Maintaining competence in the changing world: How to improve foresight capabilities in the case company?

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Pysyäkseen kilpailukykyisenä epävakaassa ja epävarmassa maailmassa, yritysten ja organisaatioiden tulee kehittää kyvykkyyksiä ja keinoja havainnoida muutosta indikoivia heikkoja signaaleja sekä hyödyntää tapahtuvaa muutosta. Tulevaisuutta rakentavan toiminnan merkitys on kiistattoman tärkeää yrityksille, jotta ne pysyvät kilpailukykyisinä. Tämän opinnäytetyön tavoitteena oli selvittää ja määrittää kohdeyrityksen tulevaisuuskyvykkyyksiä ja vahvistaa organisaation tulevaisuusorientaatiota parantamalla tekemisen tapoja ja tunnistamalla organisaatiolle sopivia tulevaisuustyökaluja ja -menetelmiä.

Tietoperustassa tarkasteltiin tulevaisuustietoa yritysmaailman näkökulmasta sekä sen roolia strategisessa suunnittelussa ja innovaatiotoiminnassa, sekä tulevaisuustiedon luomaa arvoa yrityksissä. Tämän lisäksi esiteltiin malli, jolla arvioida yritysten tulevaisuusmaturiteettia sekä tarkasteltiin keskeisiä tulevaisuuskyvykkyyksiä.

Kehittämistyön prosessi yhdisteli palvelumuotoilun ja tulevaisuusajattelun menetelmiä. Keskeiset sidosryhmät osallistuivat aktiivisesti prosessiin sen alkuvaiheesta asti, jotta voitiin varmistaa, että lopputulos vastasi heidän tarpeisiinsa ja tämänhetkisiin kipukohtiin. Käytettyjä menetelmiä olivat mm. haastattelut, ideointityöpajat ja tulevaisuuden asiakaspolku.

Tulevaisuuskyvykkyyksien keskeiset elementit tunnistettiin ja niitä tarkasteltiin sekä nykytilan että toivetilan kautta. Tulevaisuusajattelun nykytilaa käytettiin lähtökohtana ja sitä työstettiin yhdessä sidosryhmien kanssa, jotta ymmärrys tavoitetilasta ja miten siihen voitaisiin päästä, saavutettiin. Keinoja linkittää tulevaisuusajattelu ja -tieto pitkän tähtäimen suunnitteluun ja innovaatioprosessiin tunnistettiin ja määritettiin.

Tulevaisuuskyvykkyydet rakentuvat usean ominaisuuden summana eikä ole olemassa yhtä työkalua, jolla koko asian voisi ratkaista. Ylimmän johdon sitoutuneisuus ja avoin yrityskulttuuri ovat keskeisiä muutoksen mahdollistajia organisaatiossa. Erilaisia tulevaisuusajattelun työkaluja ja menetelmiä tulisi testata laajemmalla joukolla. Tulevaisuusajattelun jalkauttaminen organisaatioon vaatii myös monitasoista viestintää tulevaisuusajattelun merkityksestä.

Asiasanat: tulevaisuusajattelu, tulevaisuuskyvykkyydet, innovaatio, strategia

Laurea University of Applied Sciences **Abstract**
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To remain competent and to survive in the volatile and uncertain world, companies and organizations need to develop capabilities and ways to detect the early signals of changes and capitalize on them. The importance of foresight activities in corporate context is unarguably important in maintaining competitiveness. The objective of this thesis was to study and define foresight capabilities in a case company and strengthen future-orientation of the organization by improving ways of working and identifying suitable foresight tools and methods.

The knowledge base explored foresight in corporate context, its role in strategic planning and innovation and the value it can provide to organizations. In addition, a model to evaluate corporate foresight maturity and key foresight capabilities were presented.

The process for the development work combined service design and foresight methods. Key stakeholders were engaged throughout the process to ensure that the outcome would answer to their needs and current pain points. Methods such as interviews, ideation workshops and future customer journey maps were used.

Key building blocks for foresight capabilities were identified and they were examined through the current state and the desired state. Current state of foresight was worked further together with the key stakeholders to understand, how the desired state of foresight would look like and what would be the ways to bridge the gap between the two. Ways to link foresight with current long-term planning and innovation processes were identified and defined.

Foresight capabilities are built through several elements and there is no one tools or method that would solve the case. Top management commitment and open company culture were identified to be the key enablers of change in the organization. Tools and methods to bring foresight as part of the key processes need to be piloted further with a wider audience. Multi-level communication on the importance of foresight is needed.

Keywords: foresight, corporate foresight, foresight capabilities, innovation, strategy

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1 Introduction

Companies and organizations need to constantly adapt to their changing environment to ensure competence and successful business continuity in the future. The speed and complexity of change in the surrounding world however sets a challenge to this. Thus, it is important to ensure that the organizations have the right capabilities and resources to anticipate futures and act accordingly when needed. Often companies end up facing rivals, technologies, regulations and rapid changes in the environment that seem to come as a surprise and survival of the companies is threatened in the times of discontinuous change. To remain competent and to survive, companies and organizations need to develop capabilities and ways to detect the early signals of these changes and capitalize on them (Day & Schoemaker, 2005).

It is also important to understand that the nature of future is, and always will be, unpredictable (Hiltunen 2013, 25). Future is easily seen a something that just happens and that companies cannot affect. In addition, many of our ideas about the future come from science fiction, fantasy fiction and speculative fiction which may make it difficult to understand its true nature (Raymond 2019, 46). Predictions of the future are always best guesses, and no one knows for sure what the future will be like. However, it is valuable to understand that companies, organizations and people are in a vital role affecting and creating the future (Hiltunen, 2013, 25).

The importance of foresight activities in corporate context is unarguably important in maintaining competitiveness. Developing a point of view about the future should never be a massive one-time effort but an ongoing project sustained by continuous debate within a company. Unfortunately, many companies consider the need to transform their strategies and reinvent their industries only when restructuring and reengineering fail to solve the challenge of corporate decline (Hamel & Prahalad, 1994). Interestingly, a major share of companies lack a systematic method for looking at the future, limited understanding on how to interpret the signals they see, and how to allocate their limited resources for scanning the future (Day & Schoemaker, 2005). Often managers recognize major social, economic, and technological trends, but many of them too little consider the way in which trends influence consumers' aspirations, attitudes, and behaviours and thus, their business (Ofek & Wathieu, 2010). According to Hamel and Prahalad (1994, 4), senior management is devoting less than 3 % of their energy to building a corporate perspective on the future. Their experience however suggest, that 20-50 % of their time and energy should be spent on developing a perspective on the future. There clearly is a gap between what is currently done and what should be ideally done.

According to Rohrbeck (2010, 51-52), commitment and focus from top management are in a key role in successful corporate foresight, but that alone is not enough. In addition, specific systems to detect discontinuous change are needed. Foresight information should be

distributed throughout the organization by multi-level communication and through participation. There needs to be enough resources (people) with right kind of capabilities to collect and interpret foresight information. It's also good to recognize that contextual factors such as company size and the industry clock speed have high impact on ideal design for corporate foresight. Successful corporate foresight is not only about creating a systematic process to anticipate future. According to Ratcliffe (2006), the qualitative, subjective and behavioural dimensions are too often overridden by the quantitative, technological and empirical. While there is a need for structure, one should not forget vision, imagination and creativity. Ratcliffe (2006) states, that moving from traditional planning to foresight-based strategic planning requires a transformation of the corporate culture. A culture of foresight is about openness, creativity, tolerance for uncertainty and willingness to embrace trial and error.

1.1 The aim and objective of the thesis

The aim of the thesis is to study and define foresight capabilities in a case company. In addition, the aim is to create a holistic understanding on corporate foresight and how it can be utilised in long-term planning and innovation and create ideas on how to utilize and integrate foresight in the current planning and innovation processes in a way, that it also serves the user in the best way. The purpose of the thesis is to improve future orientation of the current key processes and strengthen foresight capabilities by improving ways of working and identifying suitable tools and methods for collecting and processing foresight information. The tools and ways of working will be developed and evaluated together with the stakeholders and users of foresight information with the help of service design methods. The aim, purpose and key research questions are presented in Figure 1.

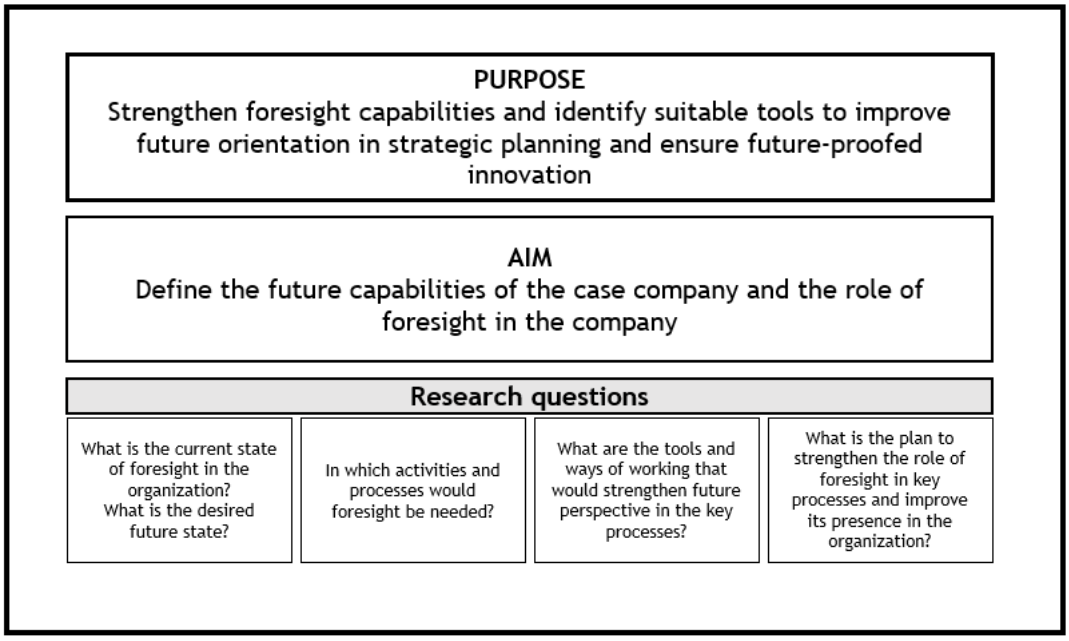

Figure 1. Purpose, aim and key research questions of the thesis.

1.2 Structure of the thesis

The thesis consists of five key sections: an introduction, knowledge base, methods and processes, results and conclusions (Table 1). In the first chapter of the thesis I will define the purpose and aim of the thesis as well as present the case company and give background information on the importance of the work done within this thesis process. The first chapter also presents key research questions that the thesis is answering to.

Chapters from two to five cover the knowledge base which will look at four different areas: Foresight, foresight in the corporate context, foresight capabilities and maturity in organizations, and individual and collective cognition for corporate foresight. Chapter two presents the key concepts of foresight, different approaches to future and why futures anticipation is important for companies to stay alive and competent in the volatile, uncertain, complex and ambiguous (VUCA) world. In chapter three, foresight is studied in the corporate context. As corporate foresight is in the intersection of innovation management, strategic management and future studies (Rohrbeck 2010, 13), these perspectives to foresight will be looked in more detail. The fourth chapter presents a model to evaluate corporate maturity in foresight. The model has been created by Rene Rohrbeck (2010) and this model will work as the theoretical framework for the thesis. The fourth chapter also examines how foresight capabilities can be built in organizations, what are the possible challenges with foresight and what kind of value corporate foresight can create. The fifth chapter will look at foresight from the individual and collective intelligence perspective, study how knowledge is socially constructed and how this should be considered when building foresight capabilities in organizations.

In the sixth chapter the process and methods used in the development work are presented. In this chapter I will present the whole development work process, the methods used in each stage, and justify the use of certain methods through theory. I will also present research-based development work approach, which has been used in the thesis.

Chapter seven focuses on the results gained during the thesis. It starts from defining the current state of foresight in the case organization, followed by the desired state of foresight in the organization and how foresight could be implemented in innovation and long-term planning processes. I also present how a foresight tool, trend framework, was piloted in the case company and what kind of results were gained when implementing existing foresight knowledge in chosen pilot projects.

The eight and the last chapter of the thesis will discuss the key findings for the thesis and reflect them against existing literature. In this chapter I share my conclusions and recommendations on how foresight could be organized in the case company. Implications of the results are also discussed.

Table 1. The structure of the thesis

Chapter	Content
1 Purpose & aim of the thesis	• Introduction to the topic • Purpose, aim and key research questions • Presenting the case company
Knowledge base 2 Foresight	• Definition of foresight and its key concepts • Different approaches to future
3 Corporate foresight	• Definition of corporate foresight • Three perspectives to corporate foresight: innovation, strategic management and foresight studies
4 Corporate foresight capabilities and maturity	• Maturity model for corporate foresight • Building foresight capabilities • Challenges and value of foresight
5 Individual and collective cognition for corporate foresight	• Collective intelligence • Knowledge societies and networks
6 Methods and processes	• Process for the thesis combining design thinking and foresight • Research-based development work • Methods used in different stages of the process
7 Results	• Current state of foresight in the case company • Desired state of foresight in the case company • The role of foresight in long-term planning and innovation • Towards a systematic way of organizing foresight
8 Conclusions & recommendations	• Key conclusions from the results reflected with existing knowledge from previous research • Discussion on the implications of the results

1.3 The case company

This development work was done for a specific business area in a company, which is a Finland-based FMCG company that is market leader in its core categories in Finland and whose products are sold in over 40 countries around the world. The current business is strongly focused on Finland, but the products are also sold in Scandinavia, the Baltics and Russia which are the key growth markets for the company.

The company has a strategy and transformation plan that the business area follows, and the business area strategy is aligned with the company strategy. The business area has its own organization structure and processes, and for example marketing and product development functions operate independently and based on the business area's needs. Central product development and innovation functions are based in Finland, but they serve all markets. There is one centralised marketing team in Finland but also people who are responsible for implementing the marketing activities for the key markets. Currently there are around 1 300 employees in the business area and its own production facilities are in Finland.

As a market leader in its main categories, the company needs to constantly innovate and launch new products on the market. Over the years, the number of product launches per year has increased which puts pressure on the whole innovation process and people and teams involved in it. This way of operating has also taught consumers and customers to demand and desire new novelties which makes it difficult to change the current way of working.

Previous experience from the company have shown that the business area is very good at short-term optimisation, but it lacks a more longer-term perspective. There is a high level of willingness to change this and put more focus on true innovations instead of only optimising the current portfolio. As a first step to change the approach, an extensive future-oriented project was started in marketing function together with a consultancy agency to understand, what will create value for the consumers in the future and how the business area should play its game in the upcoming years (a separate project from this thesis). This project however was a one-off. When starting the thesis process it was agreed with the head of marketing that the business area should have a more systematic and continuous way to scan the environment and understand the changes that potentially will happen in the future and create plans to become better prepared.

2 Foresight

In the literature, many definitions for foresight can be found. Foresight can sometimes be considered as an elusive and misunderstood term, as it can refer to a process, a capability or

to a national foresight programme (Major at al. 2001). Berkhout et al. (2007, 74) gives the following definition for foresight:

"*Foresight is the ability, the competence and the art of describing, explaining, predicting, exploring and/or interpreting future developments as well as its consequences for actions and decisions in the present*".

This definition is stating that foresight requires skills, meaning a set of actions that can be learned and if looked from another perspective, not a black box or something that should, or could, be looked at from a crystal ball (van der Duin 2016, 7). Foresight is not predicting what will happen in the future, but it's about being aware of the possible development directions and maintaining viability in the changing world (Lustig 2015, 16).

How organizations then deal with the future depends on two factors. First, how much knowledge there is for anticipating important future events (scale from High to Low) and second, to what extent there is knowledge and capabilities to process this information and draw conclusions for undertaking actions (scale from High to Low). Depending on how these questions are answered, there are four different ways the organization can try to deal with the future (Figure 2). Of these approaches, scenario-based learning is the most widely used approach to deal with uncertainties. It requires relatively low level of knowledge to anticipate future events and high level of knowledge on which to draw undertaking actions. Building scenarios is not an attempt to eliminate uncertainty but merely recognise unpredictable changes in the environment and being better prepared for such changes. (Tsoukas & Shepherd 2004, 3-4).

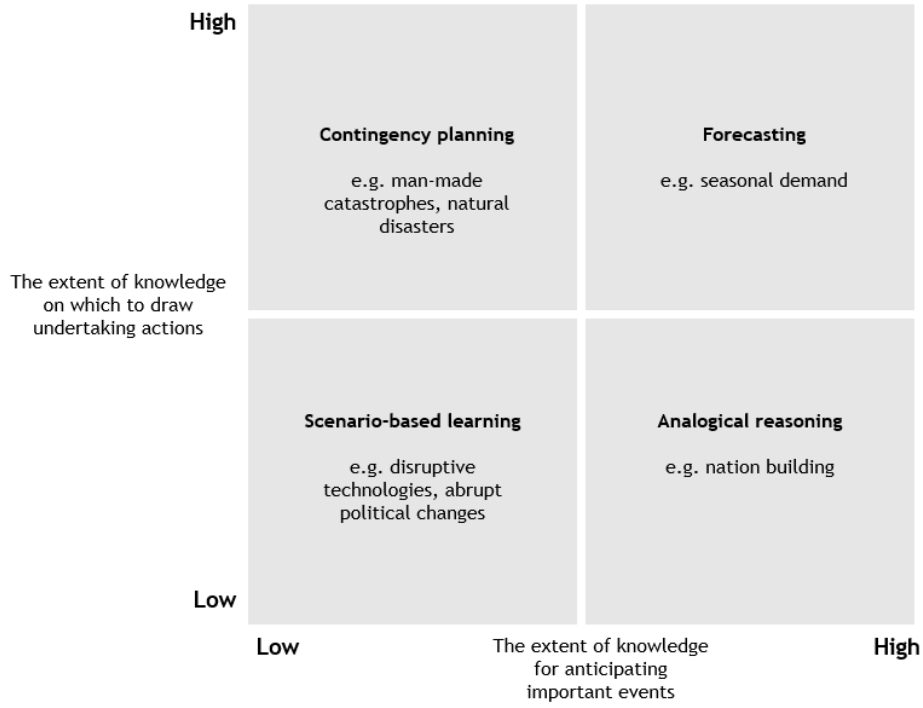

Figure 2. Four different ways to deal with the future according to Tsoukas & Shepherd (2004, 4).

To maintain competent in the current, rapidly changing world, using past data for planning is insufficient and foresight is needed (Lustig 2015, 18). VUCA is an acronym that is often used in business context to describe the environment that is constantly changing and unpredictable. The component of the acronym refers to the following words: volatility, uncertainty, complexity, and ambiguity. It is commonly said that we are now living in a "VUCA world". Bennet & Lemoine (2014) point out the importance of understanding what each of the components of VUCA mean and what kind of implications they have for business and organizations. They state that business leaders may use the acronym in wrong contexts or misinterpreting the implications for their business.

Bennett and Lemoine (2014) present the following distinctions within the VUCA framework:

Volatility stands for relatively unstable change in which information is available and understandable, but change happens frequently and is sometimes hard to predict. They suggest that *agility* is a key capability to address volatility by creating flexibility in resourcing and ability to redirect resources where they are needed.

Uncertainty stands for the lack of knowledge whether an event will have significant consequences or not. Cause and effect of the event are understood. Bennet and Lemoine (2014)

suggest that *Information* is critical to reducing uncertainty. Organizations should gather new data (in addition to the existing one) and look at and analyse the data from different perspectives.

Complexity is about interconnectedness of information and procedures that form a complex network. The writers suggest *Restructuring* internal operations to match the external complexity as the key capability address the challenge. Organizations should aim at matching their structures and processes to match the complex environment.

Ambiguity stands for the lack of knowledge on what is happening. The cause and the effect are neither understood and there is no understanding on what to expect to happen next. Bennet and Lemoine (2014) suggest that *Experimentation* is necessary to overcome this challenge. As there is no one clear path to take, organizations need to do intelligent experimentation to see, which of the strategies work.

Although people make statements about the future all the time, no one can predict the future. Van Duijne & Bishop (2018, 19) state that learning about the future requires learning about change. However, the impossibility of knowing what the future will be like doesn't mean that the future couldn't be studied. Futurists assume that there are several possible futures and learning about those different possibilities will make one better prepared for the future. Future is always an unfolded process which cannot be fully predicted (Jalonen et al. 2015, 20). Many of our spontaneous assumptions and ideas about the future come from science fiction which may lead us thinking, that future is something that cannot be predicted (Raymond 2019, 46).

The future can be approached in different ways (Figure 3). According to Börjeson et al. (2006), the classification on the different ways is based on three basic questions:

- *What will happen?*
- *What can happen?*
- *How can a specific target be reached?*

The first question, 'What will happen?', is answered with a *predictive approach*. This approach leans heavily on historical data and projects historical patterns onto the future (van der Duin 2016, 2). Predictive approach is often chosen when the aim is to create a plan and to adapt to situations that are expected to occur (Börjeson et al. 2006). The second question, 'What can happen?', is responded to by the *explorative approach*. This approach assumes that the future is not a continuation of the current and it can't be predicted only by looking historical data (van der Duin 2016, 2). Explorative approach looks situations or developments that are considered as possible to happen, usually from a variety of perspectives (Börjeson et al. 2006). The third question, 'How can a specific target be reached?', is answered by a

normative approach. This approach sees the current situation dissatisfying and is looking for ways fix things in the future and to reach a desired future state.

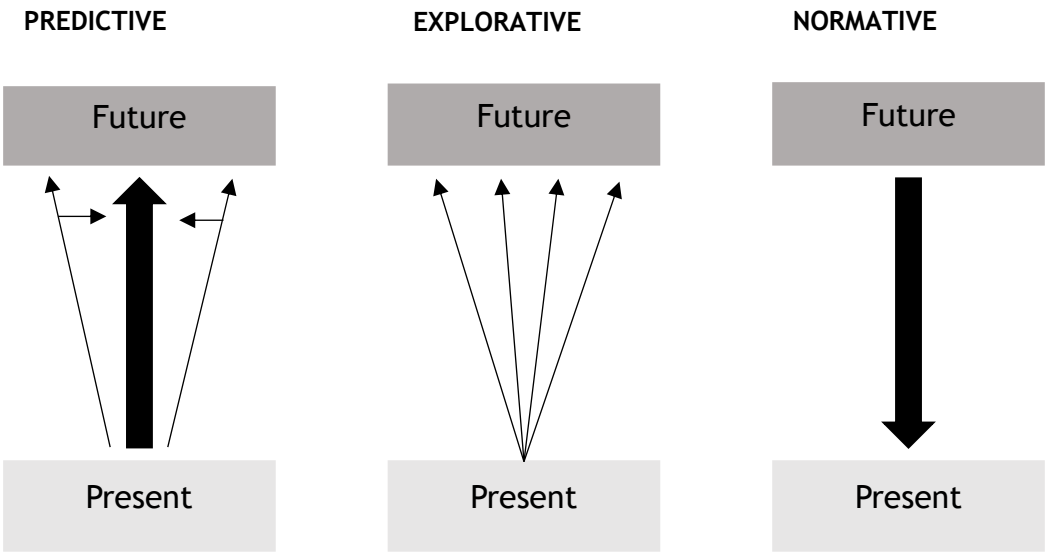

Figure 3. The three approaches to foresight (Quist 2016, 126).

The approach has also an impact on which methods are chosen to study the future and thus the result, i.e. the decisions or actions that are taken based on the findings from the study (Figure 4). Therefore, it is important to define and understand the approach to the future before choosing the method(s) and ways to anticipate the future.

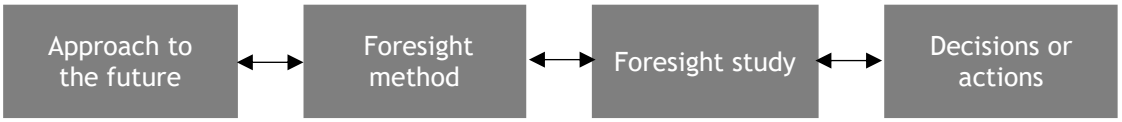

Figure 4. From approach to the future, to foresight methods and study and to decisions and actions (adapted from van der Duin 2016, 5).

There are few generally established basic concepts of foresight: trends, megatrends, weak signals, wild cards, scenarios and visions.

Trends are changes in people's behaviour, attitudes and values – both locally and globally. A trend is a direction of development and a description of change.

Megatrends are major forces that impact everything, everyone and everywhere. Megatrends often describe societal change that takes place globally.

Weak signals are indications of an emerging issue or an early sign of a change that may (or may not) be meaningful in the future. A weak signal is a sign of a new thing or a new element of an old one. It is characteristic to weak signals that they are often surprising to its interpreters and they force one to challenge present assumptions and look at things from different perspective. Weak signals require time to mature and to become later trends.

Wild cards or black swans are low probability events that have a major impact or outcome. They are sudden and unpredictable in nature.

Scenarios are one of the main methods in foresight. Scenarios are multiple and alternative futures. They need to be plausible yet surprising in their nature. Scenarios are built based on the most influential drivers of change.

Vision a description of the desired future (scenario), written from its creator's perspective. Vision presents the operator's aspirations and requires action to achieve the world it describes.

(definitions combined from Dufva 2018; Jalonen et al. 2015, 27; Van Duijne & Bishop, 2018).

3 Corporate foresight

Jalonen et al. (2015, 24) state they believe that future's core capabilities have to do with building long-lasting and meaningful value in people's lives and therefore it's critical for companies and organizations to understand what creates value for their customers in the future. Strategic foresight methods are designed to tackle the VUCA world around us (Van Duijne & Bishop 2018, 5). According to Tsoukas and Shepherd (2004, 9)

"*A foresightful organization is an organization that has sharpened its ability to see, observe, perceive what is going on both externally and internally, and to respond accordingly*".

Rohrbeck (2010, 109-110) defines corporate foresight is an organizational ability that supports identification and assessment of continuous change, triggering management actions and ensuring the long-term survival of the firms. One of the major roles of foresight is to test and challenge basic assumptions. The culture of the company needs to be open to external sources and there needs to be a will to look at the company and the business also from the outside perspective. One of the most common challenges to foster foresight activities is the lack of willingness to share across functions.

In her book, Lustig (2015, 16) defines strategic foresight as following:

"*Strategic Foresight is not fortune-telling. It is about thinking ahead so you can act ahead, it is preparing strategy so that you or your organisation can anticipate possible futures and remain viable not just today but also in the future. Most of all it is a willingness to explore the future and jointly and collectively make sense of it.*"

However, strategic foresight is not about making companies and organizations better at making accurate predictions about the future but making them more prepared for different futures that are all possible and plausible. It is merely a practise that engages to develop strategies and plans for the future (Lustig 2015, 17). Understanding the meaning of possible futures enables organizations to capture new opportunities, particularly ones that are in the long-term future and new business strategies can emerge from understanding these opportunities (Van Duijne & Bishop 2018, 14).

Strategic foresight is

1) **action oriented**, meaning that it's about actively working on and shaping the future to the direction you want to see it to happen

2) **open to alternative futures**, meaning that you work with several directions and are open to alternatives because no one can predict the future for sure

3) **participatory**, meaning that participation of the key stakeholders are needed in the process to build and co-create the future together

It is also multidisciplinary, and it requires a broad spectrum of knowledge and collaboration for people and organizations to make sense on the possible directions (Lustig 2015, 19). Industry foresight is based on deep insights into trends in technology, demographics, regulations, and lifestyles, which can be harnessed to rewrite industry rules and create new competitive space. It is a synthesis of many people's visions. (Hamel and Prahalad, 1994).

As it is difficult to point one single department that would be responsible for foresight in the corporate context, it is reasonable to look at corporate foresight from different perspectives. The following three perspectives can be found in research conducted on corporate foresight (Rohrbeck 2010, 13):

- **The Strategic management perspective**, which includes organizational change, ambidexterity, environmental scanning and decision making

- **The Innovation management perspective**, which includes radical innovations and (technological) disruption

- **The Future research perspective**, which covers both public foresight activities on a national (macro level) and corporate foresight activities (micro level)

Rohrbeck (2010, 12) defines corporate foresight as "*The ability to create and maintain a high-quality, coherent and functional forward view*". Corporate foresight is in the intersection of strategic management, strategic controlling, innovation management and business development & marketing (Figure 5).

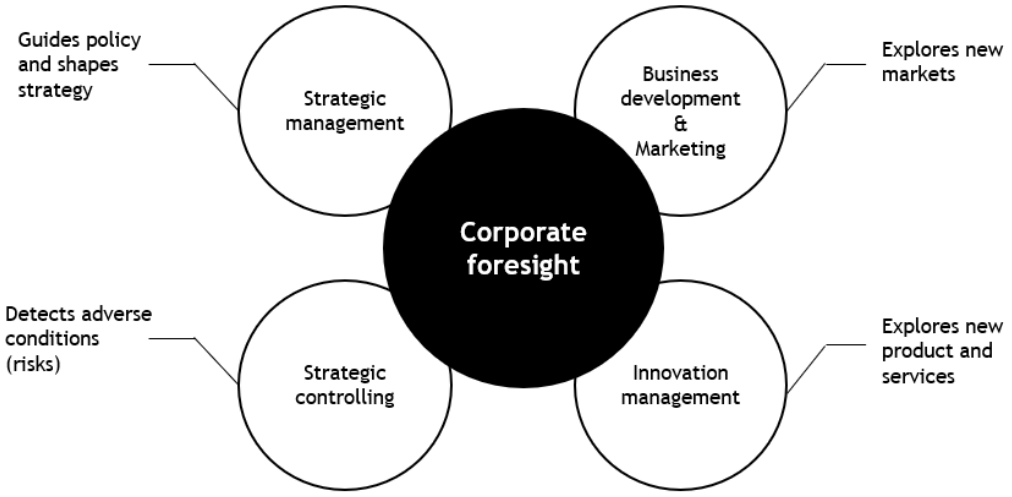

Figure 5. Definition of corporate foresight (Rohrbeck 2010, 12).

Rohrbeck's (2010, 51) main conclusion regarding *the strategic management perspective* is that top management should be involved in interpreting foresight and participate in foresight activities. Companies also need to ensure strategic flexibility and build capabilities to scan continuously the environment. Insights from foresight activities should be communicated on many levels of the organization simultaneously.

On *the Innovation management perspective,* he concludes, that committed individuals are critical to radical innovation and these individuals should be integrated into foresight activities. Additionally, for larger companies to stay on the top of continuous change, dedicated structures for scanning the change are needed.

From the *Future research perspective* Rohrbeck (2010, 51) concludes, that the approach to foresight should be more qualitative than quantitative, and that active participation of internal stakeholders is needed to succeed.

3.1 Corporate foresight driving innovation

Even though consumer-centricity and focus on the consumer experience seem to be on many company's agenda, still far too few succeed in delivering superior experiences. Allen, Reichheld, Hamilton and Markey (2005, 1) conducted a survey in which they interviewed 362 companies and 80 % of these stated that they deliver superior customer experience, but when interviewing their customers, only 8 % of the customers thought that they were getting superior experiences when interacting with these companies. When looking at the 8 % of the companies who managed to deliver quality to their customers, the researchers noticed that these companies invested in the loyal and most profitable customers and in ensuring that these customers will come back also in the future and recommend the company to their friends. These companies also invested in truly understanding their customers and especially what creates value them, to avoid making compromises with the most important features in the experience.

Why innovation matters?

Innovation management is much more than just planning new products, services, brand extensions, technological inventions or new product launches. It's about imagining, organizing, mobilizing and competing in new ways (Mootee 2013, 16). Peter Drucker (2006) once said it well: "*The greatest danger in times of turbulence is not the turbulence; it is to act with yesterday's logic*". Tushman (1997) states that companies tend to start losing in the marketplace after they've gained control of a product class in an industry. In other words, winners become losers. To prevent this, companies and especially senior managers must be willing to understand the changes in the marketplace.

According to Tushman (1997), longer periods of incremental change and continuous improvement are followed by revolutionary change that result in even more incremental change which will be interrupted by a subsequent revolutionary event. The time between these revolutionary events depends on the industry. Long-term success has to do with managing different streams of innovation rather than singular innovation events. The organizational structure and culture are in a key role in managing innovation streams. The organization must be built in a way that the current incremental change requires but at the same time there needs to be strategy, structure, processes and people who look for more revolutionary change. In his article Tushman (1997) states: "*Senior teams must manage inherent inconsistencies consistently if they are to manage innovation and change*".

The role of foresight in corporate innovation

In their research Rohrbeck and Gemuenden (2010) found three roles for corporate foresight in enhancing the innovation capacity of a company (Figure 6). The three identified roles are

Initiator role (at the front-end of the innovation process), **Strategist role** (outside the innovation process) and **Opponent role** (along the innovation funnel).

In the *Initiator role*, corporate foresight triggers new, innovation initiatives, including new R&D projects and new process or business-model innovations. In doing so, foresight is fed to the innovation funnel. Initiator can identify new and emerging consumer of customer needs, emerging technologies and competitors' new concepts early. Identifying these changes requires continuous scanning of the environment.

In the *Strategist role* foresight is not directly linked with innovation process. Instead, it provides guidance and directs innovation activities toward new and promising business fields. In the strategist role corporate foresight can assess and reposition innovation activities, provide strategic guidance, identify new business models, consolidate opinions and create visions.

In the *Opponent role* foresight has an impact throughout the innovation process. The role of corporate foresight is to challenge basic assumptions, scan for disruptions that could possess risk for current and future innovations and challenge the state-of-art of the current R&D projects and activities.

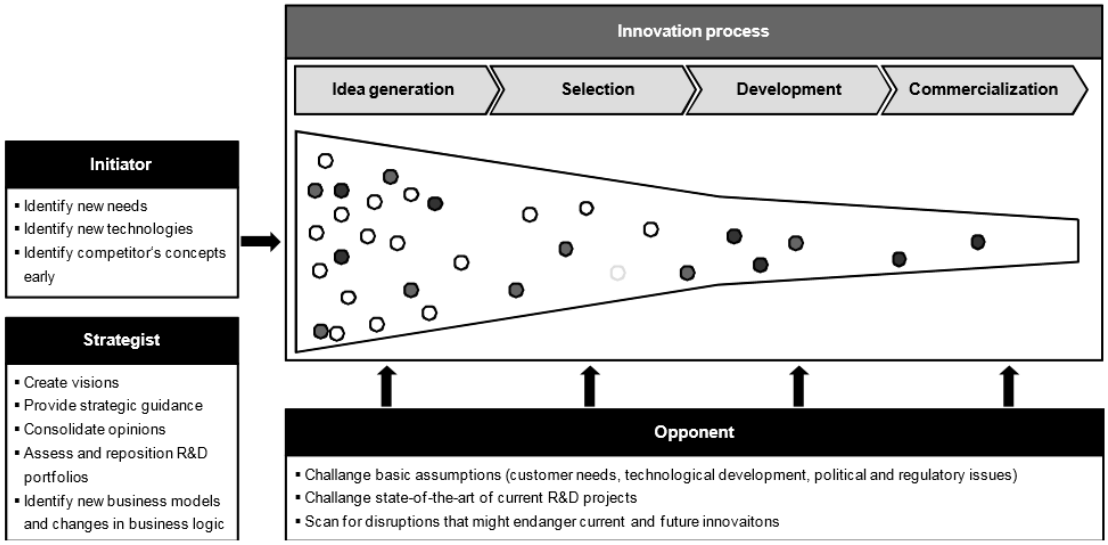

Figure 6. The three roles of corporate foresight (Rohrbeck & Gemuenden 2010).

Rohrbeck and Gemuenden (2010) conclude that corporate foresight should contribute through these three roles to the ability to anticipate new opportunities that arise from disruptive change. Their tentative conclusion is that companies should establish process links when sharing their insights from foresight activities.

The diffusion of innovation

The diffusion of innovation is a widely recognised theory, which explains how new things become accepted and recognised by the majority (Hiltunen 2012). The theory is presented as a curve, in which people are divided into groups based on how fast they adopt an idea or a trend (Figure 7). First a small group of people (Innovators) adapt the idea or certain behaviour before everyone else. Early adopters, as the name suggests, are the ones that adapt the idea next, followed by early majority, late majority and laggards, who will most likely never adapt to the idea (Hiltunen 2012).

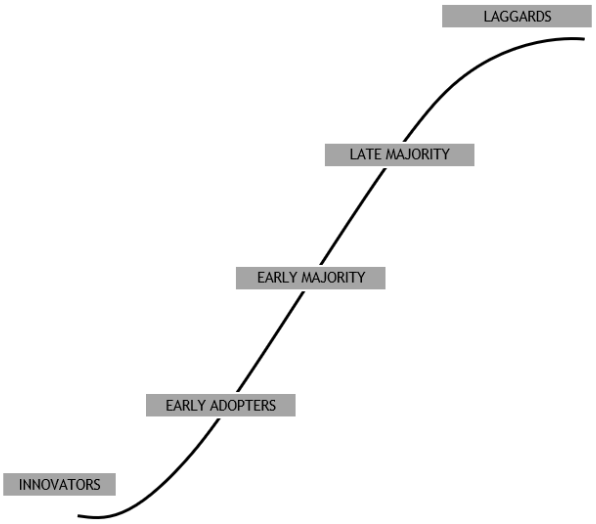

Figure 7. The diffusion of innovation curve (adopted from Raymond 2019, 26).

For people working with foresight this curve and the different diffusion types are very useful tools (Hiltunen 2012). Innovators, which represent only 2,5 per cent of the population, are arguably one of the most important groups to focus on and understand (Raymond 2019, 17). Innovators are disruptors, change activists and the ones who author tomorrow. They are the ones we should seek out. Many of the big trendy things of their own time, like Airbnb, Uber and Tinder, were first adopted by Innovators who were then able to make them a thing for the majority.

While Innovators are crucial in making disruption happen, Early adopters are the ones who spread the word about Innovators and their disruptive ideas. Early adopters cater 13,5 per cent of the population and are influencers who connect people to the ideas in ways that convince the Early majority but also attract the Innovators. Early adopters tend to have high-

value networks, which explains their power in reassuring the Early majority. Early majority, which make a sizeable and thus influential 34 per cent of the population, are the ones who act as a bridge between Early adopters and Late majority. They can convince the more sceptical Late majority, who need high level of assurance before they buy into new ideas or behaviours. Late majority also covers 34 per cent of the population. Laggards are the slowest ones to adapt new ideas and they make up about 16 per cent of the population. This group is conservative and most resistant to new things. (Raymond 2019, 17-25).

When looking at emerging trends or weak signals, Early adopters and Innovators are the people to look for as they are the ones driving the change and disruption (Raymond 2019, 45). If there is a completely novel innovation in one's hands, it may be beneficial to seek for feedback from the Innovators and Early adopters first and see how they think and feel about it. As Late majority may be easier to please, many of the big and established brands concentrate their efforts because this group is easier to pursue (Raymond 2019, 22).

3.2 The role of foresight in strategic management

There is no single definition for strategy, but as it is a complex concept it is difficult to describe in just one sentence. However, there is a substantial agreement on its principal dimensions. According to de Kluyver and Pearce (2015, 2)

"*Strategy is about positioning an organization for competitive advantage. It involves making choices about which markets to participate in, what products and services to offer, and how to allocate corporate resources*".

The primary goal for strategy is to create long-term value for shareholders and other stakeholders by providing real customer value. Strategy is the result of choices executives make, about what to offer, where to play and how to win to maximise long-term value. As strategy talks about long-term value, a good strategy anticipates a wide range of potential changes in the competitive environment and contains plan for how to effectively deal with those anticipated changes (de Kluyver & Pearce 2015, 8).

Foresight in strategic management

Companies need to find a future in which they can play role in to create value. As our dynamic world continues to include unexpected events that cause disruption and uncertainty, all companies must endure change to survive or grow (Mootee 2013, 108). Organizations need to plan for change. At best, they should be able to anticipate change and capitalize the opportunities that emerge from it. To face the unknown, organizations must adopt a different approach to predictability. To remain viable also in the future, the ability to manage

uncertainties is critical. Strategic foresight is appreciated by most managers, but it is too easily understood as planning, whereas in reality strategic foresight is one of the many inputs for planning. Strategic foresight should provide a vision (or multiple visions) for strategy to facilitate creating an understanding on competency gaps between today and tomorrow and how to close that gap (Mootee 2013, 98). Strategic foresight is a systematic process that help to guide planning and decision-making. According to Lustig (2015, 20), foresight can help the organization in the implementation of strategy and making decisions based upon this, managing uncertainty and coping with future change and challenge. It is the practice that the organization can use to engage with the future, make sense of what they see and make the needed decisions based on this understanding.

In a Europe-wide study Becker (2002) found that direction-setting, determining priorities and strategy formulation were among the most often mentioned goals for foresight activities within European companies. Foresight was used for establishing board guidelines for business strategy and guiding strategic decision-making. It is widely acknowledged among researchers and practitioners that foresight is an important strategic capability and critical for successful long-term planning (Peter and Jarrat, 2015). However, very easily managers are focusing too much on looking at the obvious trends and not thinking enough on the deeper implications of these development paths. Many don't think how these trends, especially the ones that may seem irrelevant to their own industry, affect people's aspirations, attitudes and behaviours. As a result, companies are missing the opportunities the trend might create to their business or even make false assumptions in the future (Ofek and Wathieu, 2010). In addition, there is a limited understanding on which foresight methodologies would work best and in which stages of the planning processes they should be incorporated (Peter and Jarrat, 2015).

In their research Peter and Jarrat (2015) looked at the practise of foresight in long-term planning in two different companies through comparative analysis. In a company that had stronger emphasis for foresight, foresight activities were structurally supported by a community of practise, who concentrated on activities around on-going collection and synthesis of strong and weak signals, which were further worked into scenarios that depicted alternative futures. The community of practice widely engaged strategists across the organization in conversations about emerging futures and how to take those emerging futures in to account in different strategies. The findings from these activities encouraged managers to see long term planning an ongoing examination of implemented and anticipated strategies within alternative futures. As a result, these activities prepared the organization for future environments.

According to Peter and Jarrat (2015), key drivers of successful integration of foresight in long-term planning process are

- Top management commitment and support, which ensures the importance of foresight is recognised and thus funded
- Innovation friendly culture, which supports openness to new ideas
- Flat hierarchy, which ensures efficient information flow and decision-making
- Efficient sharing of foresight knowledge and understanding the importance of foresight both among management and employees
- Real-time scenario building based on weak and strong signals, which enable continuous development of strategic initiatives and testing the relevance of current initiatives

The importance of middle management in strategy development has been well recognised in recent years. They are the critical step linking top management to the organization and thus have a key role in ensuring the strategy is implemented successfully (Darkow, 2015). One key thing is to ensure that the strategy development leverages from the expertise that is dispersed throughout the organization. According to Darkow (2015), middle management have a role in each step of the strategy development, from collecting the input for the strategy work to evaluation of the collected foresight information and further creation and prioritising the strategic options and implementing them.

Long-term decisions call for good advice, observations and arguments. The challenge however often is, who to talk to and ask for advice to get the best understanding. In business context these decisions have been supported with knowledge from various sources, including quantitative and qualitative market research, external business and trend consultants and other "trend gurus". Hoffman (2015) presents a trend receiver concept, which can open new ways to build this future-leaning understanding and knowledge. Trend receivers are "*individuals who perceive changes and potentials of the new in a specific area in highly sensitive and differentiated ways*". One of the key tasks for the trend receivers is to translate the recognised trends foresight information into tangible recommendations on how the organization should tap the possibilities the trends are creating.

3.3 The futures studies perspective to foresight

Futures research may not have one clear definition, but it is used here to describe the whole range of research that is conducted to help organizations, individuals and governments to explore, prepare for and respond changed in the environment. One reason for commonly agreed definition is the lack of cross-referencing between different research perspectives (strategic

management, innovation management and futures research) which has created siloes among scholars from different streams. Futures research perspective can be divided into two streams: National economy (macro) perspective and Corporate perspective (micro). (Rohrbeck 2010, 35).

After the Second World War, many national governments were looking for ways to boost their national economies (macro perspective) by identifying promising emerging technologies that could maximise their economic benefit and more generally enhance the quality of life. Today, national foresight projects not only accelerate the identification of emerging technologies but also enhance research on methods and practises for exploring the future. As a result, over the years a large toolbox of futures research methods have evolved from the national foresight projects. Corporate foresight research has benefited from this development. (Rohrbeck 2010, 35-40).

Past research on corporate foresight (micro perspective) reveals three major findings that show how this field of research has evolved over time. First observation is that there is a trend towards thinking about uncertain and possible futures instead of just planning how the company should be changed toward a new desired state. The second finding reveals the high importance of involved actors, meaning the importance of external information in a company to successfully scan the future. The third finding in corporate foresight research has shown that participation is crucial, and that key stakeholders and decision-makers need to be integrated into the process of foresight. (Rohrbeck 2010, 43-44).

4 Corporate foresight capabilities and maturity

Rohrbeck (2010, 71-72) noticed, that a common framework for corporate foresight was missing, even though the importance of forward view in corporate context was well recognized. In his work he created a maturity model to evaluate foresight in organizations that can be used as a benchmark when organizing foresight and building foresight capabilities with the organization. His work is based on 19 case studies from multinational companies and total of 107 interviews with board members, strategists, innovation managers and foresight professionals. The Maturity Model of Corporate Foresight can be used as a benchmark to evaluate the maturity of the company in foresight and futures anticipation (Rohrbeck 2010, 71). The model consists of statements related to different aspects of foresight maturity and the level of maturity is evaluated on a 4-point scale (Level 1 – Level 4).

The Maturity Model of Corporate Foresight consists of three elements: The Context, The Capabilities and The Impact (Rohrbeck 2010, 72). **The Context** consists of six different criteria: size of the company, nature of strategy, corporate culture, source of competitive advantage,

complexity of environment and industry clock speed. Rohrbeck assumes (2010, 73) that differences in the context of a company will affect the need for different foresight capabilities and that when evaluating the design of the corporate foresight systems the context will help in this work.

The Capabilities part is used to evaluate company's foresight system from the perspective of its strength to identify, interpret and respond to continuous change. The capabilities are divided into five dimensions:

1. **Information usage**, which describes what kind of information is used in the foresight systems

2. **Method sophistication**, which describes the methods that are used for interpreting the information

3. **People and networks**, which describes what kind of people and networks the company utilises to communicate the foresight and related insights

4. **Organization**, which describes how information is collected, interpreted and used

5. **Culture**, which describes how the organizational culture supports foresight effort and activities

The Impact part is used to evaluate what kind of the outcome or value the foresight activities can create. It consists of four different criteria: Reduction of uncertainty, triggering actions, influencing others to act and secondary benefits which are more like by-products of foresight activities, improving company image to their clients being one example of a secondary benefit (Rohrbeck 2010, 72 & 93). As the model suggests, there is "no one size fits all" solution for foresight activities within a company but they need to be evaluated and adjusted based on the context and company needs.

In addition, Rohrbeck (2010, 111-113) identified two directions for building high corporate foresight ability: Structured approach and Cultural approach. In the **Structured approach** foresight activities are executed according to a process and by dedicated units. In this approach the foresight activities are linked to other corporate functions. In the **Cultural approach** a larger number of employees are involved and accountable for detecting and responding to discontinuous change. There are no dedicated processes for foresight, but the activities are triggered through more traditional processes such as new-business development. In the end, it's up to the company to decide how they want to organise foresight within the organization. Most often companies combine elements from both approaches.

Rohrbeck (2010, 123) also presents best practises for corporate foresight. These practises are network of scouts, data mining, combining scenario analysis and road mapping, IT-based collaboration tools, communicating insights through participation, linking foresight to strategy, linking foresight to innovation management and promoting an external view.

4.1 Foresight and dynamic capabilities

In fast-moving consumer goods (FMCG) business environments that are open to global competition, sustainable competitive advantage requires more than the ownership of difficult-to-replicate assets. The key to sustainable advantage is dynamic capabilities that are difficult to replicate by the competitors. These capabilities are in key role to sustain the company's unique asset base through continuously creating, extending, upgrading, protecting and keeping it relevant. Dynamic capabilities can be described as capabilities 1) to sense and shape opportunities and threats, 2) to seize opportunities and 3) to maintain competitive through keeping the company's tangible and intangible assets relevant and up to date. Dynamic capabilities also include company's capabilities to adapt to changing customer and technological opportunities. (Teece 2009, 4).

Dynamic capabilities can be defined as routines within a company's managerial and organizational processes that aim to gain, release, integrate, and reconfigure resources (Teece et al., 1997). Resources refer to specific physical (e.g. geographic location), human (e.g. expertise), and organizational (e.g. sales force) assets that can be used to implement value-creating strategies (Eisenhard & Martin, 2000). To differentiate dynamic capabilities from operational capabilities, Cepeda and Vera (2007) state that dynamic capabilities focus on the modification of operational capabilities and lead to changes in the company's products or production processes whereas operation capabilities focus on the actual operational functioning of a company.

While both corporate foresight and dynamic capabilities are both widely researched topics, the joint analysis between corporate foresight and dynamic capabilities is under-explored and only very few scientific papers discuss the both concepts simultaneously (Semke & Tiberius, 2020). Schwartz, Rohrbeck and Wach (2019) explored to what extent corporate foresight can be considered as an element of dynamic capabilities. In their research they found that foresight practises and training on foresight make a significant contribution to dynamic capabilities both on a managerial and organizational level. Further research is however still needed. Haarhaus and Liening (2020) state that strategic foresight has a strong positive impact on two distinct type of dynamic capabilities: strategic flexibility, which refers to organization's capability to identify major changes and quickly adapt and direct resources to actions in response to identified change and decision rationality, which can be understood as the extent of how

much information is gathered and utilised in decision-making processes. In addition, they conclude that the higher the environmental uncertainty, the more the organization benefits from strategic foresight.

According to Semke and Tiberius (2020), corporate foresight and dynamic capabilities both aim at making the organization better prepared for the future challenges. To clarify the roles of the two concepts, corporate foresight can be regarded as a specific activity that corresponds with the sensing phase of dynamic capabilities. However, the main difference between the two concepts was in their role in seizing: transforming is not integrated in the foresight processes whereas it is a vital part of dynamic capabilities. To conclude, the future-oriented knowledge gained through foresight activities is a crucial element for renewal processes and thus can be considered having a link with dynamic capabilities.

4.2 The value of corporate foresight

As anticipating futures can be a quite complex task, the success of these activities can be critically assessed, and questions of their accuracy may rise. But it's not only about the accuracy but also about the value these activities have created in the organization. When looking from the strategic management perspective, Rohrbeck (2012) concludes that foresight can contribute in multiple ways: 1) identifying relevant external changes, 2) enhancing decision-making and providing strategic guidance, 3) challenging dominant models, 4) moderating strategic discussions and 5) supporting configuration, deployment, and implementation by ensuring sufficient participation. To conclude, foresight can create value by supporting strategic renewal as well as strengthening resilience against and responsiveness towards external change. In addition, foresight can add value by identifying the need for new strategic resources and trigger exploring and developing new business fields. If looking at the value foresight can create from the innovation management perspective, it can enhance the ability of a company to gain competitive advantage through facilitating creation of incremental and radical innovations.

Foresight can help organizations in many ways. The key benefits were found to be in relation to shaping the future, improving organizational flexibility, enhancing alignment within the organization, improving customers' perception of the company and creating better awareness on the new opportunities (Hammoud & Nash, 2014). Amanatidou (2014) states that major impacts of foresight belongs to three groups: in relation to knowledge, network creation and promoting engagement in policymaking. His key conclusion is that foresight contributes to building participatory knowledge societies. According to Vecchiato (2015), value of foresight is not only in the alternative visions of futures it creates but also about foresight activities'

capability to foster a process of organizational learning about the future which enhances organizations capabilities to adapt to change.

4.3 Challenges in foresight

As academic and business literature unarguably prove the importance of foresight activities in corporate context, why are there still so many companies that are still mainly focusing on short-term optimization? According to Hamel and Prahalad (1994) senior managers are more occupied with restructuring and re-engineering current than the future. Even though both tasks are important, they are more related to today's business than of tomorrows. In addition, in most companies, return on capital employed, shareholder value, and revenue per employee have become the primary measures of top-management performance and thus the focus is merely on short-term optimization. Burt, Mackay and Perchard (2015) concluded based on their research that foresight can get too much emphasis on top management level and cause "managerial hyperopia". Thus, they suggest that there should be a balance between operational activities and foresight activities to prevent detrimental organizational performance in the short-term.

Hamel and Prahalad (1994) emphasize, that organizational transformation must be driven by a point of view on the future of the industry, not by cost optimization. As one definition on foresight states that "*Foresight has to be seen as a system comprised of a number of basic elements, namely actors, objectives, processes, inputs and outputs*", the organizational transformation should take a look at all these factors (Amanatidou & Guy, 2008). One challenge in measuring the value contribution of foresight is that the value is difficult to measure and that the results are often measurable only on the long run (Amanatidou & Guy, 2008). According to Rohrbeck (2012) this challenge of low return on investment can be reduced by defining the expected value contribution in the early phases, identifying committed individuals, and as active participation of internal stakeholders in the foresight activity.

5 Individual and collective cognition for corporate foresight

5.1 Foresight skills of an individual

If everything remained the same also in the future, one could just extrapolate the past into the future. But that is not how future can be seen from today. One of the most critical characteristics for a person looking at the future is to have a mindset that embraces exploration of potential futures and willingness to make sense out of them (Lustig 2015, 25). Understanding and looking at futures requires creativity and imagination. Foresight specialists use their

instincts and ‘gut feeling’ to recognise past cues and familiar patterns and some kind of mental modelling to develop action plans (Raymond 2019, 76). It’s not guesswork but how our brain work and how it makes it possible to convert tacit knowledge into explicit knowledge.

When we want to think creatively, we need to forget some things we were taught. We need to separate ourselves from the logical thinking and aim further than we would automatically do. Hartman (2016, 203-204) lists five skills that support creative thinking:

1) Looking at new points of view instead of limiting us to things we already know
2) Using associations as inspiration to solve the problem
3) Focusing on quantity over quality when creating alternative solutions to a problem
4) Postponing all judgement
5) Using our imagination

In addition to creativity and intuition, Rohrbeck (2010, 81) mentions individuals’ willingness to test basic assumptions and readiness to listen and willingness to share across functions as key elements of culture that support foresight capabilities.

Hines and Goldman (2015) suggest that proper integration of foresight into an organization can create an impact and add value. They propose an organizational futurist role to aid with integration. In practise this role means a person whose full-time work should be promoting, facilitating and supporting foresight activities within an organization. This person should have expertise in foresight and capabilities to take a futurist role. Organizational futurist role would also tackle many of the major challenges that are often faced with foresight. Organizational futurists could address challenges such as episodic use, cultural resistance and lack of integration and usage. Hofmann (2015) proposes a role of the agent of new, a trend receiver, who is an individual who tracks and reflects changes and potentials of the new in a specific environment in a highly sensitive and differentiated way. The key characteristics of a trend receiver are experience in a certain domain, curiosity, open-mindedness, ability to observe and recognize patterns, networking skills and intuition.

5.2 Foresight is socially constructed

Often ability to create innovations or being creativity is defined through specific, hyper-intelligent individual who have exceptional visionary skills to produce something ground-breaking. However, quite often this is not the case, but best ideas and innovations are born as a result of social activities and social construction instead (Pentland 2014, 35). Interestingly, the social aspect of knowledge construction can both enable integration of foresight within an organization and enhance the actual foresight activities.

Evaluation of foresight activities often focuses on evaluating the achievement of a specific goal but not much emphasis is put on looking at the impacts associated with the foresight process itself, i.e. how the foresight exercises are designed and implemented, and which mechanisms create value (Boe-Lillegrave & Montarde, 2015). Interesting point of view to this is to look at how these exercises are able to drive 'participatory knowledge societies', meaning the interdependencies and inter-relationships between different elements such as actors, processes, inputs, outputs and impacts, as well as the interaction of the system with the broader macro environment (Amantidou & Guy, 2008).

Drucker (1995) states, that the ability and the skills of an individual, organization and industries to acquire and apply knowledge will become a key competitive advantage in the future. As this statement is already from 1995, one can assume that this has already become true. Organizational foresight is a result of collective knowledge creation. Because of its collective nature, it is important to acknowledge that understanding its emergence requires understanding the social context and context of the collective. As a result, phenomena such as leadership, power, communications, roles and values can determine the ability of a collective to create useful foresight knowledge. And vice versa, if the collective is not able to operate in an acceptable manner, it can hinder the formation of collective foresight knowledge (Schwandt & Gorman 2004, 94-95).

Foresight acknowledges that knowledge is 'socially constructed'. As foresight can bring together all interested parties, it facilitates knowledge diffusion and production among cross-functional groups with different backgrounds. It also allows non-expert knowledge and people's perceptions, interests, concerns and fears to be considered. Foresight meets the need to move beyond reliable knowledge towards socially robust knowledge and provides a space for knowledge depiction, mediation and co-production by integrating different knowledge sources and types (Amanatidou & Guy, 2008). According to Fuller and Loogma (2008), foresight is both a social construction, and a mechanism for social construction. From the methodology point of view, foresight projects should acknowledge the socially constructed nature of their process and outcomes because this will lead to greater accuracy and validity.

As foresight is to a great extent about dealing with uncertainty and partial or incomplete knowledge, it needs collaboration and the strategic alignment of actors. This is facilitated both by sharing knowledge and uncertainties and by identifying alternative solutions and commonly agreeing on actions to avoid undesired consequences (Amantidou & guy, 2008). According to Boe-Lillegrave and Montarde (2015), foresight can alter mindsets, stimulate hypothetical thinking and help organizations to become more attentive and proactive to future issues.

Peter and Jarratt (2015) emphasize the critical role of future agents in in gathering foresight information and initiating strategic conversations with the broader community and beyond

organizational structures. This network of future agents facilitate sharing of foresight knowledge and ensure interaction, which results in a better understanding on future within the organization and recognition of foresight knowledge in long-term planning.

5.3 Corporate foresight in networked organizations

According to Castells (2010, 77), a new informational, global and networked economy arose in the last quarter of the 20th century. It is informational, because competitiveness of actors (e.g. companies or organizations) is fundamentally dependent on their capacity and capability to generate, process and apply knowledge-based information. The global aspect of the economy comes from the fact that the core activities in production, consumption, distribution as well as components are organised on a global scale. It is networked, because production and competition is played out in global networks of businesses. As a result, knowledge management and information processing are essential to the performance and competitiveness of organizations operating in this networked global economy (Castells 2010, 165). In a knowledge-creating company the knowledge comes from largely from its worker's experience and cannot be shared and distributed under a highly hierarchical and formalised management procedures (Castells 2010, 171). A horizontal and flat corporation hierarchy has a better readiness to adapt to the changing conditions (Castells 2010, 176). A network-based organization or social structure is highly dynamic, open, susceptible to innovating without threatening its balance (Castells 2010, 502).

6 Research-based development work grounded on foresight and service design

For the development work I chose to apply a conceptual framework that combines service design and future thinking. I ended up choosing this approach because both service design and futures thinking strongly focuses on looking at the challenge from user perspective and I wanted to do the development work having the user in the centre. This approach also helps with building engagement with employees as they get to participate in the development work along the way. Another reason why I chose to apply futures thinking in addition to service design methods is to ensure new and forward-looking thinking and solutions beyond "the obvious". The co-creative, user-centric and iterative nature of the design process is one of the key reasons why I've chosen to use it as the basis of my work.

The conceptual framework used in this development work has been created by Ojasalo, Koskelo and Nousiainen (2015). According to Ojasalo et al. (2015, 201), futures thinking and service design have similarities but also unique elements that supplement each other. First, they are both *future-oriented*, which means that they can map a route to the future as they both

focus on imagining things that don't yet exist. Secondly, both futures thinking and service design are about creative *problem-solving* aiming at finding and defining new opportunities. Third shared principle is a *participatory* approach and integrating users to the process.

Service design and foresight are both interdisciplinary approaches that combine different methods and tools from various disciplines (Stickdorn 2011, 29; Wetter-Edman, 2011). According to Stickdorn et. al. (2018, 23), service design is a practical approach to be used in the creation and improvement of experiences, services and products. It is an iterative process of research, development and experiments that is driven with service design principles and mindset.

UK design council (2015) has stated, that service design is all about making the service useful, usable, effective and desirable. Design thinking has many benefits. It helps structure people interactions to cultivate greater inclusiveness, foster creativity, deepen empathy and align and engage people around specific goals and results (Mootee 2013, 63). Design thinking is not an experiment itself, but it empowers and encourages people to experiment. Service design tools and methods can deliver an in-depth understanding of users and their behaviours, likes and needs, which can enable new solutions to be developed (UK Design Council, 2015). Because my greatest wish is to build tools and ways of working that are widely accepted within the organization, I felt service design was a powerful approach to be used in this development work.

As the thesis aims at developing new ways of working that are different from the current ones, I felt future-oriented approach was beneficial. During the development work I was able to apply foresight methods and test them for the first time. This was also a great way to get initial feedback on foresight methods and introduce key stakeholders to foresight methodology. According to Ojasalo et al. (2015, 208), foresight offers tools and ways for imagining and creating alternative futures, which in this case was seen to provide ideas and solution beyond the most obvious ones. Fraser (2010) suggests that imagining is the key issue that can take the leap from observable and provable to what could be a possible new solution for unmet needs.

The process used in this development work was research-based, because it aimed at developing new ways of working and recognize new capabilities that were needed to improve the overall foresight capabilities of the organization. In research-based development work wide range of different data sources and knowledge are utilised and the work is anchored to theory and knowledge base, even though it aims at developing a practical solution that improves capabilities within the organization (Ojasalo et al. 2014, 17). The chosen research-based approach can be considered as research-based development work described by Toikko and Rantanen (2009). In research-based development (suom. *tutkimuksellinen*

kehittämistoiminta), research is in a supportive role in the development work and the aim is to create concrete change, but at the same time also provide information for reasoning (Toikko & Rantanen 2009, 23).

Interestingly, research-based development approach also discusses the way the knowledge is constructed in organizations. It must be recognised that there is no "one truth" and one, unchangeable reality in organizations, but different actors have different perceptions on their reality and how they perceive different things and actions (Toikko & Rantanen 2009, 37). In research-based development work the aim is to provide information on, for example, if a method or process is seen as relevant and working in the organization. When developing something new and at the same time looking for high engagement from different actors, this kind of research is in a vital role providing insights and input in the development work.

6.1 Thesis process combining foresight and service design

There can be found several descriptions for foresight processes in literature, but they all consist more or less of the same phases. In general, the futures anticipation process is rarely linear but iterative and dynamic in nature (Dragt 2017, 53). Ojasalo et al. (2015, 201) presents a conceptual framework for service innovation that combines design and futures thinking (Figure 8). They state that in this model service design and foresight methods complement each other and create and approach that facilitates sensing and seizing new opportunities for service innovation. There are four phases in the process: 1) Map and understand, 2) Forecast and ideate, 3) Model and evaluate, and 4) Conceptualize and influence. Even though the process may seem linear, the phases often overlap, and it may be integrated in actual service practise. The application of different methods in the process is highly context-driven and dependent on the resources that are available.

The first phase of the process, Map & Understand, focuses on creating a holistic understanding on the business environment and consumers' behaviour, needs and desires, and looking and scanning at the environment to find weak signals that could tell something about the change. This also enables creating empathy towards the users, which is also in the essence of service design (Ojasalo et al. 2015, 202-203). The methods in this phase are for example contextual interviews, content analysis, field research, desk research, ethnography and Delphi (Ojasalo et al. 2015, 202; Dragt 2017, 54).

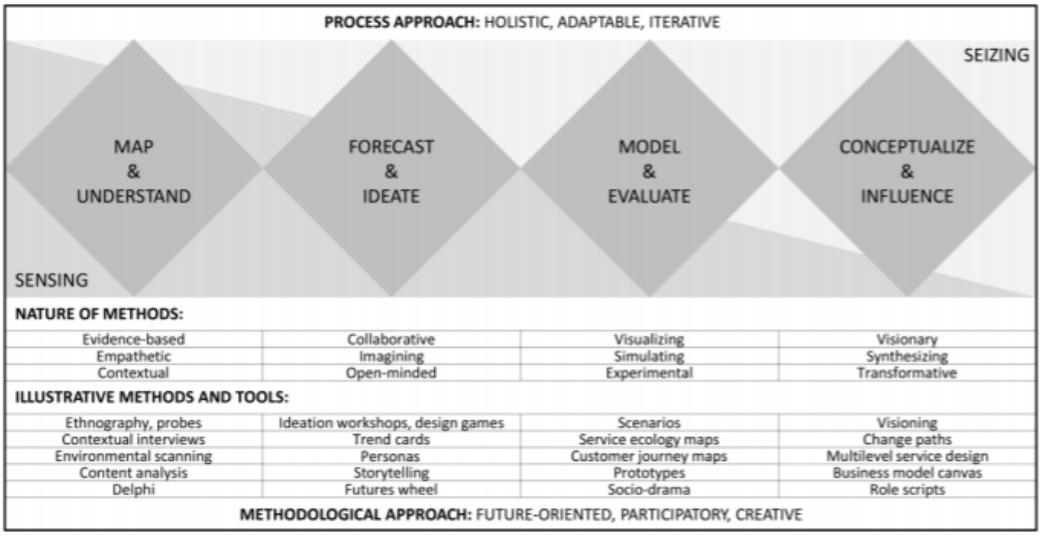

Figure 8. Service innovation process framework combining design and futures thinking (Ojasalo et al. 2015, 202).

The second phase, Forecast & Ideate, focuses on analysing and making sense of all the gathered data and starting to spot patterns within them (Dragt 2017, 55; Jalonen & al. 2017, 28). The aim is also to inspire ideation and create input for forecasting alternative futures (Ojasalo et al., 204). Ideation can be organised through ideation workshops and brainstorming or brainwriting sessions. Tools such as trend cards, personas and futures wheel can be utilised to fuel and inspire ideation end ensure future-looking view (Ojasalo et al. 2015, 202).

In the third phase, Model and Evaluate, the aim is to seize the opportunity that has been drawn in the previous phase. As both service solutions and alternative futures tend to be intangible in nature, visualisation and powerful narratives play a key role in bringing them alive. This phase focuses on looking both at the details and holistic big picture. Tools such as scenarios, customer journey maps and prototypes can be used. The goal of this phase is to create possible or alternative new service solutions and ideas and test them quickly and iteratively. (Ojasalo et al. 2015, 205-206).

The fourth phase of the process, Conceptualise & Influence, aims at conceptualising the new service solution that may also influence the future. In this phase current business thinking is integrated into creative thinking. Methods and tools such as visioning, change paths, business model canvas and role scripts can be used. (Ojasalo et al. 2015, 207).

The thesis process followed the phases described in the conceptual framework combining foresight and service design created by Ojasalo et al. (2015). The process and its phases, as well as tools and methods used in each phase are presented in Figure 9. The objective for

each phase is also captures in the figure. The emphasis was on the three first phases as actual implementation of the created ideas and solutions is not in the scope of this thesis. However, an initial implementation plan was created in the fourth phase.

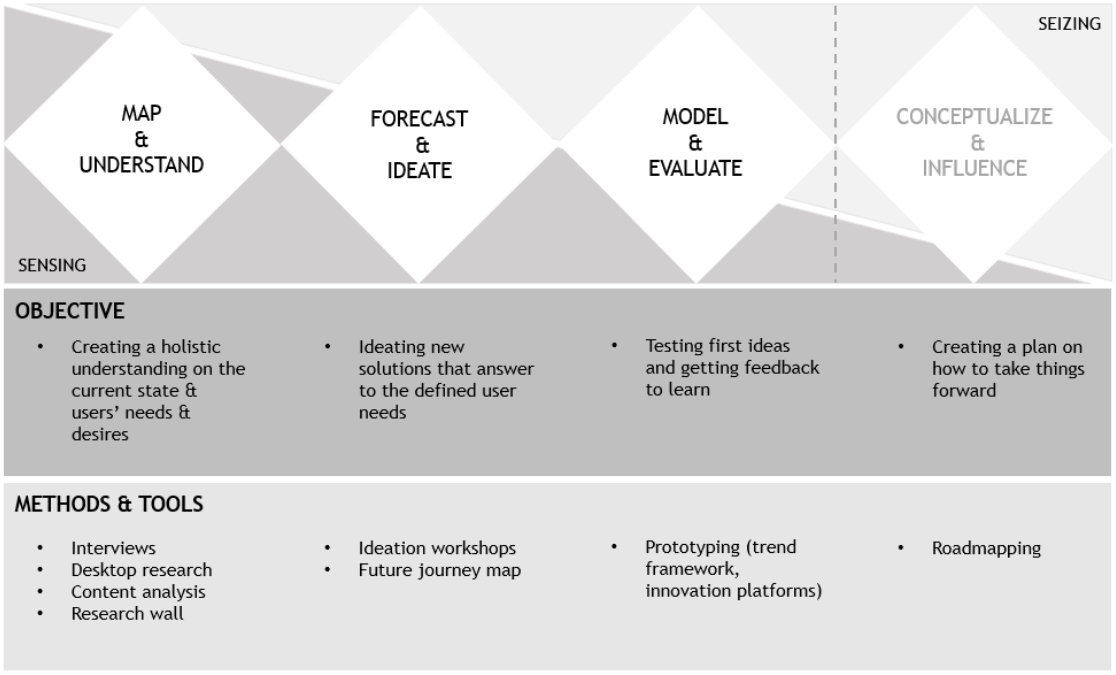

Figure 9. The thesis process and its phases

Methods and tool used in each phase are presented in more detail in the following chapters. Figure 10 presents key tools and methods used in each phase in more detail as well as the timeline for the whole process.

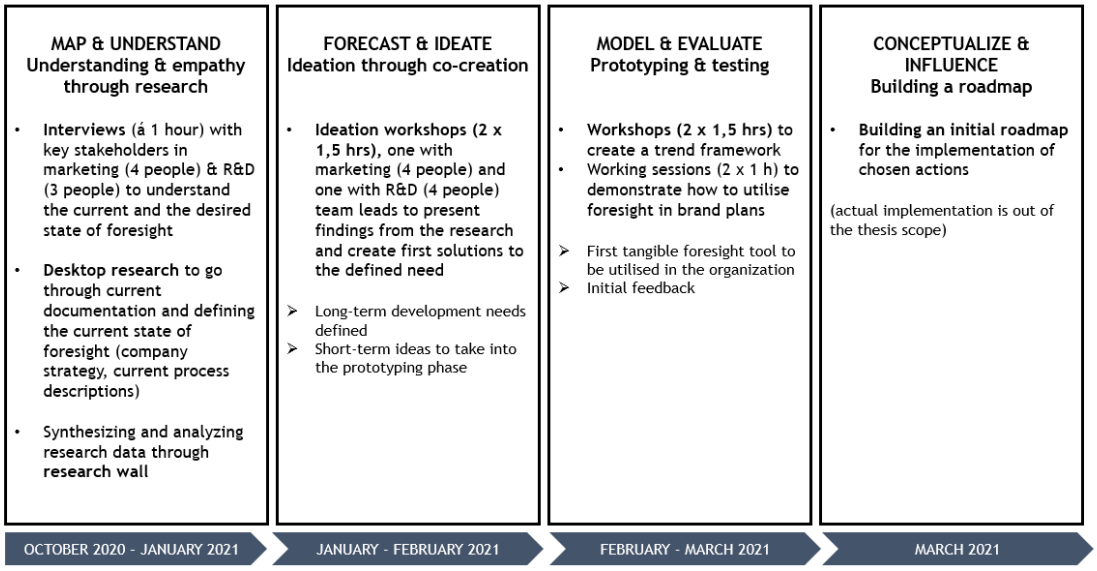

Figure 10. Detailed steps and the timeline of the thesis process

6.2 Deep understanding through interviews

According to Stickdorn et al. (2018, 38) research is in crucial role in service design as it helps the designer to move beyond assumptions. Research plays a role in every stage of the design process and can be either qualitative or quantitative in nature, but insights from qualitative research are often better at providing deep insights as it answers to the question “why”. Methods used in service design are mostly qualitative in nature. Qualitative research approach seeks to understand how people construct the world around them, what they are doing or what is happening to them in a sense that it creates rich and deep insights that can be act upon. Qualitative research approaches the world from the outside perspective and aims at providing understanding, explanations and descriptions on social phenomena (Kvale 2007, x).

In this thesis research was used to gain understanding on the current state of futures capabilities in the organization from a managerial perspective and study how the role of foresight is currently perceived and understood in the organization. The research also aimed at understanding the current needs of marketing and product development professionals and how they see foresight could be used in the organization to guide their work and improve more future-leaning thinking.

<u>Preparatory research</u>

Desktop research was used as a preparatory research for the interviews. Preparatory research is often used to find the right questions to ask in the actual research (Stickdorn et al., 2018,

118). In the thesis, desk research covered content analysis of internal documents such as company strategy, annual report, current innovation and long-term planning process descriptions and current long-term business plans. The aim was to get a good understanding on what has already been said and stated and what is the current presence of future and futures anticipation in the organization.

In very early phases of the thesis process, when the topic was still under development, the writer of this thesis also participated in several internal forums in which different type of business plans were presented and accepted. The approach was mostly observative, as the focus was on seeing and listening how people were talking and what was the level they talked about the future or took that into consideration in their justifications. As a method observation involves observing people in their natural activities and usual context such as in work environment (Curedale 2013, 127). Observation allows the researchers to observe in actual context, but it gives no explanation on the cause of the behaviour. The purpose was to get as objective view on the current state as possible. The observer didn't participate in the discussions and remained just as an external viewer not interacting with the observants or having any kind of influence in what was said and done.

Deep understanding on the current and desired state of foresight through interviews

One possible risk in service design is that the designers start designing for themselves and forget the "real user". To avoid this, deep understanding on the user is needed already in the early stages of the process (Portigal 2013, 2). Interviews are used to understand people and their needs, beliefs, emotions, expectations and environment better (Stickdorn et al., 2018, 120). Interviews are not any kind of conversations but one with a structure and a purpose (Brinkmann & Kvale 2015, 5). It's a careful questioning and listening approach with the purpose of obtaining deep knowledge.

According to Portigal (2013, 3) the key steps in the interviewing process, be it user research, contextual research, ethnography or design research, are

1) Deeply studying people, ideally taking also the context in consideration

2) Exploring not only their behaviour but also motivations and meanings that lie under their behaviour

3) Making sense of the data through inference, interpretation, analysis and synthesis

4) Using those insights to point toward a design, service, product or other solution

When researching the user, the objective is to learn something completely new. Interviews often play a great role in the first phases of service design, but it's worth interviewing users in several phases of the development work (Portigal 2013, 6).

In the thesis interviews were used to get deep understanding on how foresight is currently understood and what is the desired state and role of foresight in the company and how big of a change the organization is ready to make. To ensure full involvement and to engage all the key decision-makers, I started by interviewing marketing directors (4 people) and product development team leads (3 people). The interview guide with detailed themes and questions are presented in Appendix 1. The interviews were held in November-December 2020 and the duration of the interview was approximately 1 hour. Due to the global pandemic (COVID-19) and strong recommendations on remote working, the interviews were held virtually via Microsoft Teams. Portigal (2013, 20) raises building rapport as a one key corner stone of a good interview as it has a big impact on the outcome and whether you get the interviewee to really open his thoughts and beliefs. Ideally these interviews would be conducted face-to-face to ensure good rapport between the interviewer and the interviewee, but the closest we could get taking into consideration the circumstances was to conduct a video interview. With the video on I was able to also see how the interviewee reacted and not only to rely on what they said.

The interview guide was built based on the themes that arose from the literature which ensured I was able to reflect the findings from the interviews with the themes rising from the literature in later phases of the thesis work. Also, knowledge gathered from internal documents and from the observations done outside this thesis were utilised. For the analysis purposes all the interviews were recorded. Quick notes were made right after each interview to write down the key findings from each interview. After the interviews I listened all the interviews once more and made more thorough transcripts from each of them to cover and document all the topics discussed during the interviews.

Data analysis through content analysis and research wall

Brinkmann and Kvale (2015, 216) emphasize the importance of planning the data analysis in good time before doing the interviews and gathering the data to avoid a situation where a huge amount of data is gained, and the researcher gets lost in hundreds and hundreds of pages of interview transcripts. The data gathered in the research phase was analysed through content analysis and the results were visualised in the forms of a research wall. I read through the transcripts and notes and wrote key themes simultaneously as they rose from the data.

Research wall is a tool for synthesizing and analysing research data by visually arranging the data from the research on the wall (Stickdorn et al. 2018a, 128). The data used can consist

of quotes, photos, statistics, artefacts etc. A research wall helps the researcher to identify patterns within the data (Stickdorn et al. 2018b, 66). It's a way to start synthesizing the data to specific categories by clustering the data. One thing to look for and to avoid when clustering the data is confirmation bias in which the researcher start to look for evidence that supports their own assumptions instead of objectively looking for insights rising from the data (Stickdorn et al. 2018b, 68). It is recommended to document the outcome from the research wall before moving forward with the work.

After conducting the interviews, I started analysing the data by clustering the findings. I used post-it notes and wrote down the arising themes and started looking for patterns and themes that kept repeating in the data. To further visualise the results and interdependencies between them I created a mind map first by drawing them by hand and then with PowerPoint (see Figure 11). Mind map helped to spot patterns and cluster the data into themes which I named as key building blocks of foresight in the case company (see Figure 14 on page 48). I also looked for possible differences between marketing and product development to see if their needs and aspirations differ. After creating the research wall and mind maps, I summarised the key findings in a figure (see Figure 15 on page 55), which created the first version of the key building blocks of foresight capabilities within the case company.

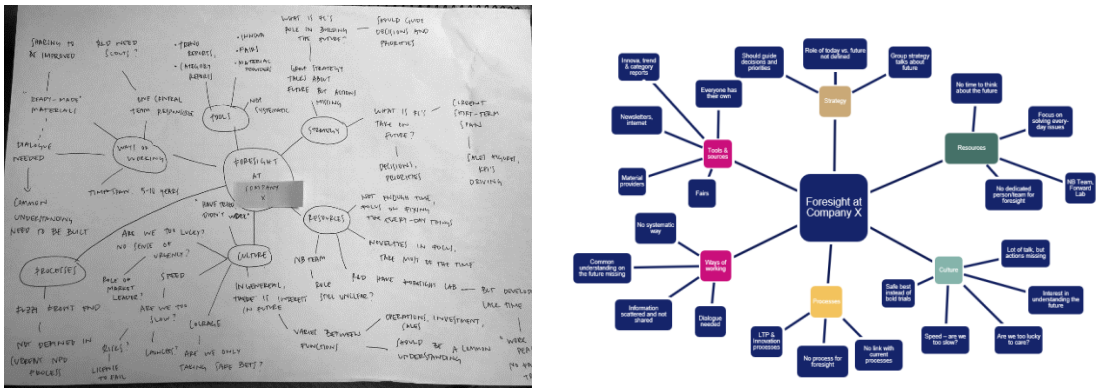

Figure 11. Visualisations of the interview data in the form of mind maps

6.3 Ideation through co-creation

The second phase was done in close collaboration with the users of the foresight information and tools. Two workshops were organized: one 1,5-hour workshop with the marketing team leads (4 people) and another 1,5-hour workshop with the product development team leads (3 people). As I wanted to understand how foresight could be linked with both the existing long-term planning process and the innovation process, I chose to run two separate sessions, one for each process. The workshops were run virtually, as the restrictions due to the global

pandemic at the time limited the possibilities to run face-to-face sessions. Microsoft Teams and Microsoft PowerPoint were used as tools to facilitate the virtual workshops. The workshops were organized at the end of January and beginning of February 2021.

The workshops started with presenting the key findings from the interviews and desktop work. The focus was on presenting the current state to create a common understanding on where we are now and how the participants see the current state from a holistic perspective. The participants were asked to comment and discuss on the results and some additional notes were made to elaborate the key findings further. After presenting the current state of foresight in the case company, I showed the first version of the visualised desired state (see figure 15) that was created based on the interview data and also based on the frictions that had come up when analysing the current state. Participants were asked to comment on the visualisation and fill-in if they felt something essential was missing. When the current and the future state had been discussed through, we moved on to creating a future-state journey map of the process in focus. As it was difficult to make the virtual workshop as interactive as a face-to-face workshop would've been, a very initial version of the future-state journey map on the process (see Figures 17 and 18) was created during the workshop and it was finalised by the facilitator (me) after the workshop based on the notes made in the actual session.

Workshops to ideate the future state of foresight

To ensure internal buy-in and engagement among people involved in innovation activities, it is crucial to let them to participate in the ideation of the possible solutions and tools. According to Stickdorn et al. (2018a, 164), heterogenous teams usually generate the most extreme ideas. It is also important to choose participants who can contribute to the topic at hand. The reason why I decided to keep marketing and product development people in separate teams instead of mixing the two groups was to keep focus and to be able to concentrate on one process and set of needs at a time. However, during the process it became evident that these two groups share common needs and challenges, but they also have specific needs and challenges in their own field.

Ideally an ideation session starts with properly briefing the participants and inspiring them to collaborate (Stickdorn 2018a, 165). Briefing ensures that the participants are on the same page of the current situation when starting the actual ideation. Stickdorn et al. also advises always to consider a good mix of ideation methods because this ensures potential biases are levelled out and invites diverse talents of the contributors. According to Kumar (2013, 213-214), ideation session are more structured compared to traditional free-form brainstorming as ideas are generated using insights, frameworks and principles that have been created in the previous phases of the process. The focus of the ideation session should be in creating as many ideas as possible and then evaluate the ideas later. With brainstorming it is important

to start only when the current state has studied and defined properly and base the ideas on this understanding (Ogilvie & Liedtka 2011, 103). Rushing into brainstorming too early most likely results in obvious solutions which could've been available even without the brainstorming. When doing the '*What is?*' current state analysis properly in the beginning and feeding these findings in the ideation session, brainstorming ensures that ideas considered are fundamentally new and different and have potential for completely new kind of value creation.

In the workshops, the visualised results from the interviews and current process descriptions were used as the input for the ideation, and the ideas were created against understanding created in the previous phase. Ideation was done through brainstorming in which each participant created as many ideas as they could and then shared the ideas to other participant. First round of ideas from the workshop with the product development team (on virtual sticky notes) are shown in Figure 12. Taking several rounds of idea creation ensured that we looked beyond the most obvious solutions. Participants were encouraged to use their imagination and learn from each other, meaning that they could build on the top of each other's ideas. After the workshop the results from ideation were documented and the future-state version of the processes were visualised in PowerPoint.

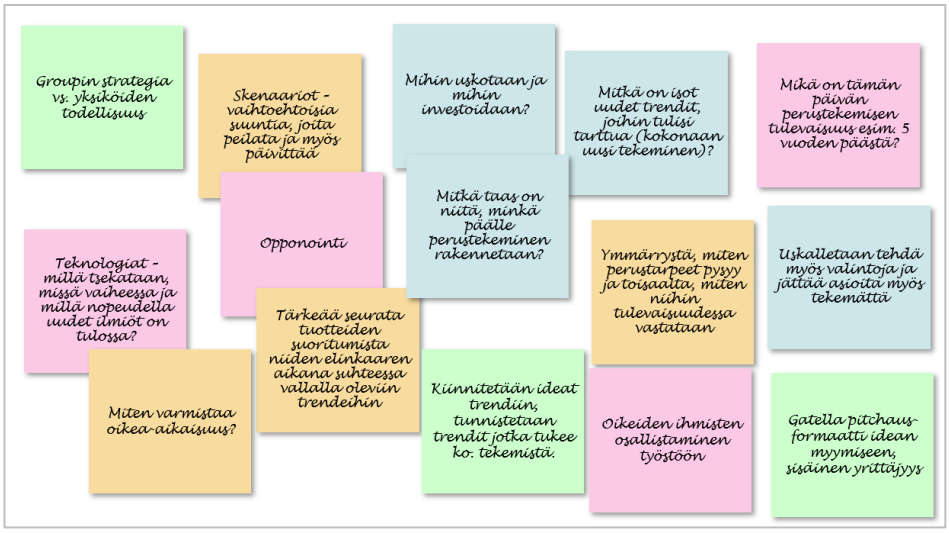

Figure 12. First round of ideas from the ideation workshop

Future-state journey mapping as a tool to visualise the role of foresight in key processes

Customer journey maps present the steps the customer goes through before, during and after he/she uses the service or the product in a visual format (Mueller-Roterberg 2018, 54). As a method, journey maps break down customers' journey into components to gain insights to problems there may be and to recognize opportunities for innovation (Kumar 2013, 183).

Customer journey maps illustrate an individual customer's needs and goals, the series of interactions and information or knowledge needed to fulfil those needs as well as the emotional states the customer feel throughout the journey. The outcome of a customer journey exercise highlights how the customer is feeling throughout the journey and makes it easier for the stakeholders to enter to the world of the customer (Mootee 2013, 132). Customer journey maps can either describe the current state or the (desired) future-state. Future-state journey maps visualizes the user experience with a not-yet existing service or product. These future-looking maps help people to imagine and understand with the potential experience and context in use. They may also help to select which elements of the journey should be prototype and tested (Stickdorn et al. 2018a, 50).

Future-state journey mapping was used to describe the desired future-state of foresight as a part of existing long-term planning and innovation processes. The current process description was used as the starting point for the future process and each step of the current process was discussed together. Participants got to suggest, how they would change the current process in order to improve the presence and utilization of foresight information in the process. The visualisation of the future-state journey map was finalised in a virtual format after the workshop due to limited time in the actual workshop session. The current-state future mapping exercise focused on recognising the steps in the current process that would be the most critical in relation to improving the role of foresight and creating concrete ideas how foresight could be brought as part of the process with different tools and ways of working.

6.4 Prototyping ways to utilise foresight knowledge

During the time the thesis work was done, there were several on-going initiatives in the company which aimed at improving the future-looking view within the organization. These activities have been considered in the Model and Evaluate phase as the writer of this thesis had an active role in organizing these initiatives. Part of these trials were done in parallel with the previous phase, which enabled taking the learnings from the interviews and ideation sessions in the trials and feed findings from these initiatives to the ideation workshops. In general, the third phase of the development work focused on testing and prototyping initial ideas on how to bring foresight more strongly as part of what we do.

As visualization and prototyping are key concepts of service design, the most potential ideas should be created into tangible prototypes already in early phases of the development work to get feedback and see if they really are able to solve the problem at hand. Service design also emphasizes iteration, meaning that we start with small, easy attempts and experiments, allowing also failure and adapting the process along the way (Stickdorn 2018a, 26-27).

“Fail fast, fail cheap and fail early” is a well-known mantra in the business world, but design thinking brings a new dimension to this by suggesting to “Learn fast, learn cheap and learn early” (Mootee 2013, 150). Prototyping is the way to reach this dimension. It seeks to involve and engage multiple stakeholders and end-users as participants to gain feedback than can be utilised when iterating with development work. It’s also a way to produce new knowledge and make ambiguous concepts more tangible. Prototyping also assists to identify any problems with the design (Curedale 2013, 156).

In the thesis, two different prototypes were created. A trend framework that covered the key macro and consumer trends that the company should consider was built and this framework was presented to different target groups. In addition, three sessions in which existing foresight information from an extensive project that looked at future opportunities for the company from value creation perspective (project that was out of the thesis scope but done partly at the same time as the thesis) was utilised and participants were explained from a more practical perspective how the material and the knowledge it provides could be utilised in brand planning. Both these prototypes provided a tangible foresight tool for the users to test and use.

Trend framework

Trends are development directions or changes in consumer behaviour (Hiltunen 2017). They are commonly used tools to look at future because they often have already existed in the past and they continue to exist also in the future. The pace of change is often however relatively slow. A trend framework is a powerful tool to ensure that trends that are picked form a clear view and fit into the big picture (Mason, Mattin, Luthy & Dumitrescu 2015, 99). Trend framework helps effectively and efficiently capture and process business-relevant trends and innovations. According to Mason et al. (2015, 100-101) trend framework is a top-down approach, in which the major forces shaping the future of the consumer arena is defined first. Mega trends are looked at and assessed from two perspectives: Human and environmental. The trend framework approach created by Mason et al. (2015, 101) has three layers: macro trends, trends and innovations.

As part of the company-level strategy work a team of insight specialists (including the writer of this thesis) were asked to create a trend material as an introduction to the strategy material. This offered a great opportunity to pilot and test a trend framework. Even though creation of a trend framework was not in the initial thesis plan, this created also a great opportunity to utilise learnings from the interviews as a basis for the framework creation and pilot a common foresight tool in a real-life case. The timetable was very limited, and the team had to agree on the way of working and create the actual trend material in three-weeks’ time. Luckily, there was a lot of existing material that could be used to create the material.

The structure and key themes of the trend framework were created in two 1,5-hour virtual ideation sessions (Figure 13). As all the participants were already familiar working with trends, it was easy to get started. In the first session I presented the key findings from the interviews and key things to consider from the user perspective when building the trend material were discussed. The aim was to create a simple and concise yet informative and inspirational material that would be written on a level that it is still relevant to all business areas and units withing the company. In the second half of the first ideation session the structure for the presentation was created and agreed. In addition, initial structure for the trend cards, that were part of the full material, was built.

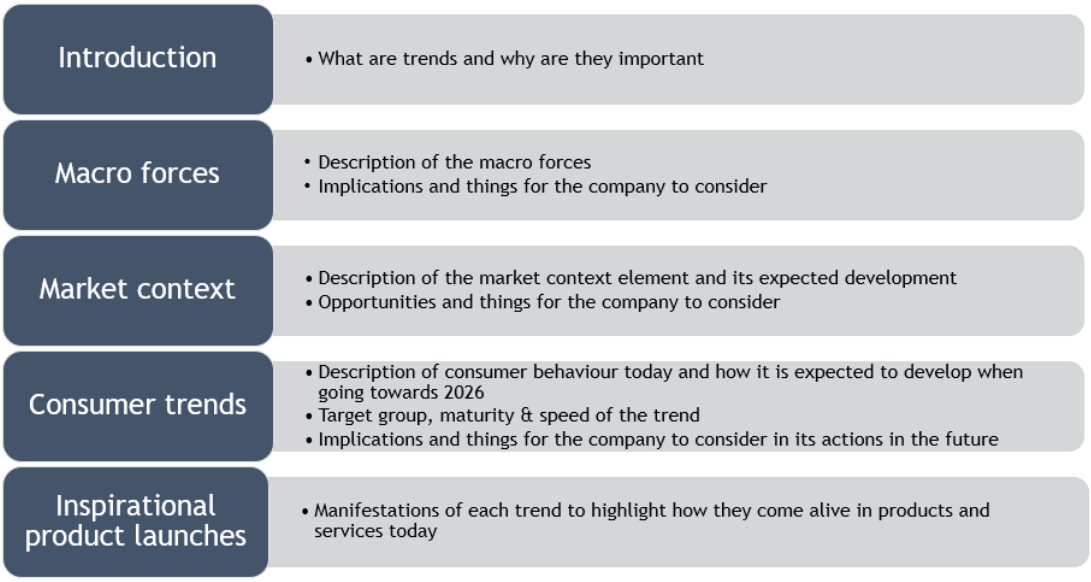

Figure 13. The structure and key themes of the trend framework material

The second ideation session was organized a week after the first one. Between the sessions existing trend materials were gathered and reviewed to create an understanding on their availability and content, and to be able to form a common understanding on the key trends the company should take into consideration. In the second session we discussed and ideated around the key trends and agreed on the content and who is in charge for creating which content. The chosen trends were mainly chosen based on the evidence they exist (i.e. trends came through in several available trend reports) and relevance to the business (i.e. based on our expertise we could say they have an impact to our business and the categories the company operates in). Everyone worked individually until we had one more session to review the material and finalise it. The material was shared with the team responsible for the strategy creation and it became part of the updated company strategy document. The trend material was presented on several forums during spring 2021.

Implementation of existing foresight information

An extensive future-looking project to define future opportunities for the company from value creation perspective was conducted before and finalised during the time this thesis was written. The project was done in collaboration with a consulting agency and the writer of this thesis had an active role in the project group. The implementation of this project to the wider audience in marketing and product development started in December 2020 when I presented the key findings from the project that had been re-worked from the original project report. The presented findings had been translated into a company-relevant language, acknowledging that previous projects have been perceived too complex and complicated to understand if the original materials created by consultants was used without any modification. People from marketing had been participating in the project along the way, but this was the first time when the outcome was presented to a wider audience. The presentation was built from a top-down perspective, meaning that it first focused on describing the macro forces shaping the globe and the consumers' lives, then looking at major changes in relevant consumer trends and then presenting innovation platforms that were created using all the knowledge and understanding gathered in the project regarding how value is created in the future, taking into account the changes occurring in the surrounding world and in consumer behaviour. Nearly 30 people from marketing and product development participated in the 1,5-hour virtual presentation. Participants were asked to give feedback right after the presentation.

After the presentation it was agreed with marketing team leads that two pilot projects will be chosen and in which the results from the project would be utilised. Separate meetings were organised with the project teams to discuss, how the results from the project could support the chosen pilot projects.

6.5 Towards an implementation plan

Even though implementation of the created concept is not in the scope of this thesis, an initial plan for implementation was created in the fourth phase. The initial version of the plan was created as desktop work and it did not involve any stakeholders. The aim was to present the initial plan as a recommendation that have been formed based on all the data and understanding gathered during the thesis process and continue the discussions from there.

7 Results

This chapter presents results from different phases of the process. The results will cover the current state as well as the desired state of foresight in the case company. In addition, this chapter will look at current innovation and long-term planning processes and how foresight could be implemented into these and presents elements for a good foresight material from the user perspective as well as the trend framework that was created in the prototyping phase.

7.1 Current state of foresight in the case company

Interviews revealed that the current state of foresight in the organization was seen in a very similar manner among the interviewees and no big differences were identified. Foresight and future-orientation were seen crucial for the company but a systematic way of collecting and processing foresight information was missing, which proved one of the initial assumptions about the current state to be valid.

"Understanding the future is critical to us. We are the market leader and we should be the one to lead the way. Currently future is partly considered in what we do, but we should become better in it".

- Director, product development

However, future-orientation was seen present in discussions inside the company and future was mentioned and considered here and there, but concrete actions to bring all this talk alive were missing or they were seen to happen very slowly or not visibly. In addition, the company-level strategy mentioned future and importance of maintaining competence and transforming the company several times but the link between the strategy and current actions was seen somewhat weak. Despite this, interviewees felt that there is interest and openness to look at futures and no resistance in the company.

" Understanding how the future might evolve is important to us. We talk about it a lot, but foresight is not lead in any way at the moment."

- Director, marketing

Analysis of the data from the interviews pointed to five key building blocks that were seen important when talking about future-orientation and current state of foresight in the company (Figure 14). Based on the interviews, these themes were seen critical when talking about foresight capabilities. Each building block is looked in more detail in the following chapters.

Figure 14. Key building blocks of future-orientation in the case company.

Strategy

It came evident in the interviews that participants expected everything to start from the strategy and that strategy should be setting clear direction and priorities for the company. In addition, key take-outs on relevant changes and trends in the future should be stated in the company strategy. Strategy should set priorities to focus on and define what is the role we want to take in building to future as a company. However, during the past few years focus in the strategy had been more on short-term optimization and business continuity, and interviewees were quite unanimous that the strategy should have more emphasis on the long-term view.

" During the past few years the focus has been very strongly on short-term optimization and success. We don't see future mentioned much in our plans or strategies."

- Director, marketing

The main reason the interviewees pointed as the driver of the focus on the short-term optimization was the chosen business metrics (KPI's) that mostly measure short-term success.

"The role of showing short-term success has got a lot of emphasis lately. If we measure all our projects with the same metrics, we will never invest in the ones that are not a business in the first place nad carry uncertainty within. "

- Director, marketing

The company strategy currently talks about future and the need to renew and develop the business to remain competent and relevant also in the future. However, the current company strategy lacks a clear point of view on the future as the company sees it, and interviewees felt it was unclear, what is the business area's take-out on the future and especially what are the related actions the business area is going to take. Interviewees also felt that there was a

gap between the company strategy and the business area strategy, and it was difficult to find a link between these two because they at least partially told a different story.

" Different business areas get a very different weight in the current company strategy. It is very difficult to say based on that document, what exactly is our business area's role in building the future of the company"

- Director, marketing

Due to the state of the current strategy, interviewees felt it was unclear where we want to focus on in the future and how we are planning to respond to the changes happening in the world, in our operating environment and in consumer behaviour. As a result, interviewees felt they end up doing "everything" instead of prioritising the most important ones which is consuming in many ways. In addition, it was commonly agreed that there is more talk about the concerns around future than real actions or even plans how the company is going to address these changes.

Resources

The lack of clear strategy and focus areas has resulted in unclarity on how the current resources should be used. From the resource perspective the biggest challenge seemed to be lack of time. All interviewees described how all their own and their teams' working time went to solving every-day issues. There is a desire to do more trials and test new things within the organization but, people don't have the time to do this even though the desire is there.

" There is so much enthusiasm in my team to think about the future and make out-of-the-box trials. Unfortunately, people don't have the time to do this because current projects and day-to-day tasks take all their time".

- Director, product development

Based on the interviews it seemed there is also some unclarities on people's roles and in many cases, people have ended up working outside their own job descriptions because there are not enough people to do all the work. To ensure business continuity, people have to back-up their colleagues even if the tasks would be something, they are not responsible of. This has made their working time dedicated to their own responsibility areas even more limited.

Currently there is no person or a team that would be dedicated to collecting and sharing foresight information in the organization. However, there are relatively lately established teams in both marketing and product development that are dedicated to think beyond the current business and to look for new opportunities, but these themes were still developing and establishing their ways of working which made their role in the organization to some extent unclear. Due to unestablished resources and roles for gathering foresight information, everyone

had developed their own ways to keep themselves at least to some extent aware of the changes happening in the environment. Majority felt that this was not enough or on a desired level and that there is room to improve.

One resource-related issue that arose from the interviews and discussions in the workshops was investments and the current challenges in getting approval for investments building future (production) capabilities.

" The current challenge is that we treat all the concepts similarly. We've had some of these ideas that would build the future for quite some time already but because they require investments, they have not proceeded. We are not willing to take the risk that these could possibly fail."

- Director, marketing

" We are very slow in making decisions when it comes to investments. We don't believe strongly enough in the opportunities to act. Too easily we compare the future opportunities with our established business."

- Director, product development

It seemed that there were several future business opportunities that had been identified earlier in the organization, but for many reasons the investment proposals never went through. The key reason for this seemed to be the set KPI's, which were the same that were used to measure short-term success. Thus, an investment proposal aiming at building future capabilities was never able to show strong enough business case when they were compared with existing businesses. It was quite commonly agreed that when it comes to making investments, the organization is not willing to take big risks and we are quite bad at tolerating uncertainties linked with future. There is more will to focus on safe bets and foster the current business.

<u>Culture</u>

When it comes to company culture, the interviews proved that there is interest towards looking at the future and understanding it better. However, perceptions on whether future changes are taken seriously enough seem to vary. In some cases, the organization seems to be even too careful and try to solve all the challenges future may throw to their way but in some cases, there seems not to be enough "sense of urgency" that would make them act. People just trust that things will go well also in the future and there is no need to do anything about it.

“ We talk about the risks that future trends could potentially possess our current business. At the same time, we continue operating similarly as we have always done. This feels controversial to me. It seems we are not concerned enough to act.”

- Director, marketing

The business has done well for many years and there has been many successes along the way, which have potentially made people think that this will also continue in the future – which is not necessarily true. Most of the interviewees also mentioned lack or courage as one reason why there are not enough actions taken. This was often linked with the courage to invest in future capabilities.

As future always carries uncertainty within, interviewees wished to see more open culture that would support quick trials and embrace failures. On the company level it is stated that the organization actively looks for ways to be more agile and support culture of trial and errors, but for the majority these statements seemed to lack proof. Failures were seen not acceptable and when one occurred, they wanted to be forgotten as soon as possible instead of analysing what could be learned from the failure and how these learnings could be utilised in the upcoming projects. The negative attitude towards failure seemed to be present in all layers of the organization.

“ We are lacking a culture that would accept failure and we would need to create a safe atmosphere where there would be room for trials without fear of failure.”

- Director, marketing

One reason behind the current culture was considered to be the several changes that had happened in the company management and there has not been stability from that perspective in few years’ time. However, interviewees agreed that culture changes relatively slow and they were not able to identify what has been the main reasons behind the current culture.

“I’ve heard that in the past there has been a lot of crazy trials and this kind of way of working has been supported. But I don’t know what has sappened because I don’t feel we have this culture anymore.”

- Director, marketing

The people who have worked in the company for a longer time say that in the past the company has been better in capturing also the future opportunities and nourish the culture and courage to try new things with no fear of failure, but for some reason this culture has diminished over time.

Processes & Ways of working

When looking at current process description for key marketing and innovation processes and our ways of working, foresight as such is not mentioned in any them. Trends are mentioned as input in the beginning of the process, but there is no documentation on where the trends come from, how they are chosen or how they should be taken into consideration in the process. One comment from a person who works closely with the process descriptions and participates in developing them revealed, that our way of describing our processes is very technical and thus, it is difficult to capture things like analysing information or identifying new opportunities in the process description templates. In the interviews it also came evident that there is no process for gathering or processing foresight information, but the need for this kind of process seem to exist.

"There are good things happening here and there but there is no systematic way. Someone should be responsible of foresight and organizing foresight activities."

- Director, product development

There were several sources for information that were used to find information on future mentioned in the interviews, but none of them were seen perfect as such. Most often mentioned sources were trend reports from external partners, new product launch databases, fairs and material received from our partners and suppliers, but none of these were followed systematically and only when one had the time.

" In my opinion, understanding what is happening in the world is one of the key tasks for marketing. Everything we do today actualises in the future. However, the information on the future is scattered around the organization and it's up to everyone how much or how they follow the future."

- Director, marketing

In general, there was consensus that currently the information is scattered around the organization and not shared efficiently or systematically. However, there was no lack of information but the biggest challenge was that the link between the foresight information and our business were still too far from each other and there was no common understanding on how the understanding on the future should be taken into consideration in our business.

My previous experience in participating key decision-making forums also proved that there was very little talk about future development or trends when thinking everyday business decisions on new product launches. In the planning documents (e.g. portfolio & category plans, brand plans) trends are sometimes mentioned, but they are not communicated in a unified way along the plans as it seems that the creator of each plan pick the ones they feel are the most important ones from their own perspective.

7.2 Desired state of foresight in the case company

Desired state of foresight is looked through the building blocks that were presented in the previous chapter. The desired state is described based on the data that was gathered from the interviews and in the workshops.

Strategy

Based on the interviews there is a strong desire to change and strengthen the foresight capabilities in the company. The interviews also revealed that there is a common understanding on why we need to change and improve the role of foresight in what we do. In the desired state the company strategy would have a point of view on future and what we believe will affect our business the most and how it reflects to our strategy and actions. Strategy would set priorities for our business and guide decision-making. Strategy would also state the role the company wants to take in building the future and how much emphasis is put on investing in future versus supporting the current business. Ideally the priorities would be set on the top management level and all functions would be engaged with the set strategy, which would also build a joint direction and common understanding on the future we anticipate. A good strategy would also enable the organization to prioritise our resources and direct them to the right places.

" Everything should start from the strategy. We should highlight the relevant development directions we believe will shape our business in the future and we consider relevant to us. Then we should be able to tell, how we are going to respond to these changes. "

- Director, marketing

Culture

Culture was seen as the key enabler of a successful future state. No matter how great tools for foresight would be created, they would not be fully utilised unless there is a right kind of culture in place. To enable more future-looking view, there would need to be an open culture which support trial and embraces error as an important source for learning. Culture is something that people together create and thus, there needs to be commitment to common goals on each level of the organization. Top management is however in a key role setting the direction and creating conditions where certain kind of culture can occur. Culture doesn't change overnight, and new direction and way of working would need a lot of communication and discussions. Better risk-taking skills and tolerance of uncertainty would be needed to drive culture that supports bolder future moves. When there is a common understanding on why

certain things are done and commitment to both win as team as well as fail as a team, there are better opportunities to get things done.

Resources

From the resources perspective there would be a dedicated person or a team that would be responsible for collecting and distributing foresight information.

"Someone should be responsible for foresight. Someone who has the skills and competence to do it. It cannot be a responsibility that is scattered around the organization. "

- Director, product development

In addition, people working in marketing and product development teams would have part of their working time dedicated to thinking about the future and creating alternative plans on how to respond to the changes we believe to happen. Plans would be agreed together and there would be less changes and adjustments, e.g. fast track projects outside agreed plans.

"Currently, if we need to prioritise what we are doing, we will always cut down the projects that aim at creating something totally new. In the future, there should be less "regular" projects and more true innovations that aim at building the future."

- Director, marketing

This would help individuals to plan their work time better and ensure they can spend the time for creativity and thinking. As currently the trend has been towards increasing the number of novelty projects with same resources as earlier, focusing on less projects would also help the current situation with too little resources.

Processes

In the desired state there would be a systematic process for gathering foresight information and it would be linked with the existing processes. Ideally, sharing of information would be improved significantly and this would create common understanding and language within the organization. Sharing information (e.g. distribution of reports via email) was not seen enough but there should also be forums where discussion could take place and a common understanding would be created. Discussion and active dialogue between different functions to create a common understanding was seen very critical for success.

" It's not enough that we just read trend reports. There should be more discussion and we should think together, what do these trends and development directions mean to our business. Then we would have a common understanding that everyone feels committed to."

- Director, marketing

In the desired state these discussions would take place when the yearly planning process starts, and the outcome of the discussion would be fed into the business plans.

Tools & Ways of working

When thinking about concrete tools that would improve future-orientation of the company, ready-made reports and materials were seen the most useful. A company-wide trend framework was a concrete example mentioned by few of the respondents.

"In the past we've had some trend materials that have been distributed in the organization. But I don't know what happened to these. It would be good to have a company-wide trend material."

- Director, marketing

All the plans, actions and launches would be tied to the framework and communicated through the same business-relevant trends and changes in the operating environment. The same framework would be communicated throughout the company and additionally to our external customers to show what we believe in and what are our take-outs on the future.

The key findings from the interviews can be looked at through the same key building blocks as presented in the previous chapter. Figure 15 presents these building blocks in relation to each other and explains the role of each block in creating and enhancing foresight capabilities in the case company.

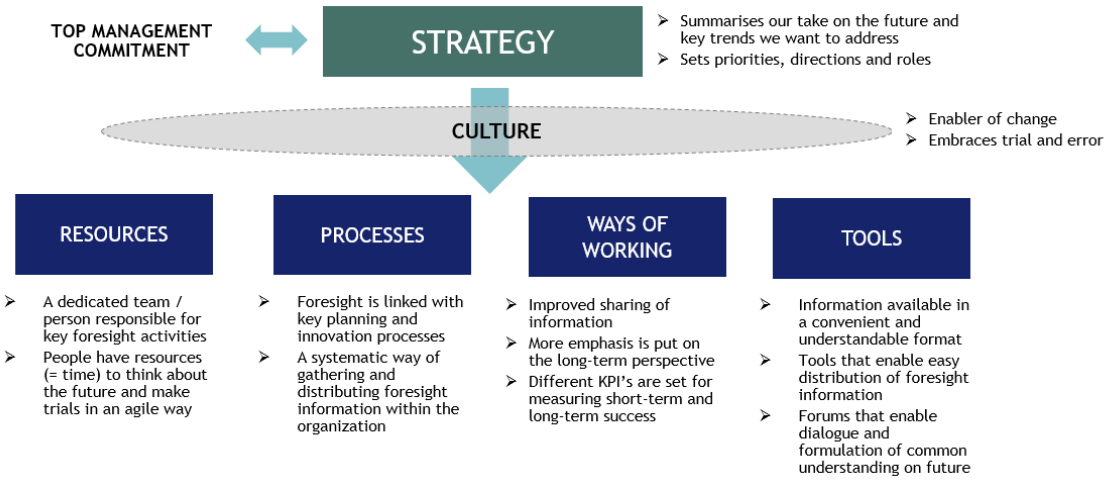

Figure 15. The desired state of foresight in the case company

As the industry where the company is operating is changing relatively slowly, time span of 5-10 years was considered as the most interesting time frame to look at. There could

potentially be scenarios built on a longer time span as well, but these would be secondary and less important than first building an understanding on the nearer future view. In general, it was seen often enough if there would be one bigger "future forum" organised once a year and less extensive exercises a few times a year or when needed. These exercises would be more case-specific than the bigger event once a year. R&D seemed to have a need to check the environment for new technologies and patents more often and they would ideally have ways to share this information within the R&D teams as they arise.

Principles for a "good" foresight material

The interviews and workshops gave a good understanding on the needs and expectations on the foresight material that would be distributed in the company and work as input and tool to guide work. These findings are very useful when developing first materials as these comments are from the users of these materials. First, the material needs to be *understandable, simple and condensed*. All the company-wide materials are provided in English but there are only few people in the organization that are native speakers. Hence, the language used in the material shouldn't be too sophisticated but simplified common language that everyone can understand. The material should also contain only the essentials so that it is easy to get a grasp on the main things to consider. Additional information can be provided for the ones that are interested in the details, but this information should preferably be in the appendix. Secondly, the material should contain *concrete examples* or "manifestations" of the trends and phenomena to bring the foresight information alive. The closer the examples are brought to the industry and categories the company is operating in, the better. This will make the user of the material understand the meaning and the implications of trends and phenomena better. Thirdly, other formats than power points that are distributed via email should be considered. Ideas of podcasts, recordings and webinars were given as examples.

" PowerPoint reports are so last seasons and email has gone through inflation. Materials should gain attention, inspire and create excitement. Formats beyond traditional reports need to be considered. How about podcasts or videos? I would prefer them over PowerPoint reports."

- Director, product development

A PowerPoint report is good to have, but as the only source it easily gets forgotten and disappears in the mailbox because it's considered boring and not the most inspirational format. Presentations on the material is seen essential and the users thought it creates a better engram if they hear someone telling the story instead of them reading the material by themselves.

In addition, and as mentioned earlier, there is a need and desire to work on the material together to create a common understanding on the future and agree on the actions as a team.

This could mean scenario workshops to create alternative future directions and to discuss, how different scenarios would affect our business and how it would require us to act. As a result, there would be a common view on the future(s) the company believes in and an action plan, how to operate in the future to remain as a competitive and viable business with a clear future direction. Key principles for a good foresight material are presented in Figure 16.

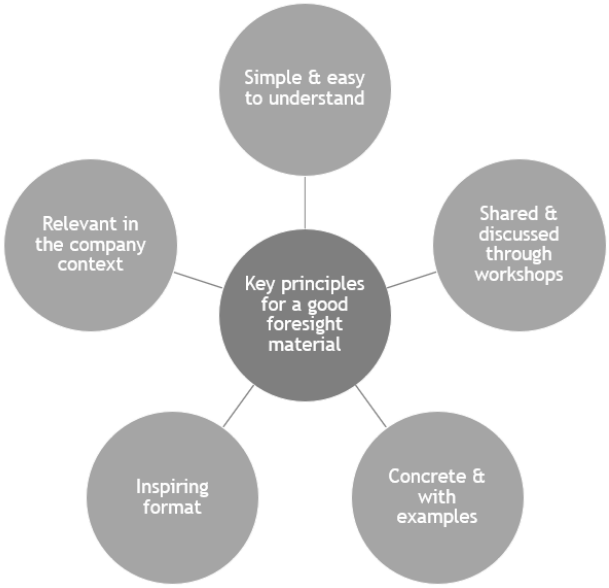

Figure 16. Principles for a good foresight material

7.3 The role of foresight in innovation

The role of foresight in innovation was discussed through the existing process description for the current innovation process, in the case company called “Idea to Market”. Foresight was mostly seen as an input material that should guide the work throughout the process. Company strategy and company growth plan were also identified as other important input materials that should be taken into consideration and which should also guide the work all the way from an idea to the actual product. In Figure 17 the process is described from the foresight point of view, highlighting the same phases of the process as they are described currently. For integrity reasons the whole process description is not presented as part of this thesis.

The current Idea to Market process consists of five stages and three of them describe the process from identifying the opportunity to developing the idea into a tangible product. The two latter stages are more related to the product lifecycle and what happens after the product is launched. Thus, these two stages were not seen relevant from the foresight perspective.

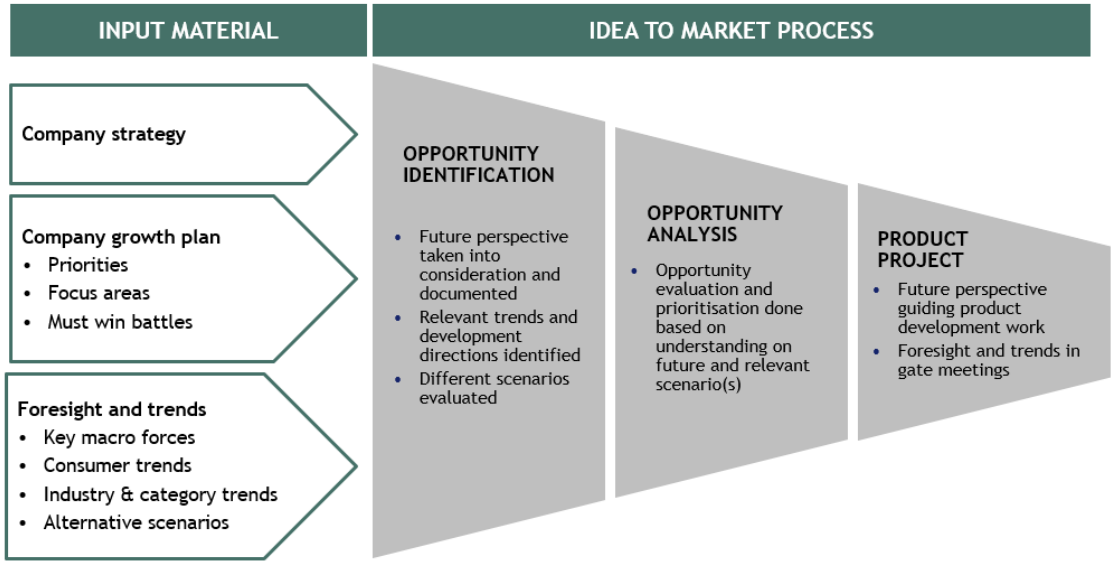

Figure 17. The role of foresight in innovation process

In the innovation process foresight would be fed into the process and this information / knowledge would be used to identify relevant trends and development directions that create the opportunity and / or which should be taken into consideration when developing the actual product or service. Ideally, different scenarios would be created, and the most relevant ones would be identified in the opportunity analysis phase. The chosen scenario(s) should be well documented and communicated in the project team.

When analysing and defining the opportunity, related foresight information should be documented in the project management tool used in innovation projects, similarly as any other business or market data used in the opportunity phase to define the business opportunity at hand. In decision-making meetings project-related foresight information should be presented among other data and findings that support the project. In different phases of the innovation project, the product that is under development should be reflected against the foresight information defined in earlier stages and this information should be used as a "check point" to see that the product is still answering to the opportunity, scenario and development directions or trends that were defined earlier.

7.4 The role of foresight in long-term planning

During the past two years long-term plans (LTP) have been updated on an ad-hoc basis and the focus has been mostly on updating the business plans and financials. Earlier there has been a more thorough process in place and it was mutually agreed in the workshop that

ideally this process would be again used also in the future. This was the reason to use a process description from few years back as the basis for the LTP process description.

In the LTP process trends have been an input material among company strategy and company growth plan. In practise this meant that in the kick-off meeting there was either an external consultant or someone from the company who gave a trend presentation on the topical trends and macro forces affecting the business environment and consumer behaviour. These presentations were seen inspirational and important to have, but previously the link between trends and how the process continued after the kick-off meeting had been somewhat weak. This was considered as an important point to be developed and improved in the future.

There were many ideas on how to improve the role of foresight in long-term planning and improving the creation of a common understanding of possible futures was considered as one of the most important ones to focus on. Instead of just having a separate trend presentation, there should be a more extensive and participatory session, where trends, macro forces and changes in the operational environment would be presented and discussed together, and after this, different scenarios would be created. As a result, there would be a common understanding on future development as well as commonly agreed vision on what we believe will possibly happen in the future and how we take this into account in our business and in our plans. The result from this workshop should be well documented and distributed within the organization.

Current way of creating category and brand plans was not perceived very systematic and there were several versions of templates in use. Common templates that direct the creation of the plans and ensure similar format no matter which category or brand was, were seen critical. The templates should also include a section for foresight and trends and through this the creator of the plan would be forced to include foresight in the plans. It was commonly agreed that if foresight is not in the templates and a default part of the plan, it will be left aside. Also, commitment from the top management was considered an important element for successful implementation of foresight in long-term planning. They were expected to require foresight to be present in the plans but also foresight to be part of everything we do, starting from the company strategy.

The role of foresight in long-term planning is visualised based on the discussions in the workshop in Figure 18. The kick-off meeting was considered as a critical point for sharing information and creating common understanding on the future and discuss, how the company will response to the changing environment. After the kick-off brand and category teams will start working on their plans and the understanding created in the kick-off meeting workshop would be fed into the plans. As stated previously, templates and general guidance on how foresight should be implemented in the plans, was considered mandatory in order to succeed. After the

plans have been created, it is important to share them back with the wider audience and ensure that they still follow the directions set in the kick-off meeting.

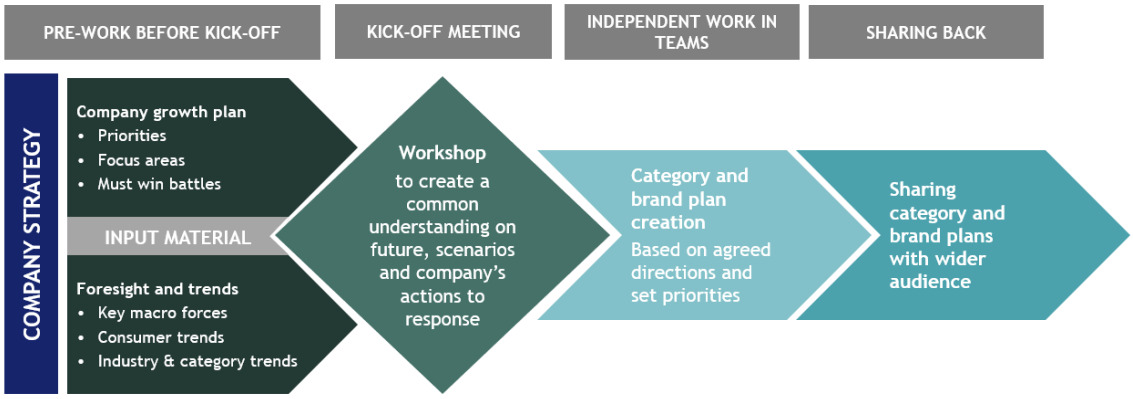

Figure 18. Foresight in long-term planning (LTP) process

7.5 Prototyping through trend framework and existing foresight knowledge

In the prototyping phase two different approaches were selected. First, a company-wide trend framework was created and understanding from the current user needs and pain points identified in the interviews and workshops were utilised in the creation process. Second, existing foresight knowledge from a future-leaning project outside this thesis scope was presented to a wider audience and further implemented in two real-life cases.

Towards a company-wide trend framework

The trend framework that was created in the prototyping phase had three levels: macro forces shaping the world and thus consumer behaviour, changes in market context highlighting the key development directions in the operating environment and key major consumer trends that will have an impact on the company's business. In addition, to bring the trends alive and give concrete examples, inspirational product launches highlighting and manifesting the trends were presented at the end of the material. Example slides from trend material are presented in Figure 19. The time span in this work was five years from now, in line with the strategy period in focus. In all levels the phenomena and development direction were described, as well as potential implications for the company. This way the material and findings aimed at being as tangible as possible, not leaving the reader to think what the trends or macro forces would mean in the company context.

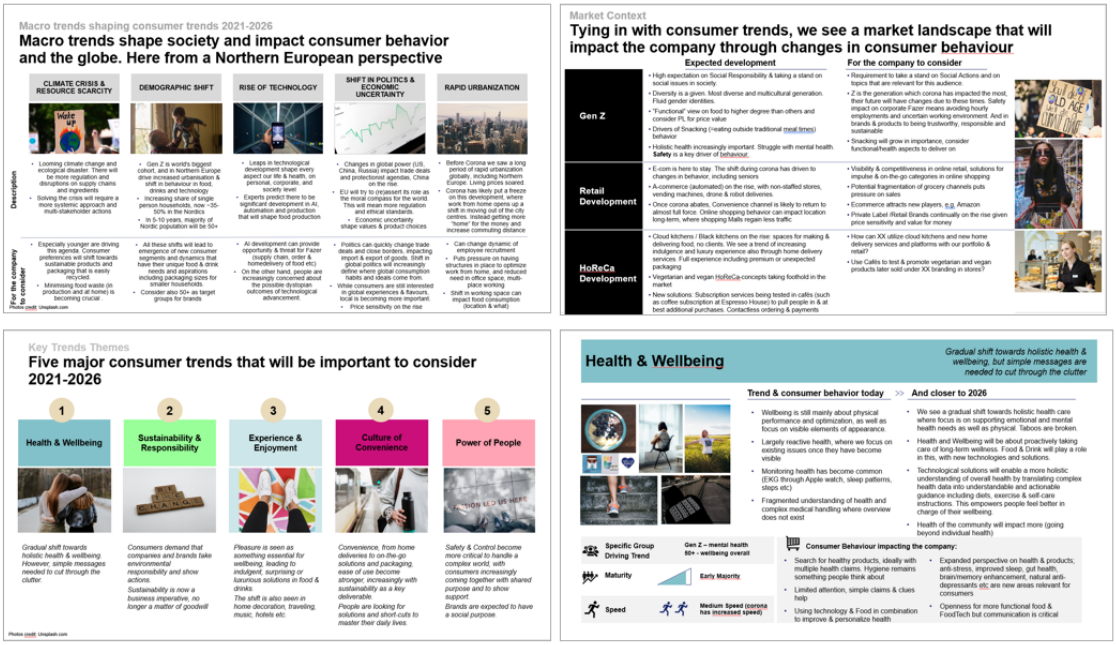

Figure 19. Example slides from the trend framework material

Implementation of existing foresight knowledge

Existing foresight information from a future-leaning project was presented virtually to the marketing and product development teams. In general, feedback from the presentation was positive. People felt that the information they got was relevant and inspiring. As we had learned from the interviews, the challenge with this kind of projects was that they easily end up being “yet another presentation stored in SharePoint” and that they are not tangible enough as such to be utilised right away. To avoid this, we chose two pilot projects for which me and another person from the future-related project team organised sessions to show, how the material could be used and aided on how to do it. Separate materials were created based on the needs of these pilot projects and the more general knowledge from the project was translated into the language of the pilot projects and the data was looked from the pilot projects point of view. This got a lot of good feedback and the project lead from the pilot projects told how they now understood how this kind of material could benefit their work and it clearly opened their eyes to see the opportunities it created. This feedback proved that the organization is still quite nascent in utilising foresight in everyday work but the willingness and excitement to learn and use foresight information exists. For foresight to become an integral part of what is done requires training and open dialogue.

8 Conclusions and recommendations

The aim of the thesis was to study and define foresight capabilities in a case company and create understanding on how to improve the role of foresight in the company. The focus was on building a holistic understanding on corporate foresight and how it can be utilised in current key processes. The purpose of the thesis was to improve future orientation of the company and strengthen foresight capabilities by improving ways of working and identifying suitable tools and methods for collecting and processing foresight information. As a result, a preliminary plan on how to improve the role of foresight was created. The plan looks at foresight through the key building block that were identified in the process: Strategy, culture, resources, processes and tools & ways of working.

In the development work corporate foresight and foresight capabilities were studied both from the theoretical and practical perspectives. Knowledge base that focused on looking at foresight, foresight maturity and capabilities and the role of foresight in innovation and long-term planning gave good understanding and a base for evaluating and reflecting the current and desired state in the case company. Especially the maturity model for corporate foresight by Rene Rohrbeck (2010) worked as an important reflection point when evaluating the case company and looking for ways to strengthen the role of foresight in the company together with the key stakeholders. Innovation and strategic planning are generally recognised as key for building a successful business for the future and this is the reason why these were key processes that were looked at from the foresight perspective.

8.1 Answers to research questions

One of the first questions to answer in the development work was to understand how key stakeholders saw the current state of foresight in the company. The interviews built a unified view on the current state. There were several separate, often ad hoc, initiatives that aimed at building a view on the future, but a systematic way was missing. According to Hamel and Prahalad (1994), foresight and creating a point of view about the future should be an ongoing project sustained by continuous debate within a company and not a one-off. In addition, it is quite common that companies lack a systematic way for looking at the future and they have limited understanding on how to interpret the signals they see, and how to allocate their limited resources for scanning the future (Day & Schoemaker, 2005). One potential reason behind the current state in the case company was the prevailing idea of “no sense of urgency”, meaning that the business was doing so well that majority felt there was nothing to worry about. However, often companies consider the need to transform their strategies and reinvent their industries only when optimising and re-engineering the current fail to solve the business challenges or even decline (Hamel & Prahalad, 1994).

As a result of not having a systematic way to gather or process foresight in the case company, different functions had developed their own ways to gather information on the possible future trends and changes in the operating environment. In addition, understanding on the possible futures was scattered and siloed around the organization. This is a common challenge recognised also in other organizations. According to Rohrbeck (2010, 110), one of the most common challenges to foster foresight activities is the lack of willingness to share across functions. This may not the main hinder in the case company, but it is clear that different functions work quite isolated from each other and in siloes.

Rohrbeck (2010, 111-113) has identified two directions for building high corporate foresight ability: Structured approach, in which is foresight is linked to other corporate functions, and Cultural approach, in which there are no dedicated processes and activities are triggered through other processes like new business development. Most often companies combine elements from both approaches but what is important is that foresight requires efficient and multi-level communication and engaging the organization in foresight activities to make it successful and integral part of the company's way of working. Foresight should be participatory in nature, meaning that participation of the key stakeholders are needed in each step of the process to build and co-create the future together. It is also multidisciplinary, and it requires a broad spectrum of knowledge and collaboration for people and organizations to make sense on the possible directions (Lustig 2015, 19).

Another identified challenge that arose from the data was the current focus on optimising the business on the short-term and not putting much focus on the long-term. This seemed to be driven by the current organizational culture. Metrics (key performance indicators, KPI's) to measure the business were set to measure the short-term benefits, and this drove the actions and activities quite strongly. On the other hand, there was a will to change the course and the key stakeholders both in marketing and product development saw the need to change. Burt et al. (2015) suggest that there should be a balance between operational activities and foresight activities to prevent detrimental organizational performance in the short-term. It is quite common that organizations desire to apply the same metrics for the most promising new innovations and current business, which easily gets organizations stuck into the status quo (Kirsner, 2021). Comparing innovations that are in the beginning on the innovation curve may seem like failures when compared with products that have already scaled to the majority. This means that organizations should be willing to change their measures along the way, meaning that the early metrics should focus on showing the progress and these would be changed later to metrics that demonstrate the impact and value they're creating.

Secondly, a good understanding on the desired state of foresight in the future was built. As mentioned, there was a will and motivation to change the status quo. The desired state would be built on strong and coherent strategy, that would have a view on the future and

relevant trends and changes occurring in the operating environment and that the company should consider in the future. This would also require strong commitment from the top management and their understanding on the importance and involvement in building and supporting foresight activities. All the plans and actions would be built to answer to the described view on the future or alternative futures, and there would be so called read thread starting from the strategy and following all the way to actions. Strategy would set the direction and guide people to do the right things. It would also set one unified direction, that was clear for everyone in the organization. The strategy would also build the "big narrative", that would link with further portfolio, category and business plans. This narrative could be communicated also to the external stakeholders such as the customers of the company. The view on the future would be built together and worked further to the more detailed level, still being true to the original picture. The importance of foresight in strategy is supported by previous research. Strategic foresight is a systematic process that help to guide planning and decision-making and it should provide a vision (or multiple visions) for strategy to facilitate creating an understanding on gaps between today and tomorrow and how to close that gap (Mootee 2013, 98). According to Lustig (2015, 20), foresight can help the organization in the implementation of strategy and making decisions based upon this, managing uncertainty and coping with future change and challenge. In a Europe-wide study Becker (2002) found that direction-setting, determining priorities and strategy formulation were among the most often mentioned goals for foresight activities within European companies.

In the ideal state, there would be a systematic process for gathering and distributing foresight. There would be a dedicated team responsible for gathering the knowledge and organising relevant forums to share the information. Sharing the information should be engaging and involve people widely from the organization to ensure that everyone gets the knowledge and that the interpretation of the data would be done together. Previous studies suggest different type of dedicated resources and roles for organizing foresight activities. What is often common in these roles is the way the individuals suitable for these roles are described. Creativity, willingness to test basic assumptions, openness to external thinking, ability to observe and recognize patterns, networking skills and intuition are the key characteristics often mentioned when talking about foresight specialists (Raymond 2019, 76-81; Hartman 2016, 203-204; Hofmann 2015). The right resources alone are however not enough, but commitment from the top management as well as foresight as a vital part of the strategy would be needed to enhance foresight activities. According to Rohrbeck (2010, 51-52), commitment and focus from top management are in a key role in successful corporate foresight but it needs to be supported by a systematic way to work with foresight, which was also noticed in this development work.

Thirdly, the aim was to understand in which activities and processes foresight would be beneficial or needed. The key processes in the case company were the innovation process and

long-term planning. Neither of the processes currently have foresight incorporated in their descriptions even though some initiatives exist. Foresight was seen mostly as an input for both processes, and the view on the future should be present and documented throughout the process as a default. Rohrbeck and Gemuenden (2010) identified three roles for foresight in enhancing the innovation capacity of a company, one of them being the 'Initiator role' at the front-end of the innovation process, which seemed to best fit with the process of the case company. Initiator can identify new and emerging consumer of customer needs, emerging technologies and competitors' new concepts early. Identifying these changes requires continuous scanning of the environment. For successful integration of foresight to long-term planning, Peter and Jarrat (2015) call for top management commitment and support, which ensures the importance of foresight is recognised and thus funded, and efficient sharing of foresight knowledge and understanding the importance of foresight both among management and employees. Both of these success factors were also identified in the development work. In addition, the development work highlighted how foresight should be integrated in the process templates and related trends or other foresight knowledge should be presented and discussed in the key decision-making forums as a part of the justification for the projects.

In addition to processes, the development work aimed at answering which tools and ways of working could strengthen future perspective in the key processes. As mentioned, foresight was mainly seen as an input to the processes. The work created a good understanding on the elements of a good foresight material that would answer to the needs of the user. Trends were the most familiar form of foresight in the organization and a need for a tangible and crystallised trend material with business-relevant examples seemed the most suitable one. The material could be in a traditional report format, but to inspire people and bring the material alive, presentation and communication on the content would be needed. Some of the stakeholders mentioned scenarios as one interesting tool to consider. Considering the current attitude towards risk-taking and low level of tolerance for uncertainly, scenarios could potentially bring new opportunities to the table and make the organization more prepared to the uncertain. This finding is supported by Van Duijne & Bishop (2018, 14), who state that understanding the meaning of possible futures enables organizations to capture new opportunities, particularly ones that are in the long-term future and new business strategies can emerge from understanding these opportunities.

As a result, the development work aimed at building an initial plan on how the role of foresight could be strengthened and how to improve foresight capabilities in the organization. As corporate foresight is first and foremost a *capability*, there is no one size fits all -solution that would bring the organizational capabilities to the next level, but several elements and points of view need to be considered. The most critical criteria seem to be top management commitment and a strong and clear strategy, that both are enabling the change to happen in the organization and showing the desired direction for the company. Building the capabilities

require new ways of working and tools, but they alone are not enough, if there is no supportive culture and openness to change, which then require strong leadership and communication to guide the way.

8.2 Evaluation of the process and used methods

The development work was done by utilising a process that was grounded in design thinking and foresight. Because the relevance and usability of the outcome was critical, key stakeholders were part of the process from the beginning and they were actively participating in ideation and building the view on the future state of foresight in the organization. Participatory approach also aimed at engaging the stakeholders to the development work and creating excitement among them, as they will be in a critical role when implementing the development plan. When developing something new and at the same time looking for high engagement from different actors, research is in a vital role providing insights and input in the development work (Toikko & Rantanen 2009, 37).

Stakeholder interviews provided rich and holistic view on the current state and the needs and potential challenges that people were having in the organization. The interviews also highlighted what would need to be changed and how the desired state would look like. Thus, the interviews proved to be a corner stone of the process. This is very much in line with the basics of service design: the process starts from building a good understanding on the user, its needs, aspirations, beliefs and pain points (Stickdorn et al., 2018, 120). It also helps the designer to move beyond assumptions (Stickdorn et al. 2018, 38) and truly design the solution to the user, not for the designers themselves (Portigal 2013, 2).

Even though the process mainly consisted of service design methods such as interviews, observation, ideation and customer journey mapping, it also had elements from foresight methods. As the objective was to create solutions that would improve the role of foresight in the organization and build future capabilities, the focus was in building a *better future state* of the company. This required openness, imagination and creativity from the participants and chosen methods were able to facilitate the needed future-leaning thinking and make the participants to think also beyond the obvious. Ojasalo et al. (2015, 201) conclude, that futures thinking and service design have similarities but also unique elements that supplement each other. Foresight offers tools and ways for imagining and creating alternative futures, which in this case was seen to provide ideas and solution beyond the most obvious ones Ojasalo et al. (2015, 208). According to Fraser (2010) imagining is the key issue that can take the leap from observable and provable to what could be a possible new solution for unmet needs.

In the prototyping phase trend framework and existing foresight information in the form of trends and future possibilities for value creation were piloted to gain feedback and understand better, how this kind of information is perceived in the organization. Due to limited

time resources there was no chance to gain feedback from a wider audience, which would've been beneficial when developing the methodology and way of working with the trends forward. Ideally a wide group of participants would be involved, and more structured feedback would be gathered. The same applies for the existing foresight knowledge even though feedback was gathered along the way and the material was modified based on the feedback. Still, a more structured way of gathering feedback and working on the material further together with the users of the material would've been beneficial.

8.3 The way forward

Tsoukas and Shepherd (2004, 9) defines that a foresightful organization is *"an organization that has sharpened its ability to see, observe, perceive what is going on both externally and internally, and to respond accordingly*". Corporate foresight is an ability that supports identification of continuous change and it triggers actions that ensure the long-term success of the company (Rohrbeck 2010, 109-110). As corporate foresight is an ability, it's an entity that comprises of several elements that need to be considered when thinking about the way forward and there is no single tool or method that would solve the whole case. During the development work, key building blocks for better future-orientation were identified and defined and all these elements (strategy, culture, resources, processes, tools & ways of working) need to be considered when starting the implementation of the development work and thinking about the way forward. Figure 20 summarises the key recommendations based on the results and understanding from the development work.

Figure 20. Recommendations on how to implement the results from this work

The need for the development work arose from empirical findings and based on the observations and previous discussions with the stakeholders. The past year had been exceptional in the organization and all the focus had been put to ensuring business continuity, which had also been the key focus for the top management. The aim and objective for the work were discussed and aligned with the head of marketing and head of new business but it became very clear that a lot of support and commitment is needed from the top management also in the future to make the change happen. To enable this, support and help from the head of marketing is needed, as this person is also part of the management team and able to take the issue forward and emphasise its importance to the management team. The importance of top management commitment is supported by findings from literature, e.g. Rohrbeck, (2010, 51-52), who states that commitment and focus from top management are in a key role in successful corporate foresight. As the company culture is an important enabler of the change, management is also needed to drive the change. Potentially a foresight agent role could be introduced in the organization as the driver the change. Further thinking is needed on the ways to enhance and develop a more future-driven culture.

In the big picture the findings from the development work are applicable to large extent to other organizations and they are also supported by findings from literature. It's however important to bear in mind, that corporate maturity for foresight is dependent on the context, i.e. the size of the company, nature of strategy, corporate culture, source of competitive advantage, complexity of the business environment and industry clock speed. Differences in the context of a company will affect the need for different foresight capabilities and when evaluating the design of the corporate foresight systems (Rohrbeck 2010, 72-73). In the case company evaluation of the context reveals that the industry clock speed is relatively slow, and the business environment is not the most complex one, which makes it possible to take the time to develop the capability step by step. However, standing out from the competition has become more difficult year after year and from that perspective there is at least some level of urgency to become better prepared for the future.

Both innovation and long-term planning or strategic planning are recognised as key processes in which foresight play a critical role but as companies and their processes vary, this needs to be tailored to fit the needs of the organization in focus. In the case company, integration of foresight with key processes, innovation and long-term planning, should be started with the process owners. This requires thinking about the input material as well as templates that will facilitate the work. When developing the materials, engaging the users of these materials and templates is recommended. Service design methods would offer great ways to work the material and the templates further. In the beginning it would be important to follow up that foresight becomes part of the processes and monitor that the templates and material are used. There should also be openness to develop the materials further if this need occurs after they've been in use.

As the prototyping phase revealed, the organization is still relatively nascent in utilising foresight in their work. Education and communication on the importance and especially concrete examples on how to utilise foresight in business planning and innovation is needed. Foresight information should be distributed throughout the organization by multi-level communication and through participation. There needs to be enough resources (people) with right kind of capabilities to collect and interpret foresight information (Rohrbeck 2010, 51-52). The need to educate the organization to utilise foresight didn't come so clearly through in the literature, but this work revealed the importance of ensuring everyone is familiar with the basics before implementing any (complex) processes or ways of working. The development work also revealed the importance of having enough resources to think about the future. This doesn't only mean the resources (people) that would be responsible for organising foresight activities but everyone that should take part in foresight activities should have the time to do that and ideally have foresight somehow recognised in their job descriptions. This would require prioritising the projects and putting more emphasis on the true innovations instead of putting a lot of time and effort to create line extensions to existing portfolio.

The prototyping phase covered only two different prototypes, which gave some understanding on how the organization responded to them, but further prototyping of different foresight methods and tools is needed to find the ones that work the best in the case organization. The development work was able to point out the processes in which foresight should be linked and good guidance on the expectations that the stakeholders have for foresight materials, but better understanding and more feedback is needed. As mentioned, the organization is already familiar with trends, but other methods such as scenarios would be beneficial to prototype. this would bot educate the organization on the ways to look at the future and make them think beyond the obvious. Scenarios are the most widely used approach to deal with uncertainties and they require relatively low level of knowledge to anticipate future. Building scenarios is not an attempt to eliminate uncertainty but merely recognise unpredictable changes in the environment and being better prepared for such changes (Tsoukas & Shepherd 2004, 3-4). They could potentially facilitate thinking beyond the obvious and create openness to alternative futures and the opportunities they create for the business.

To conclude, this development work provided good understanding on the current state of foresight in the case company and rich guidance on how to improve the role of foresight as well as build foresight capabilities in the organization. When implementing the results, it is important to involve people from different levels of the organization to test and develop concrete tools and methods. This ensures higher engagement and relevance for the users of these tools and methods. Tools and methods however won't alone make this successful, but the change requires commitment form the top management and will to change the current way of working.

References

Printed sources

Amanatidou, E. & Guy, K. 2008. Interpreting foresight process impacts: Steps towards the development of a framework conceptualising the dynamics of 'foresight systems'. Technological Forecasting and Social Change 75 (4): 539-557.

Amanatidou, E. 2014. Beyond the veil — The real value of Foresight. Technological Forecasting and Social Change 87: 274-291.

Bennett, N. & Lemoin, J. 2014. What a difference a word makes: Understanding threats to performance in a VUCA world. Business Horizons. 57 (3). 311-317. May-June 2014.

Berkhout, G., Van Der Duin, P., Hartmann, D., & Ortt, R. 2007. The Cyclic Nature of Innovation: Connecting Hard Sciences with Soft Values. Oxford: Elsevier.

Boe-Lillgraven, S. & Monterde, S. 2015. Exploring the cognitive value of technology foresight: The case of the Cisco Technology Radar. Technological Forecasting and Social change. 101: 62-82.

Brinkmann, S. & Kvale, S. 2015. InterViews: Learning the craft of qualitative interviewing. Sage Publications Inc.

Burt, G., Mackay D.J. and Perchard A. 2015. Managerial hyperopia: a potential unintended consequence of foresight in a top management team? Technological Forecasting & Social Change 101:134-146.

Börjeson, L., Höjer, M., Dreborg K.-H., Ekvall, T. and Finnveden, G. 2006. Scenario types and techniques: towards a user's guide. Futures 38:729-739.

Castells, M. 2010. The Rise of The Network Society 2nd edition. Wiley-Blackwell: West Sussex, UK.

Cepeda, G., Vera, D. 2007. Dynamic capabilities and operational capabilities: a knowledge management perspective. Journal of Business Research 60:426–437.

Curedale, R. 2013. Design thinking: Process and methods manual. Design Community College, Topanga, CA.

Darkow, I-L. 2015. The involvement of middle management in strategy development – Development and implementation of a foresight-based approach. Technological Forecasting & Social Change 101:10-24.

de Kluyver, C.A. & Pearce, J.A. 2015. Strategic Management : An Executive Perspective. Business Expert Press. NY:USA.

Dragt, E. 2017. How to research trends – Move Beyond Trendwatching to Kickstart Innovation.

Drucker, P. 1994. Managing in turbulent times. Routledger.

Eisenhard, K.M., Martin, J.A. 2000. Dynamic capabilities: What are they? Journal of Strategic Management. 21:1105–1121.

Fraser, H. 2010. Designing business: new models for success. In: Lockwood, T. (ed) Design thinking: integrating innovation, customer experience, and brand value. Design Management Institute, New York, 35–46.

Fuller, T. & Loogma, K. 2009. Constructing futures: A social constructionist perspective on foresight methodology. Futures 41:71–79.

Haarhaus, T. & Liening, A. 2020. Building dynamic capabilities to cope with environmental uncertainty: The role of strategic foresight. Technological Forecasting and Social change 155.

Hammoud, M.S. & Nash, D.P. 2014. What corporations do with foresight. European Journal of Futures Research 2:42.

Hartman, R. 2016. Foresight and creativity. In Van der Duin: Foresight in Organizations: methods and tools. New York: Routledge. 200-217.

Hiltunen, E. 2013. Foresight and Innovation - How Companies Are Coping with the Future? Palgrave.

Hiltunen, E. 2012. Matkaopas tulevaisuuteen. Helsinki: Talentum.

Hines, A. & Gold, J. 2015. An organizational futurist role for integrating foresight into corporations. Technological Forecasting and Social change. 101: 99-111.

Hofmann, R. 2015. Visionary competence for long-term development of brands, products, and services: The trend receiver concept and its first applications at Audi. Technological Forecasting and Social change. 101: 83-98.

Jalonen, H., Lehti, M., Tonteri, A., Koskelo, M., Nousiainen, A.K. & Jäppinen, T. 2015. From signals to future stories: a handbook for applying foresight in the field of welfare. Turku University of Applied Sciences, Turku.

Kalbach, J. 2020. The Jobs To Be Done Playbook : Align Your Markets, Organization, and Strategy Around Customer Needs. Rosenfeld Media.

Kjaer, A. 2014. The Trend Management Toolkit: A Practical Guide to the Future. Springer.

Kvale, S. 2007. Doing interviews. London: Sage Publishing.

Lustig, P. 2015. Strategic Foresight : Learning from the Future. Axminster, London: Triarchy Press.

Major, E., Asch, D & Cordey-Hayes, M. 2001. Foresight as a core competence. Futures 33 (2), 91-107.

Mason, H., Mattin, D., Luthy, M. & Dumitrescu, D. 2015. Trend-Driven Innovation: Beat Accelerating Customer Expectations. John Wiley & sons Ltd. Hoboken: New Jersey.

Mootee, I. 2013. Design thinking for strategic innovation: What They Can't Teach You at Business or Design School. John Wiley & Sons Inc., New Jersey.

Mueller-Roterberg, C. 2018. Handbook of Design Thinking. [Unknown publisher].

Ogilvie, T. & Liedtka, J. 2011. Designing for Growth: A Design Thinking Toolkit for Managers. Columbia University Press.

Ojasalo, K., Moilanen, T. & Ritalahti, J. 2014. Kehittämistyön menetelmät. Uudenlaista osaamista liiketoimintaan. Sanoma Pro.

Ojasalo, K., Koskelo, M., Nousiainen, A.K. 2015. Foresight and Service Design Boosting Dynamic Capabilities in Service Innovation. In: Agarwal R., Selen W., Roos G., Green R. (eds) The Handbook of Service Innovation. Springer, London.

Quist, J. 2016. Backcasting. In Van der Duin: Foresight in Organizations: methods and tools. New York: Routledge.

Pentland, A. 2014. Sosiaalifysiikka. Terra Cognita, Helsinki.

Peter, M.C. & Jarratt, D.G. 2015. The practice of foresight in long-term planning. Technological Forecasting and Social Change 101: 49-61.

Portigal, S. 2013. Interviewing Users - How to Uncover compelling Insights. Rosenfeld Media Brooklyn, New York.

Ratcliffe, J. S. 2006. Challenges for corporate foresight: towards strategic prospective through scenario thinking. Foresight 8 (1): 39-54.

Raymond, M. 2010. The Trend Forecaster's handbook. Laurence King Publishing, London.

Raymond, M. 2019. The Trend Forecaster's handbook, 2nd edition. Laurence King Publishing, London.

Rohrbeck, R. 2010. Corporate Foresight: Towards a Maturity Model for the Future Orientation of a Firm. Heidelberg and New York: Physica-Verlag, Springer.

Rohrbeck, R. & Gemuenden, H.G. 2010. Corporate foresight: It's three roles in enhancing innovation capacity of a firm. Technological Forecasting and Social change. 78(2): 231-243.

Rohrbeck, R. 2012. Exploring value creation from corporate-foresight activities. Futures 44(5):440-452.

Rohrbeck, R., Battistella C. & Huizingh E. 2015. Corporate foresight: An emerging field with a rich tradition. Technological Forecasting & Social Change 101:1-9.

Schwandt, D.R. & Gorman, M. 2004. Foresight or Foreseeing? A Social Action Explamantion of Complex Collective Knowing. In: Tsoukas H. & Shepherd J. (ed.) Managing the Future: Foresight in the Knowledge Economy. Blackwell Publishing. 77-95.

Schwartz, J.O., Rohrbeck, R. & Wach, B. 2019. Corporate foresight as a microfoundation of dynamic capabilities. Futures and Foresight Science. 2 (2): 1-11.

Semke, L-M. & Tiberius, V. 2020. Corporate Foresight and Dynamic Capabilities: An Exploratory Study. Forecasting 2(10): 180-193.

Stickdorn, M. & Schneider, J. 2011. This is service design thinking: Basics, Tools, Cases. John Wiley & Sons Inc: Hoboken, New Jersey.

Stickdorn, M., Lawrence, A., Hormess, M. & Schneider, J. 2018a. This is service design doing: Applying service design thinking in the real world. O'Reilly Media.

Stickdorn, M., Lawrence, A., Hormess, M. & Schneider, J. 2018b. This is service design methods: A companion to This is Service design doing. O'Reilly Media.

Teece D.J., Pisano G. & Shuen A. 1997. Dynamic capabilities and strategic management. Journal of Strategic Management 18(7):509–533.

Teece, D.J. 2009. Dynamic Capabilities and Strategic Management: Organizing for Innovation and Growth. Oxford University Press Incorporated, Oxford.

Toikko, T. & Rantanen, T. 2009. Tutkimuksellinen kehittämistoiminta. Tampere University Press, Tampere.

Tsoukas H. & Shepherd, J. 2004. Organizations and the Future, From Forecasting to Foresight. In: Tsoukas H. & Shepherd J. (ed.) Managing the Future: Foresight in the Knowledge Economy. Blackwell Publishing. 1-17.

Tushman. 1997. Winning through innovation. Strategy and Leadership. 25 (4): 14-19.

van der Duin, P. 2016. Introduction. In van der Duin. Foresight in organizations. Routledge: New York. 1-10.

Vecchiato, R. 2015. Creating value through foresight: First mover advantages and strategic agility. Technological Forecasting and Social Change. 101: 25-36.

Wetter-Edman, K. 2011. Service design – A conceptualization of an emerging practice. Licentiate thesis, University of Gothenburg, Sweden.

Electronic sources

Ball, J. 2019. The Double Diamond: A universally accepted depiction of the design process. Retrieved 26.6.2020 from https://www.designcouncil.org.uk/news-opinion/double-diamond-universally-accepted-depiction-design-process

Becker, P. 2002. Corporate foresight in Europe. Foresight Brief No. 082. Retrieved 29.11.2020 from http://www.foresight-platform.eu/wp-content/uploads/2011/04/EFMN-Brief-No.-82-Corporate-Foresight-in-Europe.pdf.

Day, G. & Schoemaker, P. J. H. 2005. Scanning the Periphery. Harvard Business Review November 2005.

Drucker, P.F. 1995. The age of social transformation. The Atlantic Montly Dec 1995. Retrieved 6.12.2020 from https://www.theatlantic.com/past/docs/issues/95dec/chilearn/drucker.htm

Dufva, M. 2018. Understanding the basic concepts of foresight and three tips for the foresight jungle. Sitra. Retrieved 22.12.2019 from https://www.sitra.fi/en/blogs/understanding-basic-concepts-foresight-three-tips-foresight-jungle/

Hiltunen, E. 2017. Mitä tulevaisuuden asiakas haluaa: trendit ja ilmiöt. (ebook)

Kirsner, S. 2021. Don’t Let Financial Metrics Prematurely Stifle Innovation. Harvard Business Review March 2021.

Ofek E., and Wathieu, L. 2010. Are You Ignoring Trends That Could Shake Up Your Business? Harvard Business Review July-August 2010.

UK Design Council. 2019. What is the framework for innovation? Design Council's evolved Double Diamond. Retrieved 26.6.2020 from https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond

UK Design Council 2015. Design methods for developing services. Retrieved 14.11.2020 from https://www.designcouncil.org.uk/sites/default/files/asset/document/DesignCouncil_Design%20methods%20for%20developing%20services.pdf

Van Duijne, F. & Bishop, P. 2018. Introduction to strategic foresight. Future Motions. Retrieved 22.12.2019 from http://www.futuremotions.nl/wp-content/uploads/2018/01/Future-Motions_introductiondoc_January2018.pdf

Figures

Tables

Appendix

Appendix 1. Interview guide for stakeholder interviews

- Are you familiar with the concept or definition of foresight?
- How important is foresight or understanding the future for the company at the moment? How future-oriented is the company?
- How is future currently anticipated in the company? How and to what extent is future considered in what is currently done?
    - What are the current tools that are utilised to gather understanding on the future and changes in consumer behaviour?
    - Does the current company culture support future-leaning point of view?
    - Related to foresight, what is currently done right? What is the company good at?
    - In which way the organization should become better? What needs to be changed to enable that?

- What are your current experiences in foresight and future anticipation in the company?
    - From which channels and sources do you or the organization get information on the future changes or development paths that have an effect on consumer behaviour and thus to the business?
    - How is foresight currently utilised in business planning?
    - What kind of tools and methods are in use?

- How does the ideal situation look like from the foresight perspective?
    - What is the time perspective the company should be interested in?
    - What kind of foresight information would be beneficial for the company?
    - In which tasks or processes is foresight needed?
    - Who should be responsible of foresight or how should it be organised?
    - What kind of tools or methods would be useful for the company to become better aware of the future and its implications to the business?
    - How could the company benefit from foresight?

- What kind of new capabilities are needed in the organization to ensure the company is able to consider possible futures in its actions?