BUSINESS INTELLIGENCE BASED CUSTOMER EXPERIENCE INFORMATION UTILIZATION IN STRATEGIC DECISION MAKING

Master´s Thesis
in Management and Organization

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1 INTRODUCTION

In the 2010s, firms are exposed to increasing competition to such an extent that a durable competitive advantage has become more difficult to maintain but at the same time, increasingly more valued. Customers have a larger variety of choices than ever before as well as more channels through which to pursue them, and the experience factor has become a critical component in staying relevant to busy and socially connected customers. In such an environment, integrated and simple solutions to problems, as oppose to scattered or burdensome ones, will win the loyalty of consumers and work towards creating affective relations with the customers. (Maguire & Suluo 2007, 14; Meyer & Schwager 2007, 1–2.) The ability to create consistent customer experience across multiple channels is one of the best ways a company can achieve long-lasting competitive advantage but consequently, one of the most difficult challenges for businesses today. Important for good customer experience is the ability to understand the extent and diversity of aspects that together constitute the total experience and how a company can affect, influence and improve each part. (Gentile, Spiller & Noci 2007, 395; Rawson, Duncan & Jones 2013, 2; Martins 2014.)

Customer experience can be described as the response consumers have to any direct or indirect contact with an organization. Whereas a direct contact refers to the service, use and purchase of a product and concerns its actual functionality, an indirect contact occurs in situations of unplanned encounters with the representatives of a firm’s offerings. As many experiences are not the direct result of a company’s offerings or brand’s messages at all, a successful brand incorporates experience into the heart of business strategy and shapes experiences by adding value in offering’s every feature. Excellent examples are provided by companies such as Amazon, Apple and Starbucks since customer experience with these brands starts way before the actual purchase. (Meyer & Schwager 2007, 1–3.) Their store atmosphere is inviting, warm and welcoming, and employees aim towards creating a memorable experience for the customer (Frey 2016; West 2016). Their product design is inviting, and the online customer journey is straightforward, fast and simple and offers customers what they need before they need it. These brands are not simply about the product, but every aspect of their offerings is created with the aim of making the time one spends with the company an enjoyable experience. (Meyer & Schwager 2007, 1–3; Martins 2014.)

As customer needs are extensive, companies who want to do well need to keep up with the wants of the customers (Martins 2014). This is important since clear mistakes for customer experience, such as an exhausting number of features or the lack of a personal touch, are usually evidence of a general unawareness of customer preferences, but can engender customers to do business elsewhere or provoke them to share their negative experience forward. Considering the mindset a customer is left with is essential
since today’s consuming habits give increasingly more relevance to other people’s experiences and recommendations. (Meyer & Schwager 2007, 1–2.) Markets are also becoming increasingly more global, and it should not be assumed that a given product or service will satisfy customers in the same way for a long period of time or have the same influence on faraway customers as it has on those at home. Conversely, companies who can effectively manage the offered experience achieve rewards such as a higher customer satisfaction and increased revenue through loyal customers who are more willing to try new products and more likely to recommend the company forward. Good customer experience can also turn customer dissatisfaction or indifference into a positive experience, and customers may be willing to overlook negative aspects of the offering, such as a high price. (Rawson et al. 2013, 2–3; Martins 2014.)

However, a good customer experience does not occur by accident but requires strategic alignments, an extensive information capacity as well as an organization that is well-informed on customer needs and on possible changes in those preferences (Sawka 1996, 47; Pirittimäki 2007, 68; Toivonen 2016). The way this can be achieved is by collecting data on customer experiences systematically, comprehensively and continuously and with the use of business intelligence (BI), convert the information into actionable intelligence to support managerial work (Loshin 2013, 7). Business intelligence plays, therefore, an important role in being able to convert raw data from the external environment, in relation to emerging trends, potential patterns or competitive threats as an example, into a form usable by managers so the quality and topicality of decision making can be improved. However, systematic information collection techniques are not sufficient on their own, but the gathered information needs to be strongly interpreted and analysed within the organization so unnecessary information can be filtered out and information reliability ensured. (Gilad & Gilad 1986, 53; Negash 2004, 178.)

So, the best way a company can engage in customer experience favouring strategy is to collect new data on customer needs, run analyses on the information and utilize the knowledge in creating decisions that are based on customer preferences. Essential for this is the ability to systematically gather and analyze data, but also that the information is disseminated quickly to the organization so it can be effectively coupled with strategic decision making tools and turned into decisions that will still appeal to customers’ interests. (Loveman 2003, 111; Maguire & Suluo 2007, 14.) The purpose of strategic decision making is, therefore, to utilize the information resulting from the business intelligence process both quickly and effectively so it can be used as a basis of improved decisions. When companies can skillfully plan, manage and execute the information utilization process, they are able to create pleasant, consistent and differentiated experiences through strategic decisions that are based on a true understanding of customer behavior and preferences. (Rawson et al. 2013, 2.)
In this perspective, the purpose of the study is to investigate how customer experience information can be collected and through business intelligence process converted into valuable intelligence to support strategic decision making. The thesis is both a contribution to the ways customer experience information can be utilized within a strategic decision making process as well as an exploration of the issues that arise during, from and after the process. The motivation behind choosing the particular subject and associated themes of business intelligence and strategic decision making stems from discussions between the researcher and her acquaintance (an entrepreneur, M.Sc. Econ.) on the importance of customer experience for a company’s competitive advantage in an environment where competition is extensive, offerings similar to each other and the way to stand out is often done by other means than the product itself. The motivation of the researcher is also to be highlighted as the researcher placed increasing importance on the subject due to personal interest, observations and experiences in regard to customer experience, which made investigating the subject both very interesting and motivating for the researcher.

This study was conducted as a qualitative case study of six companies, and the empirical contribution was based on six individual interviews with the representatives of the case companies. The companies were chosen for their high valuation of customer experience as well as for their recognition of customer experience as an important part of their strategy, and the criteria were based on CXPA Finland’s (Customer Experience Professionals Association) survey as well as on recent articles in regard to customer experience. In this perspective, the empirical contribution of the thesis should bring up new, interesting topics in relation to customer experience information utilization in strategic decision making and increase the awareness of the issues that need to be taken into account when making customer experience information based strategic decisions.

1.1 Research objective, frameworks and limitations

The purpose of the study is to investigate the connection of customer experience information and strategic decision making. The study seeks to understand how customer experience information can be collected and through business intelligence converted into valuable intelligence to support strategic decision making. The thesis is also an exploration of various interesting issues that arise during, from and after the process, whether related to issues perceived as very important, problematic or otherwise notable for the overall process. In order to fulfill the objective of the research, the following research question is presented:
Which issues in relation to the characteristics of customer experience information need to be considered when making business intelligence (BI) based strategic decisions with a specific focus on customer experience information utilization?

The problem is further approached with the following sub-questions:

1. In which ways and from which sources is customer experience information collected?

2. How is customer experience information to be utilized within business intelligence process?

3. What are the characteristics of customer experience information based strategic decisions and how does the process proceed?

The theoretical contribution of the study is comprised of two frameworks of business intelligence and strategic decision making. Frameworks guide the completion of the study by identifying what will and will not be involved in the research and by introducing possible relationships based on logic, experience and theory (Miles & Huberman 1994, 18). The first framework of business intelligence focuses on introducing the concept in detail as well as explains the important characteristics of a business intelligence process. The framework provides also a short introduction to data, information, knowledge and intelligence as well as explains how customer experience and customer experience information can be defined. The second framework of strategic decision making provides an overview of the concept by describing the characteristics of strategic decisions and by introducing the strategic decision making process in detail. The chapter also explains how intuition, politics and rationality relate to decision making and how information utilization contributes to the effectiveness of the decision making process.

Due to the various definitions of business intelligence and strategic decision making, limitations are required in the study. When it comes to business intelligence, several concepts are often used to describe the same phenomenon, and the concept can be seen to include terms such as market intelligence, customer intelligence, competitor intelligence, product intelligence and so on (Tyson 1986, 9). Due to the scope of the thesis, the main focus of this study is not on any specific intelligence tool, method or term but rather on providing a comprehensive insight into the subject. For this reason, explaining any subcategories of BI is beyond the purpose of this study. The viewpoint of the thesis is also more human-centric than technology-centric, focusing more on describing the concept rather than on its practical execution. The BI model used in the
study is a combination of the models of Timothy Powell (1996), Tamar Gilad and Benjamin Gilad (1985) and Virpi Pirttimäki’s (2007) and was created by the researcher to be more corresponsive to the study. As the literature on strategic decision making is also abundant, the aim of the thesis is to provide a comprehensive view to the second framework also. The strategic decision making model of the study is based on the work of Frank Harrison (1996) and was chosen since it highlights issues important for the purpose of the research such as the significance of external environment and the importance of information utilization throughout the decision making process.

The empirical contribution of the thesis is based on six large-scale Finnish companies that represent a number of industries, some of them being characterized by more unstable and some more stable conditions. The scope of the thesis is, therefore, limited to large Finnish companies in the selected industries, and the conclusions of the study may not extend to smaller companies or companies in other industries or countries without further research. Additionally, the thesis does not emphasize any specific industry in-depth but instead, aims to be relevant to other large-scale companies in similar industries. Finally, as the study focuses on providing an insight into customer experience information utilization in strategic decision making, the scope of the thesis is limited to managing the information collection, processing and utilization process rather than on measuring the outcomes of BI performance or strategic decision making.

1.2 Research structure

This study is divided into six main chapters. The chapter following the introduction focuses on the research methods and methodological choices of the study as well as introduces the case companies of the research. Chapters three, four and five focus more profoundly on the theoretical contribution of the study, providing a comprehensive look into the previous studies and literature. References include recent journal articles and books which are supported by older studies to provide more depth when necessary. The purpose of the theoretical parts is to create frameworks used as a basis for the empirical analysis as well as to introduce the reader to the subject by giving him an initial understanding of the research subjects (Yin 2012, 27, 30).

Chapter three begins with a literature review of business intelligence and customer experience information as well as identifies important characteristics of a business intelligence process. The theory is enhanced on the basis of the empirical contribution by describing what issues the interviewees highlighted in relation to customer experience and customer experience information and by explaining how customer experience information was collected, interpreted and processed in reality. Chapter four focuses on providing an overview into strategic decision making by describing the
characteristics of strategic decisions and by explaining the strategic decision making process in detail. The theory is evaluated on the basis of the empirical results by examining what issues the interviewees highlighted in relation to strategic decision making and what they saw as significant or influential for the strategic decision making process.

Chapter five links together the two frameworks of the study by explaining possible barriers that may exist before information that results from a business intelligence process can be utilized in decision making and by introducing central issues that need to be taken into consideration when basing decisions on the information. The chapter is more oriented towards the empirical material than theory as it centers on the issues the interviewees highlighted or saw problematic within their decision making, which resulted from the nature and characteristics of customer experience information. The sixth and final chapter rounds up the thesis by introducing the main results of the study and by giving conclusions to each of the research questions. The chapter also focuses on research analysis and validity and ends with possible suggestions for further research.
2 METHODOLOGY

2.1 Qualitative case study

This study is a qualitative, descriptive research and was conducted as a case study. Qualitative research has an interpretative approach to the subject as it focuses on examining the phenomenon in its natural environment, trying to comprehend the phenomenon in relation to the meanings individuals include in and bring to it. It offers an approach to managing individual thoughts and perceptions, and its purpose is to create an in-depth understanding of the subject under study and to capture the phenomenon in everyday life. Qualitative research is a continuous process of discovery and is often guided by wide research questions based on theoretical frameworks. (Taylor 2005, 101.) The significance of a researcher’s value system on the study results should also be considered as values define the way a person approaches and comprehends the world. Therefore, it is possible for qualitative research to find different connections and relationships from the studied phenomenon depending on the observant. Overall, qualitative research has an interpretative and naturistic approach to the subject under study as it takes place in the real world and involves observing the subjects in their natural environment with an influence by the researcher. (Hirsjärvi, Remes & Sajavaara 1997, 161; Taylor 2005, 101.)

Qualitative case study typically focuses profoundly on relatively small cases that are selected purposefully. The power and logic behind purposeful sampling are based on selecting cases that are information rich and from which the researcher can learn a lot about issues important for the objective of the research and the question under study. (Patton 1990, 185.) Case is usually understood as a social unit that can be limited to a certain place and time, but in economics, case usually refers to a company or to a part of it, such as a specific business unit, that can be examined on an organizational, divisional or an individual level (Räsänen, Anttila & Melin 2004). Qualitative research involves a variety of data collection techniques such as open-ended interviews, personal experiences, direct observations as well as visual texts and written documents that describe moments and meanings in individuals’ lives (Patton 2002, 4). Regardless of the technique, the researcher focuses on examining the full context of the subject and interacts with participants while collecting most data individually and face-to-face. The researcher usually starts with a preliminary idea that develops as a researcher learns more about interviewees and their experiences, thoughts and feelings. The data analysis is mostly interpretative and must be judged in context. (Patton 1990, 185; Taylor 2005, 101.)
Overall, the purpose of a qualitative case study is not to make generalizations of the subject matter but instead, to describe and analyze the phenomenon using how and why questions and to make new observations for future research (Yin 2003, 89). A qualitative case study was chosen as an appropriate method for this study since it supports goals important for the sake of the research such as interpreting individuals’ experiences, thoughts and perceptions in order to gain an in-depth understanding of the subject in a real life context. As the objective of the research was also to have a profound understanding of the phenomenon in a few purposefully selected cases as oppose to finding generalizations or making judgments from the collected data, was a qualitative case study a good fit for the thesis.

2.2 Research methods

The data collection methods of this study include in-depth, open-ended interviews that were conducted individually and face-to-face. As a data collection method, interviews generate direct quotations from people about their experiences, opinions and feelings and were chosen as an appropriate method for the study as the purpose of the research was to gain a profound understanding of the prevailing thoughts behind customer experience information collection, processing and utilization (Patton 2002, 4). Interviews as a method were necessary for the research as they allowed the researcher to interact with the respondents and to guide the conversation in a direction the researcher saw best for the sake of the research. Interaction is, overall, an essential part of qualitative data collection as gaining a profound understanding of the ideas and motives behind answers provided often requires additional, clarifying questions to be asked. Interaction with the respondents can also bring out new, interesting topics the researcher may not have initially thought of that can deepen the studied phenomenon. (Hirsjärvi & Hurme 2008, 34; Tuomi & Sarajärvi 2009, 72–73.)

The case interview form was based on the theoretical contribution of the research and divided into three themes according to the frameworks of the study. In this way, it could be ensured that the case form was relevant to the research as well as covered all the topics of the study. The case interview questions were tested before the actual interviews to ensure the form was suitable and the questions relevant to the research. Since all of the respondents were Finnish, the form was written and the interviews conducted in Finnish to avoid possible misapprehensions or general ambiguity caused by language and, overall, to have a clear understanding of the subject under study. The case interview form was also translated into English and both versions can be found from appendixes. During the interviews, the researcher ensured that all of the
frameworks got covered and important questions answered by continuously following the course of the interview and by guiding it if necessary.

The empirical contribution of the study consists of six case companies and involves six respondents (n=6). Due to the small amount of cases, qualitative research bases on respondents having enough experience and knowledge of the studied phenomenon to justify the selection (Koskinen, Alasuutari & Peltonen 2005, 273). The cases need to be information rich in order to illuminate the research questions and the respondents need to be able to describe the subject under study based on his or her knowledge and experiences (Patton 1990, 169). In this study, the respondents were chosen based on their position in the company and their knowledge of customer experience and strategic decision making to ensure their capability of answering to questions related to both frameworks of the study. The knowledge was verified by the researcher before contacting the company as well as confirmed during the initial contact with the person in question. The verification was based on the researcher’s investigation of the company and its personnel, and the confirmation was done in a form of an interview proposal letter sent directly to the interviewee. The interviews were conducted between 7.12.2016 and 13.1.2017 on the companies’ premises and lasted approximately an hour, shortest being 50 minutes and longest 90. The interviews were done separately, recorded and transcribed for analysis. The anonymity of the respondents and corresponding companies will be protected in the study.

2.2.1 Case companies

The empirical contribution of this study is based on six case companies that were chosen for their high regard for customer experience as well as their recognition for customer experience as an important part of their strategy. The criteria were based on CXPA Finland’s (Customer Experience Professionals Association) annual survey on customer experience management in Finland (CXPA.fi) as well as on recent articles and news reportages with respect to customer experience in papers such as Kauppalehti and Helsingin Sanomat. A majority of the companies were selected among the top ones of CXPA’s rankings but a few also according to the information provided in the articles with respect to companies that were mentioned by their good customer experience. Comprehension of the subject and of its importance was, in most cases, also confirmed during the initial contact with the company as the interviewees commented either on the topicality of the matter or its importance for the company on their own initiative.

Another selection criterion was having a designated person responsible for customer experience who also played a role in strategic decision making and was, therefore, capable of answering to questions related to both frameworks of the study based on his
or her knowledge, experiences and perceptions. The way the issue was approached in the study was by contacting a person who the researcher assumed to be responsible for customer experience management in the organization based on his or her title in the company or by contacting persons mentioned in the articles. The start of the interview request letter also stated that the purpose of the research is to interview a person in charge of both customer experience and strategic decision making in the company, which ensured the respondent knew what was expected from the interview. Therefore, if the researcher ended up contacting a person who was not, after all, in charge of customer experience management in the case company, the message could be forwarded to a person better suitable for the interview.

The selected case companies represent different fields of businesses but are similar in a sense that all are significant players in their own field. They all represent large-scale enterprises with a revenue more than 40 million and personnel more than 250 (Finnish bookkeeping law 4c §), and majority operates also internationally. The choice of large-scale enterprises was not intentional but management level customer experience representatives could be found mainly from larger enterprises. Even so, ending up with different industries provides an extensive understanding of how challenges, objectives and perceptions of customer experience information vary by industry as well as to which extent they remain similar. The approach also contributes towards gaining a comprehensive understanding of the extent of issues related to customer experience information and its utilization in strategic decision making as well as brings dimension to the thesis in a form of different, varying perspectives. The selected case companies are depicted in appendix 3.

Due to the size of the companies and sensitivity of some of the industries, information provided in appendix 3 is left very vague. The industry categorization is based on industrial classification benchmark (ICB –classification) that divides industries further to supersectors, sectors and subsectors from which the supersectors are included in the table (Icbenchmark 2016). Revenues and personnel numbers are also approximations and the exact value can be found within the given range. The three ranges for revenue and personnel have been divided by the researcher in a way she saw most convenient for the data and the research. It is to be noted, however, that the starting points for the lowest ranges in both categories represent the minimum requirements for large-scale enterprises. All in all, the purpose of the information is to help to comprehend the scale of the operations and to give a specified dimension to the concept of customer experience information collection and utilization in each of the case companies. The companies are listed in no particular order and marked with an identifier letter so each interviewee can be easily linked to a corresponding company.
2.2.2 Semi-structured interviews as a research method

The data collection methods in this study include semi-structured interviews with an open-ended nature. An open-ended nature means that the matters under investigation can be questioned and that respondents are able to propose their own insights and opinions on the subject matter as opposite to closed-ended questions that provide short or even single-word answers. (Yin 2012, 11, 86–90.) As a research method, a semi-structured interview is rather a conversation guided by the interviewee instead of a structured query, and its efficiency lies in the fact that the researcher is able to guide the interview without completely controlling it. The interview questions are prepared beforehand but instead of giving respondents ready-made answer options, questions can be answered freely and in respondents’ own words, which often yield new topics and additional questions to be asked during the interview. Therefore, open-ended questions result in in-depth answers about individuals’ thoughts, experiences and opinions, and the gathered data consists of verbatim citations with sufficient context to be interpretable. Semi-structured interviews are a clear favorite of qualitative research and among the most important ways to gather information for a case study since they focus directly, profoundly and comprehensively on the case study topic. (Patton 2002, 4; Koskinen ym. 2005, 104–109; Yin 2012, 11, 86–90.)

Semi-structured interviews were chosen as an appropriate method for the research as they gave the researcher freedom to guide the interview in a direction she saw fit to ensure that all of the frameworks, questions and important topics of the research got covered during the interview. The way this could be achieved was by asking additional questions during the interview if clarification was needed or if interesting, new issues emerged from the discussions. Another objective behind choosing the method was to gain an in-depth understanding of the phenomenon under study while giving the respondents enough freedom to answer the questions freely based on his or her knowledge, experiences, feelings and perceptions. The empirical contribution of the research involves six respondents, three of them women and three of them men, all of them in a management level position in the company. The participants and their background information in relation to their main responsibilities and time in the case company are depicted in appendix 4. Each participant has been given an identifier based on which the citations in the following chapters have been divided.
3 CUSTOMER EXPERIENCE INFORMATION IN RELATION TO BUSINESS INTELLIGENCE

3.1 From data to intelligence

It is important to start by emphasizing that data, information, knowledge and intelligence are not interchangeable, how basic it may sound. An organization’s success or failure can depend on understanding which one you have, which one you need and what are you able to or cannot do with each. (Davenport & Prusak 1998, 1.) However, it is useless to gather an extensive amount of data or information if a company is not able to turn it into knowledge and intelligence to support decision making within the organization (Pirttimäki 2007, 109). Understanding the difference between these terms and what you can get from each one is, therefore, essential for organizational success (Davenport & Prusak 1998, 1).

In the following chapters, the concepts of data, information, knowledge and intelligence will be introduced more precisely. Whereas the first chapter will focus on explaining the characteristics and differences of the concepts and how each is derived from another, the focus of the second chapter is on introducing the various ways in which data and information can be divided and categorized. All in all, the following chapters provide a comprehensive view on the matter and help to comprehend the differences and defining characteristics of data, information, knowledge and intelligence.

3.1.1 The differences between data, information, knowledge and intelligence

Data is a collection of discrete, objective facts that represent the properties of objects and events (Davenport & Prusak 1998, 2; Ackoff 1999, 170). In an organization, data is often illustrated as structured records of transactions. For example, data can describe how many times a customer visited a specific store, what he bought, how much he spent and when did the visit occur. However, data cannot tell anything about why he went there and how likely is he to return. Data has no inherent purpose, it can only tell a part of the picture in relation to what happened but is not able to describe where to go or what to do next. Data cannot say anything about its own relevance and, therefore, piling up data just for the sake of its factuality does not necessarily result in good decision making. However, data is essential for the creation of information and will, therefore, always be needed in an organization. (Davenport & Prusak 1998, 2–3.)
Unlike data, information has a meaning (Davenport & Prusak 1998, 3). It is a result of subjective and cognitive interpretations of data, in other words, “data endowed with relevance and purpose” (Drucker 1988, 4). Information is usually described as a flow of messages in a form of a document or in a visible or audible communication. The purpose of information is to change the way a person comprehends the subject in question, have an effect on his behavior and make a difference in his mindset. Information circles in an organization through soft and hard networks. A hard network has a clear infrastructure and delivers messages in form of e-mails, packages, traditional mails and so on. A soft network is both less visible and less formal. Passing someone a hand-written note is an example of a situation where information transmits in a soft network. (Machlup 1983, 643; Nonaka 1994, 15; Davenport & Prusak 1998, 3.) So just like data, information describes the characteristics of objects and events but does it more compactly and usefully than data. The real difference between data and information is, therefore, more functional and less structural. (Ackoff 1999, 170.)

Knowledge is a personal belief, closely tied to our past experiences, values and senses (Nonaka 1994, 15, 17; Von Krogh 1998, 134–135). It can be pictured as intuitive, being difficult to describe in words or fully comprehend in a logical way. Knowledge exists within people, it is created and applied in the minds of individuals. In an organizational context, knowledge often exists in organizational routines, processes, practices and norms, and organizations play a critical role in amplifying this knowledge. And just as information originates from data, knowledge is created from information that is subjective to the beliefs of its holder. Knowledge-creation is a complex and unpredictable process that happens in human interactions, in a process of obtaining and sharing knowledge in a continuous dialogue with other individuals. (Nonaka 1994, 15, 17; Davenport & Prusak 1998, 4–6.) Multiple interpretations are exchanged and challenged, assumptions are made visible, contested and revised. It is a continuously process that circles between reduced complexity and findings that compel a rethinking of existing concepts. (Choo 2002, 45–46.) Knowledge is closer to action than data or information and can, therefore, be more easily utilized as a basis for sound decisions. It is to be noted, however, that knowledge is not self-evident and is highly dependent on employees and their motivation. (Davenport & Prusak 1998, 4–6.)

One common dimension to the process of knowledge is to form a difference between tacit and explicit knowledge. Explicit knowledge refers to digital and codified records of the past, such as archives and databases, which are needed on a sequential basis. (Nonaka 1994, 16.) Tacit knowledge, on the other hand, is very personal and difficult to communicate or formalize. It is rooted in a specific context through action and commitment and contains both cognitive and technical factors. Cognitive factors cover beliefs and viewpoints that help people to understand and determine their world whereas the technical side includes concrete skills and crafts in a specific context.
According to this viewpoint, knowledge and intelligence can be seen to belong as a part of tacit knowledge whereas data and information are to be considered as close concepts to explicit knowledge (Pirttimäki 2007, 40).

As information derives from data and knowledge from information, is intelligence only achieved if enriched information is disseminated to and utilized in an organization, in solving important matters and in decision making overall. Intelligence can, therefore, be best described as communicated knowledge that expands one’s capacity of logic, understanding and learning and provides an organization with an understanding of essential factors with respect to its environment, business and success. (Powell 1996, 8; Pirttimäki 2007, 39, 65.) From an organizational perspective, intelligence relates to having a profound understanding of the relationship between the organization and its customers and facilitates the process of detecting crucial trends and identifying significant changes in the environment (Thierauf 2001, 10–11). Therefore, intelligence improves an organization’s reaction time to changes, facilitates the identification of new possible growth opportunities and enhances the ability to spot potential vulnerabilities that reveal early warnings for competitive threats. All in all, intelligence helps an organization to adjust to the changing environment and provides opportunities for competitive advantage. (Herring 1992, 59; Ross, McGowan & Styger 2012, 3.)

### 3.1.2 Data and information types

Information sources can be broadly divided between external and internal information (Pirttimäki 2007, 44). External information includes sources outside an organization and information is usually collected on issues such as technological advances, suppliers, partners, customers, competitors and general trends in the business environment. Internal information involves company-specific information and is composed of an organization’s culture, structure and resources. Whereas culture involves the expectations, beliefs and values created and shared within an organization, structure points to the way a firm is organized in regard to communication, decision making and workflow. Resources include material and financial assets as well as the know-how of people in an organization. (Wheelen & Hunger 1992, 47; Pirttimäki 2007, 44, 50, 65.)

In addition to dividing data based on its source, it can be divided depending on its form or its degree of structure. Structured data can be represented in a relational form, assigned to dedicated fields and is stored in data warehouses and relational databases. It contains historic data, of a customer’s purchase history for example, in numerical, quantitative form and provides answers to questions such as who did when, where and how many times of what. Structured data can be directly processed with computing
equipment as well as assigned to a specific problem and is relatively easy to analyze. The most well-known tools in BI for addressing structured business data are reporting, data mining and online analytic processing (OLAP). (Baars & Kemper 2008, 132; Park & Song 2011, 12.) While reporting systems focus on presenting numeric data in a form that includes graphics and charts, data mining concentrates on identifying previously unknown patterns and correlations from large quantities of structured data based on statistical methods. Online analytic processing, on the other hand, is a concept that enables the multidimensional analysis of quantitative business facts and gives users flexibility with respect to the choice of dimension when observing the facts of interest, the time frame to be looked at or the level of detail. Even though it may seem so, OLAP and data mining are not overlapping concepts but complement each other. While OLAP summarizes large quantities of data and makes forecasts about the future, data mining operates on a detailed level with the aim of unveiling hidden patterns from the past. (Baars & Kemper 2008, 132; Chaudhuri, Dayal & Narasayya 2011, 90, 97.)

According to Park & Song (2011, 12), only 20 percent of the data available is structured and stored in data warehouses whereas up to 80 percent is unstructured and presented in various forms of documents such as memos, e-mails, chats, reports, articles, web pages and so on (Negash 2004, 180; Baars & Kemper 2008, 132–133). Unstructured data is typically qualitative and descriptive, making it harder to analyze than structured data. The information is attached to an individual person, involving various cognitive elements such as visions, thoughts, ideas and may be described as broad, general and subjective. Unstructured data is very ambiguous and not easily sought using existing tools made for conventional databases. The research methods involve the interpretation of various verbal and visual sources in order to reveal what people think, perceive and feel, and the approach is most useful for interpreting information in depth at the individual level. Due to its ambiguousness, unstructured data is harder to formalize, share or communicate than quantitative data and requires that an organization is willing to invest in and prioritizes qualitative research. (Uusitalo 1995, 79; Frishammar 2003, 319.)

Structured and unstructured data should be seen as a reinforcing unity where one is always combined with the other to some degree (Frishammar 2003, 319; Baars & Kemper 2008, 132–133). Information that emerged from the case study discussion was also convergent with the idea as a majority of the interviewees agreed on quantitative and qualitative information having different roles but being equally needed and complementing each other. Qualitative data was seen to explain quantitative, in other words, why do things happen and what can we learn from them. Qualitative methods were, therefore, regarded very valuable in gaining an in-depth understanding of customer behavior. However, an issue that was brought up as problematic by few of the interviewees was management’s attitude towards qualitative information. It was
mentioned that even though management was interested in qualitative insights, they often prioritized quantitative results when making decisions and hoped the information they received would be summarized, simplified and mostly quantitative. Therefore, for an idea to sell, it was regarded necessary to have a considerable amount of quantitative facts supporting your conclusions and to be able to show the management the connection between quantitative data and qualitative information.

*Qualitative and fast, quantitative information are equally needed -- of course leading requires numbers to be frank, being able to show trend curves is very important for management so they are able to see on a large scale what is going on, but from a developmental perspective, it would be interesting -- to have more qualitative information.* (C₁)

All in all, effective decision making requires both quantitative and qualitative insights and neither should be emphasized at the expense of the other (Frishammar 2003, 319; Baars & Kemper 2008, 132–133). The incorporation is essential in obtaining a complete view on business intelligence as structured data provides information on topics such as quantity, repetition and time whereas unstructured data provides an insight into why something was done (Park & Song 2011, 12).

### 3.2 The characteristics of customer experience information

Customer experience is a comprehensive term that extends to and encompasses every aspect of a company’s services, products and brands. The overall experience is a combination of a customer’s emotional, physical, social affective and cognitive reaction to a company and to the product or service offered, which means the range of issues affecting and contributing to the overall experience is numerous. (Verhoef, Lemon, Parasuraman, Roggeveen, Tsiros & Schlesinger 2009, 32.) The complexity of the concept is also increased by the fact that the experience is affected by various irrational factors that may affect the experience in unpredictable ways and in ways a company may not have expected. And just as the concept is extensive, so are the ways in which information on customer experiences can be collected and the issues that need to be considered while collecting it. (Gentile et al. 2007, 396–397.)

The following two chapters will focus on defining the concept of customer experience more precisely in relation to the extent of issues involved in the term. While the first chapter will focus on introducing the characteristics of the concept, the focus of the second chapter is on explaining how customer experience information can be collected and what methods should be used to monitor past, present and potential
patterns. Overall, the following chapters provide a comprehensive view on the matter and help to comprehend the issues that need to be taken into consideration when collecting information on customer experiences.

3.2.1 What is meant by customer experience?

Customer experience can be described as the response consumers have to any direct or indirect contact with an organization that provoke a reaction (Gentile et al. 2007, 396–397; Meyer & Schwager 2007, 1–3). Therefore, customer experience involves everything from the quality of customer care to advertising, purchasing, consumption, ease of use, assortment, store atmosphere and online services, and can appear in a shape of word-of-mouth recommendations, criticism, reviews, news reports and so on (Meyer & Schwager 2007, 1–3). The experience is strictly personal and affected by various rational and irrational factors and implies a customer’s emotional, physical, social affective and cognitive reaction to a company. The reason why increasing importance should be placed on customer experience is because it plays a crucial part in defining customers’ preferences that affect their purchasing decisions and opinions about a specific company. (Gentile et al. 2007, 396–397; Verhoef et al. 2009, 32.)

It emerged clear also from the case study discussions that customer experience was seen as an extremely vast concept that extends to and involves everything the company does. It was said to comprise multiple channels and numerous touch points in addition to extending and applying to various different segments and divisions within the company. As the concept was said to be extensive, the way the majority of the interviewees had approached the matter was to consider the concept as a journey that involves numerous touch points and different segments during the time a customer does business with the company, which together constitute the overall experience for the customer. The extent and complexity of the concept were said to be something that makes working with the matter very challenging but, at the same time, interesting and rewarding.

Customer experience consists of the product selection surely, that’s what the customers come to buy, and what the experience and satisfaction were to it. Then the personal customer service and surely the store atmosphere, surroundings and all the visual aspects -- and of the brand of course, so it’s not all about the experience but also about the image. (C1)

So, customer experience encompasses the total experience a customer has with a company, including direct and indirect contact, functional and emotional aspects as well
as elements a company can and cannot control (Verhoef et al. 2009, 32). Direct contact concerns the actual functionality of the offering and occurs during purchase, use and service and is initiated by the consumer. However, many customer experiences are a result of an indirect contact with a company, which involves any unplanned encounters with the representatives of a company’s product, services or brands. (Berry & Carbone 2002, 2; Meyer & Schwager 2007, 1–3.) Both direct and indirect contact include elements a company can control, such as retail atmosphere, price and assortment, but also elements out of a company’s reach, such as the purpose of shopping or the influence of others (Verhoef et al. 2009, 32).

A customer contact can happen on various retail channels that differ in regard to the extent of their influence (Verhoef et al. 2009, 32). While a traditional in-store shopping experience is created through the environment and the service offered, internet shopping is restricted to online interactions and the system interface. In-store experiences can be strongly influenced by human contact and the store atmosphere whereas online shopping lacks personal interaction, and the experience is created through other factors such as the ease of use and system interface. (Dawes & Rowley 1998, 354; Meyer & Schwager 2007, 1–3.) Any contact a customer has with a company, whether direct or indirect, online or in-store is embedded with emotions and involves the scents, sights, textures and sounds of the offering as well as the surroundings in which it is offered. Emotional aspects are equally important as functional ones in the creation of customer experience and they work best in a synergy, reinforcing each other. (Berry & Carbone 2002, 2; Meyer & Schwager 2007, 1–3.)

When it came to the case study interviews, it was noted by a majority of the interviewees that as competition is extensive and products similar to each other, the way to stand out from competitors is created through other factors than functional ones. A product is something that needs to be in order as well as working as intended but does not itself result in remarkable competitive advantage or significantly increase customer satisfaction or loyalty. This is because even if the product is as promised but other factors are lacking, customers can be very unsatisfied. Conversely, if other aspects of the experience are superior, it can excuse for negative aspects of the offering and stay positively in customers’ minds for long. As an example, an excellent customer service or communication can excuse for problems with the product or the delivery process and even increase customer satisfaction in the end. Emotional aspects were, therefore, seen more influential for customer experience than functional ones.

*One of our most important tasks is to communicate to customers about the process, so not only that we deliver a product and [service] on time -- but if someone cares and looks after your case, it has a big impact.* (B1)
In reality, even in a situation where things go wrong but you are able to excellently handle the problem, customer satisfaction can be remarkably better than if everything had gone smoothly, so we aim at influencing customers’ feelings. (F1)

To realize the full potential of customer experience, what is needed is an understanding of the differences between customer relationship management (CRM) and customer experience management (CEM) and how employees can contribute to the latter. Often what undermines the potential of a good customer experience is not that it would not be valued, but that individuals are not aware of its difference or of the value it can bring. Understanding the way employees contribute to the experience is another important issue since too often people responsible for specific aspects of customer experience might not have given any real thought to how their actions shape the overall experience. (Berry & Carbone 2002, 1.) As experience data is also relatively ambiguous as well as more difficult and risky to act on, understanding the process is a prerequisite for its effective utilization. So, as depicted in table 1, the difference between CEM and CRM is that customer relationship management describes what an organization knows about an individual customer, such as the history of inquiries and product returns, whereas customer experience management reveals a customer’s subjective thoughts about the company. (Meyer & Schwager 2007, 5.) The central idea of customer experience is to extend the transaction-based view of customer relationship towards a more continuous concept where the value is realized through increased customer satisfaction and, thus, improved customer loyalty (Berry & Carbone 2002, 1, 5; Gentille, Spiller & Noci 2007, 396).

Table 1 CEM versus CRM (modified from Meyer & Schwager 2007, 4)

<table>
<thead>
<tr>
<th></th>
<th>What</th>
<th>When</th>
<th>How monitored</th>
<th>Who uses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CEM</strong></td>
<td>What customers think about a company</td>
<td>At points of customer interaction</td>
<td>Surveys, targeted and observational studies</td>
<td>Business and functional leaders</td>
</tr>
<tr>
<td><strong>CRM</strong></td>
<td>What a company knows about customers</td>
<td>After a recorded customer interaction</td>
<td>Automated tracking of sales, point-of sales data</td>
<td>Customer facing groups such as sales and marketing</td>
</tr>
</tbody>
</table>
When it came to customer experience (see table 1), a common approach in the case study discussions was either that the prevailing idea of customer experience had been a part of the company’s strategy for long but hidden behind different names or that the focus had previously been more on customer service but had later been expanded. The distribution was two to two between these categories and rest did not comment on the matter. For one of the interviewees, curiosity towards the concept was the reason for the initial change as it resulted in an understanding that the offered experience is comprised of far more other factors than customer service only. The idea was then taken upon as different divisions came together and discussed the elements from which the concept is built on in the company. It was said to be a unifying viewpoint within the company as people who previously were not so customer-oriented saw their connection to the concept. For the second company, the change of focus and the concept’s appearance on management’s agenda resulted mostly from the current competitive environment. Customer experience was seen as a way to stand out from competitors in an environment where the organization could not otherwise affect the competitive situation or differentiate through the offered product or service.

We realized that we should not only be improving the offered service but also the broader experience that is comprised of far more other issues than the customer service only. (C1)

An organization’s first step towards improving customer experience and customer satisfaction is to figure out what customers need and expect from an organization. Unveiling customer expectations and preferences requires a comprehensive understanding of every aspect of a customer’s journey, from the expectations before the experience to search, purchase and consumption as well as to after-sale encounters and the assessments customers make afterwards. (Berry & Carbone 2002, 1–2; McColl-Kennedy, Gustafsson, Jaakkola, Klaus, Radnor, Perks & Friman 2015, 432.) This demands that all customer experiences, whether warm or harsh, have to be conjured up, processed and studied. Information about experiences can be collected at touch points, in situations of direct or indirect contact with the representations of an organization’s products, services or brands. Customers can be interviewed, surveyed or observed about their experiences to gain a deeper understanding of the thoughts they are processing during their encounters with the company. It is worth noticing that customer experiences are strongly shaped by former experiences with the company as customers instinctively compare the new experience to the earlier ones and judge it accordingly. Market conditions, competitors, other customers as well as personal situations and general perceptions of market segments, products or services also affect the experience,
either directly and indirectly. (Berry & Carbone 2002, 1–2; Meyer & Schwager 2007, 2–3; Toivonen 2016.)

After unveiling customer expectations and preferences, an organization needs to recognize the set of clues it is sending to customers that make up the experience. The clues are everywhere and involve everything that can be perceived, sensed or recognized by its absence. The product or service for sale, the physical setting and the employees, through their comments, dress and gestures, set out clues that carry messages, suggesting something to a customer. These clues involve functional as well as emotional aspects and can be mechanic or humanic, emitted either by things or by people. Functional aspects concern the actual functionality of the offering and are interpreted by the logical side whereas emotional aspects include issues such as the sounds, sights, smells and textures of the product and address the emotional and irrational side rather than reason. (Berry & Carbone 2002, 1–2.) By understating the extent of the clues together with the expectations and preferences of customers, organizations can organize their set of clues in a way that they meet and exceed customer expectations (Gentille, Spiller & Noci 2007, 396). Understanding the set of clues as an interrelated unity is important for the creation of customer experience since merely one unsuccessful unity with the representations of a company’s products, service or brands is enough to create a negative experience that easily escalates if shared forward (Meyer & Schwager 2007, 2; Toivonen 2016).

In relation to the subject, few of the interviewees commented that one of the reasons for customer experience growing in importance was the increasing transparency of the current global environment and a culture where everything can be reviewed, shared and rated and where increasing importance is placed on the reviews. The ability to give feedback or rate a company’s products or services was commented to be easier as well as more visible and transparent than before, which means negative experiences do not go unnoticed and their influence on a company’s reputation can be significant. Conversely, it was commented that transparency can also be positively rewarding as positive experiences are often shared with the ones around you. However, getting such a reaction was seen to require something out of ordinary as it was said to result from offering customers something extra that positively stands out from the usual service or product offered.

Companies are at a very public position and customers rate services, so if you greatly screw up in something, it is pretty visible immediately. (laughter) (B₁)

If everything goes well, smoothly, you do not necessarily remember it, but if you are offered something extra, there is something nice about the customer contact,
then [the customer] can really remember it for long, he can talk about it on social media, tell about the experience to his friends and so on. (F₁)

However, the way to achieve a good customer experience and improved customer performance does not result only from offering a multiplicity of features, providing plenty of entertainment or being exceedingly creative. The issue is very complex, and a successful company shapes customer experiences by adding value in offerings’ every feature so that even the most routine and weightiest customer experiences become pleasant and efficient. Essential for this is the ability to combine functional and emotional benefits to the offering, which together contribute to building emotional bonds with customers as well as to strengthening customer satisfaction and loyalty. (Berry & Carbone 2002, 1, 5; Meyer & Schwager 2007.) In other words, successful experiences create satisfied and loyal customers that see the brand, service or product incomparable with competition and share their positive experience forward as well as recommend the company actively to others. The ability to create emotional bonds between a company and its customers is essential for competitive advantage since loyalty is extremely difficult for a competitor to copy or sever. (Meyer & Schwager 2007, 1–4; Toivonen 2016.)

When it came to the benefits of customer experience in the case study discussions, a common approach was to see the concept as a way to build the company’s identity and to develop its competitive advantage especially since it was regarded to be very difficult for competitors to copy. It was commented that one of the reasons for customer experience growing in importance was because, nowadays, the way to stand out from competitors is achieved through other factors than the product itself. A product was said to be something that needs to be in order as well as working as intended whereas being able to stay relevant and positively in customers’ minds is achieved through the overall experience. Investing in customer experience was also said to bring other benefits for the organization such as increased sales and revenue as good customer experience results in loyal customers who are committed to and willing to invest in the company by buying repetitively or even exclusively from the company.

The product is not the greatest, most magnificent thing anymore but it is something that needs to be in order, and the way to stand out is achieved through customer experience. (B₁)

In our industry, [supply] is very similar -- therefore, customer experience is seen as a way to stand out and bring forward the company’s identity, it is seen as a big competitive advantage at our company nowadays, it is something that is way more difficult to copy. (F₁)
A good customer experience results in customers buying more, being willing to pay more, buying more frequently and becoming loyal towards the chain slash brand. (E1)

Overall, delivering a good customer experience requires a close-loop process where all of the functions within an organization focus on delivering a good experience and where the focus of management is on ensuring that the offered product and service keep the conceptions and clues in balance and connected to the bottom line (Meyer & Schwager 2007, 1–4). To carry out such a strategy, companies must have a comprehensive understanding of every aspect of a customer’s journey, recognize the set of clues they are sending to customers throughout this process as well as understand how separate decisions affect and shape the customer experience. As a result, the concept contributes to the company’s competitive advantage by improving customers’ overall satisfaction and by increasing the added value. (Berry & Carbone 2002, 1, 5; Meyer & Schwager 2007, 1–4.)

3.2.2 Past, present and potential patterns

When it comes to customer experience information, there are three distinct patterns that require monitoring, each with its own level, pace and way of data collection. Depending on the issues the company wants to focus on, it can decide to monitor past, present or potential patterns or their combination. Each of the patterns has its own techniques for monitoring, gathering and analyzing data that can be collected on different touch points and differ in regard to information purpose, scope and analysis. (Berry & Carbone 2002, 1.) The objective of each pattern is to unveil the various thoughts, emotions and perceptions customers are processing during their encounters with a company that determine their preferences, guide their purchasing decisions as well influence their evaluations of the company itself (Gentile et al. 2007, 396–397; McColl-Kennedy et al. 2015, 432). The patterns together with their characteristics are depicted in table 2.
### Table 2  
**Patterns of interaction (modified from Meyer & Schwager 2007, 6)**

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Purpose</th>
<th>Collection frequency and scope</th>
<th>Collection and analysis methodology (e.g.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Past patterns</strong></td>
<td>Captures a recent experience</td>
<td>To improve transactional experiences</td>
<td>Focused, short-cycle, timed data collection</td>
</tr>
<tr>
<td><strong>Persistent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Present patterns</strong></td>
<td>Tracks current relationships</td>
<td>To have a consistent yet deeper watch on relationships</td>
<td>Targeted, observational studies and regularly scheduled formats</td>
</tr>
<tr>
<td><strong>Periodic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Potential patterns</strong></td>
<td>Identifies future opportunities</td>
<td>To unveil and test future prospects</td>
<td>One-off, special purpose driven</td>
</tr>
<tr>
<td><strong>Pulsed</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in table 2, organizations can monitor customer experience in various ways. When organizations monitor transactions that occur in extensive amounts and are done by individual customers, they are dealing with *past patterns*. Past patterns capture recent transactions and focus on determining the quality of the experience directly after it has occurred. On-going feedback systems and surveys triggered by the completion of a transaction are tools most often used for collecting data on past patterns, but customers can also be contacted through user forums or in social media. (Meyer & Schwager 2007, 6–7.) One of the most popular systems to rate customer satisfaction is a net promoter survey that is based on a customer’s likelihood to recommend the company to others. Respondents that rate the firm 6 or lower are subtracted from the proportion of respondents that rated the firm 9 or 10 and the difference describes the firm’s net promoter score (NPS). By monitoring past patterns, companies receive a persistent and uninterrupted flow of information that they can interpret within functions, disseminate internally and forward to or by general managers if necessary. The analyzed information is primarily intended for improving transactional experiences, tracking goals and for assessing the influence of new initiatives, but can also be used in
identifying emerging issues. (Keiningham, Cooil, Andreassen & Aksoy 2007, 40; Meyer & Schwager 2007, 6–7.)

The case study discussions revealed that the methods used to capture past patterns were to large extent very similar and only executed in a slightly different manner. The two main methods for measuring past patterns were customer feedback systems that followed directly the experience itself and methods that focused on registering and tracking customer transactions. Customer feedback systems were either based on NPS methodology or executed through texts, calls or online questionnaires on the quality of the experience in order to continuously know what is happening at each of the touch points. Additionally, tracking customer purchase behavior was regarded very valuable in being able to understand customers’ behavior more comprehensively especially when it came to the connection between customers’ thoughts and actions. Overall, both methods were highlighted for their fast reaction time, but the information was also used as a basis for a more profound analysis of customer needs.

Promoter score is our main indicator just like sales or profitability -- and it is something that we collect really regularly, continuously actually -- it is kind of like our bible. (D1)

[data on customer purchase behaviour] is a very important part of customer insight, in being able to understand how a customer’s experience converts into turnover. (A1)

Present patterns monitor the state of customer relationships and customer experiences while also having an eye towards identifying future opportunities. They look forward as well as backwards while picturing a continuing relationship with a customer and, thus, are more than simple assessments of the purpose or success of a recent encounter. User experience and relationship studies, surveys and direct contact are most commonly used for acquiring this type of knowledge. The low price and easy accessibility are the reasons why surveys are the clear favorite for analyzing past and present patterns, but they should be complemented with observational studies as they can yield insights surveys cannot. The issues present patterns want to unveil extend from new features customers might desire to what they see as challenges to a company’s competitiveness, and the patterns that come up suggest further areas of research. Given the wide scope of the inquiry, information should be collected periodically at scheduled intervals instead of being solely triggered by a customer initiated transaction. By approaching customers at different touch points at different times, organizations can create a persistent flow of data that is not dependent on the completion of a transaction. Emerging issues are then analyzed and broader trends forwarded to management either
on a strategic or operational level where a more profound analysis of the findings can be realized. (Meyer & Schwager 2007, 6–8.)

The case study discussions revealed that the methods used to capture present patterns involved a variety of issues ranging from methods in common for the majority of the companies to methods only a few interviewees mentioned to be using. Common methods can be grouped into three categories of social media and online behavior, customer service and feedback and mystery shopping based collection techniques. First of all, social media was considered as a very valuable source of information by a majority of the interviewees. Customers’ online behavior was tracked and interpreted continuously to see how customers correspond to digital marketing initiatives and to understand how customers behave and act online. As an example, how much time customers spend on a site or what type of articles they read. The purpose of tracking online behavior was to find out any aberrations, inconsistencies or other interesting issues in customer behavior that might require action or serve as a basis for a deeper analysis.

We constantly interpret what posts customers are interested in and how we are able to get people to visit our site and what creates good engagement -- and in this way, try to estimate the customer’s experience and what it involves. (A1)

As for customer service and feedback, customer service could be contacted and feedback given through chat, email, calls or in-person, and the method was used in rating the overall service. Mystery shopping based information collection techniques were also popular among the case companies, which refers to the use of mystery guests to rate the quality of service. Mystery quests behave and seem as normal customers but are actually well-trained people observing and measuring the quality of the service for the customer. (Hesselink, Iwaarden & Wiele 2004, 9.) The method was regarded as a very good tool in supporting the improvement of customer experience, but the method was not without criticism. On the plus side, mystery shopping was seen to enrich the company’s knowledge of its internal processes and of issues that might require more attention. However, the negative comments were related to the same topic that mystery shopping mostly ensured that the company’s internal processes were working as intended.

[mystery shopping] keeps our company awake and probably at least enriches the so-called ongoing research. (D1)

The criticism was indeed related to the fact that this is not a real customer, this is something previously arranged -- and that a real customer does not know
anything about our internal targets or process definitions -- so although we did really well in mystery shopping, it did not necessarily mean the offered experience was good, just that our process was working. (C₁)

As for the less common methods, benchmarking, customer events and in-person interviews were methods only one or a few companies mentioned to be using. Tracking how customers rate and react to competitors’ activities and how a company’s own activities correspond to those of competition was considered as a valuable source for information since it was noted that it is not necessarily customer experience information driving the change but what competitors do. Customer events served as a significant source of information for one of the case companies as it was an opportunity for the company’s employees to meet their customers face-to-face and to get immediate feedback. Finally, a few of the interviewees emphasized the importance of in-person interviews that were conducted in store and right after a purchase in order to chart the quality of the service just as it had occurred and to receive an immediate reaction from the customer. As also indicated by the study of Holbrook, Green and Krosnick (2003), conducting face-to-face interviews can be very beneficial as customers tend to be more cooperative as well as more likely to express their satisfaction than on phone or online surveys, as an example.

We were able to access the h-hour where emotions and the overall experience from the purchase were still present. (C₁)

It’s also customer experience information how customers have rated [a competitor] and us on the same issues and that we are able to compare -- so it is not necessarily the customer experience resulting in a change but what a competitor does. (F₁)

While collecting data on past and present pattern, sometimes customers’ failure to react or indifference to give feedback can be just as telling. For this reason, companies must be alert for areas their data collection methods might not address or are not able to address while evaluating the received results and incorporate the impact of missing data. (Meyer & Schwager 2007, 7.) The issue was visible in a few of the case companies but emerged in a slightly different way. The problem was either that a specific data collection method seemed to reach only certain types of customers, leaving a part of the company’s customer base unknown, or that a data collection method was unable to reach a specific customer segment due to issues the company could not control. The way to approach the issue varied as in the first case, the segment was identified as indifferent towards the company or uninterested to give feedback whereas in the second
case, the problem was more related to the current feedback system. In both cases, the inability to reach a specific customer segment prevented the companies from gaining a comprehensive understanding of their customer base and from improving the segment’s satisfaction and overall experience with the company. What was needed were said to be new ways of approaching and engaging with the segment as well as an ability to create a general picture of the segment by linking information from other sources so the needs of the customers could be better understood.

They are simply not interested, so the employee never hears their opinion -- and they are the ones we often most easily lose, the ones who do not give feedback, because they do not necessarily have any kind of relationship with us. They really do not care. ’Do whatever you want’ -- they easily disappear from sight. (A₁)

They are not in the customer system and do not have any contact information -- so we are not able to get any kind of contact with the group, which means there are a lot [of customers] of which we do not know enough. (F₁)

Additionally, it should be avoided that a company’s information collection techniques become a negative aspect of the customer experience itself. Surveys and other questionnaires should be kept brief enough and companies should consider when, where and how often is appropriate to ask customers for feedback to avoid annoying customers to the extent that a negative experience is created. For instance, asking questions on issues the company already has a record of, such as recent purchases, is unnecessary and to be avoided. (Meyer & Schwager 2007, 8.) The issue was also highlighted by a few of the interviewees as it was commented that being sensitive towards customers and considerate towards their willingness to give feedback is important to remember. One of the interviewees also noted that it could be better if the company was able to observe the customers without having to ask them everything about their experience, in which case questions could be reduced and the problem avoided to some extent. The issue was also connected to information reliability as one of the interviewees commented that extensive, frequent and long questionnaires might create a situation in which the respondent loses his motivation and gives up on answering all of the questions truthfully, which makes it difficult to know if the respondent actually means what he says and acts on it.

There is always the risk of being annoying that ’ahh, again they ask me something’, if you do a lot of business with [us], so you kind of have to be
sensitive in a sense that the customer experience does not decrease from asking all sorts of questions. (laughter) (B₁)

It is no use making very extensive and long customer surveys because if you have answered surveys yourself, it makes you feel like, ‘whatever’, and then you simply tick some random boxes. (C₁)

Lastly, potential patterns focus on unveiling and testing future opportunities that usually emerge from interpretations of customer data or from observations of customer behavior. The collection methodology is highly focused and led by individual customers and their unique problems. It includes existing knowledge of customer relationships and is influenced by the findings of past and present patterns. The collection strategies are usually unscheduled or pulsed, focusing exclusively on specific customer segments or on particular customers. Observational studies in combination with personal, in-depth interviews are techniques most suitable for monitoring potential patterns but can also be utilized for analyzing present ones. (Meyer & Schwager 2007, 7.) One example is documenting customer behavior as it allows an organization to observe actual experiences as they unfold and analyze the gathered data by focusing on expressions, gestures and body language to understand customers’ emotions in various situations throughout the interaction. Documentation should be combined with personal interviews to achieve an in-depth understanding of the experience by revealing what people on both sides of transactions feel about specific aspects of the customer service and of the emotional associations that go along with it. The findings are then analyzed and forwarded to strategic and operational forums for a deeper analysis if necessary. (Berry & Carbone 2002, 1–2; Meyer & Schwager 2007, 7.)

Information on potential patterns and related collection techniques was quite limited in the study interviews as it was mostly commented that by monitoring past and present patterns companies identify issues and topics that require closer attention and are to be analyzed further. It was also noted that more tailored collection techniques could provide the company with an even more profound understanding of the fundamental reasons behind customer behavior but no such methods were currently in use. However, one method majority of the interviewees mentioned as important, valuable and as something the companies could utilize even more was engagement marking. The technique was mostly used in combination with launching a new product or service where customers were asked to engage in a discussion in relation to features customers would see valuable or relevant, and the service or product was designed based on these discussions. The method was seen as a concrete, valuable and positive way to gather information as customers were able to see their influence on an actual product or service. The interviewees underlined that the reason for using customer engagement in
combination with already a half-designed idea as oppose to asking customer directly for what they want was that customers are not usually able to picture what they need but are able to produce information on features they see valuable.

*We interview people about issues they would consider... okay you should never directly ask a customer what they want because then they want the faster horse, but information on topics such as 'would this be something you would like, would this be useful, would this have a some sort of solution to your problem'.* (E₁)

*We ask customers for feedback whether they would be interested in this or that kind of product -- so we sort of engage the customers in the discussion and I believe it brings sort of good, positive conversation to the entity.* (D₁)

Finally, experience data is an asset that should be managed in a systematic way. Information collection should be systematic and involve various methods in order to gather data on numerous channels and on different touch points continuously, systematically and throughout all interactions. A comprehensive understanding of the customer journey as well systematic data collection methods are a prerequisite for a good experience as customers’ thoughts and opinions of the experience can change over time, sometimes very frequently and unexpectedly. (McColl-Kennedy et al. 2015, 432.) Therefore, organizations need to understand how each of their actions resonates with their customers as well as consider the experience as an end-to-end journey instead of focusing solely on maximizing satisfaction on individual touch points as it can create a narrow view and divert attention from the bigger picture. (Rawson et al. 2013, 3; McColl-Kennedy et al. 2015, 432.)

Information emerging from the case study interviews was also convergent with the idea as it was commented by few of the interviewees that in addition to focusing on the results of a specific data collection method, seeing the customer journey as a whole is important to consider. This was said to be because often the overall satisfaction to an offered service or product and the final mindset customer is left with is affected by many other factors than the one he initially gave feedback of. One of the interviewees also pointed out that in addition to measuring customer experience comprehensively and continuously throughout every touch point, data collection methods should be checked periodically and updated in relation to a company’s development stage so they correspond the state of the company and produce the maximum utility for the customers and the company itself.
The purpose of the touch points surveys is to understand the total satisfaction to the service throughout the customer journey -- because various different aspects constitute the service and they together create the overall experience in relation to it. (B₁)

But [the method] served its purpose and we then discussed -- what should we do, should we put an end to it, replace it by some other or continue with it, but the opinion of the store was also the same that the method might have outlived its purpose and we might not be able to develop further with it. (C₁)

Lastly, when the interviewees were asked to prioritize their sources in relation to past, present and potential patterns, the results were quite varying. Each case company prioritized a different technique for acquiring the information, but a common pattern among the replies was that an increasing importance should be placed on methods that allowed a fast and immediate reaction. Therefore, methods that enabled a continuous and real-time monitoring of customer behavior, such as social media platforms and ongoing surveys, were emphasized over irregular, extensive and heavier data collection methods. One reason for the prioritization was being able to react fast and fix a problem before it escalates, which was considered very important in the current, increasingly transparent environment. In fact, it is often emphasized that especially in fast moving environments the ability to make a quick decision is better than a delayed decision, which is why immediate and up-to-date indicators should be emphasized over statistical trends and forecasts (Johnson, Scholes & Whittington 2008, 573). Additionally, the importance of online behavior was highlighted in the discussions since it antecedes and explains in-store behavior. As making a decision to purchase or even enter a store is often preceded by a great amount of online activity, analyzing online behavior helps to understand customers’ actions more comprehensively.

Even though the annual survey is important, immediate feedback and the ability to react to it is clearly something we are going to enhance -- we aim at being able to turn an unsatisfied customer immediately to satisfied, if possible, but at least show that we care that he was unsatisfied. (B₁)

The store is of course [important], the human contacts there, but the thing is that the role of the web is only increasing because if the product is not there, you do not even go to the store. (E₁)

However, the interviewees generally agreed that transactional and continuous information collection techniques as well as more extensive, periodical or annual
methods are both needed to get a holistic view on customer experience since they serve a different purpose. Annual and periodical surveys provide a more wide understanding of the brand image and how the company is doing in relation to its competitors and customers whereas continuous and transactional collection techniques generate a real-time understanding of customer behavior, perceptions and satisfaction and allow an immediate reaction if necessary. It can be concluded that issues that emerge from analyzing past, present or potential patterns suggest new areas of research which are then to be assessed, forwarded and transformed into necessary improvements. The improvements should be then monitored in order to assess the success of the implementation and issues emerging from the analysis start a new cycle in the process. The process is, therefore, cyclic and reinforces itself over time as new information improves the experience by creating products and services that better meet and exceed customer expectations. (Berry & Carbone 2002, 1–2; Meyer & Schwager 2007, 7.)

3.3 Business intelligence and related concepts

The concept of business intelligence is often described to encompass the technologies, processes and equipment needed to turn data into information, information into knowledge and knowledge into actionable intelligence that drives the competitive advantage of the organization (Powell 1996, 3; Loshin 2013, 7). The concept is far from unambiguous but most of the definitions refer either to the refined information, knowledge and intelligence about the business environment and the organization’s relation to it, or to the process that creates ideas, insights and suggestions for the management, team of professionals and decision makers overall (Sawka 1996, 49; Pirttimäki 2007, 57).

In the following chapters, the concept of business intelligence will be introduced more precisely. Whereas the focus of the first chapter is on explaining what is meant by business intelligence and what sort of characteristics the concept involves, the focus of the second chapter is on introducing the business intelligence process and its different phases in detail. All in all, the chapters provide a comprehensive outlook on the matter and help to comprehend the issues that need to be taken into consideration when gathering, processing and utilizing information during a business intelligence process.

3.3.1 What is meant by business intelligence?

Typically, business intelligence is described as an analytic process in which raw data from the business environment is systematically gathered, analyzed and then, through
various processes and tools, converted into relevant and usable information to support decision making. It is a process that combines various sources of data and information, whether structured or unstructured, external or internal, published or from human sources, into actionable and valuable intelligence. The objective of the process is to improve the topicality and quality of the decision making process, hence to facilitate and support managerial work. (Tyson 1986, 9; Negash 2004, 178; Loshin 2013, 7.) Business intelligence is typically seen more as a strategic concept, used to enrich information utilization and to produce strategic knowledge of the external environment in relation to emerging trends, potential patterns and competitive threats (Gilad & Gilad 1986, 53). The strategic role of business intelligence is emphasized since being able to make long-term decisions, manage emerging events and direct the course of a company, extensive and enriched information of the external environment and related changes is required (Thierauf 2001, xi–xii, 10–11, 66; Ross et al. 2012, 3).

So, as shown in figure 1, business intelligence is a process that pulls and combines information from various external and internal sources (Negash 2004, 178–179). From the external point of view, information is typically collected on issues such as competition, customers and their needs, partners, conditions in the industry and general technological, cultural and economic trends (Collins 1997, 4; Golfarelli, Rizzi & Cella 2004, 1). Whereas external information comes from outside an organization, internal information originates within an organization and relates closely to a company’s personnel, finances and production and includes organization’s resources, weaknesses, capabilities and processes (Frishammar 2003, 319; Pirittimäki 2007, 65).

Figure 1 Information sources for business intelligence (Salo 2004, according to Pirittimäki 2007, 66)
While the objective of business intelligence is to gain a better understanding of the current competitive environment and of the present state of the organization (see figure 1), evaluating future situations and how they are likely to evolve is also an essential part of business intelligence. Information on issues such as new market trends, market developments and the effects of competition are, therefore, very important for organizational competitiveness in addition to being an essential part of strategic decision making. (Negash & Gray 2003, 3193; Golfarelli et al. 2004, 1.) Overall, information flows companies need to consider are numerous and as the volume, velocity and variety of data sources only increase in the future, essential for business intelligence is the ability to effectively store, integrate and manage the collected data (Steinberg 2000, 3).

Big data and data fusion are concepts often used to handle large volumes of data. Whereas big data refers to analyzing extensive amounts of data computationally to reveal trends and patterns and to make better predictions of the information, data fusion refers to the ability to integrate data from various sources to have a greater and more accurate understanding of different entities. (Steinberg 2000, 3; McAfee & Brynjolfsson 2012, 62–63.) When it came to the case study discussions, the ability to integrate data emerged as a very important issue. While the concept was seen very valuable and desired by all, few of the interviewees commented that information was still mostly scattered on various systems as oppose to one centralized one, which meant data integration was difficult and had to be done also manually. What was needed was said to be one centralized system processing the information to find cause-and-effect relationships and to make data integration easier. However, due to limited time and resources, the system’s implementation was seen very challenging. It was also commented that having an effective system was not sufficient on its own but what was also needed were competent people processing the information who are involved in the process and capable of interpreting and drawing conclusions from the data.

What plays a key role is having a sort of 360-view, so one database that assists in making decisions, that is the next significant phase in our business -- but it costs, it takes time, it requires patience. (F₁)

[data integration] seems to be a problem in many organizations already from a system perspective -- as one type of data goes here and one there, so how are you able to build it in a way that -- management is able to draw conclusions from it, that is something that usually requires a lot of time. (A₁)

After identifying the information sources, the collected information can be quantitative or qualitative, structured or unstructured and acquired by a variety of methods. The majority of the information needed is publicly available and includes
sources such as online databases, surveys, journals, financial reports, media and special interest groups like academics and trade associations. It seems as the difficulty nowadays is not the lack of information but its abundance, and how to separate relevant from unnecessary. Ensuring information validity and reliability is, therefore, an essential part of business intelligence since incomplete and inaccurate information can jeopardize the entire effort of the process and cause an organization to respond inappropriately to a competitive event. (Imhoff 2003, 36–37; Pirttimäki 2007, 65.) Organizations should also adhere to certain cautions when collecting the required information. The whole process needs to rely on legal and ethical information collection and to a careful analysis of that information in order to rule out inferences and judgements. Any illegal techniques or techniques that might cause the organization to become an object of antitrust or legal investigation, like discussion market intentions with a competitor, should be avoided. The demand for business espionage should in any way be unnecessary since most of the information required can be found legally from public sources. (Sawka 1996, 49–50; Cook & Cook 2000, 8.)

Information reliability emerged as a big theme from the case study discussions as ensuring information reliability was regarded very important but, at the same time, somewhat problematic. It was commented that customers’ diversity and differences in personality can influence the way questionnaires are interpreted or feedback given, which can falsify results and lead to misleading statistics. People can perceive questions in different ways as well as in ways the company may not have considered while some people might simply not give feedback at all. Additionally, the way feedback is collected and with what frequency should be considered as extensive and long questionnaires can lead to misleading or incorrect statistics if the respondent loses his motivation and gives up on answering them truthfully. Mood changes were also seen to interfere with information reliability as customers’ mindsets and opinions can change frequently and affect the way feedback is given or the experience felt and result in a situation where customers say one thing but do another. For all of these reasons, it was said to be very difficult to know when information is correct, truthful and truly something on the basis which needs to react.

*It had been interviewed how feedback is given -- you know with respect to these smiley faces of smile, lesser smile, pursed and very pursed face, so this grandma had said that ‘she always replies with the face the customer service person had’ (laughter) -- so basically you have to think how data is collected, from where it is collected and what does it mean. (E4)*

*I put a lot of thought on when can we truly rely on customer information, that this is how the customer really thinks and acts on the basis of it. And as opinions*
also change, you are never able to get absolute, 100 percent assurance that this is definitely the case, but it is always the best knowledge on the basis of which need to be reacted. (C1)

It was generally agreed on that to ensure information reliability, information should be collected systematically, throughout all touch points while focusing on the same issues in order to spot emerging trends and correlations more easily. Effective planning is, indeed, very important for business intelligence as information should be gathered, analyzed and utilized systematically to effectively support decision making (Collins 1997, 4; Pirttimäki 2007, 50). In the same way, it was commented by a majority of the interviewees that questions should be appropriate for the source, the way they are presented should be considered, and the received information should be analyzed critically as oppose to trusting it without further analysis. Information should also be considered from different aspects in relation to what has been asked, in which channels, how the questions have been presented and what should be considered as the main indicators. It was also agreed on that the impact of missing data should be taken into account as some customers’ opinions might not be presented due to indifference to give feedback or inability to reach them, as an example.

Spontaneous feedback is more dependent on a customer, whether he gives feedback or not -- in which case forming a picture of the data can be a bit challenging, it requires both expertise and data integration -- and of course you must filter it in a different way, that this is not necessarily a plain fact and how others think as well. (F1)

You have to keep in mind that all data is mainly trending, so it has to be strongly interpreted and thought over in regard to what it means -- and of course you have to take into account that missing data also implies something, so it has to be considered from various perspectives. (E1)

While the information collection covers both external and internal sources, the importance of external information is often emphasized in business intelligence (Pirttimäki 2007, 58, 60). The reasons given for this are usually related to the strategic nature of the concept and to a viewpoint that in the contemporary business, it is the external influences that determine a company’s success and only through good intelligence can these influences be tackled and understood. The main focus of BI should, therefore, be on anticipating market behaviour and on predicting upcoming trends by monitoring developments in the external environment. (Sawka 1996, 47–48, 50–51; Miller 2000, 13.) Conversely, internal information is typically required more for controlling current practises and is valued less in BI since it can only describe the
current state of an organization but cannot determine or anticipate the future direction (Xu & Kaye 1995, 22–23). Internal information should not, however, be disregarded in BI either as strategic decisions are strongly influenced by the resources and capabilities within an organization (Barndt 1994, 22). According to Xu and Kaye (1995, 22–23), the optimal state of the balance between external monitoring and internal checking should be somewhere at 80 : 20. With the integration of external and internal information, an organization has a more holistic perspective of its capabilities and the external environment and can adapt more easily to upcoming changes (Pirttimäki 2007, 58, 60).

The main purpose of business intelligence is to help an organization to adjust to the changing environment by providing managers and decision makers with a description of the organization’s current competitive situation, how it is likely to evolve and what is its most likely future environment (Herring 1992, 58–59). As a result, organizations are provided with more time in which to react and can develop their competitive position by avoiding surprises and by identifying opportunities and threats more effectively. Business intelligence can also be utilized in identifying and assessing own weaknesses and vulnerabilities, allowing an organization to be proactive and well prepared if confronted by the competition. An essential role for business intelligence is also to identify and challenge prevailing economic, political and technological assumptions that affect an organization’s strategic thinking but are often implicit and go unnoticed, meaning managers are not aware they are basing decisions on them. All in all, business intelligence enhances the long-term viability of an organization by improving proactive decision making and strategy creation through enriched information of the external business environment and of the company itself. (Herring 1992, 58–59; Collins 1997, 19.)

### 3.3.2 Business intelligence process

Business intelligence is a process which purpose is to convert raw data into a form that that decision makers can utilize in making important strategic decisions (Gilad & Gilad 1986, 53). Powell (1996, 5–6) calls this refinement process a business intelligence value chain where the input is raw data and the output is actionable knowledge and intelligence. The transformation is done during a business intelligence process by adding value to the collected data and information and creating knowledge and intelligence as a result. New insights and understandings are created in the process, which are then used in modifying a company’s behavior towards a more proactive approach in order to identify and assess possible changes in the external environment. A majority of the BI process models presented in the academic literature are quite similar to each other and differ mostly in regard to the number of phases, information sources
and the methods of gathering, analyzing and sorting information. Typically, a BI process is depicted as a cyclical, continuous and systematic method of action that a company can use in gathering, evaluating, analyzing, storing and disseminating relevant business information. (Pirttimäki 2007, 72–74, 77.)

The model used in this study is a combination of the models of Timothy Powell (1996), Tamar Gilad and Benjamin Gilad (1985) and Virpi Pirttimäki’s (2007), and was created by the researcher to be more corresspective to the study. The model is based on the BI process model of Gilad and Gilad’s, but has been expanded to include also the identification and utilization phases of Pirttimäki’s BI model as the researcher felt the phases were important for the process but were not clearly illustrated in the model of Gilad and Gilad’s. The model also includes Powell’s value chain that describes how raw data converts into actionable intelligence as the researcher saw it complemented the overall model in addition to being important for the purpose of the research. By combining the three models, the new model is able to clearly illustrate the different phases of data modification in regard to data, information, knowledge and intelligence as well as depicts the different phases of business intelligence that are needed to turn one into another. The researcher named the model as the value chain based BI process model. The model is pictured in figure 2.

Figure 2  Value chain based BI process model (modified from Gilad & Gilad 1985, 69; Powell 1996, 6; Pirttimäki 2007, 74)
When it comes to the model depicted in figure 2, the first phase of the process is to determine decision makers’ information needs by focusing on key themes and questions in relation to current issues, problems and trends. The *identification* phase is very important for the success of the overall process since it helps to reduce an extensive amount of material to a relevant and valuable set of information. (Gilad & Gilad 1986, 53; Pirttimäki 2007, 75.) Specifying information needs also guarantees that the process is focused on gathering and analyzing information on which the management has a right to act due to some strategic objective and ensures they are fully involved in the process. This is a prerequisite for an effective process since business intelligence systems are created for the needs of the managers and the lack of support from the top level during the initial phase is one of the main reasons a BI process fails. (Fuld 1991, 12–17; Sawka 1996, 48, 50–51.) Information provided on the case study interviews with respect to the identification phase was not so abundant as the discussion stayed more on a general level in regard to how information was utilized in the organization altogether. However, there were a few examples of a situation in which an interest towards an emerging trend or a need to solve in which direction a product or a service should be developed in the future was the reason for the process to start. The purpose of the BI process was then to produce information that would help to guide the direction of the development process.

*We know that these are now the issues we have to get developed in online service, as an example, which basically helps us to prioritize particular development paths and specific questions we need to resolve.* (E1)

The process input consists of data from various human and print sources in the external environment. Effective planning is a key to a successful information *collection*, which means the process should start with identifying the best possible sources for the information and how and where these sources can be contacted. A list of questions or topics should be prepared in advance, which needs to be suitable for the intended source and the answers then efficiently coupled with information from other sources to provide valuable insights into main business concerns. The aim is to discover relevant and reliable information, synthesize it to weed out redundant and summarize it for the end users. (Gilad & Gilad 1986, 53; Sawka 1996, 48–50.) The gathered information can be structured or unstructured, qualitative or quantitative, thus, gathered either formally through reports and papers or informally through beliefs, attitudes and stories. Even though the main focus of BI is on external issues, a real understanding of the external environment can only be achieved if the information is combined with the existing knowledge and experiences within the organization. The information is then forwarded to a centralized data warehouse from where it is later transferred into specific data marts according to decision makers’ information needs and the intended application of the
data in order to facilitate the use of need-specific information. (Pirttimäki 2007, 75.) The empiric material in regard to information collection is assessed in the chapter 3.2.2.

During the processing phase, information is used to put together a general picture of the situation (Gilad & Gilad 1986, 53). Techniques like data mining, reporting and online analytical processing (OLAP) can be used for browsing large volumes of structured data whereas the analysis of unstructured information relies on human interpretations and cannot be directly assessed by computing (Uusitalo 1995, 79; Baars & Kemper 2008, 132). The purpose of the processing phase is to understand ongoing events and signals in the external environment from the viewpoint of their significance to the decision makers and the business overall by evaluating, analyzing and interpreting the gathered information (Pirttimäki 2007, 75). Analysis increases the value of the collected data by transforming it into actionable knowledge in a process where decisions and conclusions are first made based on the results, then communicated to a group of professionals and decision makers who can again analyze and synthesize the received information and the refinement process is completed when the processed information is disseminated to the organization (Uusitalo 1995, 79; Sawka 1996, 49).

Results in regard to the information processing phase were quite varying in the study interviews and it was not only due to differences in organizational structures or in the size of the case companies but also dependent on the nature of the information at hand. First of all, the majority of the larger case companies had an assigned team focusing exclusively on analyzing customer experience and customer behavior. The team was often responsible for the initial analysis of the results gained from heavy and extensive collection techniques or for periodically synthesizing and summarizing information from various sources. Results were then forwarded to the management where they were discussed in-depth and on different levels, such as local, regional or store level, in order to spot emerging issues or notable trends. Conversely, smaller case companies or companies with a lower hierarchy interpreted information directly within management or specific departments. The processing phase was otherwise pretty similar. The results of transactional methods were followed periodically or even continuously to spot changes or notable trends in their development. When it came to more extensive or irregular collection methods, the main findings were brought up and the way they could be utilized in improving products and services were discussed together. Information was also monitored on different levels, e.g. on local or store levels.

_The results are then [discussed] within our management group and very much the discussion centers on the themes that clearly cause dissatisfaction and on the themes that arise as our strengths._ (B1)
[the result] and its development are discussed monthly within the organization and open comments are brought forward to explain why it has gone either up or down -- so what are the explanatory issues. (D₁)

The dissemination phase is about communicating what has been learnt during the processing phase to a group of decision makers who have expressed the need for the information in the first place and have the authority and ability to act on it. In other words, dissemination ensures that the right people have the right information at the right time. The dissemination phase is very important for the success of the whole process as delivering information too late for a decision maker to act on it will kill the process overnight. (Sawka 1996, 49; Negash 2004, 178.) In Colin Powell’s words, ‘if you can tell me with 100 percent certainty that we’re going to be bombed, it’s too late for me to do anything about it’ (Sawka 1996, 50). Dissemination can be done in the form of a report or a newsletter, in formal meetings or through an intranet database or a portal (Pirttimäki 2007, 75). A common pattern among the case companies was that after the initial analysis, the results were forwarded to different levels and to individuals who worked with the matter so the information could be utilized where it is most needed and valued. It was seen important by majority of the interviewees that information needed in managing day-to-day operations but that does not require extensive procedures was communicated quickly within the organization to allow a fast reaction time whereas strategic issues like emerging trends or other critical issues that could result in changes in the organization were discussed further on the management level.

The goal is that everyone who works directly with customer service would receive as real-time feedback as possible -- because if the information connects directly to what you have done, what the recent job was, then it matters. (B₁)

In the fifth phase, the loop between the ones who gather and interpret information and the ones who utilize the processed information in decision making closes. The purpose of the utilization phase is to allow the end-users to access the information as quickly and effortlessly as possible for the decision making to be efficient. Information storage should, therefore, be relatively easy to use but also secure enough to allow a quick retrieval of information. This phase measures the effectiveness of the previous ones since the utilization cannot be successful if one or more of the previous phases of the cycle have failed. (Gilad & Gilad 1986, 53; Pirttimäki 2007, 76.) It was a common pattern among the interviews that after the information had been disseminated to different levels and individuals, it was utilized within the levels in thinking what should be done based on the results, or what can I do based on the results. On an individual level, it often referred to development discussions in regard to how customer contact
can be improved based on the results or what quick and practical solutions can be introduced. On a management level, information led to additional, in-depth analysis. Actions on the gathered information led to, therefore, varied according to its nature but it was generally agreed on that due to the fast-paced nature of the current business environment, information that allows a short reaction time should be prioritized and reacted to quickly. The ability to make swift decisions was seen very important for customer experience also because not all improvements need to be extensive to greatly increase customer satisfaction as already small changes can have a large impact.

[the results] are then utilized in a sort of general analysis, but their main purpose is to provide the corresponding unit with quick ways to react to customer feedback and fix operations. (B₁)

You have to also remember sort of quick fixes that can have a large impact while being fast and quick to implement, so some information is utilized also in small decisions. (F₁)

Information access and usage are generally regarded very important for business performance, which requires an interrupted flow of information within the organization (Davenport & Prusak 1992, 53). When it came to effective utilization, access to data was indeed seen very valuable by a majority of the interviewees, if not already during the processing phase but latest in the form of the results. The way this was achieved varied according to the size and structures of the companies as some were able to bring information close to the one whose work it concerned already on the processing phase whereas majority forwarded it at the stage when the initial processing was already done. Overall, having information accessible to the ones whose work it related and who were able to act on the received information was seen essential for the information to result in effective and concrete actions. Additionally, one of the interviewees mentioned that just as it was important for employees to be able to access data relevant to them, it was important that management was able to access data not obtainable with their collection techniques, which mostly meant information in employees’ minds such as observations of customer behavior. Additionally, it was commented that the ability to stay close to the surface-level is important so you are able to hear the direct and immediate feedback and not only an assembled report presented to the management. In this way, the company is able to have a more comprehensive understanding of the customer journey.

We want that -- [data] is not behind some difficult user interface but can be interpreted and utilized in decision making exactly where the point of sale is, so on a commercial level, not somewhere here. (E₁)
We want to remind that we should all, regardless of the role, be close to the customer surface -- instead of thinking that we are here and customers there but boldly close to the customer whatever the channel may be. \(D_1\)

The BI process cycle closes when a decision based on the communicated knowledge and actionable intelligence has been made, executed, results assessed and evaluated and possible defects and areas for development communicated. The outputs of the process also serve as an input for a new BI-cycle, which is why non-stop feedback throughout the process is essential in optimizing each of the cycle’s phases. (Pirttimäki 2007, 76.) When it came to the case study discussions, the effective functioning of the BI process was regarded very important as it was generally agreed that the processes and systems in relation to data collection, maintenance, processing, dissemination and analysis need to be in place and in order before an information can result in effective actions that bring value to the organization. What this meant was having clear and functional data collection systems as well as the right people processing the right information in the right place who are satisfied with their work and involved in the process. The reason why having well-designed systems and processes were emphasized was due to the various gatekeepers along the way that need to be considered when collecting and processing information and because only when processes in regard to information storage, collection, processing and responsibility are clear, can organization react to information both quickly and effectively.

When it comes to customer experience, at least as important to data are the processes that you build around it, so getting people involved in the process, how does the process work, who processes what and what then, so the process development is actually a really essential part of the value creation. \(A_1\)

The processes need to be in order, the systems need to be in order, you must have the resources as well as the right people in the right place -- when you have the structures clear, then can think about the bottlenecks and the issues that do not work, and solve the problem. \(F_1\)

When it comes to the overall process, it is important to notice that in addition to producing general information and knowledge to the decision makers, the purpose of the business intelligence process is to produce company-specific solutions that allow information to be utilized efficiently as well as help the organization to notice gradual changes in the environment and identify its strengths and weaknesses in comparison to competition (Pollard 1999; Pirttimäki 2007, 76). Overall, the value of business intelligence is created from “the processes for delivering actionable knowledge to the
end users, the processes for acting upon that knowledge and the right people willing to take the action” (Loshin 2013, 7). As a result, the process leads to more systematic analyses of information needs as well as to faster and more efficient decision making through relevant and timely intelligence (Pirttimäki 2007, 76).
STRATEGIC DECISION MAKING

4.1 How are strategic decisions defined?

A decision, shortly described as ‘commitment to action’, implies distinct, identifiable choice (Mintzberg, Raisingham & Theoret 1976, 246; Langley, Mintzberg, Pitcher & Posada 1995, 261). Strategy, on the other hand, can be described as the course of organization’s activities in the long-run that focuses on achieving competitive advantage in the business environment through the utilization of organizational resources and competencies. Essential to strategic issues is strategic decision making through which the long-term consequences and the livelihood of the organization are assessed. Strategic decisions can, therefore, be described as fundamental and highly influential choices made by the top management that build on organization’s capabilities and shape the course of a firm, critically affecting its health and survival. (Eisenhardt & Zbaracki 1992, 17; Elbanna 2006, 1; Johnson et al. 2008, 3, 6.)

Strategic decisions are typically concerned with the direction of a company’s activities in the long-run and thrive towards gaining a competitive advantage for the company in the current environment. Doing better is vital and strategic thinking focuses on anticipating the moves of the rivals so that the organization can outperform its competitors and gain success by finding an ideal positioning in the business environment. (Harrison 1996, 46; Johnson et al. 2008, 3, 6; Rosenzweig 2013, 90, 92–93.) Strategic decisions are, therefore, highly consequential and very important for an organizational success and usually involve issues that are unusual to the organization instead of being a part of a routine decision making process. Routine decisions differ remarkably from strategic ones and executives must be able to discern the decision at hand in order to respond with the appropriate approach. Strategic decisions, such as whether or not to acquire a company, enter a new market or launch a new product, are more influential and, therefore, require a more careful as well as a deep analysis. (Elbanna 2006, 1; Rosenzweig 2013, 90, 92–93.)

Strategic decisions are highly complex and ill-structured in nature, especially when it comes to companies with wide geographical scope, like multinational firms, or in firms with a variety of products or services (Harrison 1996, 46; Johnson et al. 2008, 6). Strategic decision making in these types of firms adds to complexity as decisions are connected to other decisions and set the ground for upcoming ones, are associated with various trade-offs, involve numerous variables and are difficult to assess in terms of performance, which means there is rarely one clear or certain answer to the problem. Strategic decisions also entail high levels of uncertainty due to their long-term focus and since no one is able to predict what is going to happen in the future. (Elbanna 2006, 1;
Johnson et al. 2008, 6; Rosenzweig 2013, 92–93.) From complexity and uncertainty, follow risks. Risks are an inseparable part of every decision but the complex nature of strategic decisions together with the long-term focus and the unpredictability of the future means that risks related to corporate decisions are especially high and their consequences extensive. Strategic decisions are also difficult to reverse, rarely have one best solution and even a win-win situation entails costs for the firm in the form of paths not taken. It is, therefore, essential for efficient decision making that related risks are identified, assessed and managed. (Buchanan & O’Connell 2006, 33; Elbanna 2006, 1.)

As strategic decisions are guided by the values and expectations of the most influential players in and around the organization and as these individuals may have partially conflicting perspectives, organizational decision making can be considered highly political where the most powerful actors aim to influence decisions (Eisenhardt & Zbaracki 1992, 35; Johnson et al. 2008, 3, 6). There is no single area of expertise that can alone define strategic decision making, but instead, numerous actors, individuals, groups and organizations drive fundamental issues and affect the course of an organization’s strategy. Managers have to deal with issues across functional and operational areas and reach an agreement with various actors who, most likely, have varying interests and possibly even different priorities. Relationships and networks outside an organization, with suppliers, distributors and consumers, for instance, are also an important part of the process and not to be overlooked. Integration, both inside and outside, is, therefore, important for efficient decision making and requires a strong management control to succeed. (Johnson et al. 2008, 3, 6; Mahmood 2008, 643; Kachru 2009, 9.)

Lastly, all decisions in an organization fall closer to strategic or operational (Marakas 2003, 90–91). Whereas strategic decisions have a long-term focus, operational decisions lean more towards the short-term, are usually highly structured and have little impact on the organization as a whole. The grouping is quite strict and, in reality, the issue is not so simple as decisions are always intertwined with and affected by other decisions. (Bocij, Greasley & Hickie 2008, 19.) Strategic decisions affect operational ones and set the course of decision making for the overall organization. Understanding the link between different decisions is extremely valuable since if an organization’s operational aspects are not compatible with its strategic ones, not matter how well planned a strategic decision might be, it will not succeed. It is also at the operational level that the real impact of strategic decisions can be reached. (Johnson et al. 2006, 5–6.) Additionally, if the decision making within the top level is inefficient, it affects the whole organization as the decisions made in other parts of the organization will be the same. In the same sense, if the choices made at the top level are successful, it has a positive effect on the choices made at the lower levels of the organization. Overall, decisions made at the top level should provide a clear guidance for all the major
activities throughout the organization and involve all of the main functions performed in the organization. (Harrison 1996, 46.)

4.1.1 The role of rationality, politics and intuition

There are three dimensions in particular that have been largely discussed in the literature of strategic decision making and need to be considered when examining the concept: rationality, politics and intuition (Buchanan & O’Connell 2006, 33, 34; Elbanna 2006, 3). When it comes to rationality, the classic models had a very straightforward view of the concept as they described decision makers being able to define the value of possible consequences of each action. Decision makers started by gathering information of the subject under investigation and then created a set of possibilities from which they simply chose the best possible alternative. (Eisenhardt & Zbaracki 1992.) In reality, the process is rarely so straightforward and already during 1950s, Herbert Simon noted that rational decision making models were incomplete and unrealistic. He pointed out that decisions makers are not able to have complete information on options and their consequences and just choose the one with the best utility since various organizational and environmental factors influence decision making conditions and restrict the resources available to the decision maker. (Langley et al. 1995, 262; Johnson et al. 2008, 33; Kalantari 2010, 514.)

As organizations and their environments are constantly changing, decision makers rarely conduct a profound analysis but instead, search for information haphazardly and opportunistically. Goals are unclear, change over time and are often discovered in the process of searching. Analysis of choices may be incomplete and decisions are the result of standard procedures instead of a comprehensive analysis. When you also consider the limits on cost, time and resources, decision makers do the best they can within the limits of their knowledge and experience, which usually leads to a good enough choice but not necessarily the best one. (Eisenhardt & Zbaracki 1992, 20; Johnson et al. 2008, 33.) Langley et al. (1995, 262) later expanded the concept by saying that decisions are also affected by the mindset of their actors and the cultures of their contexts. As a result, decisions cannot be connected to exact time or place but instead, become intertwined with other decisions. And even if a decision could be separated, often the process leading up to it cannot as the process is driven by intelligence, emotions, imagination and the memories of the decision makers. So a more accurate description would be that a strategic decision making is a limitedly rational process that cannot be understood apart from the perceptions of the actors and cultures of the contexts in which they are embedded. (Langley et al. 1995, 261.)
The main focus of politics is on the way numerous actors involved in decision making attempt to influence the process and outcomes of strategic decisions (Elbanna, Thanos & Papadakis 2014, 228). The reason why strategic decision making can be considered strongly political is because organizations are not uniform entities but instead, comprised of individuals with differentiating interests. While it could be that the individuals share some common goals like the success of the organization, they often have conflicting perspectives as people favour different things. In such a situation, power often dominates the rational choice and decisions become influenced by personal interests as individuals aim to shape the decision in line with their preferences instead of considering the best course of action from an organization’s perspective. Politics can be executed either through the power the decision makers possess or through the measures they are willing to take to exert their influence. (Eisenhardt & Zbaracki 1992, 18–23, 27–32; Elbanna et al. 2014, 228.) Biases are usually created by a position in an organization, control over information and by conflicts in personal ambitions and preferences. In the end, usually the most powerful people with authority and charisma get their way. (Allison 1971, 167, 169; Johnson et al. 2008, 572.)

Politics can either be seen as positive process driving conflict in an organization or as a power-driven phenomenon that signals dysfunction in decision making (Kathleen & Zbaracki 1992, 27). On the positive side, conflict created through politics can challenge over-optimistic self-assessments of managerial competence as well as situations of seemingly too easy consensus (Johnson et al. 2008, 572–574). Most literature, however, highlights the negative relationship between political behavior and organizational outcomes. Politics is said to limit an organization’s information flow as decision makers tend to keep information from each other when pursuing their own self-interest. Decision makers can also exaggerate information in favor of their proposal and hold overstated opinions of their competence and status, especially when there is little data available. Decisions are, therefore, made with incorrect or inadequate information, which often leads to poor or over-optimistic choices. Political behavior can also result in a partial understanding of environmental constraints and in an exclusion of feasible alternatives as politics is focused on the interests and power positions within an organization instead of what is possible in a given environment. A chosen course of action might, therefore, turn out to be ineffective or revoked by external forces, resulting in wasted time and resources. Politics can also rule out otherwise viable options since a promising course of action might be dropped due to the resistance of a powerful individual. (Dean & Sharfman 1996, 375–376; Elbanna 2006, 8.)

As it was not among the case study questions, politics did not majorly come upon in the discussions except for one occasion as one of the interviewees touched upon the subject by saying that a barrier for information’s effective analysis and utilization was human nature as especially people in higher positions were sometimes either unwilling
to or unable to internalize new information and new ways of thinking. This was said to result from ignorance and pride as managers often lived in the belief that they knew how things should be done. Having a high self-respect was said to result in a situation where a person does not believe being mistaken about something or does not want to admit it because it could make them feel uneasy, which is something that wants to be avoided. The concept was seen as a natural way people deal with the world and should, therefore, be approached understandingly but for information’s effective utilization, a change from a secure way of thinking towards one that is more daring and curious would be needed.

Often [decision making] is about people’s feelings... about sense of security... self-respect and courage, versus fear -- and not having an investigative mentality, a person does not, in principle, want to learn new things and especially if he is over 40 and in a senior management position -- he basically is not wrong. (A3)

Intuition is often described as having a clear feeling of knowing what is about to happen without neither being capable of explaining the reasons behind it nor the ways in which the decision was reached (Prietula & Simon 1989, 122; Nutt 1998, 334). Intuition can be pictured as a phenomenon that consists of ‘knowing (intuition-as-expertise)’ and ‘sensing (intuition-as-feeling)’ and that considers intuition and rational analysis as convergent ideas of knowing (Sadler-Smith & Shefy 2004, 76). Whereas intuition as expertise refers to a deep knowledge of issues or problems related to a given environment or area of expertise, gut is personal and a non-transferable attribute, usually a strong feeling of being right about a decision (Prietula & Simon 1989, 122; Buchanan & O’Connell 2006, 40). Intuition is increasingly seen as a viable way to comprehend the current environment as situations of limited time or incomplete information are very common. Gut decisions are often made in moments of crisis where there is little time to consider the impact or count the likelihood of every outcome. They are common in unstable environments and in situations where there is only little evidence or reliable data available. Making decisions based on intuition requires courage and testifies the confidence of a decision maker since they involve uncertain and time critical situations. (Buchanan & O’Connell 2006, 40–41; Elbanna 2006, 11.)

The criticism on intuition centres on the idea that managers who get too comfortable with intuition become impatient with routines and details. Managers can end up ignoring relevant facts and drawing conclusions too quickly without gathering enough data to support their thoughts. The critics also argue as intuition originates from emotions, it is irrational and should not be trusted. (Dean & Sharfman 1996, 374.) On the other hand, the proponents of intuition believe that intuition can deal with issues too
complex or fast for the conscious mind to understand. Intuition is quick, encompasses years of experience and is often able to bypass the step-wise decision making process, enabling the decision maker to know almost immediately what the best choice of action is. All in all, intuition should be considered as a type of intelligence decision makers can rely on when they are not able to access rational processes. (Parikh 1994, 33; Khatri & Ng 2000, 60.) The last viewpoint to intuition is that effective decision making needs a balance of rational analysis and intuition, two seemingly contradictory capabilities. This is because intuition allows executives to perceive important but very weak signals whereas rationality allows decision makers to act on them. (Sadler-Smith & Shefy 2004, 76; Buchanan & O’Connell 2006, 40–41.)

Information provided in the case study discussions in relation to intuition was very limited as it was not among the case interview questions either. There were still, however, a few occasions where the issue came up as two of the interviewees touched upon the subject in their answers. First of all, it was commented that decisions should always be both based on and led by reliable data as oppose to feelings or opinions of what should be done. Each decision should, therefore, require an extensive amount of information, and data accessibility and availability should be considered essential for effective decision making. On the other hand, one of the interviewees pointed out that due to issues with information reliability, discussed earlier, trusting the information you are provided with might not result in the most effective choice as the information can be misleading or incomplete. As these issues might be difficult to resolve, especially in a situation where reliability is connected to customers’ inability to express or known in which direction they would like a product or service developed in the future, trusting your own vision or an idea of the future becomes emphasized.

We aim at people having access to data -- so it is not an opinion matter, because very easily it comes to the point that ‘I think of this and that’. But that the process really is structured by data and data-driven. (E3)

Customers do not necessarily tell you what is going to happen next... in which case the vision is the point... so that we do not start from what customer want but from [offering] something new. (A1)

All in all, rationality, politics and intuition are concepts tightly connected to the literature of strategic decision making (Elbanna 2006, 3). The influence they have on strategic decision making is, however, quite contradictory as they can be considered either beneficial or harmful for the process, depending on the perspective. Therefore, considering their extent of existence and the influence they may have within decision making should be acknowledged so their impact can be better understood.
### 4.1.2 Information in decision making

Information is essential for decision making. During the past decade, organizations have underlined that information is among their most important organizational resources and expanding its access and utilization as well as improving its quality are essential in being able to reduce uncertainty and, in this way, improve decision making and overall business performance. What this means is that a free flow of information around the organization is a prerequisite for successful decision making. (Davenport, Eccles & Prusak 1992, 53.) Information should also be sought and used actively throughout the entire decision making process, gathered from relevant sources, be timely as well as correctly distributed. However, the ways information is to be used during the decision making process varies depending on the decision phase and the decision at hand, as can be seen from table 3. (Choo 2002, 47–48; Brynjolfsson, Hitt & Heekyung 2011, 2.)

Table 3 Information characteristics by management levels (modified from Bocij et al. 2008, 21)

<table>
<thead>
<tr>
<th>Information</th>
<th>Time period</th>
<th>Frequency</th>
<th>Source</th>
<th>Certainty</th>
<th>Scope</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic</strong></td>
<td>Wide</td>
<td>Infrequent</td>
<td>Mainly external</td>
<td>Less certain</td>
<td>Wide</td>
<td>Summarized</td>
</tr>
<tr>
<td><strong>Operational</strong></td>
<td>Narrow</td>
<td>Frequent</td>
<td>Internal</td>
<td>More certain</td>
<td>Narrow</td>
<td>Detailed</td>
</tr>
</tbody>
</table>

When it comes to strategic decisions, strategic management focuses on setting the direction for the business and is mainly concerned with information with respect to upcoming possibilities since the impact of strategic decisions are extensive and far-reaching and the purpose is to be proactive, thus, to find new approaches and techniques (Harwood 1994, 31). For these reasons, external information has more importance in strategic decisions than internal. Additionally, since the effects of strategic decisions on an organization are larger than those of operational decisions, the requirements in regard to information quality and information sources are higher. (Pirttimäki 2007, 45.) Overall, information utilization should be more intense in strategic decisions where a problem could result in an extensive damage whereas day-to-day, operative and routine decisions can be addressed with a more relaxed approach (Choo 2002, 46; Bazerman & Chugh 2006, 97; Loshin 2013, 3). The differences between information requirements in operational and strategic levels are quite remarkable and are summarized in table 3 for comparison.
When it came to case study discussions, the interviewees generally agreed on that ensuring information quality and verifiability in strategic decisions, or in any decisions for that matter, is very important. The requirements in regard to information quality, source and nature were regarded very high, and it was generally commented that it is extremely difficult to follow through an idea without concrete facts, numbers and verified data to support it. Information sources need, therefore, to be clear, visible and reliable as well as internalized before an idea can be introduced to the management or become accepted. However, one of the interviewees pointed out that often what creates an issue is not that the management would not receive high-quality information but that the management itself does not know how or finds it difficult to evaluate the nature of the information at hand or draw conclusions from it.

*Well probably really, really critical since we have information management at the heart of our strategy so very difficult is to follow through an idea without facts and figures.* (D₁)

*The problem with business management is that they receive various different kinds of information and then [the interpretation] is often so difficult that decisions end up being made on the basis of whether sales have increased or fallen.* (A₁)

As the requirements for information quality are high, decision makers are encouraged to continuously scan their environment as well as to actively search for information about alternatives and their consequences. A whole decision making process centers on active monitoring, and the quality of decisions should, therefore, improve as more data is gathered and utilized throughout the decision making process. (Choo 2002, 28, 46; Brynjolfsson et al. 2011, 2.) However, this is not necessarily the case as not all decisions require an extensive amount of information and the risk is that decision makers end up collecting more data they know what to do with, which exceeds their capacity to absorb the information (Bazerman & Chugh 2006, 97; Loshin 2013, 3). An overflow of information can also contain trivial facts or a mass of details that simply burden the decision maker instead of serving actual needs. The end result can be data fatigue, meaning a situation of too much information to be useful. (Pirttimäki 2007, 42.) This can both delay the decision making process as well as make it difficult to identify as well as understand the information that actually matters (Davenport & Prusak 1998, 3; Loshin 2013, 3).

Data fatigue emerged as an issue also from the case study discussions. Almost all of the interviewees commented that as the amount of information increase, the tools to manage, filter and prioritize information need to be in place and working as intended in
order to find the data that matters and to avoid drowning in the gathered information. It was commented that it is overall better not to gather data you do not need nor are not sure what to do with as it simply complicates finding the information that is valuable for the organization. Being overwhelmed by data was not only an issue due to limited time and resources but also since data protection laws meant the companies have a responsibility for the data they collect. The interviewees generally agreed on that data should always be gathered for a purpose as oppose to simply gathering it for the purpose of gathering something, especially since companies were said to have a moral responsibility to utilize and act on the collected information.

When you start to receive thousands of feedbacks from various different touch points you need have a really good structure to it -- so you do not drown in the collected information because you always have a responsibility to put the information to use, so instead of having information collection as the starting point, place utilization in front. (B₁)

In the end, any kind of data that does not have actionable insights should not be collected -- and if you also consider EU-regulations and that privacy is important for people, it is overall better not to collect information you are not going to use because there are always various things [you have to consider]. (E₁)

EU’s new data protection law was an issue majority of the interviewees mentioned as influential and as something that requires emphasis in the future. The purpose of the new regulation, taking effect mid-2018, is to standardize personal data collection procedures within EU to enhance individual rights and to make data surveillance more effective. A problem EU wants to focus on is that companies are not really aware of the data they hold, where and how it is stored, how it is maintained and who is in charge. According to the regulation, information collection should be minimized and involve only necessary information, and it should be clear who the data is connected to. Data warehouses should be secure and data validity continuously maintained. (Lehtola 2016.) It was commented among the interviews that as companies’ responsibilities in regard to information collection become stricter, the importance of understanding what data is required and how it is maintained increases. It was highlighted by almost all that is overall better not to gather data the organization does not need or does not know what to do with as there are numerous aspects that need to be taken into account when collecting it. It was emphasized that information should be gathered for a purpose and people working with the matters should be competent and capable of understanding the issues so the information collection and utilization becomes synchronized with the law.
EU’s new data protection law is stricter and it increases companies’ responsibilities as well as defines different roles when it comes to gathering and managing customer data -- so you should be able to organize data collection in a way that it becomes synchronized with the law simultaneously. (A1)

Being aware of your information needs and requirements is, therefore, a prerequisite for being able to determine the most value adding information in terms of business processes (Pirttimäki 2007, 41–43). As have already been discussed, there is always the possibility that due to limitations in analytical skills or coordination, decision makers can end up collecting information that cannot all be utilized in decision making at all (Feldman & March 1981, 175). Decision makers should know what information is collected, what information is required and also what information is not needed as wants and needs are not the same things. It would be a waste of both resources and time to collect information on issues decision makers want but the organization does not need, which is why a distinction between wants and needs is important to establish. This distinction is called an information gap and is depicted in figure 3. (Choo 2002, 29; Pirttimäki 2007, 41–43.)

![Figure 3 The information gap (modified from Pirttimäki 2007, 43)](image-url)

When it comes to the information gap shown in figure 3, the most value adding area where the most appropriate and valuable information can be found is the area where
information wants and needs overlap. This area has the most potential for an organization, but can be difficult to achieve since determining information needs and requirements is not easy and not always possible. (Pirttimäki 2007, 43, 47.) This is not only due to the complexity and difficulty of unveiling such needs, but also because limited rationality causes people to unintentionally ignore valuable, perceivable and accessible information during the decision making process (Choo 2002, 29; Bazerman & Chugh 2006, 88, 90).

Limited awareness can happen on numerous occasions during the decision making process. Firstly, executives may fail to recognize valuable information if they are very focused on one task at a time. While this is, of course, important, it may limit an executive's awareness to notice gradual changes in an environment. The business environment is becoming increasingly more dynamic and failing to notice gradual changes can later snowball into larger issues. (Bazerman & Chugh 2006, 90–92; Pirttimäki 2007, 42.) External forces can change the focus of the decision making process by revising information needs, presenting new alternatives or by blocking out selected solutions. These changes can be destructive and executives need to be capable of recognizing as well as estimating them quickly so the organization can respond to them in time. The probability and frequency of interruptions increase with the duration of the decision making process and with the volatility of the external environment. (Choo 2002, 48; Pirttimäki 2007, 42, 51.) One way executives can increase their awareness is by assigning responsibilities to others as getting another perspective can help to see critical information easily overlooked when immersed in day-to-day activities (Bazerman & Chugh 2006, 90–92).

The dynamic nature of the current business environment was something that was highlighted also in the case study discussions. It was stated that it is important to acknowledge that the state of the industry might not stay the same for long, but is continuously changing and affecting the direction in which an organization should develop. Therefore, increasing importance should be placed on external monitoring in order to stay ahead of the changes and the competition it may bring. By continuously monitoring the signals in the external environment, an organization can be more alert for the possible changes in customers’ expectations and demands and can react to them on time. A fast reaction time was something that was emphasized throughout the discussions and was regarded as something that could require even more focus in the future.

*You cannot assume that the world is going to stay the same as it is now -- so emphasis should be placed on quick customer information and on understanding how our customers’ expectations change -- so if we start to receive signals that*
we do not respond to what customers require, that is something to which we have to react very quickly. (B1)

Another common limitation is not using information organizations already have since decision makers are not aware of its relevance. Although it may be hard to believe, valuable and accessible information is continuously missed out or disregarded in decision making, and it seems as problems with information interpretation are one of the main reasons preventing executives from using readily available information. While it is true that executives should rely on others to streamline information for them, they should also focus on the received information and be skeptical in the absence of contradictory evidence. As data and information sources are extensive, importance should be directed towards their selection, use and relevancy. (Bazerman & Chugh 2006, 90, 92–94; Pirttimäki 2007, 44, 51.) The absence of contradictory evidence is an indication of an inadequate analysis or for the dominance of personal preferences, which should be followed by an action to send team members to search for missing evidence or supplementary information. Overemphasize one element at the expense of other can be dangerous. By unpacking the situation at hand and by thinking about its full context, executives may be less likely to disregard important data when making decisions. (Bazerman & Chugh 2006, 90, 92–94; Elbanna et al. 2014, 228.)

When it came to information interpretation, the issue also emerged in the case study discussions as few of the interviewees commented on management relying highly on others for streamlining information for them as oppose to interpreting and making conclusions of it themselves. The issue was said to result from the fact that data analysis was seen so difficult that management rather hoped someone would simplify the information for them and show them the possible connections and correlations between different sources of data on a large scale as oppose to familiarizing with the information themselves. It was commented that instead of giving responsibility to others, management should be more eager towards the information in order to understand what data actually means and what information helps them to perform better. Rest of the interviewees did not touch upon the subject.

*Managers should figure out what information really helps them to perform better -- because very often the burden of proof is on an analyst and you are forced to sort of feed the issues as well as sell specific managing solutions [to managers]. (A4)*

Information sharing can also be an issue in an organization. As information is the basis for organizational structure and as employees’ tasks and roles are increasingly determined by the information they hold, information in relation to a specific role can
be very defined and unique and become a source of power and irreplaceability. If information is used as a source of power and conflict, the best approach is to see politics as a necessary activity that requires careful management and use negotiation to bring possibly competing and non-cooperating individuals together. This requires a strong leadership and an organizational culture that encourages learning and cooperating. Another viable approach is to get rid of politics through a central authority, usually by a chief executive, who tells the rules for how information is to be managed. This approach is most suitable for companies with difficulties in reaching a consensus. Managing politics or issues with information sharing is a very complicated and time-consuming task but is very important for decision making efficiency. (Davenport et al. 1992, 53–54, 59–60; Bazerman & Chugh 2006, 90, 96.)

When it came to the case study discussions, only one interviewee touched upon the subject by commenting that differences in personalities and backgrounds can create a barrier for information’s effective sharing. According to the interviewee, information sharing between different units in the organization was sometimes difficult and the discussion unprofitable if people represented different extremes with regard to personality traits or had reversed fields of responsibilities within the organization. It was commented that people who are very analytical or introverts by personality might explain very complicated issues with the expectation that they are as obvious for the receive to understand as they are for them, in which case the discussion was quite difficult to maintain and unprofitable for both. People with intermediate roles were said to be needed to simplify the issues, show the connections between different issues and simply work in between the two extremes so the discussion can be profitable.

[analysts] are mathematically terribly intelligent and often a bit introverted and then they tell something that they regard as absolute banalities and then someone does not get it.. then the dialogue is not necessarily so profitable. (A1)

Another way information sharing can become an issue is when consensus is overvalued. Decision makers usually work in teams where members represent various departments and units within the company to access diverse sources of information. However, most groups often still fail to share their information with each other and get stuck on discussing common ground information instead since it is easier and often more positively rewarded as consensus can be achieved faster and more effortlessly. (Bazerman & Chugh 2006, 90, 96.) It may simply be that the team members fail to realize the importance information sharing just as they may fail to seek others for their unique information but, nevertheless, consensus achieved this way often results in average choices based on the lowest common denominator. This pattern undermines the reason why groups should be diverse and why negotiation should be used to evoke
underlying and conflicting perspectives and to bring different parties together. Consensus should not, however, be aimed for at any cost. In a situation that a debate cannot be resolved to everybody’s satisfaction, decisions makers should plainly decide instead of wasting time and resources on achieving a consensus that might actually be impossible to reach. (Bazerman & Chugh 2006, 90, 96; Johnson et al. 2008, 573.)

When it came to the case study discussions, the issue of consensus emerged only in one of the case companies whereas other interviewees did not comment on the matter. When it came to the one example, the interviewee commented that what caused problems for information’s effective utilization was that people did not know how to disagree, debate or discuss with each other. It was commented that in order for information to result in an effective choice for the organization that everyone agrees on, the idea was needed to fit into the already existing ways of thinking and acting within the organization. According to the interviewee, what was needed was a change towards a way of thinking where people are more willing to ask questions and to present divergent opinions in order to question the usual and established ways of thinking, break the common pattern and find new approaches.

The truth is that we should ask a lot more questions and be ready to rock the boat -- because if you think -- how [information] is to become a fertile part of the business in a sense that first a common vision is formed and then a decision reached based on the information, it has to fit pretty well into the existing ways of thinking and doing things. (A1)

All in all, information sources are extensive and often from a decision maker’s perspective, it is better to have more information than is needed than to not have some critical information that the decision making might require. Information overload can, however, increase the risk of being unable to spot, comprehend or use relevant information in decision making and can result in a situation where valuable information is missed on or disregarded. (Feldman & March 1981, 175–176; Bazerman & Chugh 2006, 88, 90.) Additionally, as various limitations exist within an organization that can create barriers for information utilization, being sure of information necessity, verifiability and reliability prior collection is essential in addition to having efficient systems for gathering, filtering, storing and disseminating the information.

4.2 The strategic decision making process

Strategic decision making can be depicted as a process that involves numerous actions and dynamic elements (Mintzberg et al. 1976, 246). The process generally starts with
the identification of an emerging trend or force that requires an action from an organization and “ends with the specific commitment to action” (Mintzberg et al. 1976, 246). The purpose of the process is to create decisions that shape the course of the firm as well as positively affect its health and survival by achieving competitive advantage in the changing business environment (Eisenhardt & Zbaracki 1992, 17). The objective of business intelligence within the process is to transform raw data from the external environment into a form usable for the decisions makers so the information can be turned into a set of actions that increase the livelihood of business (Elbanna 2006, 1).

The following two chapters will focus on explaining the process of strategic decision making in detail. Whereas the first chapter will focus on giving a short introduction to the previous theory in relation to models that have been dominating the strategic decision making literature, the focus of the second chapter is on describing the phases of the process and on explaining the issues that need to be considered during the process. Overall, the following two chapters provide a comprehensive outlook on the matter by describing the extent and complexity of the process and issues involved.

4.2.1 Literature on strategic decision making

The literature on strategic decision making is rich, abundant and diverse (Harrison 1996, 48). However, according to Elbanna (2006, 2), there have been two types of models that have been dominating the strategic decision making literature and these are ‘synoptic formalism’ and ‘political incrementalism’. Synoptic formalism can be seen to be close to the traditional rational model whereas political incrementalism is more often associated with politics and intuition. A research by Langley et al. (1995, 260) has a slightly wider view on the matter, suggesting that most of the literature on decision making can be positioned along a continuum of cerebral rationality based stage theories on one end and ‘organized anarchies’ supporting irrationality at the other. Figure 4 depicts the most common and widely used models among strategic decision making literature. The figure has been put together by the researcher based on the study of Langley et al. (1995) on strategic decision making in order to clearly illustrate the main characteristics and differences between the three of models of sequential, iterative and anarchical theories that have dominated the strategic decision making literature.
Langley et al. (1995, 260) later complemented the continuum (figure 4), with adding an iterative sequence to the middle of the two opposites as they believed the continuum failed to capture some important characteristics of decision making. Most of the main contributions of strategic decision making literature can, therefore, be positioned along this continuum as well as under one of the three process categories of sequential, anarchical and iterative. The sequential model is based on the work of Herbert Simon (1960, 2) who described decision making as a three phase sequence of intelligence, design and choice that progresses steadily towards a solution and emphasizes structure and order. The model is a strong supporter of procedural rationality, defined as “the extent to which the decision process involves the collection of information relevant to the decision and the reliance upon analysis of this information in making the choice” (Dean & Sharfman 1996, 373). It is best applied in stable environments and directly associated with decision effectiveness (Dean & Sharfman 1996, 373).

On the other extreme are anarchical processes that emphasize irrationality and regard decision making as a socially interactive process that happens in a complex, unpredictable and unstable world. The emphasis of the model is on the numerous ways problems and solutions that emerge from various different parts of an organization are combined to produce decisions. In this approach, decision making occurs in an incoherent way, emerging from a kind of whirlwind without any clear sequence or structure. (Eisenhardt & Zbaracki 1992, 27; Langley et al. 1995, 262–3.) The garbage can model of Cohen et al. (1972) that depicts decision making as a process where problems and solutions come together in random ways is probably the best known-
metaphor and goes furthest in picturing decision making as an irrational and chaotic process.

An iterative sequence forms the middle ground between the two opposites. The iterative sequence is based on the work of Mintzberg et al. (1976, 252, 263) and supports the foundation of the structure of unstructured strategic decisions. The model is a combination of sequential and anarchical processes since it has a linear sequence as a foundation but is affected by a variety of dynamic factors that refer to the random elements of anarchical processes, such as politics and external influences and interrupts. In this view, a decision maker starts with something tangible such as a problem or crisis that is needed to be resolved and then uses his best efforts to keep the process on track (Langley et al. 1995, 263). Although broken into logical phases, the entire process is cyclic and nonlinear with many interferences, interrupts and delays caused by external interrupts that may knock the process off track or cause it to shift, cycle and recycle. Depending on the effectiveness and severity of the interrupts, decision making can take different forms by falling closer to the sequential model if interferences are fewer or closer to the anarchical process if interrupts are so severe that the order of the process is difficult to maintain. (Eisenhardt & Zbaracki 1992, 21–22; Choo 2002, 47–48.)

4.2.2 The strategic decision making process model

The strategic decision making process model used in this study is based on the work of Frank Harrison (1996) and can be best described as an iterative process where sequential and anarchical views combine. The model has a linear sequence and clear structure but is influenced by various dynamic factors throughout the process. The model understands decision making as a dynamic process that is complex, full of sideways and detours, abundant in information gathering and influenced by fluctuating uncertainty and conflict (Zeleny 1981, 333). The model was chosen since it emphasizes aspects important from the perspective of the thesis, such as the significance of external environment and its significant influence on decision making throughout the process. The model also clearly illustrates the various information flows between different functions and highlights the importance they play in contributing to the total outcome of the decision making process. (Harrison 1996, 50.) The model is depicted in figure 5 and is composed of two elements: the strategic gap and the process of managerial decision making. The chapter will start with the analysis of the strategic gap and end with the assessment of the managerial decision making process that is depicted in figure 5 by the dotted line.
To begin with, it is essential to understand the types of process flows that contribute to the total outcome of the strategic decision making process depicted in Figure 5. The primary flows encompass the principal functions of the strategic decision making process that cannot be avoided without significantly compromising the cohesion and unity of the overall process. The corollary flows consist of assisting functions that enhance the probabilities for a decision to be successful. Corollary flows can be shortened or bypassed but not without consequences or by impairing the process in some ways or to some extent. All of the information flows have their own specialized contribution to the overall process by providing a set of possible alternatives when making a decision or feedback from the external environment after a decision has been implemented. (Harrison 1996, 49–50.)

As strategic decisions are strongly connected to the relationship between an organization and its most important external entities, the decision making process starts with an analysis of the external environment. The external analysis is an important part of the process since the effectiveness of strategic decisions is strongly influenced by various external factors and the opportunities and threats they may bring. (Dean & Sharfman 1996, 377–378; Harrison 1996, 47.) The external analysis is epitomized in
figure 5 as *strategic gap* and concentrates on the balance between an organization’s capabilities and its most influential external forces. The aim of the strategic gap is to reflect the possible imbalance between an organization’s current and desired strategic position and the balance is determined by identifying the extent to which a company’s internal capabilities are capable of dealing with the forces emerging from the external environment. (Harrison 1996, 47; Johnson et al. 2008, 119.)

The strategic gap analysis, shown in figure 6, starts with the development of a capability profile in order to uncover principal areas of strengths and weaknesses. The capability profile involves assessing an organization’s biggest capabilities in regard to management, technology, policies and resources and is important in being able to measure the strategic gap of a given organization since a real understanding of external factors can only be achieved with the effective use of internal strengths. Equally important is the assessment of internal weaknesses since a protection against various threats that emerge from the external environment requires a strong knowledge of an organization’s internal weaknesses. The effectiveness of external monitoring and the ability to benefit from external opportunities are also highly dependent on existing knowledge and experience within an organization. All in all, the value of external opportunities can only be realised through the utilization of internal capabilities. (Harrison 1996, 47; Pirittimäki 2007, 75.)

As can be seen from figure 6, the categories to be assessed for their strengths and weaknesses when developing a capability profile include management, technology, policies and resources. The focus of *management* is primarily on a management’s decision making record where the purpose is to find out whether or not the company has been successful enough to be considered as an organizational strength. *Technology*...
capabilities should be tracked in regard to their equivalence to find out whether or not technology is regularly developed and kept up to date to ensure its efficiency and productivity. The focus of politics is mainly on finding out whether or not there are written statements providing guidance and governance throughout the organization. Resources, whether human, fiscal, physical or institution, should be available in proper kind as well as utilized efficiently so the organization is able to tackle the forces rising from the external environment and maintain its competitive advantage. Before assessing the opportunities of the external environment, an organization should ensure that there are no weaknesses in some of the internal capabilities of an organization. If they do exist, weaknesses should be transformed into organizational strengths before assessing the opportunities arising from the external environment. (Harrison 1996, 47–48.)

Main topics mentioned in the case study discussions in regard to the capability profile were budget and technology issues. A few of the case companies commented that what caused restrictions were limited time and resources as not all customer experience incentives could be executed but work and focus points had to be prioritized, often towards operative work. These issues were, however, mostly seen as the realities of business an organization needs to survive and cope with. It was also commented that since resources were limited, they were often directed towards operational issues in order to get things done. However, focusing solely on a resource increment was not seen to fix the issue either as companies were said to just end up doing the same things in the same way. What was needed was a resource increase in addition to new, developed systems processing and integrating information. The lack of a centralized database was, in fact, the second main issue causing problems for a few of the case companies as data and information were said to be scattered on various different systems as oppose to one centralized one, making data integration and interpretation difficult. Information on management or politics in regard to the capability profile did not come upon in the discussions.

_Time and resources are something we have sometimes had problems with. So I would say that people consider, see and feel [customer experience] important but then in practice, the operational work, as an example, can take over and we have to prioritize._ (F₁)

Like the company itself, the external environment is comprised of four main components that can influence decision effectiveness in various unpredictable ways (Harrison 1996, 47–48; Walters, Jiang & Klein 2003, 487–488). Firstly, _opportunities_ refer to situations that can increase an organization’s competitive advantage. However, an opportunity presumes a company is able to act on it, which is also the main test for the management. Management needs to be capable of identifying as well as exploiting
the emerging opportunity for its benefit for the total organization. **Threats** represent external forces that might harm a company and result in disadvantages for the organization whereas **requirements** constitute of corporate governance that can restrict the possible choices of management. Finally, **responsibilities** include expectations of a specific stakeholder group that a strategic decision will not work for its disadvantage. Typical factors bringing forth these components are related to political, economic, socio-cultural, technological, environmental or legal issues, also known as PESTEL (Dean & Sharfman 1996, 377; Yüksel 2012, 52–53). Issues such as competitor behaviour, new technology, changes in the industry or technological obsolescence can affect decision effectiveness by presenting new opportunities, creating threats, loosening regulations or increasing responsibilities, depending on the nature of the influence (Dean & Sharfman 1996, 377; Harrison 1996, 47–48).

Environmental screening is an activity that assists an organization in identifying significant changes in the external environment or in reassuring that there is none. The volatility of the business environment means that increasing importance should be placed on external screening in order to be up to date on the possible changes in the external environment. (Feldman & March 1981, 176; Walters et al. 2003, 487–488.) When it came to the case study discussions, a majority of the interviewees commented their decision making to start from the environmental assessment. Understanding the world around you was regarded very important in being able to comprehend the issues the company needs to focus on, especially since the external environment and market conditions were seen to change very frequently. Therefore, information on external forces, such as emerging trends, that can influence the organization, its operational environment as well as its customers and their expectations was regarded essential in order to know in which direction to develop in the future. In other words, to know if the company’s focus points were still valid and up-to-date or if reformation or development was needed. One of the interviewees also commented that a comprehension of the external environment is a prerequisite for being able to lead the change as oppose to reacting when someone else is making the change.

*It does begin with a sort of -- mega trend understanding, so what is going on in the world, what are the forces that affect us and our environment and our customers -- so we would be leading the industry change as oppose to simply reacting when someone else is making it.* (B₁)

*It does strongly start out with customer behaviour and the change of the world, so it is the large surfaces that define the strategic aspects.* (E₁)
The *gap analysis* measures the difference between the internal capabilities of a given organization and its environmental components, providing a statement of an organization’s strategic position. If the assessment shows that a company’s internal capabilities outdo its external components, the balance is favourable for the organization and a positive gap exists. What this means is that an organization’s management, technology, policies and resources are more than capable of realizing and exploiting any opportunities, coping with any threat or meeting any requirements or responsibilities in the external environment. (Harrison 1996, 48, 50; Helms & Nicon 2010, 216, 229.) Conversely, when a capability profile reveals a balance of weakness, a company is at a significance disadvantage in relation to its external environment and the weaknesses should be eliminated before considering the opportunities arising from the external environment. This is because managerial objectives reflect the state of the current gap analysis and strategic decisions based on internal weaknesses are certain to fail. Transforming a negative gap into a positive one must, therefore, be a top priority. However, it is important to notice that the concept of strategic gap is unavoidable for an organization and will always exist to some extent. For this reason, reaching the positive side to an irreducible extent is an ideal state for an efficiently managed organization.

The gap analysis is followed by the managerial decision making process, depicted in figure 7. The managerial decision making process is the second and final part of the overall strategic decision making process model depicted in figure 5. (Harrison 1996, 48, 50; Harrison & Pelletier 2000, 108.) The managerial decision making process pictured figure 7 has been modified slightly to include the impact of external factors, politics and intuition as they can significantly influence the course of the decision making process either positively or negatively, depending on the nature of the influence. Their impact was not illustrated in the original model of Harrison (1996) but was added later by the researcher as she felt it was important for the content of the thesis to show their connection to the model and to illustrate the influence they play in the overall process.
The managerial decision making process, shown in figure 7, is dynamic in nature and comprised of six functions of decision making that are sequential and highly interrelated with each other. The process starts with setting objectives that are set by management and determined by the nature of the strategic gap. In the next phase, the external and internal environment is scanned for relevant and accurate information that describes options likely to fulfil the objectives. (Dean & Sharfman 1996, 373, 378; Harrison & Pelletier 2000, 108–109.) When it came to the case study discussions, a majority of the interviewees commented their decision making process to start as issues identified as strategic or as something the companies need to focus on were brought forward and discussed together. The discussion centered on issues that need to be changed, improved or transformed based on the information and the strategic objectives were set according to the discussions. Generally, it was commented that if the decision did not require significant resources or extensive measures from the organization, it could be implemented more directly whereas larger issues were forwarded to the top management for further discussions and approval. Few of the interviewees also mentioned having assigned persons in charge of the decision making process to ensure effective implementation, follow-up and assessment.
From there begins a sort of prioritization and discussion in regard to what are the focus points we need to develop in and want to focus on and what are the strategic objectives that we use to measure our progress. (B1)

Alternatives are then evaluated and compared based on their perceived consequences and the preferences of the decision maker. The purpose of the evaluation phase is to reduce a large number of alternatives into a few feasible ones by defining the criteria for selection with the best available information. (Mintzberg et al. 1976, 253, 257; Harrison & Pelletier 2000, 108–109.) Among the alternatives, the decision maker chooses the one with the greatest potential in attaining the chosen objectives given the environmental constraints identified in the gap analysis (Dean & Sharfman 1996, 373, 378; Harrison 1996, 48–49). Especially when faced with limited time in which to react, decision makers are often tempted to sideline the evaluation phase but the risk is to end up with a poor decision that has not been thought through. Careful planning adds to the likelihood of a decision to increase long-term growth since it is more corresponsive to the changes in the external environment as oppose to a decision that has been made in an ad hoc fashion without placing careful attention on analysis. (Mankins & Steele 2006, 77, 81.) The choice is then implemented through task assignment and resource allocation and transferred to customers in a form of a product or service. Lastly, it is essential that the whole process is oriented towards achieving the organizational goals and objectives for the choice to be efficient. (Harrison & Pelletier 2000, 108–109.)

When it came to the case study discussions, a few of the interviewees commented that the current competitive environment creates a situation in which a good enough choice is not good enough, but the option you go with needs to be able to show clear benefits and additional value for the end user in order to motivate people to change from one product to another. However, it was commented that if you succeed in motivating the customers, the benefits will be additional as the customers will eventually also motivate the ‘laggers’, meaning people who are not actively seeking for an alternative or are reluctant to change even if the benefit was apparent. When it came to the implementation phase, half of the interviewees commented to approach the matter through small-scale testing where the quality of the idea could be ascertained through facts, feedback and customer reactions before it was scaled bigger. Small-scale testing was seen as a very valuable way to be sure of the decision’s functionality and appropriateness for the intended use and source before executed further.

If there is room to choose, you use what works best for you, so your optimal solution. And to be able to get you to change from the service you have chosen or from the way to act to something else, it has to be clearly better. (E1)
We rather pilot an idea that is considered good on a small scale first and then verify with the facts – that this is how it seems to work if scaled bigger. (D1)

The performance of the choice is later evaluated through information from the external environment and internal operations, and the evaluation is done in comparison to standard operation procedures to guarantee a result that is consistent with managerial objectives (Harrison & Pelletier 2000, 108–109). When measuring decision effectiveness, it is important to define the quality of the implementation process as otherwise is cannot be known if a poor decision was badly conceived, which refers to a faulty decision making process, or just badly implemented. If the selected alternative has not resulted in the desired result, decision makers can rethink the process and choose one of the sub-processed of revised or updated objectives, corrective action or renewed search, shown in figure 7. (Dean & Sharfman 1996, 373, 378; Harrison & Pelletier 2000, 108–109.)

When it came to the case study discussions, a choice was assessed by a variety of ways. Firstly, a majority of the interviewees collected information internally to understand employees’ reactions and experiences in relation to the changes and whether or not the changes had improved the functions affecting their work. Another big theme was monitoring customers’ reactions either in-store or through feedback given, but the behavior was also followed online to understand what sort of recommendations or criticism customers give to others. It was commented that as the quality requirements of customers can be different to the ones of a company’s, feedback from the external environment should be emphasized to avoid a situation in which a company believes everything to have gone well while customers disagree. Profitability and revenue numbers were also mentioned by few of the interviewees but were generally given less attention in the interviews. The information from external and internal sources was then utilized in fixing or improving the offering or in deciding whether or not to pursue it further. Assessment of the choice was said to be very important to understand if what the company had done had actually had some effectiveness as oppose to simply getting something done.

Social media is one that affects, through that we will start to receive information on how we have succeeded. And then spontaneous feedback and at the same time these surveys, so we are able to see the overall picture and make decisions whether to continue or do some larger changes. (F1)

We can measure [quality] from our point of view or we can measure it from a customer’s point of view. So we need to change the perspective because
**traditional quality indicators can be very focused on optimizing operational aspects and we aim at changing it in a sense that, in the end, quality is what customers get and experience.** (B₁)

In reality, the decisions making process is rarely so straightforward and this is where the impact of external factors come in. External factors can impact the course of the decision making process by various ways but are outside the influence of management control. The success of acquiring a smaller firm, for example, is influenced by the number of other firms that enter the market and by whether or not emerging industry standards support the firm’s products. The deregulation of markets or advances in information technology can create market gaps that create new opportunities whereas the introduction of new competition can danger the position of an organization. (Dean & Sharfman 1996, 377; Johnson et al. 2008, 83.) What management can do, however, is to try to anticipate these factors by monitoring changes in the environment. It is worth noticing that the effects of environmental constraints are strongly influenced by the stability of the business environment. In stable environments, industrial standards are long-established and conditions are well understood. Conditions are not likely to change much, for example in regard to demand or competitors, and the impact of environmental factors is minor. In unstable environments, changes occur regularly and the potential for environmental conditions to influence strategic decisions is higher. So, for decision making to result in an efficient choice, it must be based on an assessment and comprehension of external constraints and on a deep analysis of the environment. (Dean & Sharfman 1996, 377; Yüksel 2012, 53.)

The information emerging from the case study discussions indicated that the two main factors influencing the companies were societal factors, such as politics and legislation and competition. The issues were mentioned by all of the interviewees but were more influential on some industries than others. A majority of the interviewees commented that political decision making affects and limit the companies’ operations as their decisions are influenced by the ones of society. Societal factors were said to slow down the companies’ development either through slow political decision making, in which case the companies are unaware of the direction in which to develop, or through legislation as some developments cannot be realized even if they were clearly better or more functional for customers’ perspective, in which case the offered experience cannot be as good as it could. When it came to competition, its extent was varying among the case companies as on some industries were numerous competitors whereas on others only a few larger ones and the conditions were more stable and barriers of entry high. Nonetheless, competition was mostly seen as a positive thing that keeps the company awake as its activities are constantly compared to those of competitors’.
If [the politicians] are not able to reach a decision, then we do not know what we should offer to the customers -- it is a sort of zero-sum game and kind of difficult, because we should move forward but we do not know what is the thing we should start out with. (A₁)

Competition is only good, it keeps our company awake in a way and kind of clearers our mission or what our distinctiveness is in the market. (D₁)

What emerged as a big theme from the case study discussions was the ability to make swift decisions and react quickly to feedback. This is because the ability to make a quick decision is often better than a delayed decision, especially in fast moving and dynamic environments (Johnson et al. 2008, 573). When it came to the discussions, having an organizational culture that encourages testing and continuous learning was seen as its precondition and as something towards which the companies would like to move even more in the future. It was commented that sometimes bureaucratic issues or a stiff organizational culture had created barriers for an idea’s fast implementation and testing and, therefore, prevented a fast reaction. While the idea behind a traditional development cycle was seen important, it was noted that today’s dynamic business environment requires such a fast respond time that there is simply no time to weight the possibility of each outcome if an organization wants to react on time. What was required was said to be a more flexible approach where a product or service is improved through testing, learning and continuous feedback as oppose to focusing on planning and designing everything perfect before an idea can be executed.

If I now had a good development idea, I would want to try this quickly in our stores, then it might not be so possible. So [the corporate culture] has maybe stiffened our development a little bit, to tell you the truth. (C₁)

We are accustomed to a very traditional development cycle -- so we need to learn how to quickly prototype, try and learn -- it requires a new way of thinking where you do not immediately kill an initiative if it is not complete by the last bolt but learn and improve continuously. (B₁)

Our ambition is to enhance a culture of testing and experimentation, so we would be swift to react instead of planning and planning and then simply hoping [the product] is good when ready. (D₁)

To conclude, the strategic decision making process is an extensive and multiphase concept that can be influenced by numerous of dynamic factors throughout the process.
These external factors have a potential to strongly impact the course of the decision making process either by helping or hurting decision effectiveness. (Zeleny 1981, 333; Harrison 1996, 47–48.) Therefore, careful planning in regard to information collection, processing and utilization as well as the ability to efficiently follow through the different phases of the process are essential in being able to increase the probabilities for a successful decision that increases the profitability and long-term growth of the organization. (Feldman & March 1981, 175–176; Harrison 1996, 47; Mankins & Steele 2006, 81.)
5 CUSTOMER EXPERIENCE INFORMATION WITHIN STRATEGIC DECISION MAKING

5.1 Barriers to information utilization in strategic decision making

The way the connection between business intelligence and strategic decision making has been done in the study is to continue from the dissemination phase of business intelligence where processed information is communicated within the organization as well as forwarded to individuals who are able to utilize it in decision making (Sawka 1996, 49). Whereas chapter 3.3.2. focused more on describing the BI process, the focus of this chapter is on issues that are identified as something that require further analysis on the management level and on possible barriers that can exist before information can be efficiently utilized within strategic decision making. Figure 8 depicts the connection between BI and strategic decision making as actionable intelligence resulting from the BI process is disseminated to the end users (decision makers) and utilized within the strategic decision making process (information flows). In this way, information can be coupled with strategic decision making tools and turned into decisions that assist the organization in adapting to the changing environment (Walters et al. 2003, 487–488).

Figure 8 The managerial decision making process combined with BI (modified from Harrison 1996, 48 & Gilad & Gilad 1985, 69)
As shown in figure 8, the managerial decision making process is comprised of six functions of decision making that are sequential highly interrelated (Harrison & Pelletier 2000, 108–109). The process usually starts with setting objectives, but as strategic decision making and business intelligence are combined in this study, a phase preceding the strategic decision making process as well as the first phase of the overall process can be seen to be the additional analysis of information emerging from the BI process as something that requires further processing on the management level. In this phase, information that entails strategic issues is forwarded to management where the focus is on conducting additional analysis to understand the information more profoundly and to provide enough comprehension for the decision making to start (Choo 2002, 47). It was a common pattern among the case study discussions that information on emerging issues and trends led to an additional analysis or in-depth discussions on the reasons behind the results and how they could be utilized in improving the offered service or products. A majority of the interviewees said the discussions to happen within different departments either on their own initiative or with the representative of management or both, and the aim was to have everyone’s input on the matter as well as different perspectives acknowledged. The gathered information was then put together and the results forwarded again to the management level.

*We analyze the information within different units in the headquarters especially from their point of view -- so we [conduct] further analysis [on the information] and discuss more profoundly what do the results mean from their point of view. (C₁)*

*Case by case if there are bad or good experiences, the information is of course used in a positive sense to give good feedback but also if there are bad results, what are they caused by and are we able to do something about them. (D₁)*

After there is enough comprehension of the issue under investigation, the processed information can be utilized as a starting point for the strategic decision making process (Choo 2002, 47; Pirttimäki 2007, 76). However, before information can be efficiently utilized as a basis of strategic decisions there are a variety of issues to be considered as they can create a barrier for its effective utilization. The value of the produced information can be compromised for a variety of reasons. The barriers for information utilization are often related to the fact that information becomes utilized only if its relevance and precision are seen to be compatible with its cost for the end users. The assumed value of the received information can, therefore, be seen to depend on its cost, reliability and prevision and whether or not the receiver believes the information has
potential to affect a choice. However, as calculating the value of information can be very difficult and is often done in a context of conflict of interest, it can result in various problems for the organization in regard to information utilization. (Feldman & March 1981, 171–172, 176–177.)

An essential precondition mentioned by a majority of the interviewees in regard to information utilization was having a genuine desire to improve a product or service based on the received information. An attitude that values customer experience, is interested in enhancing it and wants to act on the received information was regarded very important for its effective utilization and seen as an area for improvement for a few case companies. Another issue mentioned by a few of the interviewees in regard to information utilization was the valuation of qualitative information to quantitative as management often acted on the behalf of quantitative data especially if the issues were complex or time was limited. It was commented that customer experience should be seen equal to financial indicators, as a critical factor that guides the direction of the organization and requires an immediate reaction whether on the behalf of management or an individual employee. The third issue was related to the valuation of customer experience in areas where the contacting surface with the concept was smaller, such as finance and accounting, or in situations where the receiver did not value the information or see as it applied to him. As customer experience requires the contribution of each employee and as already one employee can affect the created experience it is very important that everyone understands their connection to the concept and how they can contribute to making it a reality (Butz & Goodstein 1996, 66).

What is truly required is that we are interested in the results, want to utilize them, have the right attitude, and that we see [the information] very important and want to act on it. (C₁)

One of our key strengths is that we consider [customer experience] really important -- but people are on a bit different timeline, for some it has not really sunk in yet and for some it has sunk already years ago. But the main thing is that those who interpret data and make decisions consider it the most important. (F₁)

Additionally, one of the interviewees commented that general reluctance to adapt to continuous feedback as well as an inability to direct information to a specific segment or person created a barrier for its effective utilization. When it came to adaptation, the issue was said to be a problem especially at the beginning of the utilization phase and ease off later in the process as people became more accustomed to the information. The problem was said to result from established practices as people were accustomed to working in stable conditions to which continuous adaptation had not belong and from a
way of thinking where things are hoped to remain the same without any bigger disturbances, changes or interferences. The issue can be connected to the findings of Hough and White (2004, 782) who noted that in a situation of increasing uncertainty, people tend to count on existing knowledge and experience within the organization as the volume of data in an uncertain environment can overwhelm the receiver’s information processing abilities. Another barrier for information’s utilization was said to result from a situation where information could not specifically be directed to one person or segment but was relevant to various areas or applied to the organization as a whole. In this case, it was said to be difficult to make changes as people did not feel as the information was his responsibility when it could not be connected to a specific area.

*People also sometimes just wish things would remain the same, so many do not like if they constantly need to adapt to feedback -- or that they should continuously think how the company can perform better from a customer’s point of view.* (A1)

Finally, the last issue creating barriers for information’s effective utilization were assumptions of knowing what customers need and value. As indicated by Butz and Goodsten (1996, 63–64), often these type of assumption are, unfortunately, way off the actual mark. The pursuit of strategic decisions should be based on a real understanding of what customer need and it should be clear that it is the customers that define the value added to avoid responding inappropriately to an emerging trend. When it came to the case study discussions, it was commented by one of the interviewees that people sometimes assume to know how customers think as oppose to statistically interpreting and understanding customer behavior. These assumptions were based on the fact that the employees had been in the company for long and, therefore, had a deep knowledge of customers’ perceptions and preferences. While the know-how of employees was regarded important, it was also said to result only in a partial understanding of customer behavior and of the company’s customer base as employees often capture only a certain kind of customers in their work, leaving a part unknown. To have a holistic and comprehensive view of customers and their needs, data and facts need to be combined with the knowledge of employees. Rest of the interviewees did not touch upon the subject.

*There are also people who strongly think they know what customers think -- but it may be that only certain type of customers open up to them. So you have to understand what can be generalized and also what cannot be generalized.* (A1)
All in all, barriers for information utilization can be numerous not only because information valuation is rarely stable in an organization but also since customer experience requires that everyone in the organization considers the information valuable and is willing to act on it (Feldman & March 1981, 180; Butz & Goodstein 1996, 66). Only when the barriers have been considered and overcome, the process can efficiently move to the final phase of strategic decision making where the gathered information is utilized in creating products and services that correspond to customer needs and are able to increase the competitive advantage of an organization. Overcoming information barriers is important not only for efficient decision making but also for having people convinced of the information’s relevance. This is because people who value, gather and utilize information often actively also try to convince others of its importance. (Feldman & March 1981, 180.)

5.2 Central issues in relation to customer experience information utilization in strategic decision making

As has been discussed, the purpose of business intelligence within strategic decision making is to produce accurate and timely information on emerging trends and forces in the external environment so that uncertainty can be reduced or even removed and the decision making result in effective actions (Frishammar 2003, 318; Walters et al. 2003, 488). Relevant information is, therefore, mostly gathered and analysed prior the process and the purpose of strategic decision making is to benefit from the information for the process to be efficient (Feldman & March 1981, 172). The way information should be used within the process varies according to the decision phase at hand as information utilization is generally more intense within some of the phases. However, it is essential to keep in mind that information should, nevertheless, be sought and used actively throughout the whole process and not just at the start of some phases or during specific activities and the utilization should involve both soft and hard information. (Choo 2002, 47; Frishammar 2003, 318.)

As has been depicted in figure 5, the strategic decision making process starts with setting objectives determined by the information identified during the BI process as something that requires a reaction from the organization (Harrison & Pelletier 2000, 108). In this phase, information is used in framing the problem and in explaining its causal relationships and its primary objective is to produce enough understanding of the issue for the decision process to start (Choo 2002, 47). In the next phase, the external and internal environment is scanned for relevant and accurate information that represent alternatives that have potential to fulfil the objectives, which are then evaluated and compared. Information utilization is especially intense in the scanning phase as
opportunities are sought, detailed descriptions of alternatives conducted and solutions generated. The main purpose of the phase is to generate viable solutions that are able to fulfill the set objectives from which the option with the best potential is chosen. Information utilization is also very intense in the early stages of the selection phase as consequences have to be predicted, impractical options left out and the criteria for selection defined. The main goal of the phase is a rational evaluation of alternatives based on the best available information so the choice can be both accepted and authorized for action. (Harrison 1996, 48–49; Choo 2002, 47–48.)

When it came to the early phases of the strategic decision making process, a theme that emerged strongly from the case study discussions was the possible irregularity between what customers say versus the way they actually act. The issue was seen problematic by a majority of the case companies as it created a situation in which the companies did not know when to trust the information they are provided with or when to base decisions on the information. As it was acknowledged by all that customers might behave differently to what they say, observing customer behavior in practice was seen as a valuable way to reveal patterns not noticeable by traditional collection techniques. However, it was also acknowledged that the irregularity might result from the fact that customers are not generally able to picture what they could desire or need in the future, in which case trusting a vision became emphasized. However, the balance between when to trust the information you are provided with versus your own vision was blurry as both were said to be needed but it was unclear to which extent and in which situations. All in all, being confident of the direction in which to go to in the future based on customer experience information was seen somewhat problematic.

How companies could better observe the way customers react and how they actually act, how they really make purchasing decisions and not only what they say they will do -- because we are all similar in a sense that we may explain our behavior in a different way than how we actually act in practice. (B₁)

If we talk about challenges I have also tackled with, one is how much [a customer] can and should be asked -- as customers are not necessarily able to think about the next [phase] -- so how do you get confidence with customer information that I am now completely sure this is the right step where we want to go. (D₁)

After the choice with the best potential has been chosen, it can be implemented and transferred to customers in the external environment in a form of a product or service. The choice is later assessed by gathering information both within and outside the
organization in order to measure the effectiveness of the choice. New information that is discovered in the process is then fed back to the organization and to the decision makers in order to evaluate, modify and adjust the existing rules and procedures in regard information utilization and strategic decision making. (Harrison & Pelletier 2000, 108–109; Choo 2002, 18.) When it came to case study discussions, a majority of the interviewees highlighted that decisions are rarely so black and white that you could directly indicate what was made purely on the basis of customer experience information, which is why concrete examples were not so easy to give. It has been acknowledged also by Bocij et al. (2008, 19) that drawing lines between different decisions can be very difficult as various aspect affect the choice throughout the decision making process in addition to being affected by and intertwined with other decisions in the organization.

There were, however, a few clear examples of a situation in which a successful strategic decision had been made based on the interpretation of customer information and the analysis of the external environment. One example was a situation in which the company re-designed a service based on interpretations of customer behavior since the company realized that an aspect unprofitable on its own was still extremely important for the overall customer experience. This was realized by concept’s absence as it resulted in the loss of important customers segments. The second example was related to the identification of an emerging trend with respect to active lifestyle and wellbeing, which resulted in the company developing and investing in corresponding products. Thirdly, one of the interviewees said the company had invested in the store atmosphere after receiving feedback on the issue and understanding that customers often look for additional value in the store experience. Finally, one of the interviewees commented the company had personalized their customer experience based on feedback, which meant being involved in every aspect of the customer’s lifespan and offering additional, supplementary services in addition to the core business.

We have always received kind of low scores on inspiring, memorable stores, [we] are seen as very plain, cold even, so that is what we are concentrating on now -- it is probably connected to the generalization of e-commerce.. so what is the added value why you’d go into a ground store? There has to be something nice, striking and delightful. (C1)

We have identified that we would like to develop our customer experience with a wider perspective than simply the customer service in the store or the interface there -- so in the future we would want to be more like [centers] where everything can be found under the same roof. (D1)
The previous situations were examples of successful interpretations of customer behaviour and utilizations of customer information, but not all decisions are so successful. As has already been discussed, various barriers exist in an organization that can create problems with information processing, interpretation and utilization, whether related to information reliability and validation, data fatigue or data valuation. These issues can result in a situation where an organization invests an extensive amount of time and resources only to respond inappropriately to an emerging issue or a competitive event. (Feldman & March 1981, 17; Imhoff 2003, 36–37.) When it came to the case study discussions, only two of the interviewees were able to give a clear example of a situation in which an incorrect decision based on customer experience information had been made. This was generally commented to result from the fact that the organizations were very cautious and deliberate when making strategic decisions while acknowledging these issues and did not, therefore, have clear examples to show.

There were, however, a few examples. Firstly, one of the interviewees mentioned a situation in which the company had made an extensive survey on customer preferences since it was determinant to base its decision on customer opinions. The survey showed the direction in which, according to the customers, the company should be headed and a decision was made based on the information. The result was not, however, very successful and later its competitor made a breakthrough by offering customers a product the survey had indicated the customers do not need. The example was said to be a clear illustration that customers cannot always picture what they need or tell you where to go next, which can make data interpretation and reliability difficult. In the second example, the company had made a decision to renounce a specific product, which resulted in an extensive amount of feedback. As the issue was taken into social media, it grew into extensive proportions and the product was brought back. However, as the hustle around the issue settled, a decision was made again to drop the product and the resulting feedback was only minor. The decision to abandon the product was, according to the interviewee, right from the beginning but the extensive reaction and pressure made the company to trust the information.

_The decision was based precisely on trying to analyze customer data -- and a decision was made that we are not going to pursue this, because the market is not ready, because customers say they do not need it -- and then the following year [a competitor brought it]. (A1)_

_[we relied] maybe too much on spontaneous feedback, there were a few who took the matter to social media and as it grew into extensive proportions, the [product] was suddenly back and later pulled back again -- so you should_
consider that the reaction can be very large at start but then calm down so you
avoid making hasty decisions. (F₁)

Besides the two examples, the interviewees did not generally feel as incorrect
decisions had been made based on customer experience information, at least not on a
large scale, but majority acknowledged the risk to exist and its probability to be high.
The reason for this was said to be the fact that being certain of information’s credibility,
truthfulness and whether or not it is something that requires a reaction is very difficult.
Incorrect or incomplete information and their distinction are, in fact, one of the main
reasons why a decision ends up being inefficient or incorrect when implemented
(Imhoff 2003, 36–37). Data interpretation was seen difficult not only due to the fact that
customers sometimes act differently to what they say but also because the increasing
transparency of the current environment together with the ability to review a company’s
products or services means that everyone can get visibility for their opinion. In such an
environment, a single customer’s opinion can grow in extensive proportions and seem
more influential than it is, in which case it is dangerous to rely on information from a
single source as it can represent only a marginal proportion of the company’s customer
base. Therefore, it was commented that important is that a company does not
significantly rely on one information source but scales the information to other sources
as well as by others before acting on the information to avoid making precipitate decisions.

There is always the risk that we interpret things wrong -- but I think what works
for us is the long experience from the industry, we have people who are able to
scale the finding to their experience and think whether or not it makes any sense
-- so we do not purely focus on the data and rush into one direction but there is
the business experience in between. (B₁)

A good example [of an incorrect decision] is a situation in which a company’s
management receives feedback on some topic -- then a sin could be to draw
conclusions from the information, from a single customer’s feedback, when it
can represent one out of five thousand in a month. (F₁)

When it came to competitive advantage, the main themes emerging from the case
study discussions were personal and tailored customer service and the ability to
maintain long-term customer relations. According to half of the interviewees, customer
experience information had been utilized especially in enhancing the offered customer
service, which meant employees were well educated and competent in addition to
having a good and positive attitude towards their work. It was also commented that
some of the employees knew their customers personally, which made the service feel more tailored and worked towards creating emotional bonds with the customers. For all of these reasons, the companies had become known for their customer service in addition to it being a part of their competitive advantage. Overall, the ability to establish emotional bonds with customers can be considered extremely valuable for competitive advantage as it is especially hard for competitors to copy (Meyer & Schwager 2007, 1–4). Lastly, a few of the interviewees commented their main advantages being long-term customer relationships. This was said to be especially valuable for one of the organizations as it was among the more expensive providers in the market, which meant customers must value other aspects in the relationship and implies the company had understood what its customers expect from the organization.

One of the key strengths throughout the years has been the competent personnel who love what they do and know the [customers] who visit the [store], I think that is customer experience at its best. (D_1)

We have a lot of examples of long-term customer relationships and purchasing behavior, which is based on the fact that even if were more expensive than a competitive solution in the market, a customer feels that we are so valuable of a partner that they still want to continue with us. (B_1)

An area that was seen problematic by a majority of the interviewees and as something in which the companies would like to improve was having information within different levels and touch points commensurable, comparable and connectable so the experience could be efficiently managed as a whole and the gathered information effectively utilized in decision making. What this meant was being able to understand the different aspects of which the overall experience is comprised so they could be more easily managed on their own and as a part of a bigger entity. Customer experience’s comprehensive management is, in fact, very difficult and requires that a company understands all of the different aspects contributing to and included in the overall customer journey. As customer experience incorporates all the functions and different departments within an organization, this can be very problematic. (Berry & Carbone 2002, 1.) Among the case interviewees, the issue was said to result from the extent and diversity of the concept and from the fact that the gathered information was scattered on different levels and systems in the organization, which made data management difficult. The issue was, therefore, also connected to having one centralized database processing, connecting and drawing conclusions from the information, as has been discussed earlier. By having information commensurable and comparable, experiences in relation to
individual touch points as well as the total satisfaction to the experience could be better understood and measured as well as more systematically managed and improved.

*I wish -- we would improve our understanding of the total customer journey, so we would be able to understand a customer’s overall experience and not only the experience at a specific touch point, but how the complete journey went.* (B1)

*Managing and measuring the entity is [challenging] -- and whether or not a customer understands that a [service] at some point was a part of our supply and does he even need to understand but we should at least understand whether or not the experience felt good for the customer on all of the surfaces.* (D1)

To conclude, a well-managed decision making process that is based on customer experience information utilization can result in a number of benefits for an organization, such as increased customer satisfaction and loyalty, as the improved product or service creates better experiences with the company and its representatives (Meyer & Schwager 2007, 1–4). The ability to manage the decision making process can, however, be a very difficult and time-consuming task. The main themes creating problems for the case companies were the concept’s comprehensive management and the ability to ensure information reliability and validity as they were among the main reasons why incorrect decisions had been made or were acknowledged that could be made in the future. Incorrect, incomplete or unreliable information can have extensive consequences for an organization as it can jeopardize the complete effort of the decision making process and result in a situation where the organization has invested an extensive amount of time and resources only to respond inappropriately to an external force (Imhoff 2003, 36–37). Therefore, characteristics in relation to customer experience information and its utilization, whether related to issues seen typical, problematic or otherwise notable, need to be understood and acknowledged so the probabilities for an incorrect decision can be minimized.
6 SUMMARY AND CONCLUSIONS

6.1 The results of the study

The purpose of the study was to examine which issues in relation to the characteristics of customer experience information need to be considered when making business intelligence (BI) based strategic decisions with a specific focus on customer experience information utilization. The study centered on investigating how customer experience information is collected and through a business intelligence process converted into actionable intelligence to support managerial work. By combining the concept of business intelligence with strategic decision making, issues resulting from the characteristics and nature of customer experience information could be investigated from the viewpoint of their significance to the decision making process. This study was conducted as a qualitative case study of six companies and the empirical contribution was based on six individual interviews (n=6) with the representatives of the companies.

The following table 4 illustrates the main results of the study in relation to issues that should be considered when basing decisions on customer experience information. The researcher assembled the table based on the empirical material of the study while having the models of Gilad and Gilad (1985) and Harrison (1996) as a basis. As can be seen from the table, the researcher divided the issues into three categories of essentials, to be considered and to be emphasized and their contents depend on the phase at hand. The three phases have been divided according to the frameworks of the study as business intelligence covers the first two phases of information collection and information processing (Gilad & Gilad 1985) and strategic decision making represents the final phase of information utilization (Harrison 1996). Information collection refers especially to planning how and where information should be collected whereas processing concerns interpreting and analyzing the collected data. The final phase refers to issues that should be considered when basing decisions on the information.

So, whereas essentials are a prerequisite for the phase to be efficient, issues to be considered refer to issues that can greatly affect the outcome of the phase. This can happen either beneficially if handled well or negatively if not considered well enough, in which case they work as a barrier not only for the phase at hand but also for the overall process as the outcome of the phase affects the contents of the following ones. Therefore, the purpose of the final category of to be emphasized is to introduce ways in which problems could be resolved, probabilities for barriers’ existence reduced and the effectiveness of the overall phase enhanced. The phases and related issues are depicted in detail in table 4. The arrows illustrate the areas that should be emphasized to reduce the probabilities for the corresponding barrier.
Table 4  Issues to consider when basing decisions on customer experience information

<table>
<thead>
<tr>
<th>Phase</th>
<th>Essential</th>
<th>To be considered (possible barriers)</th>
<th>To be emphasized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection (business intelligence)</td>
<td>Transactional and more extensive methods should be combined</td>
<td>Customers’ indifference or inability to give feedback *</td>
<td>Find new ways to engage with and approach the customers</td>
</tr>
<tr>
<td></td>
<td>Methods should be checked and updated in relation to a company’s development stage</td>
<td></td>
<td>Link information from other sources and consider the impact of missing data</td>
</tr>
<tr>
<td></td>
<td>Touch points to be considered on their own and as a part of a bigger entity</td>
<td>Customers’ willingness to give feedback *</td>
<td>Consider how often and where is appropriate to ask customers for feedback</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Avoid asking what you already know</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Increase customer observation</td>
</tr>
<tr>
<td>Processing (business intelligence)</td>
<td>Well-designed systems &amp; competent people involved in the process</td>
<td>The ability to bring information close as well as have it accessible to the one who is able to act on it</td>
<td>Effective planning especially in regard to the identification and collection phases of the business intelligence process</td>
</tr>
<tr>
<td></td>
<td>The ability to integrate data to find cause-effect relationships</td>
<td>Ensure information reliability (consider the effect of diversity, personality and mindset * )</td>
<td>Only gather data for a purpose</td>
</tr>
<tr>
<td></td>
<td>Being alert for external forces and emerging trends that influence the organization</td>
<td>Information should be forwarded quickly to allow a fast reaction time</td>
<td>Systematic data collection methods that are appropriate for the intended source</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilization (decision making)</td>
<td>Ensure information quality and verifiability</td>
<td>Increasing visibility for an individual opinion *</td>
<td>Scale information to other sources and by others</td>
</tr>
<tr>
<td></td>
<td>Customer centric view that values customer experience and wants to act on the information (throughout the company)</td>
<td>Irregularity between customers’ words and action *</td>
<td>Systematic data collection methods</td>
</tr>
<tr>
<td></td>
<td>The ability to adapt to continuous feedback</td>
<td>Customers not being able to picture what they need *</td>
<td>Find a balance between data and intuition or vision</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stiff or bureaucratic culture</td>
<td>Increase flexibility (e.g. small-scale testing &amp; engagement marketing)</td>
</tr>
</tbody>
</table>

* Influences information reliability
What emerged clear from the case study discussions was that the complexity and extent of the issues needed to be taken into consideration when making customer experience based decisions were numerous and only increased by the fact that the case companies were different size and represented somewhat different industries. As each of the case companies had their own characteristics when it came to customer experience information collection, processing and utilization, data summarization was somewhat difficult and results diverging, which can, however, also be seen to bring dimension to the thesis in a form of varying perspectives. Overall, it can be concluded that as the characteristics in regard to customer experience information collection, processing and utilization vary depending on the size and structure of a company as well as on the nature of the industry at hand, it is recommended that the results are considered by all but scaled and adapted to the nature of the company. A customer experience information based strategy should, therefore, be tailored to the company in question to respond the needs of the company and to produce the maximum utility.

6.2 The main conclusions of the study

The conclusions of the study will be assessed through the research questions, starting from the sub-questions and ending to the main research question. The purpose of the first sub-question was to find out in which ways and from which sources is customer experience information collected? This question has been answered in chapters 3.1 and 3.2. The ways to monitor customer experience information were divided into three categories of past, present and potential patterns in the study. When it came to monitoring past patterns, the techniques mentioned by the interviewees were mostly convergent among the case companies and can be grouped into two categories of customer feedback systems following directly an experience and methods that focus on registering and tracking customer purchase behavior. Data collected through these techniques was emphasized as a great source of information not only for the immediate reaction-time they allowed but also for their ability to identify future opportunities, which meant the method had a larger emphasis and purpose for the case companies than previous theory indicated and the information’s usability is to be highlighted.

Present patterns involved the greatest amount of collection techniques, making it the most extensive way to gather information on customer experiences. The techniques varied from methods majority of the interviewees commented to be using to methods only a few mentioned, but the main techniques can be grouped into three categories of social media and online behavior, customer service and feedback and mystery shopping based techniques whereas the less common methods included techniques such as benchmarking, customer events and in-person interviews. While monitoring past
patterns, important issues to acknowledge were customers’ *indifference or inability to give feedback* as well as the ability to be considerate towards customers’ *willingness to give feedback*. This is because both can be seen to interfere with information reliability either by preventing a company from having a comprehensive picture of their customer base or by distorting the received information if asked too much too frequently. The results indicate that focusing solely on the received information can be misleading and that information should not be collected or aimed for at any cost.

Information on potential patterns was quite limited in the discussions as there was only one method majority of the interviewees mentioned to be using: *engagement marketing*. The reason why potential patterns were not extensively in use might result from the fact that its information collection techniques are usually very focused as well as more difficult and heavy to implement than those of past and present patterns, which makes it less desirable in situations of limited time and resources. The importance of such methods was, however, highlighted in the discussions and seen as an area that could require further emphasis in the future. This could relate to the second fact that data collection methods should be *checked and updated in relation to the company’s development stage* so they produce the maximum utility. It might, therefore, be that the companies are only moving to the stage of potential patterns. Lastly, to get a holistic view of customer experience, *transactional and periodical methods should be combined with extensive ones* and the customer journey should be *considered as a whole* as oppose to focusing too much on individual touch points as it was seen to divert attention from the bigger picture.

The empirical results indicated that the methods to monitor past, present and potential patterns were mostly convergent among the case companies but also divergent depending on the category at hand. The researcher felt it resulted mostly from differences in industries as each of the case companies had their own characteristics when it came to information collection. However, the extent of the concept was also something the researcher felt slightly distorted the results as the issues to be monitored were so vast that information was sometimes added later during the other phases of the interview as an interviewee remembered another method they were using but forgot to mention earlier, which indicates that some of the methods might not be as uncommon as the results show or some might be missing. However, it can still be concluded that the empirical material gives a comprehensive understanding of the techniques that can be used to capture past, present and potential patterns regardless of the fact that a more realistic understanding could be achieved with a more extensive investigation.

The gathered information is then converted into actionable intelligence to support managerial work, which is why the purpose of the second sub-question was to solve *how is customer experience information to be utilized within business intelligence (BI) process?* This question has been answered in chapter 3.3. The information that
emerged from the discussions was mostly parallel with previous theory in regard to the order of the process as it was seen to start with the identification phase and follow through the phases of data collection, processing, dissemination and end to information utilization and decision execution. However, what caused variation was the content of the phases especially when it came to processing and dissemination. The researcher thought it resulted from the size and structure of the companies as companies of smaller size and lower hierarchy were able to forward information close to the one who it concerned already during the processing phase whereas companies of larger size did not forward the information until in the dissemination phase as the theory had indicted, probably due to the amount of information to be processed. Therefore, it can be seen that the size and structure of a company can have an impact when it comes to the characteristics of the process.

Since an issue highlighted by all in order for information to result in effective and concrete actions was the ability to *bring information close to the one who is able to act on it*, smaller companies or companies of lower hierarchy can be seen to benefit from their size. This is not only because information can be forwarded faster but also since it allows employees to process data themselves, making it possible to familiarize with the data from early on. However, this does not necessarily mean smaller companies will be more efficient in the matter just that they have a certain benefit when it comes to their size. Another issue that emerged as very important and as something in which smaller companies can be seen to have a head start was that information was *communicated quickly to allow a fast reaction time*. A fast reaction time was something that was emphasized throughout the discussions due to the volatility of the external environment as the pace of change can be very fast but time to react very limited. Even when the emphasis was on strategic issues the importance of a fast reaction time was highlighted, which implies there is pressure also for strategic decisions to be executed quickly.

When it came to the effectiveness of the process, issues that needed to be considered for their importance and for the challenges they brought were the ability to *integrate data to find cause-effect relationships* and having *systematic data collection methods*. What this meant was having clear, functional and well-designed systems processing the information in addition to competent people who are involved in the process and able to draw conclusions from the data. The problem with a majority of the companies was either that information was scattered on various systems, making data integration difficult, or that management relied too much on others for data analysis as oppose to trying to focus on the data themselves. This indicates that effective systems are not sufficient on their own even if they were a precondition for the process, but that the people involved in the process, especially those basing decisions on the information, should be willing to, interested in and capable of interpreting and analyzing data so an organization can react both quickly and effectively to emerging forces and trends.
The reason why *systematic data collection methods* were emphasized were the various ways in which customer experience information can be misleading, falsifying or unreliable. To be able to know when information is something on the basis of which need to be reacted, information should be collected systematically throughout all the touch points while focusing on the same issues in order to spot correlations more easily. The researcher felt the information that emerged from the discussions in regard to information reliability was somewhat overwhelming especially when combined with the pressure to react fast, which is why increasing importance should be placed on effective planning especially when it comes to the first phases of the business intelligence process: identification and information collection. By focusing on executing these phases well and by ensuring *data is only gathered for a purpose*, it can reduce the probabilities for an ineffective decision based on incorrect or incomplete information.

Information identified as strategic is then to be forwarded to management for further analysis, which is why the purpose of the third and final sub-question was to find out **what are the prerequisites of customer experience information based strategic decisions?** This question has been answered in chapter 4. It is important to start by emphasizing that for information to result in strategic actions, the requirements in regard to information *quality* and *verifiability* were seen very high. This is not only due to the characteristics of customer experience information when it comes to reliability, but also because the amount of data available is so abundant. Additional challenges that created barriers for effective decision making were issues such as *the inability to debate, discuss and disagree* within the organization as well as *the inability to internalize new information and new ways of thinking* as these issues were seen to prevent information sharing within the organization. These were, however, mentioned only by a few of the interviewees and could, therefore, be strongly connected to the organizational culture and personality traits, but in any case, general conclusions cannot be made based on the results but are brought up as interesting issues that can emerge in relation to the subject.

When it came to the strategic decision making process, information was mostly convergent with the model of Harrison’s (1996). The biggest difference related to the strategic gap as none of the interviewees commented their strategic decision making to start from internal assessment but from the external analysis where the focus was on monitoring emerging forces and trends in the external environment. A great amount of emphasis was placed on the ability to *being alert for possible changes in the external environment* as it was seen as a precondition for the overall process and to able to compete in the current business environment. It could, however, be that the interviewees had not thought organizational assessment as an initial phase of the process since issues in regard to the capability profile did emerge during other phases of the interview. Among these were budget and technology issues as *limited time and resources* meant operational work had to be prioritized and *a lack of a centralized database* created
problems with data integration. It is still clear that more emphasis could be useful to place on organizational assessment in order to know if an organization is prepared to and capable of tackling issues emerging from the external environment.

Issues that were highlighted for the process to be efficient were related to the nature and characteristics of the customer experience information together with the volatility of the current business environment. Firstly, small-scale testing was seen as a very convenient and effective way to approach decision implementation as it allowed an organization to be ascertained of an idea's functionality before scaled bigger. The importance that was placed on the method might be due to the various problems with information reliability as it allowed an organization to be more flexible by improving, changing or even by pulling back an idea before scaled bigger. Another issue to be noted was that decision making did not necessarily follow through all of the steps of the decision making process if an idea was seen very easy and straightforward to implement. This might result from the volatility of the external environment and from the increasing pressure for decisions to be implemented quickly for an organization to respond in time. Therefore, decisions that were seen quick and easy to implement did not necessarily follow through a full decision making process even if considered strategic. The effect this may have on the decision’s effectiveness is, however, unclear.

External issues that were seen to complicate the process were strongly related to societal factors, such as politics and legislation. Societal factors were seen to both limit as well as slow down the companies’ development and were seen especially problematic as they can hinder the quality of the experience for a customer while customers might not realize the reason for the inefficiency is simply because the organization cannot do anything about it. Another issue that was seen to complicate the process was a stiff or bureaucratic organization culture as it was seen as a barrier for swift decisions. This was again a situation in which an increasing emphasis was placed on a fast respond time and where the pressure for strategic decisions to be implemented quickly was evident. It can be seen that more emphasis should be placed on organizational flexibility as well as on the ability to improve a product or service through testing, feedback and continuous learning, which indicates organizations can benefit greatly from using even more flexible approaches such as engagement marketing and small-scale testing.

The sub-questions needed to be resolved before moving to the main research question of the study which purpose was to discover which issues in relation to the characteristics of customer experience information need to be considered when making business intelligence (BI) based strategic decisions with a specific focus on customer experience information utilization? The main research question has been answered in chapter 5. One of the main requirements for actionable intelligence created through a BI process to result in concrete and effective actions was an attitude that values customer experience and wants to act on the received information. It was
emphasized throughout the case study discussions that customer experience is not something you happen to achieve and benefit from but requires that the concept is valued throughout the organization, not just in specific areas or departments or by specific persons. Besides seeing the concept valuable, what is required is an ability to adapt to the continuous feedback as issues coming up might be frequent and require gradual changes. It seems as one of the most important things for customer experience information to result in effective actions after it has been processed by BI is a genuine desire to understand, interpret and utilize the information and that the barriers are mostly related to stiff or traditional ways of thinking. However, even if sounded simple, changing this perspective can be very difficult as attitudes and values are often strongly rooted into the existing culture and require time, effort and patience to change.

Information reliability was one of the main characteristics of customer experience information that is to be considered when basing decisions on the information. It is not only the extent of information that makes the data interpretation difficult, but also the irregularity between what customers say and the way they act. Since trusting the information you are provided with can be problematic, this is where the impact of BI in relation to systematic data collection methods and the courage of going with your own vision became emphasized. The balance between vision and data can be difficult to find but important is to acknowledge that customers might not be able to picture what they want or require and relying too much on received data can be misleading. Another characteristic to be noted is that the current global environment allows everyone to share and get visibility for their opinion, which means a single customer’s reaction can seem more influential than it actually is. In these cases, importance should be placed on the ability to scale information to other sources as well as by others in order to avoid making hurried decisions under pressure especially since this is where the information interpretation can be most insidious.

One of the main themes highlighted for customer experience information to result in effective decisions as well as one of the biggest challenges of customer experience was the ability to have different touch points commensurable and comparable so the customer journey could be effectively managed as a whole. The ability to understand the various aspects constituting to the overall experience both on their own and as a part of a bigger entity was highlighted also in the previous theory as focusing on an experience on a single touch point can create a distorted picture and decision based on the information result in outcomes that might not improve the customer’s overall experience. Therefore, increasing importance should be placed on the first phases of the BI process in regard to identification and collection to have a comprehensive view of the experience. When companies succeed in managing the overall process, it contributes to their competitive advantage by creating emotional bonds with customers that are not only beneficial for the organization but also very difficult for competitors to copy.
6.3 Research analysis and validity

The purpose of data analysis is to introduce the main elements explaining the nature of the phenomenon under study. A data analysis generally involves five main stages of data preparation, initial exploration, data analysis, representation and validation. The first stage of data preparation means transforming the collected data into a form usable for analysis. (Cresswell & Plano Clark 2007, 129; Denscombe 2007, 289.) The recorded interviews were first transcribed and each of the interviewees was given a color-coding to help data analysis. The answers were then aggregated together and assembled according to the themes and questions of the case interview form. Unnecessary information was removed, and material rearranged if some information was better related to other question or topics of the study. The collected material was then carefully read through in order to familiarize with the data and to gain an initial understanding of the material as a whole. The initial exploration phase can, however, be seen to start already during the first interview as the researcher starts to identify specific themes and issues emerging from the discussions (Hirsjärvi & Hurme 2008, 136).

After the initial exploration, knowledge of the issues was deepened by focusing profoundly on the material and by gaining a better understanding of the material as a whole. The research focused especially on arranging information into specific themes in relation to issues that kept repeating, were very similar or significantly different to each other. Convergence adds strength to the findings as data from various sources is put together to have a better understanding of the material as a whole and as interesting themes emerging from the material are identified. (Ryan & Bernard 2003, 94; Baxter & Jack 2008, 554.) It is important to acknowledge that research analysis is guided by the researcher’s persona and highly dependent on the issues to which the researcher pays attention. Overall, the research analysis is a researcher’s interpretation of the subject under study in addition to being the result of the cooperation between the researcher and the interviewee. Some other researchers could have, therefore, interpreted the content of the research material in a different way due to differences in persona, value system or communication styles, for example. (Denscombe 2007, 296–297; Hirsjärvi & Hurme 2008, 189.) While acknowledging these limitations, the researcher focused on analyzing the material as carefully, precisely and neutrally as possible.

The fourth stage of data representation is realized through the writing process as the empirical material is combined with the theoretical frameworks of the study (Denscombe 2007, 288). The empirical material is, overall, in a continuous dialog with the theoretical frameworks, which builds a basis for a profound analysis as well as for a structured conclusion of the research material (Pihlaja 2006, 53–54). Quotations are used in the study to illustrate the empirical findings as well as to enlighten the discussed phenomenon. The quotations have been translated from Finnish to English by the
researcher and the original ones can be found from appendix 5. The researcher focused on translating the citations as correspondingly to the thoughts of the interviewee as possible while modifying the sentence structure to be corresponsive to the English language. The linguistic form of the citations has been modified in a sense that expletives not important for the content of the quotation but impeded with its readability were left out. Some words were also replaced with an equivalent one to make the citations more reader-friendly or to protect the anonymity of the interviewees. The replaced words are indicated by the square brackets.

The last stage, data validation means verifying the data is true and correct and the results credible. The validity of the research can be assessed through credibility, transferability, dependability and conformability. Credibility refers to the internal validity of the research and describes how probable the data is to be accurate and appropriate. (Flick 2002, 228; Denscombe 2007, 297–298.) The selection criteria for the case companies were based on CXPA Finland’s survey and recent articles on customer experience. The criteria for the interviewees was based on their knowledge of the frameworks of the study, which ensured their ability to answer the questions of the case interview form based on their knowledge and experiences in the case companies. The case interview form covered the theoretical framework comprehensively as it was assembled after the theoretical part of the study had been written. This also ensured the researcher had a comprehensive understanding of the theoretical material and was able to guide the interview in a direction best suitable for the content of the thesis if necessary. Lastly, the transcribed material was converged in order to understand the empirical material as a whole as oppose to focusing on various parts of the case or treating each data source independently (Baxter & Jack 2008, 555).

The research validity was also considered when collecting the empirical material of the study. Since interviews rely strongly on self-reported data, it can easily be that interviewees are not completely honest even if their anonymity was protected. For this reason, the interviews were conducted on the companies’ premises to have a familiar and comfortable atmosphere that encouraged free and relaxed conversation and where the interviewees were able to describe their perceptions and thoughts without any disturbances. The interviews were also done separately and individually to rule out the influence of others, which might have prevented the interviewees to speak freely about their opinions. Overall, the researcher felt that the situation allowed the interviewees to speak openly and freely about the subject. The data validation was also increased by using multiple sources for information (Taylor 2005, 102), and the researcher felt the number of interviews gave a comprehensive outlook on the subject as specific issues kept repeating and new information was minor during the last interview.

However, since the case companies represented different industries and as the concept of customer experience is so extensive that not all topics of the study could be
addressed in the case interview form, issues emerging from the interviews were somewhat diverging and often related to the industry in which the companies operated. Therefore, it was not uncommon that interesting information emerged from the discussions, either related to or outside the main topics, that belong to the subject but only a few or simply one interviewee commented. It is also to be noted that the interview with the respondent E started late and could not be prolonged due to issues the researcher could not control, which meant there was not enough time to address every question in the case interview form, but the discussion had to be guided in order to get a comprehensive understanding of the material as a whole so the answers could be comparable. Transferability, described as the extent to which the results of the study are applicable in other contexts, may therefore be not so evident (Merriam 2014, 223–227). The results may apply to same sized organizations in same or other industries, but cannot be generalized since numerous case companies would have been needed for that level of transferability.

Dependability measures the similarity of the results if performed by another researcher. As the conditions of a qualitative research vary each time, a study cannot be replicated in a way that exactly same results are gained. For this reason, the dependability in a qualitative research refers mostly to the assessment of the research material and whether the research process is logical so a reader can easily notice how a decision was reached. (Merriam 2014, 220–223.) In this study, the interviews were recorded so they could be transcribed as precisely and as correspondingly to the thoughts of the interviewees as possible, and the research process was documented in detail. Conformability relates closely to dependability as it depicts to what extent the researcher has influenced the outcome of the study (Denscombe 2007, 300–302). In this study, the researcher focused on analyzing the studied phenomenon open-mindedly and focused only on the interviewees and their perceptions and experiences without any preconceptions or prejudices. The researcher had no previous contact with the interviewees, which ensured the data assessment was impartial and free of bias. Data reporting also included only what had been observed and told as oppose to what was thought to have been told or making one’s own conclusions (Taylor 2005, 102). It is to be noted, however, that subjectivity is always present in a qualitative research to some extent and cannot be completely ruled out (Eskola & Suoranta 2015, 210).

6.4 Further research

As the study indicated, the concept of customer experience is so extensive that there are a variety of possible subjects for further research. First of all, the results of the study introduce an interesting area for further research especially if investigated more
comprehensively by including either a bigger sample size so the results can be compared between companies of different size, structures or industries or in-depth within a specific industry so the issues can be understood more profoundly in relation to the context in which they exist. One interesting topic could be to focus on examining the results of the study especially in regard to issues that are to be considered and to be emphasized so their influence on customer experience information utilization as well as their reciprocal relationship could be better understood. Therefore, an empirical study investigating the issues on their own in addition to focusing on the ways in which they affect each other could be an interesting topic for future research.

Additionally, considering the scope of the paper, this study provides merely an introduction into various issues important for the study as a whole but that were not focused on more profoundly as they were not the main focus of the thesis. These are issues such as information collection techniques, the effectiveness of a business intelligence process and the impact of information sharing, politics and intuition on information utilization as interesting themes emerged from discussions that could require further research. When it comes to information collection techniques, especially potential patterns could be a topic of future research as results in regard to its techniques and their implementation was very limited in the case study discussions and their possible benefits unclear. As for business intelligence, a theme that could be investigated in the future is the impact of a company’s size or hierarchy on the effectiveness of the overall process as the results indicated that smaller companies or companies of lower hierarchy were able to bypass some of the phases of the process and possibly benefit from their size and structure when interpreting and utilizing customer experience information in decision making.

Finally, the impact of information sharing, politics and intuition on information utilization in strategic decision making could be topics of future search as the empirical results in regard to the themes were quite vague. However, as interesting themes did emerge from the discussions, it indicates that there could be room for research as well as interesting issues to investigate when it comes to the connection between customer experience information, strategic decision making and the impact of politics, intuition or information sharing. An interesting topic could be to focus on investigating the possible barriers or benefits they may present for the overall process or focus more profoundly on the themes that emerged from the case study discussions in order to get reinforcement on their characteristics and extent of existence. There are issues such as the inability to debate, discuss or disagree within the organization or the inability to internalize new information or new ways of thinking.
REFERENCES


APPENDICES

APPENDIX 1 Case interview form in English

The start of the interview

1. Could you first tell me about your current position; what is your official title and main responsibilities?
2. Could you shortly describe your work experience in your current position/company?

Questions on business intelligence and customer experience information

1. How, from which sources and how regularly is customer experience information retrieved?
2. What would you consider as the most important source for customer experience information in your company and why?
3. How the gathered information is processed (sorted, evaluated, interpreted and analyzed)?
4. What happens to the processed information? How is it utilized in the organization from your point of view or to what sort of actions does it lead to?

Questions on strategic decision making and customer experience information

1. What is a typical strategic decision making process in your company like? (phases)
2. What sort of requirements does a strategic decision making process involve in regard to information quality, source and nature?
3. What kind of strategic decisions based on customer experience information have been made in your company?
4. How have these decisions been implemented and to what concrete actions have these decisions led to?
5. How is the effectiveness of the choice monitored after the implementation (e.g. in regard to customer satisfaction and competitiveness)?
6. Do you have an example of a situation in which external forces have either harmed or helped strategic decision making?
General questions

1. What would you consider as the strengths of your company in regard to customer experience information collection and utilization?

2. Do you have an example of a situation in which your company has gained business advantage by the utilization of customer experience information?

3. Have there been any problems related to customer experience information utilization (in strategic decision making and generally)? If so, what have the problems been related to?

4. How have these problems been tackled / could have been tackled?

5. Have you made any incorrect decisions through customer experience information? If so, what do you feel were the reasons for it?

6. Do you feel as your current customer experience information collecting tools support strategic decision making? What improvements/changes would you like to have?

7. How would you develop customer experience information utilization in your company (as a part of strategic decision making and generally)?
APPENDIX 2 Case interview form in Finnish

Haastattelun alku

1. Kertoisitko aluksi nykyisestä työtehtävästä; mikä on virallinen tittelisi sekä tärkeimmät päätavutautualueesi?
2. Kuvailsisitko lyhyesti työkokemustasi nykyisissä työtehtävissä/nykyisessä yrityksessä?

Kysymyksiä liittyen liiketoimintatiedon hallintaan sekä asiakaskokemustietoon

1. Miten, mistä lähteistä ja kuinka säännöllisesti asiakaskokemustietoa kerätään?
2. Mikä on mielestäsi yrityksenne tärkein asiakaskokemustiedon lähde ja miksi?
3. Miten kerättyä tietoa käsitellään (lajittelu, arviointi, tulkinta ja analysointi)?
4. Mitä käsitellylle tiedolle tapahtuu? Miten sitä yrityksissänne mielestäsi hyödynnetään tai minkälaisiin toimenpiteisiin se johtaa?

Kysymyksiä liittyen strategiseen päätöksentekoon ja asiakaskokemustietoon

7. Millainen on tyyppillinen strateginen päätöksentekoprosessi yrityksissänne? (vaiheet)
8. Minkälaisia edellytyksiä strategisessa päätöksenteossa on tiedon laadun, lähteen ja luonteen suhteen?
9. Millaisia asiakaskokemustietoon perustuvia strategisia päätöksiä yrityksissänne on tehnyt?
10. Kuinka nämä päätökset ovat toteutettu ja millaisiin toimenpiteisiin ne ovat johtaneet?
11. Miten toteutuksen tehokkuutta on jälkeenpäin seurattu (esim. asiakastyytyväisyysyden ja kilpailukyvyn kannalta)?
12. Onko sinulla esimerkkejä tilanteesta, jossa yrityksen ulkopuoliset tekijät ovat joko edesauttaneet tai vahingoittaneet strategista päätöksentekoa/prosessia?

Yleisiä kysymyksiä

1. Mitkä ovat yrityksenne vahvuudet asiakaskokemustiedon keräämisessä ja hyödyntämisessä?
2. Onko sinulla esimerkkejä tilanteesta, jossa yrityksenne on saavuttanut kilpailuetua asiakaskokemustiedon hyödyntämisestä?

3. Onko yrityksessänne ilmennyt ongelmia asiakaskokemustiedon hyödyntämisessä (sekä osana strategista päätöksentekoa että yleisesti)? Jos on, niin mistä ongelmat ovat johtuneet?

4. Miten ongelmat on ratkaistu / olisi voitu ratkaista?

5. Oletko tehnyt virheellisiä päätöksiä asiakaskokemustiedon pohjalta? Jos olet, niin mistä luulet sen johtuneen?

6. Tuntuuko sinusta, että yrityksen asiakaskokemustiedon keräämismenetelmät tukevat strategista päätöksentekoa? Millaisia parannuksia/muutoksia haluaisit?

7. Miten kehittäisit asiakaskokemustiedon hyödyntämisestä yrityksessänne (sekä osana strategista päätöksentekoa että yleisesti)?
## APPENDIX 3 Case companies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Consumer services (media)</td>
<td>1,000.0 – 5,000.0</td>
<td>5 000 – 10 000</td>
</tr>
<tr>
<td>B</td>
<td>Industrials (industrial goods &amp; services)</td>
<td>5,000.0 – 10,000.0</td>
<td>10 000 – 50 000</td>
</tr>
<tr>
<td>C</td>
<td>Consumer goods (food &amp; beverages)</td>
<td>1,000.0 – 5,000.0</td>
<td>250 – 5 000</td>
</tr>
<tr>
<td>D</td>
<td>Consumer goods (retail)</td>
<td>40.0 – 1,000.0</td>
<td>250 – 5 000</td>
</tr>
<tr>
<td>E</td>
<td>Consumer services (retail)</td>
<td>5,000.0 – 10,000.0</td>
<td>10 000 – 50 000</td>
</tr>
<tr>
<td>F</td>
<td>Consumer services (travel &amp; leisure)</td>
<td>1,000.0 – 5,000.0</td>
<td>250 – 5 000</td>
</tr>
</tbody>
</table>

*The value is within the given range*
## APPENDIX 4 Interviewees

<table>
<thead>
<tr>
<th>Company</th>
<th>Interviewee</th>
<th>Main responsibilities</th>
<th>Time in an organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A₁</td>
<td>Customer experience</td>
<td>2.5 years</td>
</tr>
<tr>
<td>B</td>
<td>B₁</td>
<td>Customer experience</td>
<td>11 years</td>
</tr>
<tr>
<td>C</td>
<td>C₁</td>
<td>Customer experience</td>
<td>10 years</td>
</tr>
<tr>
<td>D</td>
<td>D₁</td>
<td>Marketing and customer experience</td>
<td>4 months</td>
</tr>
<tr>
<td>E</td>
<td>E₁</td>
<td>Online services and eCommerce</td>
<td>2 years</td>
</tr>
<tr>
<td>F</td>
<td>F₁</td>
<td>Customer experience and customer relations</td>
<td>17 years</td>
</tr>
</tbody>
</table>
Chapter 3

Qualitative and fast, quantitative information are equally needed -- of course leading requires numbers to be frank, being able to show trend curves is very important for management so they are able to see on a large scale what is going on, but from a developmental perspective, it would be interesting -- to have more qualitative information. (C₁)

"Kvalitatiivista ja tällasta nopeeta kvantitatiivista tietoo tarvitaan molempia -- tietyt johtaminen tarvii aina lukuja suoraan sanoen, et on niitä trendikäyriä näyttää ni se on tosi tärkeää johdolle et ne nääke isos kaavassa missä mennään, mut sit kehittämissäkönkulmasta ehkä enemmän viel kiinnostais -- saada sitä kvalitatiivista, laadullista ymmärrystä lisää." (C₁)

Customer experience consists of the product selection surely, that's what the customers come to buy, and what the experience and satisfaction were to it. Then the personal customer service and surely the store atmosphere, surroundings and all the visual aspects -- and of the brand of course, so it's not all about the experience but also about the image. (C₁)

"Asiakaskokemus muodostuu siitä tuotevalikoimasta toki, sitähän ne asiakkaat tulee ostamaan, ja mikä se kokemus ja tyytyväisyyssä siihen on. Sit se henkilökohtaan asiakaspalvelu ja toki se myymälätä, se ympäristö ja kaikki visuaalisuus -- ja brändistähän se myös tulee paljon, et sitä mielikuvaa, ei pelkkää sitä asiointikokemusta." (C₁)

One of our most important tasks is to communicate to customers about the process, so not only that we deliver a product and [service] on time -- but if someone cares and looks after your case, it has a big impact. (B₁)

"Yks tärkeintä tehtävää on vie asiakkaalle etenemisestä, ei ainoastaan se et me toimitetaan tuote ja [palvelu] ajoissa -- mut et jos joku välittää ja pitää huolen siitä sun asiasta ni sillä on iso merkitys." (B₁)

In reality, even in a situation where things go wrong but you are able to excellently handle the problem, customer satisfaction can be remarkably better than if everything had gone smoothly, so we aim at influencing customers' feelings. (F₁)

"Käytännössä jopa semmossin tilanteissa et asiat menee pieleen mut pystytään hienosti paikkaamaan niin se asiakastyytyväisyyssä voi olla huomattavasti parempi ku et menis tasasesti kaikki eli pyritään vaikuttaa niihin asiakkaan tunteisiin." (F₁)
We realized that we should not only be improving the offered service but also the broader experience that is comprised of far more other issues than the customer service only. (C₁)

“Herättiin tähän ettei kehitetä enää vaan asiakaspalvelua vaan myös sitä laajempaa asiakaskokemusta, joka rakentuu sitten monesta muustakin asiasta kun pelkästään siitä asiakaspavelusta.” (C₁)

Companies are at a very public position and customers rate services, so if you greatly screw up in something, it is pretty visible immediately. (laughter) (B₁)

“Yritykset on hyvin julkisessa asemassa ja ihmiset arvioi palveluja et jos oikein lahkakkaasti mokaa jossain ni se on aika näkyvää välittömästi.” (naurua) (B₁)

If everything goes well, smoothly, you do not necessarily remember it, but if you are offered something extra, there is something nice about the customer contact, then [the customer] can really remember it for long, he can talk about it on social media, tell about the experience to his friends and so on. (F₁)

“Jos kaikki menee hyvin, tasaisesti, ni sä et välttämättä tänään sitä muista, mut jos tehdään jotain ekstraat et jonkinlainen kiva asia siinä asiakaskohtaamisessa ni se [asiakas] todellaki voi muistaa sen pitkään ja se voi puhuu siit sosiaalises medias, se voi puhuu siit ystäville ja niin edelleen.” (F₁)

The product is not the greatest, most magnificent thing anymore but it is something that needs to be in order, and the way to stand out is achieved through customer experience. (B₁)

“Tuote ei oo enää se suurin, mahtavin juttu vaan se on sellanen juttu mikä meillä täytyy olla kunnossa, et se millä se erottautuminen tehdään on tää asiakaskokemus.” (B₁)

In our industry, [supply] is very similar -- therefore, customer experience is seen as a way to stand out and bring forward the company’s identity, it is seen as a big competitive advantage at our company nowadays, it is something that is way more difficult to copy. (F₁)

“Tällä alalla toiminta on sellasta että [tarjonta] on aika paljon samanlaista -- et asiakaskokemus nähdään semmosena tapana erottautua ja tuoda sitä omaa identiteettejä et se nähdään suureks kilpailuvaltiks meillä nykyään, se on sellasta mitä on paljon vaikeempi kopioida.” (F₁)

A good customer experience results in customers buying more, being willing to pay more, buying more frequently and becoming loyal towards the chain slash brand. (E₁)

“Hyvä asiakaskokemus pistää ihmiset ostaa enemmän, on valmiit maksamaan enemmä, ostaa useemmin ja on lojaaleita sitä ketjuu kautta brändii kohtaan.” (E₁)

Promoter score is our main indicator just

“Promoter score on meille se päämittari
like sales or profitability -- and it is something that we collect really regularly, continuously actually -- it is kind of like our bible. (D₁)

"[data on customer purchase behaviour] is a very important part of customer insight, in being able to understand how a customer’s experience converts into turnover. (A₁)

We constantly interpret what posts customers are interested in and how we are able to get people to visit our site and what creates good engagement -- and in this way, try to estimate the customer’s experience and what it involves. (A₁)

[mystery shopping] keeps our company awake and probably at least enriches the so-called ongoing research. (D₁)

"[mystery shopping] pitää meijän organisaation hereillä ja varmaan ainaki rikastaa niitä niin sanottuja jatkuvia tutkimuksia.” (D₁)

The criticism was indeed related to the fact that this is not a real customer, this is something previously arranged -- and that a real customer does not know anything about our internal targets or process definitions -- so although we did really well in mystery shopping, it did not necessarily mean the offered experience was good, just that our process was working. (C₁)

"Kylhän se kritiikki toki oli se että ku tää ei oo oikee asiakas et tää on tällanen ennalta sovittu -- et eihän se [asiakas] tiedä meidän sisäisistä tavoitteista tai prosessimäärittelyistä -- et vaikka me siinä mysteryssä tosi hyvää oltiin ni eihän se välttämättä taanu sitä et siltiikään se asiakaskokemus oli hyvä, vaan et se meijän prosessi toimii.” (C₁)

We were able to access the h-hour where emotions and the overall experience from the purchase were still present. (C₁)

"Päästiin suoraan käsiks siihen h-hetkeen et ehkä ne tunteet ja ne kaikki se kokemus oli läsnä vielä siitä myymäläasioinnistä.” (C₁)

It’s also customer experience information how customers have rated [a competitor] and us on the same issues and "Sehän on kans asiakaskokemustietoa et miten asiakkaat on arvostellut [kilpailijaa] ja meitä samoista asioista ja et pystytään
that we are able to compare -- so it is not necessarily the customer experience resulting in a change but what a competitor does. (F1)

They are simply not interested, so the employee never hears their opinion -- and they are the ones we often most easily lose, the ones who do not give feedback, because they do not necessarily have any kind of relationship with us. They really do not care. 'Do whatever you want' -- they easily disappear from sight. (A1)

There is always the risk of being annoying that 'ahh, again they ask me something', if you do a lot of business with [us], so you kind of have to be sensitive in a sense that the customer experience does not decrease from asking all sorts of questions. (laughter) (B1)

We interview people about issues they would consider.. okay you should never directly ask a customer what they want because then they want the faster horse, but information on topics such as 'would this be something you would like, would
this be useful, would this have a some sort of solution to your problem’. (E₁)

We ask customers for feedback whether they would be interested in this or that kind of product -- so we sort of engage the customers in the discussion and I believe it brings sort of good, positive conversation to the entity. (D₁)

The purpose of the touch points surveys is to understand the total satisfaction to the service throughout the customer journey - - because various different aspects constitute the service and they together create the overall experience in relation to it. (B₁)

But [the method] served its purpose and we then discussed -- what should we do, should we put an end to it, replace it by some other or continue with it, but the opinion of the store was also the same that the method might have outlived its purpose and we might not be able to develop further with it. (C₁)

Even though the annual survey is important, immediate feedback and the ability to react to it is clearly something we are going to enhance -- we aim at being able to turn an unsatisfied customer immediately to satisfied, if possible, but at least show that we care that he was unsatisfied. (B₁)

The store is of course [important], the human contacts there, but the thing is that the role of the web is only increasing because if the product is not there, you do...
not even go to the store. (E₁)  

What plays a key role is having a sort of 360-view; so one database that assists in making decisions, that is the next significant phase in our business -- but it costs, it takes time, it requires patience. (F₁)

“Tämmönen 360 astenäkymä et on yks tietokanta, jonka avulla sit pystytään tekemään päätöksiä ni se on aika avainasemassa, se on seuraava yks iso merkittävä vaihe tässä toiminnassa - - mut se maksaa, se vie aikaa, se vaatii kärivolliasyyttä.” (F₁)

[data integration] seems to be a problem in many organizations already from a system perspective -- as one type of data goes here and one there, so how are you able to build it in a way that -- management is able to draw conclusions from it, that is something that usually requires a lot of time. (A₁)

“[Datan yhdistäminen] tuntuu olevan tosi monissa yrityksissä ihan järjestelmäisyydestä vaikeeta -- et yhdet datat menee tonne ja yhdet tonne niin sit se et miten sää rakennat sen sillä tavalla et -- liikkeenjohto pystyy tekemään siitä johtopäätöksiä ni se on sellnen mikä vie usein paljon aikaa.” (A₁)

It had been interviewed how feedback is given -- you know with respect to these smiley faces of smile, lesser smile, pursed and very pursed face, so this grandma had said that ‘she always replies with the face the customer service person had’ (laughter) -- so basically you have to think how data is collected, from where it is collected and what does it mean. (E₁)

“Oli haastateltu et miten annetaan sitä asiakaspalautetta -- ku on ne hymynaamat et ku on hymy ja vähempi hymy ja mutru ja tosi mutru ni tää mamma oli sanonu et 'hän antaa aina sen naaman mikä sillä asiakaspalvelijalla oli’ (naurua) -- eli periaattees just et siinäki pitää mietti et miten sitä dataa kerätään, mist sitä kerätään, mitä se kertoo.” (E₁)

I put a lot of thought on when can we truly rely on customer information, that this is how the customer really thinks and acts on the basis of it. And as opinions also change, you are never able to get absolute, 100 percent assurance that this is definitely the case, but it is always the best knowledge on the basis of which need to be reacted. (C₁)

“Mä kans paljon mietin että millon me voidaan oikeesti luottaa siihen asiakastietoon et se ihan oikeesti on tätä mieltä ja toimii tän pohjalta. Ja toisiaan mielipiteet muuttuu et sä et ikinä saa semmosta absoluuttista sanotaan 100 prosenttist varmuutta et joo, tää on nyt ihan varmasti näin tää asia, et se on aina se paras tietämys minkä perusteell pitää toimia.” (C₁)

Spontaneous feedback is more dependent on a customer, whether he gives feedback “Spontaani palaute on enemmän asiakkaast kiinni et antaaks se palautetta vai ei -- jollon
or not -- in which case forming a picture of the data can be a bit challenging, it requires both expertise and data integration -- and of course you must filter it in a different way, that this is not necessarily a plain fact and how others think as well. (F₁)

You have to keep in mind that all data is mainly trending, so it has to be strongly interpreted and thought over in regard to what it means -- and of course you have to take into account that missing data also implies something, so it has to be considered from various perspectives. (E₁)

We know that these are now the issues we have to get developed in online service, as an example, which basically helps us to prioritize particular development paths and specific questions we need to resolve. (E₁)

The results are then [discussed] within our management group and very much the discussion centers on the themes that clearly cause dissatisfaction and on the themes that arise as our strengths. (B₁)

[the result] and its development are discussed monthly within the organization and open comments are brought forward to explain why it has gone either up or down -- so what are the explanatory issues. (D₁)

The goal is that everyone who works directly with customer service would sen kuvan muodostaminen on hieman haasteellista et se tarvii semmosta tuntemusta ja tietojen yhdistämistä -- ja tottakai sitä suodattaa vähän eri tavalla et se ei oo aina se täys fakta et nii kaikki muutki ajattelee.” (F₁)

"Pitää muistaa et kaikki data mitä on ni on enemmän trendaavaa dataa et kyl sitä pitää vahvasti tulkita ja miettiä et mitä tää kertoo - - ja tottakai pitää miettiä aina et puuttuvaki data kertoo jotain et se pitää kattoo monesta näkökulmasta.” (E₁)

"Me tiedetään et nää on nyt niit kipukohtii mitkä pitäis saada kehitetty vaik verkkopalvelussa, jollon periaatteessa se sit auttaa meitä priorisoimaan tietty kehityspolkuja ja tiettyjä kysymyksiä mitä meijän tarvii ratkoo.” (E₁)

"Sit johtoryhmässä käydään ne tulokset [läpi] ja hyvin paljon se keskustelu keskittyysiihen et mitkä on ne teemat, jotka selkeesti aiheuttaa tyytymättömyyttä ja mitkä on ne teemat, jotka nousee esille meidän vahvuuksina.” (B₁)

"Sitä [tulosta] käydään kuukausittain läpi koko organisaation kanssa miten se kehitetty, sieltä nostetaan hyviä ja huonoja ihan avoimia kommentteja selittämään sitä tulosta et onks se menny ylös vai alas ja mitä ne syyt on -- et mitkä siel on ne selittävät tekijät.” (D₁)

"Tavoite on että jokainen joka tekee suoraa asiakaspalvelua ni sais mahdollisimman
receive as real-time feedback as possible - because if the information connects directly to what you have done, what the recent job was, then it matters. (B1)

[the results] are then utilized in a sort of general analysis, but their main purpose is to provide the corresponding unit with quick ways to react to customer feedback and fix operations. (B1)

You have to also remember sort of quick fixes that can have a large impact while being fast and quick to implement, so some information is utilized also in small decisions. (F1)

We want that -- [data] is not behind some difficult user interface but can be interpreted and utilized in decision making exactly where the point of sale is, so on a commercial level, not somewhere here. (E1)

We want to remind that we should all, regardless of the role, be close to the customer surface -- instead of thinking that we are here and customers there but boldly close to the customer whatever the channel may be. (D1)

When it comes to customer experience, at least as important to data are the processes that you build around it, so getting people involved in the process, how does the process work, who processes what and what then, so the process development is actually a really essential part of the value creation. (A1)

"Niitä [tuloksia] käytetään sitte tällaseen yleiseen analyysiin, mutta niiden tärkein tarkoitus on kuitenkin tuottaa sille vastaavalle yksikölle sellasia nopeita keinoja reagoida asiakaspalautteeseen ja korjata toimintaa.” (B1)

"Pitää muistaa myös tällaset quick fixit millä helposti, nopeesti tekemäl voi olla isotki vaikutukset et osaa tietoo käytetään myös tosi pieniin päätöksein.” (F1)

"Kyl me halutaan -- ettei [data] oo minkään vaikeen käyttöliittymän takana vaan sitä voidaan oikeesti tulkita ja tehdä sen pohjalta päätöksi ihan siellä missä sitä myyntii tehdään eli kauppataasolla eikä tääl pelkästään jossakin.” (E1)

"Muistutetaan et ollaan roolista riippumatta läheillä sitä asiakasrajapintaa -- et ei ajattele et me ollaan täällä ja asiakkaat tuolla et rohkeesti lähelle asiakasta on se sit se kanava mikä tahansa.” (D1)

"Täs asiakaskokemusajattelussa ni vähintään yhtä tärkee ku se data ni on ne prosessit, jotka sä rakennat sen datan ympärille, et miten sä saat ihmiset siihen mukaan, miten se toimii, kuka käsittelee ja mitä sitten, eli se prosessikehitys on itse asiassa ihan tosi olennainen osa sitä arvon tuottoa.” (A1)
The processes need to be in order, the systems need to be in order, you must have the resources as well as the right people in the right place -- when you have the structures clear, then can think about the bottlenecks and the issues that do not work, and solve the problem. (F₁) “Prosessit pitää olla kunnossa, järjestelmät pitää olla kunnossa, pitää olla resurssit ja oikeet ihmiset oikees paikassa -- sitku rakenteet on selvät ni sitte voidaan ruveta miettimään niit pullonkaulia et mitkä asiat ei toimi, ja sitä kautta ratkasta se ongelma.” (F₁)

Chapter 4

Often [decision making] is about people’s feelings... about sense of security... self-respect and courage, versus fear -- and not having an investigative mentality, a person does not, in principle, want to learn new things and especially if he is over 40 and in a senior management position -- he basically is not wrong. (A₁) “Usein siin [päätöksenteossa] on kyse ihmisten tunteista... turvallisuuden tunteesta... itsekunnioituksesta ja rohkeudesta, versus pelosta -- sekä siitä ettei oo semmosta tutkivaa mielenlaatuia, ihminen ei lähtökohtaisesti halua oppia uutta ja erityisesti jos se on yli 40 ja johtavassa asemassa -- ni sehän pääasiallisesti ei ole väärässä.” (A₁)

We aim at people having access to data -- so it is not an opinion matter, because very easily it comes to the point that ‘I think of this and that’. But that the process really is structured by data and data-driven. (E₁) “Me pyritään siihen et ihmisiä pääse siihen... et siinähän viiteet... et se on oikeesti dataohjattu ja data driven.” (E₁)

Customers do not necessarily tell you what is going to happen next... in which case a vision is the point... so that we do not start from what customer want but from [offering] something new. (A₁) “Asiakkaat ei välttämättä kerro sulle sitä mitä tapahtuu seuraavaks.. et siinähän visio on se pointti.. et me ei vaa lähetä siit mitä asiakkaat haluavat vaan et me [tuodaan] jotain uutta.” (A₁)

Well probably really, really critical since we have information management at the heart of our strategy so very difficult is to follow through an idea without facts and figures. (D₁) “No varmaan todella, todella kriittinen et kyllä meill on strategian ytimessä tiedollaa johtaminen, joten vaikeeta on viedä ehdotus läpi ilman faktoja ja lukua.” (D₁)

The problem with business management is that they receive various different kinds of... “Se liiketoimintajohdon ongelma on se et he saa hyvin monta erilaista tietoa ja sillon...”
information and then [the interpretation] is often so difficult that decisions end up being made on the basis of whether sales have increased or fallen. (A_1) se [tulkinta] on hirvein usein niin hankalaa et sit päädytään kuitenkin tekemään päätöksii sen pohjalta et onks joku myynti nousu tai laskenu.” (A_1)

When you start to receive thousands of feedbacks from various different touch points you need have a really good structure to it -- so you do not drown in the collected information because you always have a responsibility to put the information to use, so instead of having information collection as the starting point, place utilization in front. (B_1)

"Se että alkaa tulla tuhansia palautteita nopeasti ja useasta eri kohtaamispisteestä ni sit täytyy olla tosi hyvä rakenne siihan -- et ei sit huku siihen asiakastietoon, kun aina on se vastuu käyttää se tieto ku sitä kerätään ettei vaan lähetä keräämään, vaan lähetään se hyödyntäminen edellä.” (B_1)

In the end, any kind of data that does not have actionable insights should not be collected -- and if you also consider EU-regulations and that privacy is important for people, it is overall better not to collect information you are not going to use because there are always various things [you have to consider]. (E_1)

"Loppupeleis ihan mikä data vaan jos siin ei oo tämmösii actionable insightteja ni ei sitä kannata kerätä --- ja sit jos mietitään viel EU-lainsäädännöt ja et privacy on tärkee juttu ihmisille ni parempi olla keräämättä jos et sää käytä sitä ku siin on aina tiettyj juttuja [mitä on otettava huomioon]” (E_1)

EU’s new data protection law is stricter and it increases companies’ responsibilities as well as defines different roles when it comes to gathering and managing customer data -- so you should be able to organize data collection in a way that it becomes synchronized with the law simultaneously. (A_1)

“EU:n uus tietosuojalainsäädäntö on tiukempi ja siellä ikään kuin lisätään yritysten vastuuta ja tarkennetaan erilaisia rooleja mitä tulee asiakkaiden datojen keräämiseen ja hallitsemiseen -- et sun pitäisi pystyä huomioimahan datan keräys ja hallinnointi sillä tavalla et se tulee lain kanssa synkattua siinä samalla.” (A_1)

You cannot assume that the world is going to stay the same as it is now -- so emphasis should be placed on quick customer information and on understanding how our customers’ expectations change -- so if we start to receive signals that we do not respond to

"Ei voida olettaa et maailma pysyy samanlaisena kuin missä me nyt ollaan -- et tosi tärkee on se nopee asiakastieto ja sen ymmärrys et miten meidän asiakkaiden odotukset muuttuvu -- et jos sielt alkaa tulla signaaeleja et me ei enää vastata sihen mitä he hakee ni se on semmonen mihin täytyy
what customers require, that is something to which we have to react very quickly.

"Johtajien pitäis keksiä että mikä tieto oikeesti auttaa heitä johtamaan paremmin -- et aika usein meillä nykyäänkin menee niin pään että todistustakaakka on analyyttikolla, että sun pitää syöttää niitä juttuja sinne ja myydä niitä tietyjä johtamisen ratkaisuita." (A₁)

Managers should figure out what information really helps them to perform better -- because very often the burden of proof is on an analyst and you are forced to sort of feed the issues as well as sell specific managing solutions [to managers]. (A₁)

"[analyytikot] on matemaattisesti hirvittävän älykkäitä ihmisiä ja sit usein vähän introvertejä ja sit he kertoo jotain juttuja jotka on heijän näkökulmasta aivan käsittämättömiä banaliteetteja ja sit joku ei taju... ni se ei sit se dialogi ei välttämättä oo kauheen hedelmällinen." (A₁)

[analysts] are mathematically terribly intelligent and often a bit introverted and then they tell something that they regard as absolute banalities and then someone does not get it.. then the dialogue is not necessarily so profitable. (A₁)

The truth is that we should ask a lot more questions and be ready to rock the boat -- because if you think -- how [information] is to become a fertile part of the business in a sense that first a common vision is formed and then a decision reached based on the information, it has to fit pretty well into the existing ways of thinking and doing things. (A₁)

"Totuus on se että pitäis vaan kysyä tosi paljon enemmän kysymyksiä ja olla valmis keinuttaa sitä venettä -- et jos sä aattelet et -- miten [tiedosta] tulee hedelmällinen osa sitä liiketoimintaa niin että siitä muodostetaan ensin joku yhteinen näkemys ja sit saadaan päättös aikaseks ni sen pitää aika hyvin sopii niihin rattaisin, jotka ihmisillä on jo päässä." (A₁)

Time and resources are something we have sometimes had problems with. So I would say that people consider, see and feel [customer experience] important but then in practice, the operational work, as an example, can take over and we have to prioritize. (F₁)

"Aika ja resurssit on vähillä semmosia mitkä meillä on ollut ongelmia. Et kyl mä sanoisin että ihmiset ajatelleet, näkee ja kokee sen [asiakaskokemuksen] tärkeeks, mutta sitte käytännössä esimerkiks operatiivinen työ voi ottaa sen isomman vallan et joudutaan priorisoimaan." (F₁)

It does begin with a sort of -- mega trend understanding, so what is going on in the world, what are the forces that affect us

"Kylhä se lähtee tällästä -- megatrendiymmäryksestä et mitä maailmassa tapahtuu, mitkä on ne voimat,
and our environment and our customers - so we would be leading the industry change as oppose to simply reacting when someone else is making it. (B₁)

It does strongly start out with customer behaviour and the change of the world, so it is the large surfaces that define the strategic aspects. (E₁)

From there begins a sort of prioritization and discussion in regard to what are the focus points we need to develop in and want to focus on and what are the strategic objectives that we use to measure our progress. (B₁)

If there is room to choose, you use what works best for you, so your optimal solution. And to be able to get you to change from the service you have chosen or from the way to act to something else, it has to be clearly better. (E₁)

We rather pilot an idea that is considered good on a small scale first and then verify with the facts -- that this is how it seems to work if scaled bigger. (D₁)

Social media is one that affects, through that we will start to receive information on how we have succeeded. And then spontaneous feedback and at the same time these surveys, so we are able to see the overall picture and make decisions whether to continue or do some larger changes. (F₁)
We can measure [quality] from our point of view or we can measure it from a customer’s point of view. So we need to change the perspective because traditional quality indicators can be very focused on optimizing operational aspects and we aim at changing it in a sense that, in the end, quality is what customers get and experience. (B₁)

"Me voidaan mitata [laatu] meidän omasta näkökulmasta tai me voidaan mitata sitä asiakkaan kokemana laatuna. Eli käännetään se näkökulma, koska perinteiset laatumittarit voi olla hyvin sellasia operationaalisen optimoinnin lähtökohdasta lähteviä ja me pyritään käänämään sitä ajattelua siihen et se laatu on lopulta sitten kuitenkin se mitä asiakas saa ja mitä asiakas kokee." (B₁)

If [the politicians] are not able to reach a decision, then we do not know what we should offer to the customers -- it is a sort of zero-sum game and kind of difficult, because we should move forward but we do not know what is the thing we should start out with. (A₁)

"Jos ikään kuin he [päättöksentekijät] ei saa sitä päätöstä tehtyä ni me ei tiedä et mitä meijän pitää tarjota asiakkaalle -- se on vähän sellanen nollasuma peli tai sellanen vähän vaike, että ku meijän pitää menä eteenpäin mutku me ei tiedetä et mikä on se juttu mist meijän kannattaa lähte rakentaa sitä." (A₁)

Competition is only good, it keeps our company awake in a way and kind of clears our mission or what our distinctiveness is in the market. (D₁)

"Kilpailu on niiku vaan hyvästä, se pitää hereillä tiettyllä tavalla, että nimeomaan ehkä kirkastaa entisestään sitä meidän missiota tai mikä se meidän erottuvuus on sit siellä markkinoilla." (D₁)

If I now had a good development idea, I would want to try this quickly in our stores, then it might not be so possible. So [the corporate culture] has maybe stiffened our development a little bit, to tell you the truth. (C₁)

"Jos multa nyt tulee hyvä kehitysidea, mä haluun täm nyt nopeesti myymälöihin kokeilla ni se ei ehkä oo niin mahollista et se [yrityskulttuuri] on ehkä vähän jäykistäytynkin suoraan sanoen tätä meijän kehitystoimintaa." (C₁)

We are accustomed to a very traditional development cycle -- so we need to learn how to quickly prototype, try and learn -- it requires a new way of thinking where you do not immediately kill an initiative if it is not complete by the last bolt but learn and improve continuously. (B₁)

"Me ollaan totuttu sellaseen hyvin perinteiseen kehityskyllä -- et meidän pitää oppii enemmän, nopeesti prototyyppaamaan ja kokeilemaan ja oppimaan -- se vaatii uutta ajattelutapaa ettei heti tapeta jotain alotetta jos ei se oikaa viimeistä pulttia myöte valmis vaa et opitaan ja parannetaan koko ajan." (B₁)
Our ambition is to enhance a culture of testing and experimentation, so we would be swift to react instead of planning and planning and then simply hoping [the product] is good when ready. \((D_1)\)

"Ambitiossa on et tehtäis entistä enemmän semmosta testauskulttuuria, kokeilukulttuuria et oltais ketterämpi ettei mennä siihen et suunnitellaan ja suunnitellaan ja sitte toivotaan et se on oikee ku se on valmis." \((D_1)\)

Chapter 5

We analyze the information within different units in the headquarters especially from their point of view -- so we [conduct] further analysis [on the information] and discuss more profoundly what do the results mean from their point of view. \((C_1)\)

"Pääkonttorieneri yksiköitten kanssa käydään erityisesti heijän näkökulmasta sitä asiakastulostietoo läpi -- et [tehdään] lisääanalyseja ja syvempiä keskusteluaan et mitä näät asiakaskokemustulokset teijän näkökulmasta kertoo." \((C_1)\)

Case by case if there are bad or good experiences, the information is of course used in a positive sense to give good feedback but also if there are bad results, what are they caused by and are we able to do something about them. \((D_1)\)

"Case by case jos on huonoja tai hyviä kokemuksia ni tottakai käytetään positiivisessa mielessä antamaan hyvää palautetta mutta jos on huonoja tuloksia niin mistä syistä ne johtuu ja voidaank me tehä jotain niille." \((D_1)\)

What is truly required is that we are interested in the results, want to utilize them, have the right attitude, and that we see [the information] very important and want to act on it. \((C_1)\)

"Oikeesti sitä et ensinnäkin et ollaan kiinnostuneita niist tuloksista ja halutaan hyödyntää, on se asenne kunnossa, ja et nähään se [tieto] tosi tärkeänä ja halutaan toimia sen tiedon perusteella." \((C_1)\)

One of our key strengths is that we consider [customer experience] really important -- but people are on a bit different timeline, for some it has not really sunk in yet and for some it has sunk already years ago. But the main thing is that those who interpret data and make decisions consider it the most important. \((F_1)\)

"Se on yks vahvuksista että me koetaan se todella tärkeeks --mut ihmiset menee vähä eri aikajanalla että joillekki se ei oo vielä ihan kolahtanut välttämättä ja joillekki se on kolahtanut jo vuosia sitte. Mutta pääasia että ne jotka niitten kans tekee päätöksiä ja pyörittää lukuja ni se ajattelee että se on se tärkein." \((F_1)\)

People also sometimes just wish things "Ihmiset myös toivoo et asiat joskus vaan
would remain the same, so many do not like if they constantly need to adapt to feedback -- or that they should continuously think how the company can perform better from a customer’s point of view. (A₁)

There are also people who strongly think they know what customers think -- but it may be that only certain type of customers open up to them. So you have to understand what can be generalized and also what cannot be generalized. (A₁)

How companies could better observe the way customers react and how they actually act, how they really make purchasing decisions and not only what they say they will do -- because we are all similar in a sense that we may explain our behavior in a different way than how we actually act in practice. (B₁)

If we talk about challenges I have also tackled with, one is how much [a customer] can and should be asked -- as customers are not necessarily able to think about the next [phase] -- so how do you get confidence with customer information that I am now completely sure this is the right step where we want to go. (D₁)

We have always received kind of low scores on inspiring, memorable stores, [we] are seen as very plain, cold even, so that is what we are concentrating on now -- it is probably connected to the generalization of e-commerce.. so what is

"On myös sellasii ihmisiä, jotka hyvin vahvasti aattelee et he kyl tietää mitä asiakkaat ajattelee -- mut voi olla et hänelle avautuu vaan tietyn tyypipset asiakkaat. Et siin pitää ymmärtää et mikä on yleistettävä ja mikä sit taas ei oo yleistettävissä.” (A₁)

"Se et miten yritykset pystyis paremmin seuraamaan sitä miten asiakkaat reagoi ja miten ne oikeesti toimii, miten ne oikeesti tekee ostopäätöksiä eikä pelkistään sitä et mitä he sanoo et he tekee -- koska me ollaan kaikki myös sellaisia et me saatetaan perustella meidän toiminta eri tavalla kun miten me sit kuitenki käytännössä toimitaan.” (B₁)

"Jos puhutaan haasteista se minkä kans on itekki painiskellu et kuinka paljon [asiakkaalta] voi ja kannatta kysyä -- ku he ei välttämät osaa ajatella sitä seuraavaa [vaihetta] -- et millä sä saat asiakastiedolla sitä confidenceä et nyt mä oon ihan varma et tää askel on se oikee mihin me halutaan mennä.” (D₁)

"Me ollaan aina saatu vähän huonoja tuloksia tällästä inspirivoivasta, elämyksellisestä myymälöistä et [meijät]nähään hyvin semmosina, ehkä vähän kylminä, pelkistettyinä, ni sitä me ollaan nyt tekemässä -- se liittyy varmaan
the added value why you’d go into a ground store? There has to be something nice, striking and delightful. (C₁)

just tähän verkkokauppa-asian yleistymiseen et, no mikä on se lisääraavo et miks sää menisit kivijalkamyymälään, ni siel pitää olla jotain kivaa ja sykähdyttäävä ja ilahduttavaa. ” (C₁)

We have identified that we would like to develop our customer experience with a wider perspective than simply the customer service in the store or the interface there -- so in the future we would want to be more like [centers] where everything can be found under the same roof. (D₁)

”Ollaan identifioitu et me haluttais sitä asiakaskokemusta lähtee kehitämään entistä laajemmalla ajatusmaailmalla kun myymälän asiakaspalvelu tai se rajapinta -- et halutaan ajatella et jatkossa me oltais enemmän tällaisia [keskukseja] jossa kaikki tarjooma on saman katon alla.” (D₁)

The decision was based precisely on trying to analyze customer data -- and a decision was made that we are not going to pursue this, because the market is not ready, because customers say they do not need it -- and then the following year [a competitor brought it]. (A₁)

”Se päätös perustuu nimenomaan siihen et yritettiin analysoida sitä asiakastietoa -- ja tehtiin päätös siitä että ei lähdetä tekemään tällaista, koska markkina ei ole valmis, koska kuluttajat kertoo et he ei tarvii sellasta -- sitte seuraavana vuonna [kipailija toi sen].” (A₁)

[we relied] maybe too much on spontaneous feedback, there were a few who took the matter to social media and as it grew into extensive proportions, the [product] was suddenly back and later pulled back again -- so you should consider that the reaction can be very large at start but then calm down so you avoid making hasty decisions. (F₁)

”[luotettiin] ehkä liikaa siihen spontaanin palautteeseen, et oli näit muutamia [asiakkaita] jotka vei asian mediaan ja se nousi aivan käsittämättömiin mittasuhteisiin ja yhtäkkii se [tuote] oli takas [tarjonnassa], josta se myöhemmin sit taas poistu -- et se reaktio voi olla aluks iso ja sit laantuun ni sek i pitää ottaa huomioon ettei tee hätiköityi päätöksiä.” (F₁)

There is always the risk that we interpret things wrong -- but I think what works for us is the long experience from the industry, we have people who are able to scale the finding to their experience and think whether or not it makes any sense -- so we do not purely focus on the data and

”Ainahan on se riski et me tulkitaan asioita väärin -- mut mä luulen et meid auttaa se pitkä kokemus tältä toimialalta, et meil on ihmisiä jotka osaa skalaata sen löydöksen sinne omaan kokemuspohjaansa etta onks täs mitää järkeä -- et ei katsota ihan puhtaasti vaan sitä dataa ja syöksytä johonki suuntaan
rush into one direction but there is the business experience in between. (B₁)

A good example [of an incorrect decision] is a situation in which a company’s management receives feedback on some topic -- then a sin could be to draw conclusions from the information, from a single customer’s feedback, when it can represent one out of five thousand in a month. (F₁)

One of the key strengths throughout the years has been the competent personnel who love what they do and know the [customers] who visit the [store], I think that is customer experience at its best. (D₁)

We have a lot of examples of long-term customer relationships and purchasing behavior, which is based on the fact that even if we were more expensive than a competitive solution in the market, a customer feels that we are so valuable of a partner that they still want to continue with us. (B₁)

I wish -- we would improve our understanding of the total customer journey, so we would be able to understand a customer’s overall experience and not only the experience at a specific touch point, but how the complete journey went. (B₁)

Managing and measuring the entity is [challenging] -- and whether or not a customer understands that a [service] at some point was a part of our supply and does he even need to understand but we
should at least understand whether or not the experience felt good for the customer on all of the surfaces. (D₁)

meidän olis hyvä kuitenki ymmärtää että tuntuuks se kokemuksena asiakkaan kannalta hyvältä kaikissa rajapinnoissa.” (D₁)