirates and Ambition.

Main topics	Weight	Core-categories	Weight	Sub-categories	Weight
Design	127	The word & concept	47	Visual communication	10
				Man-made	4
				Well-functioning	2
				Insight	29
				User oriented	2
		The method	30	Process	28
				Organisational learning	24
				Observation	3
				Solution || Problem based	3
		The strategy	25	Targeted	11
				Opportunity	3
				Flexibility	11
		Attributes	25	Information ≠ Insight	0
				Share ∞ Test	12
				Visualise	0
				Interdisciplinarity	13
Innovation	100	The word	37	Effect for stakeholders	15
				Novel || Renewal	14
				Relative innovation	3
				Invention ≠ Innovation	5
		The method	46	Create-Capture-Deliver	12
				Business Model Innovation	21
				Future-oriented	13
		Adjecent	17	Ambidextrous	7
				Disruptive	8
				Kill point	2
Success	44	The word	23	Add-on	1
				Human Values	13
				Meaningful	9
		Empathy	8	People	7
				Planet	1
		IFTT	13	Risk & Failure	7
				Dynamic Markets	5
Company culture	52	Company culture	19	We, as individuals	7
				Cooperation	8
				Respect	4
		Change management	33	Internal pirates	2
				Adaption	15
				Ambition	4
				Power & Management	12

Figure 18 – Frequency of categories used

Figure 19 – Frequency of categories used

6.6   Wordcloud

This Wordcloud (Figure 20) and its table (Figure 21) are generated from the interview transcripts. All common and non-profession related language has been cut from the cloud. The Wordcloud table (shown as Figure 21 to avoid mixture with the core-category tables) has a weighted word count in the left column. The right column reflects the total weight of the wordcount when variations of the same word is merged. All variations are listed. Some words are both common language and profession related terms like "innovasjon". This can be both innovation and the company name "Innovation Norway". The same is with for example "behov" (needs) which are referred to as both the term "user needs" and just needs. Some words have many variations and related words, contributing to the high word weight such as "design". This Wordcloud and its table are therefore subject to skewed weighting and should be interpreted with caution. However, they are valid for this study as they reflect the collected data. It is only meant as a visual representation of the frequently mentioned word and terms. Nevertheless, some words seem to well cover the research topics.
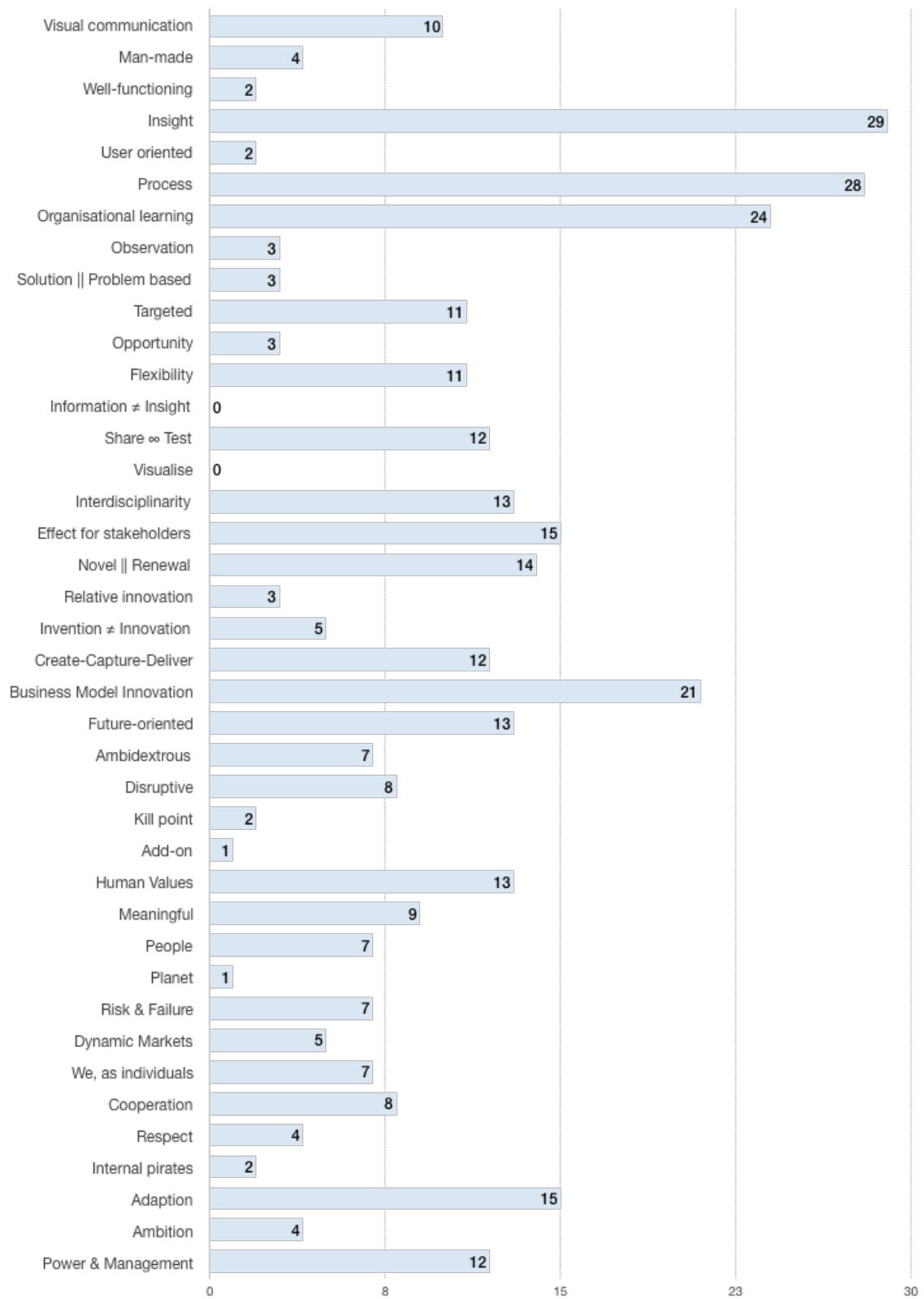

Figure 20 – Wordcloud from interview transcripts

Words and terms (including variations) with frequency ≥ 100 mentions are:
design, innovation and strategy.

Words and terms (including variations) with frequency between 50 and 99 mentions are:
values, money/economy, processes, success, people and leaders.

Words and terms (including variations) with frequency ≤ 49 mentions are:
team, visual, needs, insight, change, culture, future, agile, iterative, ambitions,
interdisciplinarity.

Words with frequency ≤ 10 have been cut from the table.

Weight	Word	Variations	Tot. weight
195	design	designer(ene), designe(r), tjenestedesign, designstrategi, designmetodikk, designdrevet, designprosess(er), designmetodikk, designmetoder, designtenkning	342
128	innovasjon	innovativ(t), innovasjon, innovere, innovative, innovasjonen, innovasjonsarbeid, innovasjonsbegrepet, nyskaping, nyskapende	225
52	strategi	strategien, strategisk(e)	102
55	verdi	verdien, verdier, verdiskapning(en)	90
44	penger	økonomi, pengene, økonomiske, budsjett(ene)	76
29	prosesser	prosess, prosessen(e),	74
44	suksess	suksessfull, suksessprinsipper	63
29	mennesker	menneske(ne), people,	55
23	ledere	leder, ledelse, ledergruppen, lederne, ledelse	54
28	team	teamene	39
13	visuell	visuelle, visuelt, visualiseres,	34
32	behov		32
27	innsikt	innsikten	30
21	endring	endringen, endringsledelse,	27
16	kultur	kulturen	22
19	fremtiden		19
19	smidig		19
7	iterativt	inkrementelt, inkrementelle	16
9	ambisjonene	ambisjon(en), ambisjoner	15
9	tverrfaglig	tverrfaglighet	13

Figure 21 – Wordcloud table from interview transcripts

7 Artifact

This chapter presents the artifact: D.I.S.C. (Design, Innovation, Success, Company Culture) guidelines (page 79) and model (Figure 22). The artifact is formed based on the results and analysis in Chapter 6 and the DSR methodology presented in Chapter 4. It also reviews two experience-based dimensions from Riis and Ratner on how to form successful guidelines [52].

7.1 D.I.S.C. Guidelines and model

When creating successful guidelines, Jason Riis and Rebecca K. Ratner suggest in Harvard Business Review, to focus on two dimensions: memorable and actionable [52]. *Memorable* suggests that the guidelines should be understood "at-a-glance". Most of us are not prepared to pay careful attention and have no desire for step-by-step instructions. Simplification and visualisation are important keywords, well in line with design-driven philosophy. The second dimension is *actionable*, which tests whether or not it guides behaviour at the unit of a typical decision. In developing a design-driven business strategy, this could mean that the guidelines are down to earth and clear enough for everyone in the organisation to be able to understand and follow in their everyday work. Everyone should feel that the strategy applies to them, rather than having a long, written document, neatly placed in a drawer. Riis and Ratner also suggest making a visual guideline, with a certain amount of specific scripting when this is useful. Still, some high level "memorable-at-a-glance" guidance should be given to inform each interaction.

When creating the D.I.S.C. guidelines and model, I have strived to accommodate these two dimensions. The guidelines have been compressed down to two guidelines per main topic, followed by a few to-the-point sentences. As discussed in Chapter 8, definitions, perceptions and use of the terms "design", "innovation" and "success" vary a lot. Even the experts use them differently. Therefore, the guidelines do not contain these three words, but rather a description of "what to" and "how's". The model consists of low-threshold, hand drawn illustrations with a few specific scripting, meant to be self-explanatory and memorable, as suggested by Riis and Ratner. The different illustrations can easily be exchanged for something more fitted to your organisation, to suit the context. The guidelines are as following:

D.

WWW – What, Why, Who
Know what you are doing and for whom. User needs and trends are not the same. Prioritise real insight before hypothesis. Test, adjust, evaluate and repeat. Visualise. Always be targeted and open to improvement and change.

Value people smarter than you
Respect interdisciplinarity and diversity in skills. Welcome professional discourses and instability that enforce learning in the organisation. Talk in a language people understand and set goals across the organisation. Develop a process, have frequent check-ups and stop doing things that no longer have value.

I.

Boxed up good intentions
Focus on what is new to you, in your organisation and in your field. Prioritise valuable improvements over novelties with no effect. Define your ambitions and avoid language that limits you. Create value, capture value and deliver value.

Work with both hands
Be ambidextrous. Work in todays and future horizons in parallel. If you are going to map todays situation, it has to be for the future.

S.

Do meaningful things
Measure what you do and spend time on what people need. Create value for people, the planet and society, and the rest will follow. Empathise.

Stay levelled
Do not fall in love with technology, products, processes or models. In a dynamic market, things change, and they change fast. Keep it simple, improve and renew. Make room for risk and failure.

C.

Have inhouse pirates
Do not spend time on redeeming the whole congregation at once. Progression stops when people feel unsafe or overwhelmed, so use inhouse pirates. When building teams, prioritise engagement before availability. Create high-performance teams and use binary splitting to spread the built-up experience. Aim for the pull- rather than the push-effect.

Challenge power – spread empowerment
If you see it, you own it. Have decision makers at ground level to generate speed and progress. Set long term goals, but break them down to manageable, strategic tasks.
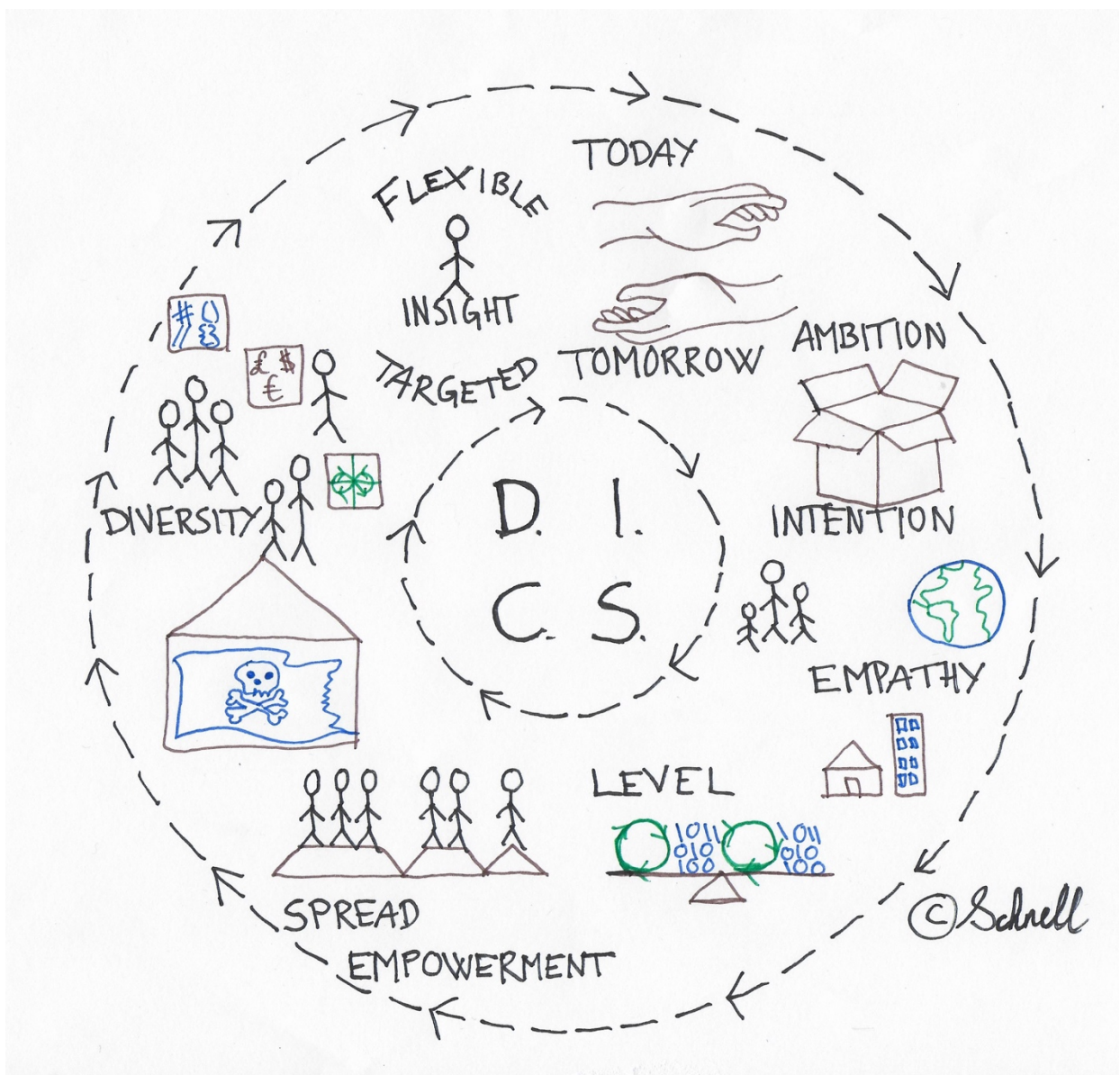
Figure 22 – D.I.S.C. model ©Schnell

8 Discussion

This chapter discusses the methods and methodologies used in the data collection, analysis and in creating the artifact. It will also discuss the limitations of the applied methods. Lastly, it will review and answer the research questions presented in Chapter 1.

8.1 Methods and Methodologies

8.1.1 The Grounded Theory

The Grounded Theory (GT) was used to analyse the data collection (Chapter 6) and to write up theories based on it. It created a systematisation and categorisation of the findings from a rather large amount of text. This resulted in main topics, core- and sub-categories (Chapter 6), which enabled the possibility to concretise, simplify and define the most important aspects emerging from the expert interviews. It also advocates reasons for using a design-driven business strategy, in order to create value for all the people involved, both in- and outside of the organisation. This should form the foundation for an innovative and thus successful and viable business for the future. GT also led the way to relevant literature and helped forming the research questions.

8.1.2 Quantification of categories

Quantification of the data collection was done to visualise, rank and compare the important aspects of the main topics, core- and sub-categories (Chapter 6). In the main categories tables this was done by counting the frequency of the sub-categories used to categorise the quotes given by the experts (Figure 18 and Figure 19). The weight of the word counting was noted per sub-category, core-category and main topic. The Wordcloud (Figure 20) created from the interview transcripts were also weighted per frequency of the words (including variations of the same word) (Figure 21). These word weights indicate an order of aspects to be prioritised. Comparison of these two quantifications can be found below. Identical words that appear in both are marked in bold.

Quote-table frequency of main topics in decreasing order:

Design (127), **Innovation** (100), **Success** (44) and **Company culture** (52).

High priority sub-categories in decreasing order:

Insight (and Information ≠ Insight) (29), **Process** (28), Organisational Learning (24*), Effect for Stakeholders* (15), *Business Model Innovation* (21) and *Adaption* (15).

Wordcloud frequency in decreasing order:

Design (352), **Innovation** (225), *Strategy* (102), Value (90), Money (76), **Process** (74), **Success** (63), *People* (55), Leaders (54), Team (39), Visual (34), **Insight** (30), *Change* (27), **Culture** (22)

Possibly related concepts in terms of meaning are presented below and marked in cursive.

Business Model Innovation ≈ Strategy

Effect for stakeholders ≈ People

Adaption ≈ Change

8.1.3 Design Science Research

Design as an artefact

The artifact created in this thesis is the "D.I.S.C. guidelines and model" as presented in Chapter 7. The artifact presents simple and concise guidelines, with an easy, at-a-glance understandable model. This allows for a low-threshold, easy to adapt way of forming a business strategy based on key aspects from the data collection.

Problem relevance

The aim of the artifact is to guide the way in creating a business or organisation strategy that facilitates for innovation and viability for the dynamic future. The relevance for this is demonstrated in Chapter 2, exemplified with the number of start-ups that fail and how well-established business loses market relying only on traditional business strategies. Secondly, people tend to be unwilling to read long documents, written with complicated language and terminology.

Design evaluation

The artifact has been evaluated using Design Evaluation Methods as illustrated in Chapter 4, Figure 11 "5. Descriptive method – Informed Argument: Use information from the knowledge base (e.g.,relevant research) to build a convincing argument for the artifact's utility". The artifact has been built upon the information provided by the design experts. It is a result of their collective educations, experiences and inputs (Chapter 5).

Research rigor

The artifact was created from an extensive, expert data collection and relevant literature. Grounded Theory was used to code and categorise the data and information. The artifact was then built and evaluated with Design Science Research, the Three Cycles View and Design Evaluation Methods (Chapter 4).

Design as a search process

This artifact is a result of search for useful and easy-to-follow guidelines that started with design experts and was informed by literature (Chapter 3). This search could be extended in the future to include even more designers and businesses. The artifact further developed and finetuned, also intact with changing times.

Communication of Research

This contribution will be published at the open-source University of Bergen publishing service, www.bora.uib.no. The thesis and artifact should be of interest to designers and anyone seeking to develop an innovative business strategy. The guidelines and model should also be understandable to the general public, in line with the design principles of being simple, clear and concise.

8.2   The three cycles

The three cycles view helped form the artifact in a systematic way. The *Relevance Cycle* was used to establishing the requirements for creating the artifact. This included recruiting the relevant design experts and collecting data from them. This has formed the outline of this thesis. The *Rigor Cycle* combined the data collection and its analysis from Chapter 6 with already established theories and definitions presented in Chapter 3. The *Design Cycle* was prototyping the artifact. In this projects, the last two cycles were worked on in parallel.

8.3 Limitations

The categorisation of the data collection using GT is subject to the writer's interpretation. The Wordcloud was created from the interview transcripts but edited by the thesis writer. Therefore, the Wordcloud could be unconsciously affected by the writer's pre-assumptions of the most important aspects. Designing the artifact was created and evaluated based upon the analysis of the data collection and applied methods. This is the first prototype and should be properly evaluated by experts before testing it on real world users that could happen beyond the timeframe of this thesis.

8.4 Answering research questions

This chapter answers the research questions stated in Chapter 1 that outlined the main goal of this thesis. The research questions were created after the data collection and having applied GT, as the need to clarify these terms that proved themselves to be crucial for development of the artifact.

RQ1: *What is design as a method in design-driven development?*

Design is a discipline whose primary concern is understanding people and their needs. It is something man-made that focuses on well-functioning rather than beautiful and prioritises real insights before hypothesis. Design is a visual process that respects diversity in skills and facilitates for a learning organisation that is flexible and targeted (Tables 1.1-1.4.4).

RQ2: *What is innovation in context of design-driven development?*

Innovation is an invention or an improvement of something that generates value for many. It can be something completely new, either in the world, in your field or in your market or an effectful improvement that generates significantly more value. An innovative organisation manages to capture the value of its innovations for the stakeholders and is able to work ambidextrous with both today and tomorrow in mind. It has a business model that facilitates for disruption and is aware of when to stop and where to move forward. Innovation is future oriented (Tables 2.1-2.3).

RQ3: *What is success in business strategy?*

Success is doing something meaningful for the people, society and planet. It puts human values before money and allows for risk-taking and failures in adjusting to a dynamic market. Success is relevant to the context and the definition of its success principles (Tables 3.1-3.3).

RQ4: *How does company culture affect design-driven development of strategies?*

When using design-driven development in building a strategy, aim for the "show, not tell". It is not necessary to enforce changes in the whole organisation at once. It is recommended to identify inhouse pirates that embrace and can initiate change processes. Let them lead the way in demonstrating and implementing, and the rest will feel and follow (Tables 4.1-4.2).

RQ5: *Why do design-driven approaches better facilitate for innovation and success in business strategies?*

Design-driven approaches are concerned with creating a strategy based on real insight, and not assumed budgets and business cases like in more traditional strategies. It facilitates for a constant improvement of its own business model, with important design features such as developing, testing, evaluating and adjusting. This creates room for innovation by continuously seeking to fit the dynamic market, ensuring the business viability in the unforeseen future.

9 Conclusion and further work

9.1 Conclusion

This thesis has gathered qualitative data from design experts to clarify terms and concepts within design-driven methods. It has utilized well-established research framework such as Design Science Research and the Grounded Theory, resulting in the design artifact "D.I.S.C. guidelines and model". The artifact consists of 8 guidelines with easy comprehendible language and a visual, memorable at-a-glance model. This aims to be a meaningful and easy adaptable artifact to use when creating a business strategy.

The main contribution to this project has been the insights, experiences and qualified viewpoints from the design experts. The requirements for the artifact have emerged in parallel with the interviews and the data analysis. It has been created and altered iteratively

throughout the process. The purpose of this thesis was to make a design-driven, low-threshold guide with universal validity. The D.I.S.C. guidelines and model can be applied by any business or organisation that wishes to form an innovative, flexible strategy which is meaningful, future oriented and creates value for its stakeholders. If anything ceases to be meaningful and/or add value to the organisation or its people, it should be replaced. This is one of the artifacts strongest assets since it welcomes flexibility and promotes an active approach to innovation.

9.2   Further work

Further work should include getting the artifact reviewed, tested and evaluated in an iterative process. Firstly, by design experts and then within an organisation. When the artifact has reached a satisfactory level, it should be piloted in an organisation and gone through a third iterative process. Since the artifact will always be a product of today's knowledge and experiences, this process never ceases. The organisation that forms their business model using the artifact should continually review, test, evaluate and adjust their business model, ensuring its constant relevance and validity in an everchanging market. The artifact itself is also subject to the same process.

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Appendix A

NSD Approval

NSD sin vurdering

Prosjekttittel

Design as business strategy

Referansenummer

447061

Registrert

23.03.2020 av Linn Schnell - Linn.Schnell@student.uib.no

Behandlingsansvarlig institusjon

Universitetet i Bergen / Det samfunnsvitenskapelige fakultet / Institutt for informasjons- og medievitenskap

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Ankica Babic, Ankica.Babic@uib.no, tlf: 55589138

Type prosjekt

Studentprosjekt, masterstudium

Kontaktinformasjon, student

Linn Schnell, lra015@uib.no, tlf: 98641837

Prosjektperiode

20.08.2019 - 01.06.2021

Status

25.01.2021 – Vurdert

Vurdering (2)

25.01.2021 - Vurdert

NSD har vurdert endringen registrert 11.01.2021.

Vi har nå registrert 01.06.2021 som ny sluttdato for behandling av personopplysninger.

I tilfelle det skulle bli aktuelt med ytterligere utvidelse av den opprinnelige sluttdato (01.06.2020), må vi vurdere hvorvidt det skal gis ny informasjon til utvalget.

NSD vil følge opp ved ny planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til videre med prosjektet!

Kontaktperson hos NSD: Maren Urheim

Tlf. Personverntjenester: 55 58 21 17 (tast 1)

25.03.2020 - Vurdert

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet med vedlegg den 25.03.2020, samt i meldingsdialogen mellom innmelder og NSD. Behandlingen kan starte.

MELD VESENTLIGE ENDRINGER

Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde: https://nsd.no/personvernombud/meld_prosjekt/meld_endringer.html

Du må vente på svar fra NSD før endringen gjennomføres.

TYPE OPPLYSNINGER OG VARIGHET

Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 01.06.2020.

LOVLIG GRUNNLAG

Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake. Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

PERSONVERNPRINSIPPER

NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

-lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon omog samtykker til behandlingen
-formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitteog berettigede formål, og ikke behandles til nye, uforenlige formål
-dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet

-lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: åpenhet (art. 12), informasjon (art. 13), innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18), underretning (art. 19), dataportabilitet (art. 20).

NSD vurderer at informasjonen om behandlingen som de registrerte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER

NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og/eller rådføre dere med behandlingsansvarlig institusjon.

OPPFØLGING AV PROSJEKTET

NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til med prosjektet!

Tlf. Personverntjenester: 55 58 21 17 (tast 1)

Appendix B

Informed consent form

Spørsmål om deltagelse i forskningsprosjekt
Design as business strategy

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet å undersøke om en design-orientert forretningsstrategi øker graden av innovasjon og suksess for bedrifter. I dette skrivet får du informasjon om målene for prosjektet og hva deltagelse vil innebære for deg.

Bakgrunn og formål: Dette forskningsprosjektet er en del av en masteroppgave ved Universitet i Bergen, Det Samfunnsvitenskapelige fakultet, Institutt for informasjons- og medievitenskap. Forskningsprosjektet ønsker å se på design som forretningsstrategi, og hvordan dette påvirker innovasjon og suksess i bedrifter.

For å kunne svare på disse spørsmålene er det nødvendig med personlige erfaringer og innsikter for å kunne støtte oppunder teori, begrep og definisjoner. Disse innsiktene vil bli tilført gjennom ekspert-intervjuer med designere som jobber i bedrifter hvor designmetodikker er en del av arbeidshverdagen. Eksperter vil bli valgt på bakgrunn av anbefalinger, samt den enkeltes stilling, bakgrunn og erfaringer.

Hva innebærer deltagelse i studien? Ved å delta i studien vil du bidra med bransjenær og erfaringsbasert innsikt, som et supplement til teorier og annen forskning som vil bli brukt i prosjektet. Det vil skje via et personlig intervju, og vil vare i underkant av en time. Det vil bli gjort lydopptak, og dette vil opplyses om og godkjennes på forhånd.

Hva skjer med informasjonen om deg? Navn på ekspert, dennes bakgrunn og bedriftspresentasjon ønskes presentert i oppgaven, da dette sikrer validiteten til prosjektet. Andre navngitt personer eller bedrifter som kommer frem i intervjuet vil være anonyme.

Prosjektet skal etter planen avsluttes 1.juni 2021. Det vil bli gjort lydopptak av intervjuer. Intervjuene skal transkriberes og legges ved den endelige oppgaven. Lydopptakene vil ikke bli lagret på andre enheter enn diktafon, og slettes så fort det er transkribert. Intervjuet vil bli sendt til gjennomlesning og godkjennelse hos den enkelte.

Frivillig deltagelse: Det er frivillig å delta i prosjektet, og du kan når som helst trekke ditt samtykke uten å oppgi grunn.

Dine rettigheter: Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandling av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg? Vi behandler opplysninger om deg basert på ditt samtykke.

Dersom du har noen spørsmål om prosjektet, ta kontakt med:

Masterstudent	Linn Schnell	986 41 837/linn.schnell@gmail.com
Veileder	Ankica Babic	555 89 138/ankica.babic@uib.no
Personvernombudet	NSD	55582117/ personvernombudet@nsd.no

Samtykkeerklæring

Jeg har mottatt og forstått informasjonen om prosjektet, og har fått anledning til å stille spørsmål. Jeg samtykker til:

☐ å delta i intervju

☐ at mitt navn og den informasjon jeg oppgir om min bakgrunn, kan publiseres i oppgaven

☐ at mine opplysninger behandles frem til prosjektet er avsluttet.

(Signert av prosjektdeltager)

Appendix C

Interview guide

Intervjuguide for forskningsprosjekt
Ekspert-intervjuer

Dette er en intervjuguide for forskningsprosjektet «Design as business strategy». Intervju med eksperter i design som arbeidsmetode har til hensikt å tilføre personlig og erfaringsbasert innsikt til teoretiske begrep og definisjoner. Intervjuobjekt og bedrift vil være navngitt dersom ikke annet er ønsket. Navn på andre personer og bedrifter som kommer opp under intervjuene vil bli anonymisert.

Intervjuene vil bli tatt opp på digital diktafon for transkribering, og deretter slettes. Skriftlig utgave av intervjuet skal vedlegges forskningsprosjektet. Denne vil bli oversendt ekspertene for gjennomgang før den legges ved oppgaven. Det vil være mulig å trekke deler av intervjuet eller gjøre avklaringer om ønskelig. Lydopptakene vil ikke bli lagret digitalt på andre enheter, verken midlertidig eller permanent.

Presentasjon (Ca. 5 min) - Introduksjon av forskningsprosjektet og hensikt med å gjøre ekspert-intervju.

Spørsmål (Ca. 40 min) - Åpne spørsmål som inviterer til samtale rundt overordnede begrep. Spørsmål i denne guiden vil fungere som retningslinjer for tema, og således være en simplifisert versjon av det endelige intervjuet.

Avrunding (Ca. 5-10 min) - Avklaringer og mulighet for ekspert til å komme med egne tanker og forslag til forskningsprosjektet om ønskelig.

Spørsmål som vil bli stilt og utdypet:

1. Fortell litt om din bakgrunn og hvorfor du endte opp i denne stillingen i denne, og i denne bransjen.

2. Hvorfor har du valgt å jobbe med design som strategi/utviklingsmetode, og hvorfor mener du dette er den beste måten å jobbe på?

3. Hva legger du i begrepet innovasjon, og hva er/gjør en innovativ bedrift?

4. Hva kjennetegner en suksessfull bedrift, og hva gjør de annerledes enn andre?