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How to Evaluate One's Performance While Improving Others'

A Customer Satisfaction Measurement System

Master's Thesis in the Master's Programme Quality and Operations Management

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ABSTRACT

In today's highly competitive market, the importance of satisfying customers has increased. Measuring customer satisfaction thus becomes essential, creating a possibility for companies to act upon issues before they become larger problems causing a decrease in customer retention. EFESO Consulting is a management consulting firm who has realized this, and they have decided to establish a system making it possible to systematically map their customers' current satisfaction level.

The purpose of this master thesis is to develop a customer satisfaction measurement system suitable for EFESO. By using a deductive approach, theory was compared with data collected through nine interviews with EFESO employees and six interviews with their customers, to serve as a base in the development of the customer satisfaction measurement system. Four selected quality dimensions to measure customer satisfaction upon derived, namely *Value for Money*, *Working Methods*, *Service* and *Recommendation*. The dimensions are defined by parameters and metrics, serving as measurements during the data collection and being a part of the customer satisfaction measurement system.

The suggested data collection process should consist of two meetings with the project buyer and six questionnaires, taking different views and types of measurements into account. The data should thereafter be compiled using a tool developed in Excel, which helps to visualize collected information and calculating customer satisfaction scores for each dimension. The score enables a comparison between the dimensions, both within the current project and between different customer projects.

The developed customer satisfaction measurement system is based on the views of EFESO and their needs. The system could serve as a guide for other organizations in their development of a customer satisfaction measurement system, letting the underlying idea serve as a starting point while selected measurements might need to be adopted according to organizational needs.

Keywords: Customer Satisfaction, Customer Quality, Customer Satisfaction Measurement System, SERVQUAL, Net Promoter Score (NPS), Customer Satisfaction Index (CSI), The Gap Model, Grönroos' Model.

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Hanna Hagström

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1 INTRODUCTION

Today, there is a highly competitive market, companies fighting for customers and market shares (Birkinshaw, Zimmermann & Raisch, 2016; Matarelli, 2018). Accordingly, customer service has become an important tool for gaining new customers, and by continuously evaluate customer satisfaction, higher levels of an organization are able to make decisions based on what the customer actually wants, thus decreasing the risk of a decline in the customer retention rate (Bergman & Klefsjö, 2010; Klementova, Zavadsky & Zavadska, 2015; Matarelli, 2018).

Customer satisfaction is often considered as a non-financial measurement that predicts the future, in comparison to financial measurements that explain the past (Birch-Jensen, 2015). Hence, customer satisfaction becomes crucial for the organization's future success and the purpose for organizations, especially within the service sector, becomes to maintain relations with its customers (Pizam, Shapoval & Ellis, 2016; Klementova, Zavadsky & Zavadska, 2015). Contrariwise, many organizations tend to look for new opportunities rather than developing relations with existing customers (Brown, 2001). Beyond this, companies invest a lot of money to gain new customers (Brown, 2001). Studies have found that a two percent increase in retained customers corresponds to a ten percent decrease in costs (Bergman & Klefsjö, 2010; Helm, Eggert & Garnefeld, 2010; Naumann, 1995; Peters, 1994; Xu & Goedegebuure, 2005). According to Peters (1994), the more personal contact a company has with its customers, the larger the cost for gaining new ones. Consequently, the cost, time and resources needed for acquire new customers is large for consultancy firms.

A consultancy firm who have realized the importance of continuously evaluate and collect feedback from their customers is EFESO Consulting, hereinafter referred to as EFESO. EFESO is a management consulting firm specialized in implementing continuous improvement systems, conducting both long- and short-term projects for different customers. Mostly, the customers choose to continue to work with EFESO after the completion of an initial project, but sometimes the customer does not. In any case, EFESO do not systematically link the continuation (or not) of a project to a measurement of customer satisfaction. Based on this, it would be of interest for EFESO to develop a customer satisfaction measurement system, that enables EFESO to reflect upon their collaboration with their customers and evaluates the customers' perception of EFESO. The measurement system would further allow EFESO to find areas to improve and develop, as well as distinguish EFESO's strengths and opportunities. Hence, this will be the focus of this master thesis, which will contribute with an interesting perspective on an organization's ability to reflect upon its own performance, while trying to improve the performance of others.

1.1 Aim

The purpose of this master thesis was to develop a customer satisfaction measurement system for EFESO, enabling them to evaluate their performance based on customer satisfaction. The customer satisfaction measurement system should further provide insights to the customer's view of EFESO, as well as the method implementation rate and bottom line. In addition, the result of the master thesis should in practical terms conclude what to measure, how to measure, and how to apply the measurement system at EFESO.

1.2 Limitations

The developed customer satisfaction measurement system is designed to fit the need of EFESO and their customers. The development process of the measurement system has not taken other organizations into account and further research is needed to conclude whether this measurement system is applicable outside the EFESO organization or not. Additionally, the development of the measurement system was limited to data collected from EFESO and their customers in Sweden. Therefore, the result might not be applicable in other regions of the EFESO organization.

1.3 Research Questions

Customer satisfaction could be measured in several ways, considering both financial and non-financial parameters. Therefore, to be able to develop a customer satisfaction measurement system that helps EFESO to evaluate their customers' satisfaction level, measurements that would be of value for EFESO had to be understood. With this in mind, the first research question was formulated as:

RQ1: *What are appropriate customer satisfaction measurements for EFESO?*

Furthermore, when collaborating with customers, EFESO puts great emphasis on that their suggested improvements becomes implemented and not only end up in a recommendation. Hence, this master thesis was not aimed to only result in a report of what is to be measured and how, but the master thesis result should include a developed measurement system, ready to be applied at EFESO. Additionally, it was considered important to relate the findings deriving from research question one (RQ1), with previously developed models of customer satisfaction when developing measures to include in the customer satisfaction evaluation. Thus, an understanding of how to include and develop a customer satisfaction measurement system based on the selected measurements were needed. Research question two (RQ2), therefore aimed at guiding the researchers into finding existing customer satisfaction models to combine and use as a basis in the customer satisfaction measurement system. RQ2 was formulated as:

RQ2: *How can existing customer satisfaction measurement systems be combined into a customer satisfaction measurement system suitable for EFESO?*

2 METHODOLOGY

Below sections present the methodology used and followed in this master thesis. Methodologies brought up by Bryman and Bell (2011) have served as a guide in the process. The suggested methodologies were compared with additional theory on the subject to define the research process.

2.1 Research Strategy and Design

When formulating a research strategy within business research, it can be helpful to distinguish between a *quantitative* and a *qualitative research*. A quantitative research emphasizes quantification of collected data and analysis, while qualitative research emphasizes words rather than quantification, when collecting and analyzing data (Bryman & Bell, 2011). The data collection in this master thesis was based on qualitative data from interviews with EFESO and their customers, hence a qualitative research strategy were used.

Further, when doing research, there are two commonly used strategies of how to approach an issue, *inductive* or *deductive* approach (Bryman & Bell, 2011). This master thesis has a deductive approach since it is based on previously developed models of customer satisfaction. A deductive approach to research means to work out of information and theory previously known to the researcher, ending up with a revised theory (Bryman & Bell, 2011). An inductive approach works in the opposite direction, starting with a hypothesis (Bryman & Bell, 2011). The customer satisfaction models selected as a base for this master thesis were adjusted to fit the need of EFESO. The master thesis links theory with collected data and in an interweave analysis process, where the researchers' ideas were continuously tested and discussed with EFESO representatives, a customer satisfaction measurement system suitable for EFESO was developed.

2.2 Data Collection

The data collection of this master thesis was based on a literature review and interviews with EFESO and their customers, later serving as a base for the development of the customer satisfaction measurement system. Below sub-sections will describe the approach used during the different data collection steps.

2.2.1 Literature Review

The master thesis was introduced with a literature review to get an understanding of the topic and previous research that has been made. The literature review also prevented the researchers from doing work already made by others (Bryman & Bell, 2011). During the search for literature, databases such as *Chalmers Library* and *Google Scholar* were used to find relevant articles and books. Additionally, some attention was put on EFESO's own collection of books, literature and presentation material distributed to the researchers.

To structure the literature review process, Bryman and Bell's (2011) suggested five-step approach to literature review was applied, see Figure 1. The model starts by selecting, to the researcher, familiar literature on the topic or readings that have been recommended by others

(Bryman & Bell, 2011). This is followed by the second step consisting of going through the selected literature (Bryman & Bell, 2011). As a start of the literature review in this master thesis, the researchers used literature previously studied used in courses taken at Chalmers University of Technology.

During the reading of the selected literature, Bryman and Bell (2011) emphasizes the good use of taking notes and find keywords. This serves as a start in the third step of Bryman and Bell’s (2011) model where new keywords to guide further readings should be generated. The first selection of keywords used in this master thesis included *Customer satisfaction*, *Quality criteria*, *Customer service*, *Customer satisfaction measurements* and *Customer satisfaction models*. Along the way, more specific keywords were added, focusing on finding information concerning selected models found through the primary literature search. Consequently, a new literature review was made based on the added keywords, as suggested as the fourth step in Bryman and Bell’s (2011) model. The last step of Bryman and Bell’s (2011) model is to go through relevant titles and abstracts, and in addition keep track of new publications appearing during the research period. This was considered throughout the master thesis process.

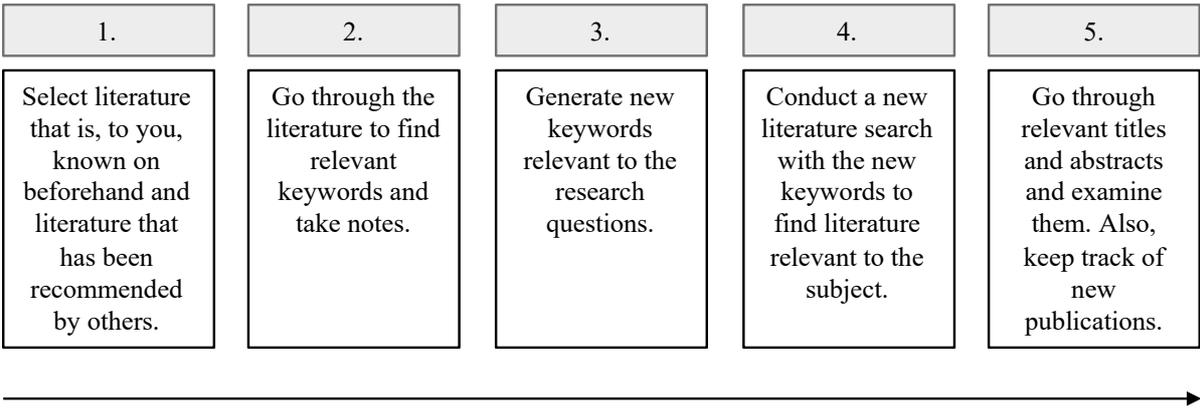


Figure 1 - Five step approach to literature review (Bryman & Bell, 2011).

2.2.2 Interviews

When conducting interviews, a semi structured approach was used. Semi structured interviews are according to Bryman and Bell (2011) a flexible way of doing interviews as the interviewer are not locked to follow any pre-set scheme, which fit the need of this master thesis. Accordingly, the reason for not choosing structured or unstructured interviews, was to not close any doors of interesting areas to further investigate.

Furthermore, since semi-structured interviews are a way to allow the interviewee to express personal opinions and reflections, it was considered to be an important tool for pinpointing measurement parameters of relevance for EFESO (Bryman & Bell, 2011). By going deeper into subjects brought up during the interviews, new information helped the researchers to get a broader perspective of the topic and it guided the research into the right direction (Bryman & Bell, 2011). If the researchers had chosen not to let revealed data guide the process, there could have been a risk that the result was not going to be applicable and suitable for EFESO. Interviews was conducted with employees at EFESO and with some of their customers to get

their point of view and what they were willing to contribute with in a customer satisfaction evaluation. The interviewed customers were selected and scheduled in accordance with EFESO, based on the following characteristics defined by the researchers.

- A customer using the WCOM™ program
- A customer using classic consulting
- A recurring customer
- A new customer
- A customer with a long project, > 2 years
- A customer with a shorter project, < 1 years

The questions asked during the interviews with EFESO and their customers are attached in Appendix A and B.

2.2.3 Data Analysis

After the data collection, the data analysis was introduced by first compile the data gathered through interviews, which thereafter was compared with ideas and thoughts from literature. To organize the data, a content analysis based on coding was used. It was applied at the data gathered through the interviews, but further adopted when going through literature and compiling the result. Content analysis refers to by pre-set categorizes, tag the data and divide it into sub-groups (Bryman & Bell, 2011). Out of the three types of coding Strauss and Corbin (1990) describes, the open-coding was used. Open-coding is a procedure where data is broken down into categories and concepts that have been compared and examined against each other (Strauss & Corbin, 1990). By using this approach, it is easier to find connections between data and it facilitates the work with sorting out important factors from the rest (Bryman & Bell, 2011). Further, by using coding, it is easier to analyze data and compare it with literature (Bryman & Bell, 2011). In this research process, the different categorizes for the division of data were partially based on recurring thoughts in the data, and partially based on what was emphasized in literature as important subjects and factors for measuring customer satisfaction.

2.2.4 Ethical Considerations

Diener and Crandall (1978) present four ethical considerations that has been taken into account when conducting this master thesis, namely: *Lack of informed consent*, *Invasion of privacy*, *Deception* and *Harm to participants*. To prevent lack of informed consent, a brief description of the aim of the master thesis was presented when conducting the interviews. In conjunction with the customer interviews, lack of informed consent was also prevented by beforehand sending out thorough information concerning the interviews and the interviewees role in the master thesis. The preparatory information, see Appendix C, further included practical information about the interview as well as the interviewees rights. Hence, deception was avoided by presenting the study for what it is and nothing else and providing sufficient information to the participants. Additionally, the interviewees were given the opportunity to not answer questions if they did not want to, to avoid invasion of their privacy. Further, all data gathered from EFESO and their customers was handled with respect and confidentiality. Notes

of the interviews' answers were deleted after the completion of the master thesis to avoid harm to the participants related to sharing information provided in trust.

2.2.5 Trustworthiness

To ensure a trustworthy result of the master thesis, triangulation was applied. Triangulation means that several sources are compared with each other, to catch the views of more than one author and ensure validity of the information (Bryman & Bell, 2011). Hence, by using triangulation the credibility of the results and tools used in the study increases (Bryman & Bell, 2011). Since the master thesis is built upon both a literature review and interviews with EFESO employees and their customers, the approach further enabled a comparison of results between different data collection methods and not only a comparison between different literature sources. Thus, the validity of the information could be further strengthened. In addition, when conducting the literature review, aspects such as where the articles were published and the author of the articles were considered.

To ensure a trustworthy result from the interviews, the interview questions were tested on several persons beforehand. This was made to avoid misunderstanding of questions and hence ensure a reliable and comparable result. By letting both researchers being present during the interviews, the risk for different interpretation of the interviewee's answers was reduced. Since the interviews were not recorded, there was a risk that the researchers missed some information or documented it wrong. Therefore, the interview notes were reviewed immediately after each interview. In the case of any uncertainties during the customer interview, the notes were reviewed in accordance with the customer in the end of the interview, as the researchers had limited possibilities to later go back to the customer and check the data. These actions were taken to further decrease the risk of false interpretation of the interviewees' answers and avoid subjectivity. In conclusion, to ensure that this thesis should be able to replicate, the method used in this thesis is thoroughly described.

3 THEORETICAL FRAMEWORK

In below sections, the theory that this thesis is built upon is presented. As this master thesis resulted in a customer satisfaction measurement system allowing EFESO to map their current customer's satisfaction, the theoretical framework starts with a description of what is meant by customer satisfaction and its different dimensions. Benefits deriving from finding out the customers' perceptions are also brought up. Thereafter, previously developed models for measuring customer satisfaction are presented, followed by theory of what to think about when designing the measurement tool. The chapter ends with suggestions of important aspects to consider when implementing a new working method in an organization.

3.1 Dimensions of Customer Satisfaction

Below sub-sections are introduced with a definition of customer satisfaction. Thereafter, different aspects of customer satisfaction are presented.

3.1.1 Customer Satisfaction

Customer satisfaction is according to Ruth (2018) *“the extent to which consumers feel gratified after an experience purchasing a business's goods or services and interacting with its staff”* (p.1). This definition can further be compared to what Parasuraman, Zeithaml, and Berry (1988) define as perceived quality, *“The degree and direction of discrepancy between the consumers' perception and expectations”* (p.17). However, there are several other studies bringing up other perspectives in their definitions of customer satisfaction and perceived quality. For example, Mbise and Tuninga (2016) describe the perceived quality as *“a global attitudinal judgment associated with the superiority of the service experience over time”* (p.63).

Similar to Parasuraman's et.al. (1988) definition of perceived quality, Smith and Houston (1983) describe satisfaction within services as something that is connected to confirmation or disconfirmation of expectations. Parasuraman et.al. (1988) argue that many definitions connected to satisfaction relate satisfaction to a specific transaction. However, the different definitions of customer satisfaction and perceived quality have their focus on the gap between customer expectations and customer experience in common.

A distinction between perceived quality and satisfaction can anyhow be found. Perceived quality is seen as something that is a global judgment or something that is related to the superiority of the service, meanwhile satisfaction is something that is related to a specific transaction (Mbise & Tuninga, 2016). One example of the relation between perceived quality and satisfaction is found in a focus group study by Parasuraman, Zeithaml, and Berry (1985). In the focus groups, the respondents exemplified situations where they had been satisfied with a specific service but could not feel that the service firm was of high quality (Parasuraman et.al., 1985). From this, it can be seen that satisfaction in one point of time will over time result in perceptions of a company's service quality (Mbise & Tuninga, 2016).

3.1.2 Service Quality

Parasuraman et.al. (1985) describes service quality as something that, in comparison to goods quality, is abstract and elusive. A good's quality can be measured in several ways, for instance, through durability and/or number of defects. Parasuraman et.al (1985) argue that the reason behind the difficulty of measuring service quality is the three unique features; *intangibility*, *heterogeneity*, and *inseparability of production and consumption*. Intangibility in such a way that you cannot touch a service, heterogeneity referring to the non-identical receiving of the service(s), and inseparability of production and consumption which means that the service(s) are produced and consumed at the same time (Parasuraman et.al, 1985; Claessens, 2015). One method for evaluating service quality is SERVQUAL, developed by Parasuraman et.al (1988). This model examines service quality in five dimensions, *tangibles*, *reliability*, *responsiveness*, *assurance*, and *empathy* (Parasuraman et.al., 1988). The SERVQUAL model and its five dimensions will be further discussed in Sub-section 3.3.1.

Several researchers agree upon that customers tend to evaluate service quality by comparing their expectations of the service with their perceptions of the perceived service (Parasuraman et.al., 1990; Mbise & Tuninga, 2016). Mbise and Tuninga (2016) further discuss that service quality is something that customers evaluate after the service is experienced and that the difference between expected and perceived service quality turns out in either satisfaction (when the expectations are fulfilled or exceeded) or dissatisfaction (when the perceived service quality is lower than expected). Dabholkar and Overby (2005) describes another angle of service quality and argue that it is related to process factors, whereas customer satisfaction is closely linked to the service outcome.

3.1.3 Loyalty

Another aspect to consider when defining customer satisfaction is loyalty. Reichheld (2003) defines loyalty as “*the willingness of someone - a customer, an employee, a friend - to make an investment or personal sacrifice in order to strengthen a relationship*” (p.48). From a customer's perspective, it means that the customer is willing to continue to buy products or services from the supplier even though the supplier do not offer the best price in a certain transaction (Reichheld, 2003). Hayes (2008) further brings up three types of loyalty, namely: *Advocacy Loyalty Index (ALI)*, *Purchasing Loyalty Index (PLI)* and *Retention Loyalty Index (RLI)*. ALI refers to what extent the customers will recommend the product, PLI refers to the degree the customer will increase its purchases and RLI refers to the extent the customer will choose to purchase from the company again (Hayes, 2008).

Furthermore, Reichheld (2003) discusses that customer loyalty do not only concern repeat purchases. Reichheld (2003) argues that a customer might buy a service or a product from a supplier as a consequence of being trapped by inertia, indifference and exit barriers (constructed by the company or circumstance) rather than being loyal to that certain supplier. On the other hand, a customer can be loyal without making frequent purchases because of a reduced need for a service or product (Reichheld, 2003). Over time as the customer's income grow, loyal customers tend to spend more money on services or products from a company they rely on (Reichheld, 2003). This argument in combination with the fact that returning customers are

more profitable in the long term, are clear incentives for companies to put effort in customer satisfaction activities to gain loyal customers (Grönroos, 1989; Reichheld, 2003).

3.1.4 *Different Types of Customer Needs*

When talking about customer satisfaction and customer needs it is important to be aware of customers' different types of needs and expectations. Different customers tend to react differently on whether the needs are fulfilled or not (Bergman & Klefsjö, 2010). The Kano model describes the different dimensions of customer needs and how this reflects in customer satisfaction (Bergman & Klefsjö, 2010). The model is built upon three types of customer needs, *basic needs*, *expected needs* and *excitement needs* (Bergman & Klefsjö, 2010). The model's dimensions are illustrated in Figure 2.

Basic needs are related to the must-be quality (Bergman & Klefsjö, 2010). The customer is not always aware of these needs, and usually, the customer would not even mention the needs if they were asked (Bergman & Klefsjö, 2010). Bergman and Klefsjö (2010) further argue that basic needs have to be fulfilled, otherwise the customer will be dissatisfied. Similarly, the customer will not be satisfied if only the basic needs are fulfilled (Bergman & Klefsjö, 2010).

Expected needs, relate to the expected quality (Bergman & Klefsjö, 2010). Customers are fully aware of these needs, and if you ask them, they can tell you about them (Bergman & Klefsjö, 2010). Bergman & Klefsjö (2010) argues that it is important to fulfill these needs, since the customer expects them to be fulfilled. A company can win customers by being better than their competitors on fulfilling these types of needs (Bergman & Klefsjö, 2010).

Lastly, there are excitement needs, which are connected to the attractive quality (Bergman & Klefsjö, 2010). Excitement needs cannot be outspoken by the customer and the customers sometimes do not even know that they have these needs, nor that they can be fulfilled (Bergman & Klefsjö, 2010). If a company manage to identify excitement needs, a considerable value has been added to the product or service (Bergman & Klefsjö, 2010). Additionally, if excitement needs are identified and added, a company can gain a considerable competitive advantage and win loyal customers (Bergman & Klefsjö, 2010).

In the Kano model, unspoken and spoken needs can also be found. Unspoken needs are related to excitement needs and basic needs, meaning that this kind of needs are either self-evident or something that the customer is unaware of (Bergman & Klefsjö, 2010). The spoken needs are simply needs the customer tells you about and are aware of (Bergman & Klefsjö, 2010).

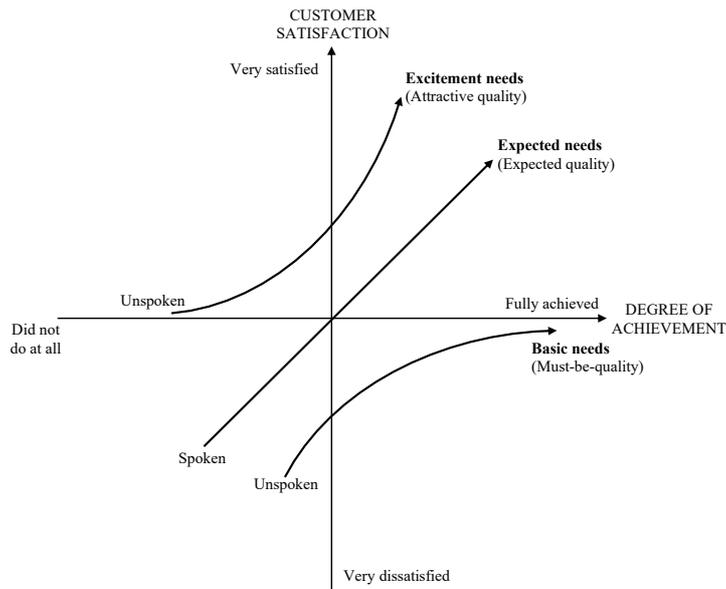


Figure 2 - Kano model (Bergman & Klefsjö, 2010, p.318).

3.2 Benefits with Measuring Customer Satisfaction

In Kristensen and Westlunds' (2003) article *Valid and reliable measurements for sustainable non-financial reporting*, the authors ask themselves: Why non-financial reporting? As a start for answering the question, Kristensen and Westlunds (2003) divide a company's value into two parts: *book value* and *market value*. Book value refers to the official value of a company, more or less summarized in a balance sheet, whilst market value refers to investors' perceptions of a company's value and future possibilities (Kristensen & Westlund, 2003). Market value is also built upon intangible resources in the company, such as relations with customers and partners, human resources, and brand assets (Kristensen & Westlund, 2003).

According to Kristensen and Westlund (2003), the gap between the book value and market value has increased during the recent years, where the book value for large companies such as Microsoft, SAP, and Coca Cola are nowadays below 10%. Kristensen and Westlund (2003) argue that a company's value no longer lies in its balance sheet, but in its market value dominated by the perception of the company. Therefore, the importance of doing non-financial measurements on intangible resources in a company lies in the need of providing stakeholders with reliable and relevant information (Kristensen & Westlund, 2003). This, since stakeholders determine the market value of a company (Kristensen & Westlund, 2003). This is further emphasized by Arvidsson (2011), bringing up the importance of adding information on intangible results to the annual report. Arvidsson (2011) argues that demands coming from stakeholders and stock-market actors on this kind of information will continue to increase and become more and more important for a company to provide in the future.

Another benefit deriving from non-financial measurements is an increased understanding of a company's future state in comparison to financial measurements, that explain the past (Birch-Jensen, 2015; Grigoroudis & Siskos, 2010; Kristensen & Westlund, 2003). Additionally, Birch-Jensen (2015) refers to several authors (Bititci, Garengo & Dörfler, 2012; Fornell, Johnson, Anderson, Jaesung & Bryant, 1996; Kristensen & Westlund, 2003; Stern, 2006), stating that

“customer satisfaction measurement has become widely accepted as a leading indicator for future financial importance, and is the most commonly used non-financial performance measurement” (p.9). Consequently, tracking and documenting a company’s customer satisfaction becomes a way to provide information of a company’s true well-being to different stakeholders, and the information may serve as a tool for acquiring new business (Kristensen & Westlund, 2003).

An additional way of how to achieve growth in business is brought up by Reichheld (2003). Reichheld (2003) argues that a company should go deeper and look into their most enthusiastic customers, the ones that are loyal to the company, and focus less on customers who are just satisfied with the performance. Enthusiastic customers are key drivers for growth in business, as they do not only return but recommend your business to others, thus bringing in new business to the company (Reichheld, 2003; Grigoroudis & Siskos, 2010; Vavra, 2002). Consequently, companies avoid large costs associated with acquiring new customers, such as costs for marketing and other promotions (Reichheld, 2003). Reichheld (2003) even argues that *“the only path to profitable growth may lie in a company's ability to get its loyal customers to become, in effect, its marketing department”* (p.49). The importance of not only gaining new customers but actually take care of the customers you have, is further emphasized by Brown (2001). Several studies show that an increase of the customer retention rate with two percent, corresponds to a cost decrease of ten percent (Peters, 1994; Naumann, 1995; Helm, Eggert & Garnefeld, 2010; Xu & Goedegebuure, 2005; Bergman & Klefsjö, 2010). Hence, creating loyal customers is a win-win situation for the company and a strategy for survival (Sun & Kim, 2013; Vavra, 2002).

However, there may, in some cases, be customers who are not loyal and satisfied with a company’s service, but rather dissatisfied (Bergman & Klefsjö, 2010). But measuring the number of complaints and claims is according to Bergman and Klefsjö (2010) not a good way to map the level of customer satisfaction. According to several studies, Bergman and Klefsjö (2010) (referring to McNealy (1994) and Gustafsson (2009)) argue that the percentage of people who actually raise their complaints to the company is as low as 5% of the dissatisfied customers. The rest of the dissatisfied customers instead sticks to telling their friends, family, colleagues, etc., about their dissatisfaction widely without the company’s knowledge (Bergman & Klefsjö, 2010). People raising their complaints do not pursue this kind of behavior but sticks to telling the company what they feel (Bergman & Klefsjö, 2010). Thus, by instead finding out if a customer is dissatisfied rather than just measuring the number of complaints, a company has a chance to turn dissatisfied customers into satisfied customers, hence preventing negative associations with the company to spread around (Bergman & Klefsjö, 2010).

An additional benefit with doing both financial and non-financial measurements (such as customer satisfaction measurements), is the possibility to distinguish potential areas for improvements (Grigoroudis & Siskos, 2010; Ittner, Larcker, & Randall, 2003). The information from financial and non-financial measurements helps to link management processes with the company objectives and thus serves as a base in the identification of suitable strategies for the company (Ittner, et.al., 2003). This is further in line with what Arvidsson (2011) argue, bringing

up the importance of providing information of intangible resources and “*explain the roles they play in the value-creation process and in corporate strategy*” (p.227).

Measuring and distinguishing the importance of an organization's different service dimensions will also help management to spend resources more effectively (Parasuraman et.al., 1990). This, since an evaluation of customer satisfaction serves as a base in decision-making at higher levels in an organization, increasing management’s capability of taking decisions aligned with customer needs (Klementova, Zavadsky & Zavadska, 2015). An organization’s mainly interest lies in gaining and obtaining customers, and hence providing what the customer actually wants is a key to success (Klementova, et al., 2015). Internal communication of information regarding what the customer wants can further be connected to an increase in motivation among employees, which in turn have a positive effect on the customer satisfaction (Brown & Lam, 2008; Chi & Gursoy, 2009; Grigoroudis & Siskos, 2010; Klementova, et al, 2015; Vavra, 2002).

3.3 Customer Satisfaction Measurement Systems

This section presents three models for measuring customer satisfaction and their applications, starting with SERVQUAL, followed by Net Promoter Score and Customer Satisfaction Index.

3.3.1 SERVQUAL

SERVQUAL is a model for assessing customers’ perceptions of service quality in service and retailing organizations (Parasuraman et.al., 1988). Aside from assessing customers’ perceptions of service quality, SERVQUAL can be used to highlight areas in need of managerial attention (Parasuraman et.al., 1988). SERVQUAL is developed by a market research team consisting of A. Parasuraman, Valarie A. Zeithaml, and Leonard L. Berry in 1998. Parasuraman et.al. (1998) along with other researchers (Rudie & Wansley 1985; Thompson, DeSouza, & Gale, 1985), identified that the ability to deliver high service quality is a must-do to stay competitive and succeed within one's business. This conclusion lead to the development of the SERVQUAL instrument with five generic dimensions of service quality, namely: *tangibles*, *reliability*, *responsiveness*, *assurance*, and *empathy*. The dimensions are further described in Table 1.

Table 1 - Dimensions in SERVQUAL (Parasuraman et.al. 1988, p.23).

DIMENSION	DESCRIPTION
Tangibles	Physical facilities, equipment, and appearance of personnel.
Reliability	Ability to perform the promised service dependably and accurately.
Responsiveness	Willingness to help customers and provide prompt service.
Assurance	Knowledge and courtesy of employees and their ability to inspire trust and confidence.
Empathy	Caring, individualized attention the firm provides its customers.

To measure service quality, SERVQUAL uses perceived quality which refers to “*the customer's judgment about an entity's overall excellence or superiority*” (Llosa, Chandon & Orsingher, 1998, p.17). Perceived quality is described as something that develops out of a comparison of expectations and perceived performance (Llosa et al, 1998). Additionally, Parasuraman et al. (1988) define expectations as customers’ *wants* (what *should* happen), and not customers’ predictions (what is *likely* to happen) (Parasuraman et al., 1988).

SERVQUAL is built upon 22 statements, or as the developers call it, *items* (Parasuraman et al., 1988). These are divided into the five dimensions of service quality described above. The purpose of the 22 items is to measure service quality and the 22 items are used twice in the service quality measurement process (Parasuraman et al., 1988). In the first step, the items are used to measure customer’s expectations, that is to say, what the customers want (Parasuraman et al., 1988). In the second step, the items are instead used to evaluate the customer’s perceptions of the performance of the supplier (Parasuraman et al., 1988). The items are evaluated on a seven-point Likert scale ranging from “Strongly Agree” to “Strongly Disagree” (Parasuraman et.al., 1988). The SERVQUAL score (which corresponds to the perceived service quality), corresponds to the difference between customer’s perceptions and expectations. The score is calculated using the following formula (Llosa et al, 1998).

$$Q = \frac{1}{22} \sum_{i=1}^{22} P_i - E_i$$

Q = SERVQUAL score, i.e. perceived service quality, P_i = Level of perceived quality on item i , E_i = Level of expected quality on item i .

SERVQUAL can be used in several ways to measure a firm’s service quality. For example, average scores on each one of the five dimensions can be measured to give a result of how good (or bad) a firm’s service quality is among the five different dimensions (Parasuraman et.al. 1988). The model can also provide an overall measure of the five dimensions by evaluating an average score across all five dimensions (Parasuraman et.al. 1988). Since SERVQUAL is dependent on perception statements, one restriction of the model is that it is limited to current or past customers (Parasuraman et al., 1988). This since the respondents need to have some prior knowledge about the firm they are evaluating to gain meaningful responses (Parasuraman et.al. 1988). Thus, it is important to note that there is a variety of potential applications within this constraint (Parasuraman et.al., 1988). Parasuraman et.al. (1988) argues that SERVQUAL preferably could be used periodically to track trends within service quality in the organization. Further, Parasuraman et.al. (1988) highlight the good use of SERVQUAL in conjunction with other tools that measure service quality to strengthen the result.

Even though SERVQUAL is a popular model for measuring service quality there are studies who have raised concerns about it. Behara, Fisher, and Lemmink (2002) bring up several studies that have questioned parts of the SERVQUAL model mainly connected to the conceptual, methodological and analytical issues. Especially, the conceptualization of service quality and its definition as the difference between perception and expectation is an issue raised by many authors according to Behara et.al (2002). Critics mean that there is little, if any, theoretical

evidence that evaluating the difference between perceived and expected quality is a proper way of measuring service quality (Behara et.al., 2002). Parasuraman et.al. (1994) meet the criticism, holding on to their theory arguing that the conceptualization of how to measure service quality has strong theoretical and empirical evidence. Parasuraman et.al. (1994) cite several authors pointing this definition to be a well-established conceptualization of service quality as well. However, Parasuraman et.al. (1994) mentions that further research could be beneficial to find the most appropriate way to integrate expectations within service quality measurements.

Carman (1990) further brings up concerns regarding the respondents' need to have some prior knowledge about the firm before taking a stand to the items in SERVQUAL. Carman (1990) argues that major problems can occur when treating the expectations, arguing that “*there appear to be serious problems with the value of the expectations battery as proposed, the ability to administer it, and the factor analysis of the difference between perceptions and expectations*” (p.51). To tackle these problems Carman (1990) for example, proposes that data regarding perceptions and expectations can be collected simultaneously rather than asking each question separately. This can be done in cases where respondents already have norms or well-formulated expectations in their heads from prior experiences.

3.3.2 Net Promoter Score (NPS)

Net promoter score (NPS) is a method for measuring customer loyalty, firstly introduced by Frederick Reichheld in his article *The one number you need to grow* (Brandt, 2007; Dewitte, 2018; Reichheld, 2003). It was published in Harvard Business Review in 2003 and has since become a widely used method for measuring customer loyalty among leading companies in the world (DeWitte, 2018; Reichheld & Markey, 2011). NPS is said to be a good predictor of a company's growth and customer behavior since correlations between an increase in sales volume and revenues have been made (Brandt, 2007; Reichheld, 2003).

NPS is built upon one question, namely asking customers how likely it is that they will recommend the company or service to a friend or colleague (DeWitte, 2018; Reichheld, 2003; Reichheld & Markey, 2011). Respondents are asked to rank the degree of their recommendation on a scale between zero and ten. Depending on their rating, the respondents are divided into three categories; *promoters*, *passives*, and *detractors* (Brandt, 2007; Fisher & Kordupleski, 2019). In addition to the recommended question, companies are encouraged to ask at least one follow-up question, with the aim of finding out the underlying reason(s) for the respondents' rating of the company (Reichheld & Markey, 2011).

A ranking of six or below, categorizes the respondent as a detractor, thus referring to a person who is less likely to exert the desired “value-creating behavior” of promoting the company to others (Brandt, 2007; Fisher & Kordupleski, 2019; Schulman & Sargeant, 2013). Detractors are dissatisfied with the company, product and/or service(s), and consequently, bad-mouth the company to others (Reichheld & Markey, 2011). Detractors may also cause additional costs for the company, sending complaint after complaint taking up valuable time (Reichheld & Markey, 2011).

If the respondent instead ranks the company with a seven or eight, they are categorized as passives (Brandt, 2007; DeWitte, 2018; Fisher & Kordupleski, 2019; Schulman & Sargeant, 2013). Passive customers nor promote or speak unfavorably about a company but are satisfied since they got what they paid for (Brandt, 2007; DeWitte, 2018; Fisher & Kordupleski, 2019; Reichheld & Markey, 2011; Schulman & Sargeant, 2013). Hence, passive customers are not to be counted to the long-term profit for a company since they make few referrals and do not mind going to a competitor with a better offer (Reichheld & Markey, 2011).

The last category, promoters, rank the company with nine or ten (Brandt, 2007; DeWitte, 2018; Fisher & Kordupleski, 2019; Reichheld & Markey, 2011; Schulman & Sargeant, 2013). Promoters are seen as customers exercising the behavior desired by the company (Brandt, 2007; DeWitte, 2018; Fisher & Kordupleski, 2019; Reichheld & Markey, 2011; Schulman & Sargeant, 2013). Promoters are enthusiastic customers, whom, for example, do not mind giving feedback and taking surveys (Reichheld & Markey, 2011). Reichheld and Markey (2011) further argue that *“any company should want to maintain the promoter’s enthusiasm, to learn economical ways to create even more customers who feel and act that way, and provide recognition and rewards the teams or individual employees who do so”* (p.5).

After collecting rankings from different customers, the company's NPS is calculated. The calculation is made by subtracting the percentage of respondents belonging to the promoter category, with the percentage of respondents categorized as detractors, resulting in a score between -100% to 100% (DeWitte, 2018; Schulman & Sargeant, 2013). The persons in the passives category affect the result by taking respondent shares from detractors and promoters, causing the score to move towards zero (DeWitte, 2018; Schulman & Sargeant, 2013). The desired outcome is a score close to 100%, and the higher percentage of the respondents being promoters (giving the ranking nine or ten), the closer a score of 100% (DeWitte, 2018; Schulman & Sargeant, 2013).

Except being a quick and uncomplicated metric for gaining an understanding of customer behavior and attitudes, NPS makes it possible to categorize customers using a simple survey (Reichheld & Markey, 2011). The result is thereafter used in a simple calculation, giving a score that is easy to understand (Reichheld & Markey, 2011). Another benefit deriving from the usage of NPS is its role in motivating employees to take steps necessary to decrease the numbers of detractors and get more promoters (Reichheld & Markey, 2011). This is made by learning to take use of feedback and scores and continuously improve the organization (Reichheld & Markey, 2011). According to Reichheld and Markey (2011), *“that’s how a company can better its results and strive toward greatness. That’s what turns NPS from a score into a system”* (p.11).

In addition, Bergman and Klefsjö (2010) describe a correlation between satisfaction and loyalty related to NPS, referring to a study made at Rank Xerox in Denmark. In the study, customers were asked to mark their satisfaction on a scale from one (1) to five (5), where five was the highest grade (Bergman & Klefsjö, 2010). The study showed that 93% of the customers who marked a five returned to make a repeat purchase, in comparison to the customers who marked four (4), where only 60% returned to make a repeat purchase (Bergman & Klefsjö, 2010).

Bergman and Klefsjö (2010) further describe other studies showing similar results, pinpointing the large difference between achieving different ratings.

There are several authors expressing their skepticism to Reichheld's (2003) recommendation as the best method for evaluating loyalty and customer behavior. While Reichheld (2003) argues that it is the most effective way, Hayes (2008), on the other hand, believes that measuring customer loyalty using only one question is comparable with measuring mathematical skills doing one test only. It does not show true loyalty and Hayes (2008) argues that more than one question is needed to give a more precise measure. According to Hayes (2008), other studies have shown that other loyalty questions rests on the same assumptions and may be a just as good predictor for growth in business (Fornell et. al., 2006; Keiningham, Cooil, Andreassen, & Aksoy, 2007; Morgan & Rego, 2006).

Further, Fisher and Kordupleski (2018) claim that NPS has damaged both companies and their customers, becoming a method widely used but not including any of the, according to the authors, desirable characteristics for doing market research. Fisher and Kordupleski (2019) bring up problems deriving from using NPS, firstly saying that it does not give any data indicating *what* a company shall improve. Secondly, NPS does, according to Fisher and Kordupleski (2019), focus solely on how to keep customers, not how to get new ones. Fisher and Kordupleski (2019) do not either believe that "passive" customers exist and further argue that NPS does not give a company any data on their performance useful for comparison with competitors. Finally, Fisher and Kordupleski (2019) argue that the method only focuses on internal demands when trying to distinguish how to get more loyal customers, not trying to distinguish what the customers actually want.

Even though NPS may be a good measure for some companies, it does not necessarily mean that it is appropriate to use for everyone (Brandt, 2007). This is further emphasized by the founder himself, saying that "*the 'would recommend' question wasn't the best predictor of growth in every case*" (Reichheld, 2003, p.51). Factors such as the type of customer and market structure may affect, i.e. if there is a monopoly, whereas there is completely irrelevant to ask whether someone would recommend the business or not (Brandt, 2007: Reichheld, 2003). The appropriate measure to use for predicting loyalty may also vary with the type of industry or sector the company acts within, and there is no such thing as "one size fits all" (Brandt, 2007).

3.3.3 Customer Satisfaction Index (CSI)

As a part of an increased interest of measuring customer satisfaction during recent years, different customer satisfaction index (CSI) has been developed both on national and international scales (Bergman & Klefsjö, 2010; Hsu, 2008). One of the leading countries in this development is Sweden, introducing *SCSB - the Swedish Customer Satisfaction Barometer*, already in 1989 (Bergman & Klefsjö, 2010). Today, the national customer satisfaction index used in Sweden is called the *Swedish Quality Index (SQI)*, carried out by the Swedish Institute for Quality (SIQ) in collaboration with the EPSI (*European Performance Satisfaction Index*) Rating organization (Bergman & Klefsjö, 2010). The EPSI organization is active in around 20 countries in Europe, performing comparative measurements (Bergman & Klefsjö, 2010).

SQI aims at “gather, structure, analyze and present information about quality issues based on how customers and other stakeholders experience quality” (Bergman & Klefsjö, 2010, p.379). SQI includes both the private and the public sector, and goods and services in the investigation (Bergman & Klefsjö, 2010). The index is built upon four latent variables as seen in Figure 3 and is based on a model previously established by Fornell (1992) (Bergman & Klefsjö, 2010).

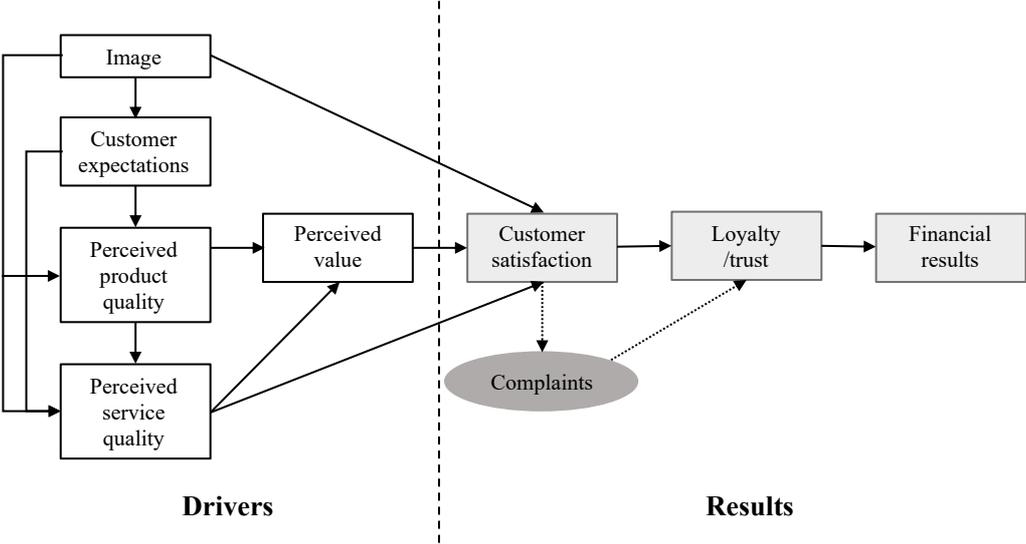


Figure 3 - The model behind the Swedish Quality Index (Bergman & Klefsjö, 2010, p.380)

The SQI evaluation process starts with the *image* variable as a first step, estimating the perception people have of the organization (Bergman & Klefsjö, 2010). Thereafter, the process continues by estimating the remaining three latent variables, *customer expectations*, *perceived product quality* and *perceived service quality* (Bergman & Klefsjö, 2010). The number of questions, their aim, and their considered aspects are described in Table 2. The latent variables are thereafter analyzed with regards to *perceived value* (Bergman & Klefsjö, 2010). Together, these latent variables serve as drivers for customer loyalty and satisfaction, which in turn constitute the resulting parts of the analysis (Bergman & Klefsjö, 2010).

Table 2 - The different steps and their aim in SQI (Bergman & Klefsjö, 2010, p.380).

VARIABLE	NUMBER OF QUESTIONS	CONSIDERED ASPECTS	AIM
Image	At least four	Reliability, customer service, value for the money and competence	Understand people’s general perception of the company
Customer expectations	At least five	Range of products, personal service, safety, correctness and additional services	Understand people’s general expectations of the company
Perceived product quality	At least three	I.e. product contents, safety and technical function	Understand how the quality of the product is perceived
Perceived service quality	At least three	I.e. personal service and availability	Understand how the quality of the service is perceived

Perceived value	At least five	I.e. the value of product(s), service and support, availability, safety and security and added functions offered	Understand how the value of the product is perceived
Customer satisfaction	Three questions are always used	On a general level, in relation to expectations and in relation to an ideal company	Estimate the customer satisfaction
Loyalty	At least two	How likely it is that the customer will return, how the company is presented talking with friends and colleagues and to what degree the company is recommended	Estimate how loyal the customers are

The data collection for the SQI estimation is done through a questionnaire, where every question is answered on a scale from one (1) to ten (10) (Bergman & Klefsjö, 2010). One (1) refers to “do not agree at all” or “very dissatisfied” and ten (10) refers to “agree completely” or “very satisfied” (Bergman & Klefsjö, 2010). After a statistical analysis of answers collected from a selected company sample representing the Swedish society, the Partial Least Square technique is used to calculate an index value for each variable in the model (Bergman & Klefsjö, 2010). The technique is further used to calculate the strength between correlations of the different variables, which helps to explain the achieved values of loyalty and customer satisfaction (Bergman & Klefsjö, 2010).

CSI has not only been used in Sweden but spread to several other countries (Bergman & Klefsjö, 2010; Hsu, 2008; Vavra, 1997). Commonly mentioned is the *American Customer Satisfaction Index* (ACSI), which is a quarterly measurement of customer satisfaction of some 200 U.S. companies (Fornell et al., 1996; Reichheld, 2003; Vavra, 1997). ACSI reflects the nations experience of different companies (Fornell et al., 1996; Sun & Kim, 2013). It measures the quality of services and goods that have been provided, creating a comparable measurement across several industries (Fornell et al., 1996; Hsu, 2008; Sun & Kim, 2013; Vavra, 1997). Based on the selected sample, a customer satisfaction index is calculated for each company, which in turn is compared against each other to estimate indices on a national, sector and an industrial basis (Fornell et al., 1996; Sun & Kim, 2013).

The model behind ACSI can be seen in Figure 4. The ACSI model is similar to the model used for SQI, building on latent variables to capture experiences of different types of companies and services (Fornell et al., 1996; Hsu, 2008). Further, ACSI includes aspects anticipating both present and future state, and the aim of the model is to distinguish customer loyalty and the reason(s) behind it (Fornell et al., 1996).

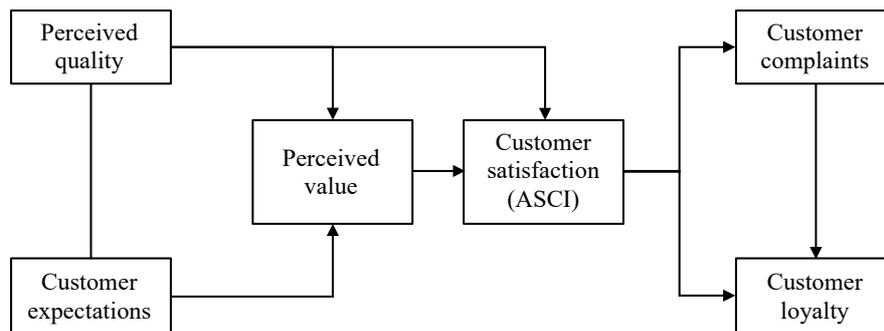


Figure 4 - The ACSI model (Fornell et al., 1996, p.9)

In line with SQI, the first steps in ACSI include to estimate *perceived quality*, *perceived value* and *customer expectations* (Anderson & Fornell, 2000; Fornell et al., 1996; Hsu, 2008). Perceived quality investigates the degree to which a company customizes their offerings (both services and products) and how reliable the output is (i.e. trustworthy offering, whether it is standardized and whether it is not deficient) (Fornell et al., 1996). Secondly, an estimation of the perceived value corresponding to how the customer experience the quality of the product or service, relative to the price paid, is made (Fornell et al., 1996). Thirdly, a determination of the expectations of the market serves as the last input for the calculation of CSI (Fornell et al., 1996).

The estimation of customer expectations also includes a review of the customer’s former experiences of the company’s products and/or services, captured using information from i.e. advertising and “*word-of-mouth*” (Fornell et al., 1996, p.9). Fornell et al. (1996) argue that together with customers’ expectations of the company’s future quality, the current customer expectations affect the customer satisfaction value. Hence, both states are important to include in the estimation.

Lastly, the ACSI model evaluates the correlation between customers’ loyalty and the number of customer complaints (Fornell et al., 1996; Hsu, 2008). According to Fornell et al., (1996), “*Loyalty is the ultimate dependent variable in the model because of its value as a proxy for profitability*” (p.9). In accordance with what is stated by Sun and Kim (2013), ACSI hence serves as a predictor of financial returns. Fornell et al., (1996) further argue that if the correlation between loyalty and customer complaints is positive, the company has succeeded in turning dissatisfied customers into loyal customers. If the relationship, on the other hand, is negative, the company has more or less made “*a bad situation even worse*” (Fornell et al., 1996, p.9) and failed with changing the mind of a dissatisfied customer (Fornell et al., 1996).

3.4 Explanatory Models of Customer Satisfaction

The previously described SERVQUAL, NPS and CSI models can be categorized as methods and models for measuring customer satisfaction. On the other side of the spectra, there are models characterized as being more explanatory models of customer satisfaction. These models focus on finding underlying reasons for why a company’s customers are satisfied or not, instead of finding out *how* satisfied the customers are. Below, two of these models will be brought up

and explained, to broaden the mapping of different measurements and dimensions to include in the resulting measurement system of this master thesis.

3.4.1 The Gap Model

The Gap model is used to explain possible root causes of customer dissatisfaction by defining five potential gaps between customer's expectations and perceptions of a service (Bergman & Klefsjö, 2010). The Gap model is illustrated in Figure 5. The gaps constitute the experienced service, as a result of how the service has been designed and produced (Bergman & Klefsjö, 2010). No detailed statements for how the gaps should be measured are mentioned in the original Gap Model provided by Parasuraman et.al (1985). However, ten characteristics of service quality was identified during the development of the Gap model which were later used to develop the SERVQUAL model. With SERVQUAL it is thus possible to estimate the gaps (Large & König, 2009).

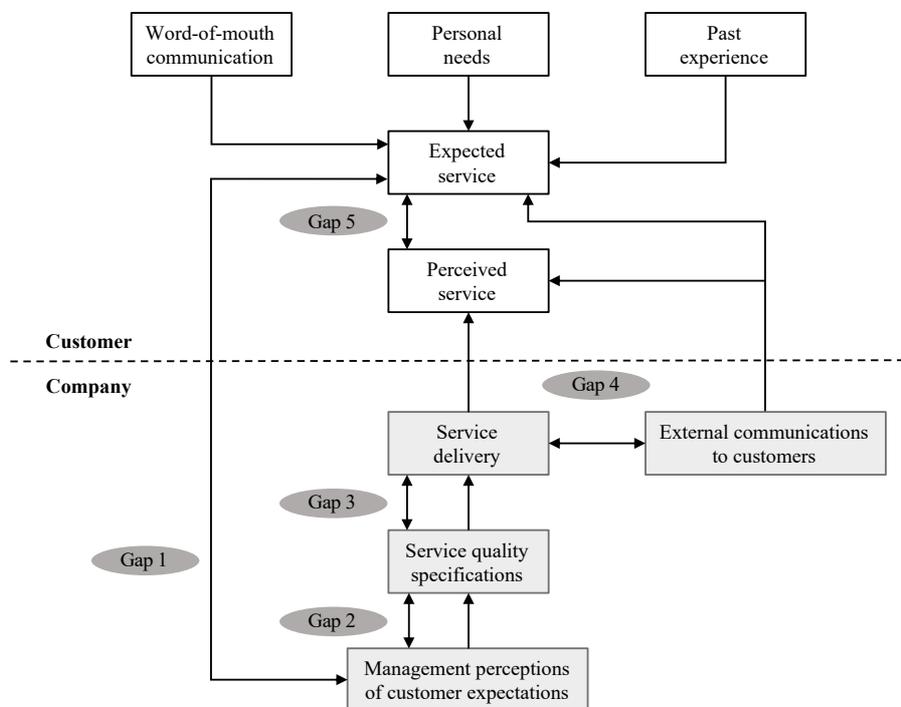


Figure 5 - The Gap model (Bergman & Klefsjö, 2010, p.342).

The first gap describes the deviation between what the company believes to be the customers' expectations and the customers' actual expectations (Bergman & Klefsjö, 2010). It is a misunderstanding between what the customers perceives as high quality and what the company perceives as high quality (Bergman & Klefsjö, 2010). Further, Bergman and Klefsjö (2010) argue that understanding what your customer expects is one of the first and most critical steps when delivering a service. To be able to deliver a service that the customer experience as excellent it is vital to know what the customer expects from you, otherwise, it is hard to know what has to be fulfilled (Bergman & Klefsjö, 2010). Bergman and Klefsjö (2010) give lack of marketing research, bad internal communication and too many levels of management as examples of common factors causing this gap.

The second gap is referring to difficulties connected to carrying the voice of the customers through the entire design process (Bergman & Klefsjö, 2010). Companies tend to have problems in their attempts to match or exceed their customers' expectations during the design process (Parasuraman et.al., 1985). “*Absence of total management commitment to service quality*” (Parasuraman et.al., 1985, p.45) is by Parasuraman et.al. described as yet another reason for the second gap. These factors together end up in a discrepancy between the management perceptions of customer expectations and what actually has been specified for the service (Parasuraman et.al. 1985). Lastly, Parasuraman et.al. (1985) argue that the second gap might affect the customer’s quality perceptions.

Gap number three is about the gap between how a company specifies a service and what they actually deliver (Bergman & Klefsjö, 2010). This is described as a gap caused by employees due to difficulties of standardizing a service (Parasuraman et. al., 1985). It is the employee responsible for delivering the service who determines the quality of it, and Bergman and Klefsjö (2010) argue that no matter how many guidelines that exists, there will still be a variety in every employee's performance of the service. Some examples of possible reasons for gap number three are that people who deliver the service have not been involved in the design of the service, lack of teamwork, and poor employee fit (Bergman & Klefsjö, 2010).

The gap between what a company promises its customers to deliver and what is actually delivered is according to Parasuraman et. al. (1985) the fourth gap that can cause dissatisfied customers. Parasuraman et.al. (1985) exemplifies it with external communication as a channel that often causes the gap. Parasuraman et.al. (1985) further argue that external communication can affect not only customers’ expectations about a service but also the perceptions of the service that has been delivered. Bergman and Klefsjö (2010) pinpoint that there is a risk of overpromising when it comes to services, since services are performed by people, who do not have static actions. Bergman and Klefsjö (2010) argue that for example, the marketing department might not fully understand what is realistic, thereby uncertainty can be raised among employees concerning how to perform the service as they do not exactly know what has been promised.

Gap five is about the difference between customers’ expected service quality and the perceived service quality (Bergman & Klefsjö, 2010). Parasuraman et.al. (1985) argues that a customer’s perception of the service performance, whether it is of high or low quality, depends on what the customer has expected in a certain context. Bergman and Klefsjö (2010) further argue that exceeding customers’ expectations is one way to achieve a high level of service quality. In Table 3, a summary of the five gaps are given and explained in one sentence to create an overview.

Table 3 - The five gaps in The Gap Model (Bergman & Klefsjö, 2010, p.341-343).

GAP	DESCRIPTION
1	Gap between customers' expectations and the company's perception of those expectations.
2	Gap between the company's perceptions of customer expectations and the service quality specifications.
3	Gap between service quality specifications and service delivery.
4	Gap between service delivery and external communications to customers about service delivery.
5	Gap between customers' expectations and perceived service.

3.4.2 Grönroos' Model

Grönroos' model, the Perceived Service Quality model, is based upon two types of quality, the *what-quality* and the *how-quality* (Grönroos, 2001). The idea behind the model is that the customer's experience of the service or product is dependent on the what-quality and the how-quality. The what-quality can be referred to as the result of the service, answering the question "*what* has been provided" (Bergman & Klefsjö, 2010). The how-quality, on the other hand, answers the question "*how* has the service been provided" and depends on the way the service has been delivered (Bergman & Klefsjö, 2010). The what-quality can be seen as technical whereas the how-quality is functional (Grönroos, 2001). According to Kang and James (2004), Grönroos argues that customers perceive both the outcome of the process as well as the function of the process itself, thus it is important to take both dimensions into account.

Further, Kang and James (2004), raise the issue with measuring what-quality in some services. Kang and James (2004) use healthcare as an example of services where what-quality is challenging to measure since it is difficult to measure the immediate result from a treatment. When a company instead lacks the ability to measure technical quality, Kang and James (2004) argue that customers tend to, instead, rely on other attributes for measuring quality. In healthcare, this could mean that customers use attributes such as reliability and empathy to assess quality, which are attributes related to the SERVQUAL model (Kang & James, 2004).

Later, Grönroos (2001) has added an extra dimension into his model, *the image concept*, since he found out that customers always bring earlier experiences and overall perceptions of a firm into each encounter. Kang and James (2004) further argue that it is important to understand customers' perception of a firm's image. If a customer has a positive image of a firm, the customer is more likely to forgive the firm for minor mistakes unless they occur too often. In contradiction, if a customer has a negative image of a firm, the customer tends to react on any mistake made and it will often be magnified in the customer's mind (Kang & James, 2004). Kang and James (2004) summarize this image concept as: "*a filter in terms of a consumer's perception of quality*" (p.267).

3.5 Designing the Customer Satisfaction Measurement System

Below sections describe subjects useful to consider when designing a customer satisfaction measurement system. The sections describe how to proceed in the design process of a measurement system, what kind of design an evaluation might have, what to include and what type of questions that can be used to evaluate customer satisfaction.

3.5.1 Design Process

Grigoroudis and Siskos (2010) discuss around the process of how to design and implement a customer satisfaction measurement system, arguing that the process should “*follow the general rules for conducting a market or a customer survey, while at the same time it should adopt the main principles of continuous improvement in a business organization*” (p.15). Grigoroudis and Siskos (2010) further argue that the efforts for measuring customer satisfaction are often formed as entire programs implemented in an organization. The measurement system should hence be possible to continuously improve and develop over time (Grigoroudis & Siskos, 2010).

Grigoroudis and Siskos (2010) bring up Naumann and Giel’s (1995) design and implementation process for a customer satisfaction measurement system as an example of possible steps to conduct in the development process. The process should use an iterative approach, revising data while letting it guide further into the process (Naumann & Giel, 1995). As a first step in the development process, Naumann and Giel (1995) suggest that the objectives of the evaluation should be defined. Thereafter, the research design should be developed, followed by an identification of desired attributes. Then, the questionnaire for collection of data should be designed, a plan for how to collect data should be set up and a pilot test of the developed measurement program should be made (Naumann & Giel, 1995). Lastly, the implementation process follows, which will be discussed in more detail in Section 3.5.5. The entire process from design to implementation are visualized in Figure 6.

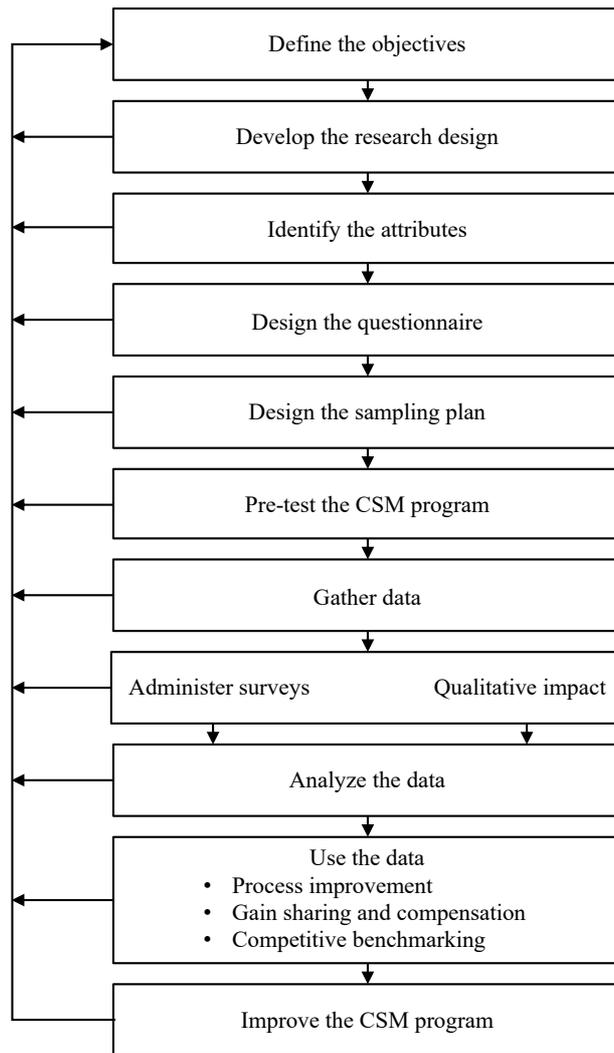


Figure 6 - Design and use of a CSM program (Grigoroudis & Siskos, 2010, p.16).

3.5.2 Defining Measurement Dimensions

One important aspect to consider when designing a customer satisfaction measurement system is to measure and collect data that is relevant for the company (Hayes, 2008; Reichheld, 2003; Kristensen & Westlund, 2003). The company must identify what dimensions that are relevant to measure and then transfer it to the quality definition of their services or products (Hayes, 2008; Kristensen & Westlund, 2003). To identify different quality dimensions in an organization, Hayes (2008) suggests two methods, *the quality dimension development approach* and *the critical incident approach* (the later developed by Flanagan (1954)).

The quality dimension development approach refers to defining quality dimensions based on customer requirements (Hayes, 2008). The method consists of two steps, starting with identification of quality dimensions (Hayes, 2008). The dimensions could be identified by, for instance, doing literature research and search for dimensions already developed by others, or by establishing dimensions based on studies of the company's product or service (Hayes, 2008). Hayes (2008) argues that if developing quality dimensions based on literature, five dimensions is enough since it otherwise is a risk of having dimensions overlapping each other. In addition, customers may find it hard to distinguish between too many dimensions (Hayes, 2018). If the

company instead develops quality dimensions on its own, the dimensions would be easier to connect to different customer requirements and thus numerous quality dimensions could be generated (Hayes, 2008).

The second step of Hayes’s (2008) quality dimension development approach consists of giving examples of the selected dimensions that help to define them (Hayes, 2008). This, since it is important to understand what customer requirements the different dimensions correspond to and also to make everyone understand what the specific dimension aims at measuring (Hayes, 2008). In Table 4, Hayes’s (2008) examples of different quality dimensions with respective definitions are given. The two steps, generating dimensions and developing examples for defining them, could according to Hayes (2008) be made simultaneously even though they are presented separately.

Table 4 - Examples of different quality dimensions and definitions (Hayes, 2008, p.13).

QUALITY DIMENSIONS AND DEFINITIONS	
1	<i>Availability of support:</i> the degree to which the customer can contact the provider.
2	<i>Responsiveness of support:</i> the degree to which the provider reacts promptly to the customer.
3	<i>Timeliness of support:</i> the degree to which the job is accomplished within the customer’s stated time frame and/or within the negotiated time frame.
4	<i>Completeness of support:</i> the degree to which the total job is finished.
5	<i>Pleasantness of support:</i> the degree to which the provider uses suitable professional behavior and manners while working with the customer.

The second method for identification of different quality dimensions out of customer requirements, the critical incident approach, is stated as a useful method when designing customer satisfaction questionnaires and when analyzing business processes (Hayes, 2008). The method relies on the customers and includes them in the process of defining customer requirements (Hayes, 2008). This to decrease the risk of developing requirements not of importance for the customers and to avoid inclusion of irrelevant requirements (Hayes, 2008). Hayes (2008) describes the critical incident approach as following: “*The critical incident approach identifies specific performance examples that illustrate organizational performance related to the services or products they provide.*” (p.17). The approach translates incidents into different customer satisfaction items, which in turn are categorized into different customer requirements and thus identifies the company’s different quality dimensions (Hayes, 2008).

3.5.3 Data Collection Methods

An effective way of measuring customer satisfaction is to use surveys, *if* asking the right questions (Reichheld, 2003). Any irrelevant information should be excluded and Reichheld (2003) pinpoints that if using surveys for collecting data, it is preferable to keep them simple. Simple surveys make the result easier to act upon, rather than ending up with a large amount of complex information hard to interpret (Reichheld, 2003). The result shall, in addition, be possible to verify by the users, and the responses should preferably be comparable as well

(Kristensen & Westlund, 2003). Most important is, according to Vavra, (2002), to ask the right people, claiming that too many programs for customer satisfaction measurements have failed due to including the wrong persons in the evaluation. Vavra (2002) therefore emphasizes the importance of taking time to define *what persons* to ask, not putting all energy on *what* to ask in the evaluation.

Grigoroudis and Siskos (2010) further bring up the importance of not only relying on one measure for customer satisfaction but to include several information sources as a basis for the evaluation. This, since “*a single indicator is usually not a good predictor of overall performance*” (Grigoroudis & Siskos, 2010, p.12). By using several sources for measuring customer satisfaction, the accuracy and integrity of the data will be possible to verify, and the information will be more reliable (Grigoroudis & Siskos, 2010). Furthermore, Grigoroudis and Siskos (2010) give examples of possible additional data sources to use for customer satisfaction evaluations. By including historical data such as previously purchases and sales, comparing it with general company information such as revenue, cash flow, and employees, and adding what Grigoroudis and Siskos (2010) refers to as “*points of customer contact*” (p.14), a better view of the customer satisfaction measure will be given (Grigoroudis & Siskos, 2010). With “*points of customer contact*”, Grigoroudis and Siskos (2010) mean for instance number of complaints, mail flow, phone calls, etc.

The importance of including feedback and information from customers when developing services is also emphasized by Vavra (1997). Massnick (1997) gives examples of different information sources to use for collecting feedback, which can be seen in Table 5. Grigoroudis and Siskos (2010) categorize the different information channels into *Direct measurement systems* and *Indirect measurement systems*. By direct measurement systems, Grigoroudis and Siskos (2010) refer to, for instance, customer satisfaction surveys, personal interviews, customer complaints, and other sources where information comes directly from the customer. Direct measurement systems hence give an update of the current satisfaction level, making it possible for an organization to take actions before issues become costly problems with high business impact (Grigoroudis & Siskos, 2010).

Indirect measurement systems instead refer to “*data reflecting the outcome/result of customer satisfaction, such as the sales level, the market share, etc.*” (Grigoroudis & Siskos, 2010, p.14). Hence, indirect measurement systems do not enable any preventive actions but summarize past performance, including the effect of undesired situations and eventual problems (Grigoroudis & Siskos, 2010). Despite this, the indirect measurement systems still provide valuable information and insights on improvement areas for the company (Grigoroudis & Siskos, 2010).

Table 5 - Customer satisfaction information sources (Grigoroudis & Siskos, 2010, p.13).

CATEGORY	EXAMPLES		
Research methods	Customer surveys	Employee surveys	Customers visits
	Dealer/supplier surveys	Focus groups	Industry trade press
	Mystery shoppers	Customer panels	
Operational data	Complaints	Customer service reports	Telephone activity reports
	Customer comment cards	Engineering/design meetings	Quality performance tracking
	Field service reports	Warranty claims	Employee suggestions
	Product returns		
Marketing/sales channels	Sales contact reports	Customer/competitor advertising	New product idea suggestions
	Trade show intelligence	Sales data analysis	Customer literature
	Lead tracking	Closed accounts	
Other	Benchmarking	Management contacts	Business literature
	Workshops/seminars		

3.5.4 Evaluation Variables

When designing a customer satisfaction measurement system, there are different types of variables to use in the evaluation. Four basic categories: *nominal variables*, *ordinal variables*, *interval variables*, and *ratio variables*, are commonly used in market surveys and are described in the following paragraphs (Grigoroudis & Siskos, 2010).

Nominal variables are used for categorizing objects without numerical value and the variables cannot be ordered, for example, gender or employment (Grigoroudis & Siskos, 2010; Idre, 2018). According to Grigoroudis and Siskos (2010), there is only one admissible mathematical operator that can be used when using nominal variables, namely equality (=) and inequality (\neq). Grigoroudis and Siskos (2010) further argue that it is only for coding reasons nominal variables are quantified.

Variables able to indicate the order of objects, for example low, medium and high, are called **ordinal variables** (Grigoroudis & Siskos, 2010). However, even if the variables can be ordered there is nothing known about the interval between the levels (Idre, 2018). That is to say, the difference between low and medium might not be the same as the difference between medium and high (Idre, 2018). Ordinal variables can in the same way as nominal variables use the operator's equality (=) and inequality (\neq), but operators such as less than (<) and more than (>) are also commonly used (Grigoroudis & Siskos, 2010).

The third kind of variables is the **interval variables**, which have a lot in common with ordinal variables (Grigoroudis & Siskos, 2010). The biggest difference between the two variables is that interval variables, in comparison to ordinal variables, have a set interval between the levels,

which means that the intervals between the levels are equally spaced (Idre, 2018). Grigoroudis and Siskos (2010) give the Celsius scale as an example of an interval scale. Important to note is that interval variables have no meaningful zero point but often an arbitrarily zero point is assigned, for example like the one in the Celsius scale (Grigoroudis & Siskos, 2010). According to Grigoroudis and Siskos (2010), one of the benefits from using interval variables is the possibility to compare results due to the use of a specific measurement unit and the defined space between the levels.

Lastly, there are **ratio variables**. According to Grigoroudis and Siskos (2010), ratio variables are similar to interval variables, with the difference that ratio variables have a zero point in comparison to interval variables having an arbitrarily zero point assigned. Ratio variables are commonly used in physical sciences and engineering, and mass, length, time and volume are typical examples of scales using ratio variables (Grigoroudis & Siskos, 2010). When using ratio scales, all mathematical operators can be used (Grigoroudis & Siskos, 2010).

Figure 7 gives examples of how the different variables can be used when measuring customer satisfaction. To collect classification information, for example, gender and age, nominal scales are commonly used as they can help to segment the dataset (Grigoroudis & Siskos, 2010). According to Grigoroudis and Siskos (2010), ordinal variables are the most common variables used for collecting the majority of information in a customer satisfaction evaluation, while ratio scales are the least common variable used.

Nominal scale	
Please indicate which product you have purchased today	
Product A	<input type="checkbox"/> 1
Product B	<input type="checkbox"/> 2
Product C	<input type="checkbox"/> 3
Ordinal scale	
How satisfied are you with product _____?	
Dissatisfied	<input type="checkbox"/> 1
Somewhat dissatisfied	<input type="checkbox"/> 2
Neither satisfied nor dissatisfied	<input type="checkbox"/> 3
Somewhat satisfied	<input type="checkbox"/> 4
Satisfied	<input type="checkbox"/> 5
Interval scale	
Give in a 1-10 scale your satisfaction level with product _____?	
<input type="checkbox"/> 1	<input type="checkbox"/> 2
<input type="checkbox"/> 3	<input type="checkbox"/> 4
<input type="checkbox"/> 5	<input type="checkbox"/> 6
<input type="checkbox"/> 7	<input type="checkbox"/> 8
<input type="checkbox"/> 9	<input type="checkbox"/> 10
Ratio scale	
Which is your percentage of satisfaction with product _____?	
Completely dissatisfied	0% _____ 100% Completely satisfied

Figure 7 - Measurement variables application examples (Grigoroudis & Siskos, 2010, p.23)

Satisfaction level, repurchase intention, service performance, and loyalty level are all examples of parameters of interest in a customer satisfaction evaluation, where the suggested variables are suitable to use (Grigoroudis & Siskos, 2010). Performance of a certain service can for example use a qualitative scale with a 1-10 interval (Grigoroudis & Siskos, 2010). However, when formulating questions and selecting scales, it is important to be aware of both the wording of the question and the direction of the scale to avoid biased data (Grigoroudis & Siskos, 2010). Accordingly, the size of numerical scales has to be considered since it can create difficulties for the respondent understanding the differences between the options (Grigoroudis & Siskos, 2010).

Another alternative to numerical scales is to use a verbal scale of an ordinal form. However, Grigoroudis and Siskos (2010) argue that verbal scales should only be used when “simply statistic” is needed. It is also common to add an arbitrarily scale of quantification as a complement to the verbal scale, as seen in the example of an ordinal scale in Figure 7 (Grigoroudis & Siskos, 2010). However, this approach has gotten a lot of criticism since it assumes that the “value” of each level is, on beforehand, considered as known (Grigoroudis &

Siskos, 2010). Critics also mean that the assumed linear relationship between the different levels might not be correct and representative and thereby lead to wrong conclusions when analyzing the collected data (Grigoroudis & Siskos, 2010). In conclusion, it is important to remember that the choice of variables has to be grounded in the objective of the analysis to give a valuable result (Grigoroudis & Siskos, 2010).

3.5.5 Implementation

Grigoroudis and Siskos (2010) bring up Naumann and Giel's (1995) process for designing and implementing a customer satisfaction measurement model in an organization, previously discussed in Sub-section 3.5.1. In Naumann and Giel's (1995) model, the implementation steps following the design process consist of data gathering, administration of surveys and the qualitative impact and analysis of data. The last steps refer to take use of the collected data - how to use it to improve processes, achieve compensation and sharing, and how to use it for competitive marketing (Naumann & Giel, 1995). Lastly, Naumann and Giel (1995) emphasizes continuous improvement of the measurement system itself.

Out of Naumann and Giel's (1995) suggested evaluation design process, Grigoroudis and Siskos (2010) points out three main principles concerning the satisfaction measurement process. The first principle concerns top management and their commitment to customer satisfaction. Grigoroudis and Siskos (2010) claim that "*customer focus is first of all a top management commitment in the business organization.*" (p.15). The second principle refers to the importance of letting customer satisfaction be embedded within the corporate culture, at least partially (Grigoroudis & Siskos, 2010). Lastly, customer satisfaction models have to be treated as sequential and iterative processes within the organization (Grigoroudis & Siskos, 2010).

Besides these three principles, it is important to remember that customer satisfaction models have to be a part of all processes within the organization and also translated into measurable parameters employees feel are linked to their job (Grigoroudis & Siskos (2010). Grigoroudis and Siskos (2010) further emphasize that organizations have to be better at using the information and data given by the customer satisfaction measurements to initiate improvement actions. According to Parasuraman et.al. (1990), one common mistake made in organizations is an ineffective use of resources when improving services. This leads to lack of motivation, as the end result is a non-existing improvement of the service (Parasuraman et.al., 1990). Therefore, the result of a customer satisfaction measurement must not only be implemented becoming a part of a company's daily work procedures, but it should be ensured that collected information will be considered and used for improving the business (Parasuraman et.al., 1990).

4 EMPIRICAL FINDINGS

In this chapter, data gathered through interviews with EFESO and their customers is presented, starting with a brief introduction to the company and what they do. Thereafter, the current state of customer satisfaction measurement is described. Further, thoughts from EFESO's employees regarding the evaluation tool are presented and the last section describes the customers' view of a measurement system.

4.1 This is EFESO

EFESO is a global management consulting firm, consisting of 400 consultants allocated at 26 offices (EFESO, 2017). About 30 of these consultants belong to the Nordic organization, working daily with coaching Nordic industries in their improvement work. Three main value areas constitute the core of EFESO's offering, namely: *Performance*, *Capability Build* and *Inspiration*. By *performance*, EFESO refers to their ability to deliver an improved result. *Capability build* refers to EFESO's role in the development of their customers' employees, referring to the development from being unfamiliar to a subject and/or method, into being capable to perform and execute it independently. The last area, *inspiration*, refers to EFESO's ability to inspire, coach, educate and lead their customers in the change process.

EFESO offers their customers both classic consulting and their program WCOM™, World Class Operation Management. EFESO are sometimes working together with their customers as an extra resource, but primarily EFESO coach and educate their customers in EFESO's methods and tools, to build capability and increase performance by inspiring employees. This is how EFESO differentiates themselves from their competitors by not only deliver an analysis of the problem but taking a central role in the improvement work. EFESO calls this process *working in tandem* and they define it as following:

“We integrate positive human dynamics in the key teams: we release the teams' emotional energy integrating the human side in every change activity and action and we work in tandem with our clients, side by side with everybody across all levels of an organisation to achieve and secure results and performance” (EFESO, 2017).

In the projects, consultants are assigned different roles and commonly there is a *client leader*, a *project leader* and one or several *consultants*. The client leader has the ultimate responsibility for a project and the main responsibility for the customer relation. The project leader is responsible for the delivery of the project to the client leader. The project leader works daily with customers together with consultants from EFESO. Consultants are responsible for the practical execution.

During the interviews, EFESO employees were asked to state three words they believed characterizes EFESO. These words are compiled in Figure 8. Three words stood out, *create capability*, *tandem* and *leadership*. Other frequently stated words were for example *change*, *improvements*, *humans* and *implementation*, all in line with EFESO's core values and tandem process.



Figure 8 - Words characterizing EFESO according to its employees..

4.2 Current State of Customer Satisfaction Measurements

Based on interviews with EFESO employees, below data was gathered concerning how EFESO employees are working to determine and secure satisfied customers. Measurements and feedback EFESO collects today is also described.

4.2.1 How EFESO Ensures Satisfied Customers

When interviewing employees at EFESO, they were asked to define what customer satisfaction means for them. The interviewees brought up the difference between expectations and perceptions as one definition, which in practical terms referred to fulfillment of the promised business case. To secure a satisfied customer, one EFESO employee stated that the key is hence to deliver in line with the customer’s current expectations. If the current expectations differ from the expected delivery of the project, the current expectations need to be adjusted. Consequently, EFESO need to know what the customers are doing at the moment and correspondingly, it is important that the customers understand what EFESO are trying to do for them.

Further, customer satisfaction for EFESO included that the customer has achieved improved results and organizational development. One way in which EFESO inspire and engage customers is by embedding results - what have we done and what is the next step - and mediating this in a pedagogical way. By boosting engagement, the customer wants to execute EFESO’s suggestions. EFESO’s employees also brought up that it is important to think about one’s behavior as a consultant. Because, as a consultant you are expected to be the one providing energy and encourage to continue, which is even more important in startups and closures of milestones or projects. It is also important to avoid being perceived as a person only coming in with methods and not seeing and caring about the entire picture. Customers also need to feel that they are the “heroes”. That is to say, as a consultant you should avoid taking credit for something you have played a large role in getting done. Instead, the consultant should let the customer feel that they were responsible for the result to further engage and create commitment. As described by one EFESO employee, EFESO is like a personal trainer - we are

with you along the way, coaching, inspire and supporting you, on *your* way to *your* results. Both the customer and EFESO should be stimulated by the collaboration and the interviewees pinpointed that a satisfied customer is identified as someone who recommends EFESO to others.

4.2.2 How EFESO Determines Customer Satisfaction

Today, EFESO do not conduct any measurements specifically investigating customer satisfaction, nor do they use data on customer satisfaction when developing strategies and goals for the organization. Performed measurements are rather linked to profitability and financial results. Financial measurements are conducted in about fifty percent of EFESO's projects, but the measurements are usually on the initiative of the customer which later shares the results with EFESO. Financial measurements are in general made within projects in the WCOM™ program and are thereafter used by EFESO primarily to prove results. The data may in some cases serve as a tool for additional sales and new business.

During a WCOM™ program, EFESO do conduct some measurements possible to connect to customer satisfaction, referring to evaluation forms handed out after completion of workshops and trainings included in the program. The evaluation forms measure how the workshop or training was perceived. However, these measurements do not have any clear connection to overall customer satisfaction.

Since EFESO do not systematically measure customer satisfaction, they rely on daily impressions achieved during meetings and visits at customer sites to determine whether the customer is satisfied or not. More specific, EFESO's employees expressed that they try to "feel the mood" and study the customers' body language to get an understanding of what the customers' feel about the collaboration and working methods. Since some people do not either express thoughts verbally, it has thus been important for EFESO to be able to determine people's feelings based on impressions. However, in critical moments such as closures and start-ups of new projects, it was considered easier to get a feeling of what the customer believes regarding EFESO and its working methods.

Even though EFESO do not receive structured feedback during projects, the interviewees were sure that EFESO and their collaboration was discussed and evaluated during customers' internal meetings. If the customer experiences any dissatisfaction from working with EFESO (mostly concerning the impression from a certain consultant) feedback is communicated directly to the client leader. The client leader has a continuous dialogue with the corresponding person at a customer site, constantly discussing the progression and collaboration, making sure the customer is satisfied with the work.

One interviewee believed that a reason for EFESO not getting more feedback during the project is because it is sometimes hard to determine the end of a phase in a project and hence give feedback of how it was perceived. When feedback is given, it is in general quite simple, such as "well done". It is given spontaneously and orally, but sometimes the consultant also receive feedback on mail or via text messages. More concrete feedback concerning working methods

and achieved results has been given during a meeting held after the completion of a project between an EFESO representative and the customer

4.3 EFESO's Thoughts on a Customer Satisfaction Measurement System

Below, data from interviews with EFESO concerning reasons and benefits for why measuring customer satisfaction is summarized. Thoughts concerning content and design of the customer satisfaction evaluation tool are also presented. The sub-sections further brings up EFESO's discussion concerning when in a project the evaluation is to be performed.

4.3.1 Reasons for Measuring Customer Satisfaction

By measuring customer satisfaction, EFESO employees believed that they will have the possibility to prove that they have delivered according to plan and what has been promised, both financially and non-financially. Having data on customer satisfaction can help EFESO to show that they historically have been good at delivering projects and that their customers actually are satisfied with the results. However, it is important to remember that people on higher levels within organizations often are driven by numbers and money. Therefore, it is important that measurements of customer satisfaction, improvements, machine breakdowns, etc., can be transferred into financial metrics that interest executives and becomes something people can relate to, for example, increased or lost income due to a breakdown. This was mentioned by EFESO employees as something EFESO can improve.

Furthermore, measuring and evaluating customer satisfaction is in the end about how EFESO employees would like to spend their time and resources. But something that is for sure is that a satisfied customer often wants to buy more. Hence, as stated by one interviewee, if EFESO had a tool that would make it possible to measure customer satisfaction, resources would be prioritized to conduct this as satisfied customers are essential in every business.

4.3.2 Desired Measurements

When measuring customer satisfaction, it is according to EFESO employees important to evaluate on what level the business case has been fulfilled. For example, whether EFESO has delivered according to plan and if they have found any new development opportunities for their customers. Since EFESO aims to deliver on the three value creation areas (performance, capability build and inspiration), concerns were primarily raised regarding how to measure capability build and inspiration. This, since it on beforehand can be hard to define and describe what capabilities that can be built among the customer's employees and further define how EFESO aims to inspire the customer to build these. Another measurement issue raised by the interviewees was the importance of measuring how customers experienced the new working methods. This included to ask questions relating to whether the organization were able to continue working with the methods after EFESO left the site or not.

EFESO employees further described that it would be good if the model evaluated how well their course of action worked, for example if EFESO's employees were responsive and keen to help. It is of value if the model evaluates both what is good and what is less good in EFESO's models and approach. One interviewee discussed the fact that everything is not, in a proper

way, possible to measure financially. For example, if the purpose of a project is to reduce the number of falling accidents, the result can be hard to measure in monetary terms. Thus, the possibility to measure non-financial results is a perspective that has to be covered in the model to make it suitable for different kind of projects.

To measure whether the scope is fulfilled or if it has been exceeded was also brought up as a factor that would be of interest to measure. The interviewees argued that if EFESO has overperformed, there could instead have been a possibility to sell more services. It is a balance between delivering according to customers' expectations and give that little extra. Because, you do not want to deliver too much, that is to say, working for free, since it would have been a chance for additional sales.

Lastly, it is important that the evaluation generates information useful for EFESO and, just as important, creates value for their customers. The customers must get the feeling that EFESO takes use of the collected feedback and information to improve the collaboration and create more value for the customers. The evaluation should not just be a check of the degree of satisfaction, documented and never looked further into. A benefit from embedding the feeling of how important the evaluation is for EFESO is that customers might be more willing to take part in the evaluation and prioritize to give feedback.

4.3.3 Measurement System Design

When designing the customer satisfaction measurement system, it is important to consider both who should conduct the evaluation, and whom to answer it. One interviewee suggested that the evaluation should be made by the project leader but depending on the state of the project in which the evaluation is to be performed, the suitability for letting the project leader perform the evaluation might change. The most suitable person to perform the evaluation might also change depending on who or what persons that take part in the evaluation.

Some interviewees suggested that the evaluation should be based on opinions from several persons, not relying on one person's opinion and hence minimize the risk of asking the only satisfied or dissatisfied person in the project. Most desirable, everyone involved in the project should be included in the evaluation, from project buyer to operators. Additionally, managers in Sweden tend to listen a lot on their employees and if the managers were asked to give feedback on the collaboration with EFESO, the managers would probably ask their employees before providing the feedback. Hence, by including higher management levels in the evaluation process, perspectives on the operational parts (and not only the satisfaction/dissatisfaction with the improved performance/result) would be caught up. Consequently, it could be a good idea to inform customers on beforehand when the evaluation is to be performed. This, to give the customers possibilities to reflect upon their perceptions of the collaboration before the time of the evaluation and hence, they may give more valuable feedback.

Another important aspect to consider is the point in time for when to perform the evaluation and the number of evaluation occasions. If the evaluation consists of several evaluation occasions, the frequency should vary depending on the organizational level. One interviewee suggested that in the bottom of the organization, daily evaluations could be made, while

monthly reconciliations could be used in the middle of the hierarchy and the top should be contacted once a month for status updates and feedback. Another suggested way in which the evaluation could be made was by letting an EFESO consultant sit down after a customer visit, take notes and him/herself make an evaluation of the current status. Having an additional “light version” evaluation possible to conduct during projects, or for evaluation of shorter projects, was also suggested.

When it comes to how to collect data for the evaluation, all interviewees believed that some form of survey would be a good base to work out of. A digital form sent out to the customer is to prefer, but to be able to capture aspects on all levels in an organization, the survey should be possible to hand out in paper form as well. This, since not all employees have access to a computer. Another benefit deriving from using paper evaluation is that it is easier to remember to respond. A paper evaluation would in addition probably be handed out in settings making the customers answering it right away and thus minimizing the risk of forgetting to respond. The survey could also be designed to be filled in together with the customer, or as some kind of activity, as suggested by one interviewee.

The value of building the evaluation on personal contact was pinpointed by some interviewees, as this makes it easier to understand what is good or bad. The evaluation could also take different form depending on whom to answer it and the level of the organization. For example, in some cases the evaluation can take the form of a phone call, while dialogues and surveys might be to prefer in other situations. The higher up in the hierarchy the evaluation is performed, the more dialogue should be included according to some interviewees. A reason for this is higher management levels’ lack of time and tight schedules. Hence, dragging them out of the office for a meeting might be the only chance to get an answer. Therefore, a mix between surveys and discussions could be beneficial to make it possible to effectively reach and include all levels in the organization.

Further, the evaluation should be easy to answer and interpret, not taking a considerable amount of time and effort. The respondent should not either experience any problems to read the questions due to small text, printing problems, etc. EFESO would appreciate if the evaluation would be possible to hand out “to the left and right”. The interviewees also wanted the evaluation to provide some kind of scale on a specific customer’s level of satisfaction, to make it possible to do a quick evaluation of the current state and compare the score between different customers. It could take the form of a “thermometer” that is easy to interpret and create an overview of the current status. Some kind of quantifiable statistics were also desired to include in the evaluation. In either case, the customer must always be given the possibility to explain their rating/answers, as a score do not tell anything about the underlying reasons and hence EFESO cannot distinguish what they did good and/or bad.

4.3.4 Data Collection Arrangement

Among EFESO employees, there were different opinions concerning whether customers should be given the opportunity to evaluate the collaboration during a project or not. Some interviewees believed that it is good due to the possibility to change and improve during a project, whereas other interviewees thought that there is a risk with doing so. This, since a

project can be in a temporary dip and therefore the evaluation might not be representative. Another perspective is that people in the beginning tend to be excited, which later tends to fluctuate, and expectation levels can differ. It can also be hard for consultants to manage all customers, and sometimes they have to put lower priority on some projects during a limited time period, which in turn can affect the short-term result. Further, projects within classic consulting often tend to be shorter and an evaluation during the project is seen as unnecessary since the projects only extends over a couple of weeks. During EFESO's standardized processes, such as the WCOMTM program, it may be more suitable to include a customer satisfaction evaluation and add it to the audits EFESO already performs as a part of the program. In addition, a customer satisfaction measurement system was seen as a good compliment to the audits since the audits do not evaluate how EFESO was to work with, but rather evaluates organizational performance.

4.4 Customers' Thoughts on a Customer Satisfaction Measurement System

In general, the customers had a positive view on taking part in an evaluation process of the collaboration with EFESO. The customers considered it to show professionalism and an interest in the customers as well as a willingness to develop the organization. The customers further believed, that by giving feedback, they would get better consultants since an evaluation creates opportunities for both parties to develop. Consequently, the customers will achieve a better result of the collaboration. An evaluation of the process was further regarded as an opportunity to reflect upon the customer's use of consultants and whether the customers themselves took the steps necessary to achieve the goals of the current project or not.

As it stands today, the customers' perception is that they provide some feedback to EFESO concerning the evaluation, but it is done randomly and not according to any structured plan or schedule. The customers believed that by having a clear process for how, when and what to evaluate, and by keeping this in mind during the project, it will not only ensure that feedback is given but making the feedback better and more useful. One customer pinpointed that the evaluation process would be facilitated by having standard questions and templates to rely and reflect upon during the project. Making the evaluation a part of the collaboration would also ensure that feedback is not only given when something comes into question, but continuously collected during the project.

None of the customers wanted anything in exchange for participating in an evaluation of the collaboration. However, one interviewee pinpointed that the time spent on the evaluation should not be invoiced by EFESO. In addition, most of the customers were very interested in taking part of the evaluation result, regarding it as a good opportunity for reflection and feedback about the collaboration.

Concerning the design of the data collection, half of the customers preferred to give feedback through a questionnaire, whereas the other half preferred a meeting. Customers arguing for questionnaires pinpointed that it is time efficient and flexible since the customer could do it when there was time. Hence, the probability that the customer answers it properly increases. With a questionnaire, it is also easier to reach everyone involved in the project. Furthermore, the customers preferred digital questionnaires instead of printed. This, since digital

questionnaires were considered more effective and possible to fill in whenever it suits the customer. Whether digital questionnaires should be filled in individually or in a group, the customers had split opinions, but the main part of the customers argued that it depends on the project. One customer gave the example that it might be good to appoint an “informant”, meaning that the customers internally discuss the question and later communicates the ideas to EFESO via the informant.

If the measurement system instead would be built upon meetings, most of the customers preferred to have individual meetings instead of group meetings. This, to make the meetings as effective as possible. On the contrary, customers arguing for group meetings highlighted the benefits of discussions, giving room for different perspectives. In any case, meetings would in comparison to questionnaires result in more personal feedback since a discussion can be held. According to the customers, it is also important that the meetings have a clear structure and follow a pre-set plan or schedule. The majority of the customers believe that the meetings can be held via a phone call or Skype, because of its simplicity and efficiency.

Concerning the frequency of how often customer satisfaction should be measured, the customers varied in their answers. Some customers argued that the measurement could be made weekly whereas other customers argued that it should be measured one time per year. The variety in the answers could be related to the different kind of projects the interviewed customers had with EFESO and the suggested frequency may therefore depend on the current project and its intensity.

Lastly, the customers were asked to state measurements they believed would be useful for EFESO to include in its measurement system. The main part of the customers wanted financial metrics, but they also pinpointed non-financial metrics they believed useful. For instance, one customer suggested the evaluation to measure whether the customer had been given prerequisites to learn the new methods and tools and if they had succeeded in building capability. In addition, an engagement parameter was suggested, and one customer wanted to measure the level of preparation of the EFESO consultants, including if their technical aids had been working. The last suggested metrics concerned whether EFESO had delivered according to plan and one customer suggested that a discussion should be held regarding the collaboration and how EFESO and the customer act towards each other.

5 RESULT AND ANALYSIS

This chapter describes the different steps in the development process of the customer satisfaction measurement system. The process is based on Naumann and Giel's (1995) method for how to design and implement a customer satisfaction measurement system. Naumann and Giel's (1995) suggested steps served as a guide in the work process, meaning that some steps were excluded, and the order were at some occasions applied differently. The work process consisted of the following steps:

- 1) Define objectives
- 2) Develop quality dimensions to measure
- 3) Develop a sampling plan
- 4) Design the measurement system
- 5) Pre-test the measurement system

The first section of this chapter presents the reasons and benefits for why EFESO should measure customer satisfaction. It is followed by the different quality dimensions that were developed using Hayes's (2008) quality dimensions development approach as a guide. Thereafter, the sampling plan is described, followed by a description of how the collected data should be compiled and presented. The chapter ends with the result from the pre-test of the measurement system.

5.1 Reasons to Measure Customer Satisfaction

By reviewing literature, many reasons and benefits deriving from developing a customer satisfaction measurement system were found. The benefits are summarized in Table 6.

Table 6 - A summary of main reasons for measuring customer satisfaction.

	MAIN REASONS
1	A company's value no longer lies in what is stated in the balance sheet, but the value is dominated by people's perception of the company.
2	There is a growing interest from stakeholders to take part of information concerning a company's intangible resources (that is to say, the customer's perceptions and the satisfaction level).
3	Measuring customer satisfaction makes it possible to get an indication of a company's future performance.
4	The result from a customer satisfaction measurement can serve as tool for acquiring new business.
5	Securing satisfied, and hence returning, customers are associated with large savings, since the cost for gaining new customers decreases. Loyal customers also serve as free marketers, since they tend to recommend the company to people in their surroundings
6	A low percentage of the dissatisfied customers actually raise their complaints. Hence, by measuring customer satisfaction, a company gets the chance to turn dissatisfied customers into satisfied customers and thus prevent negative associations with the company to spread around.
7	Data on customer satisfaction can help management to spend their resources more effectively and on the right things, using it when developing strategies and company objectives.
8	Communicating measures of customer satisfaction can serve as drivers for employees and increase their motivation to performance at their best.

In accordance with the empirical data collected through the interviews with EFESO, objectives for why EFESO should measure customer satisfaction were developed. As a start, it was concluded that EFESO does not conduct structured measurements of customer satisfaction, nor do EFESO have processes for how to use data on customer satisfaction to improve their services. The perceptions EFESO has of their customers' satisfaction level are mainly based on consultants' impressions from meetings and visits. As literature pinpoints, not everyone expresses what they feel, particularly when it comes to expressing dissatisfaction. Hence, the reliability of data on customer satisfaction would increase if it was collected with a structured customer satisfaction measurement system. The main reason for why EFESO should develop and implement a customer satisfaction measurement system is hence to:

R1: *Create an overview of EFESO's current customer satisfaction level.*

By having clear processes for collecting and documenting customer satisfaction, EFESO would achieve documented data with numbers and facts possible to take actions upon. This is emphasized by literature, and consequently, it would be easier for EFESO to know *what* to improve, and *how much* they have improved. Documentation of customer satisfaction will help EFESO to create an understanding of customers' perceptions and expectations of EFESO, and thus, it becomes easier for EFESO to deliver on these. The second reason for why EFESO should measure customer satisfaction is hence to:

R2: *Get data on customer satisfaction to know what to improve and how much EFESO has improved its performance.*

Information concerning the customer satisfaction level could further be used as a tool for acquiring new business. This was pinpointed by both literature and EFESO employees, since proof on a historically good performance is useful when selling more business. The third reason is hence:

R3: *Use information on customer satisfaction as a tool for gaining new business and predict future performance.*

Theory also brings up the benefit of measuring customer satisfaction to get a prediction of a firm's future performance. Additionally, literature pinpoints the benefits of identifying dissatisfaction, which gives a company a possibility to turn dissatisfied customers into satisfied customers by taking actions on problems in an earlier state. Resources could thus be prioritized to the right things, which is emphasized by both EFESO employees and literature. The fourth reason is hence:

R4: *Efficient resource planning.*

Lastly, as a result of more satisfied customers, EFESO could gain increased motivation among their employees since satisfied customers is proof of good performance. The last reason for measure customer satisfaction is hence:

R5: *Increase employee motivation.*

5.2 Development of Quality Dimensions

During the second step in the development process of the customer satisfaction measurement system, quality dimensions to measure customer satisfaction upon were developed. As a start of the definition process, what is meant by customer satisfaction needed to be defined to know what the different quality dimensions should measure. With the definition as a base, the different quality dimensions were developed using Hayes's (2008) quality dimension development approach and critical incident approach. Ideas from literature, EFESO, and customer interviews were summarized and compiled into four quality dimensions. The result from this process is described in below sub-sections.

5.2.1 Customer Satisfaction Definition

Based on the interviews with EFESO, three aspects of customer satisfaction can be identified: *what customer satisfaction is, when customer satisfaction occurs and how to know that a customer is satisfied.* The first aspect concerns what customer satisfaction is for EFESO, and as stated by EFESO, customer satisfaction is achieved when perceived performance and expectations correspond. This is in line with the different definitions of customer satisfaction brought up in literature. For example, Parasuraman et.al. (1988), pinpoints the difference between expectations and perceptions as the foundation of customer satisfaction, which in turn, is in accordance with Smith and Houston's (1983) definition focusing on the confirmation or disconfirmation of a customer's expectations.

The second and third aspect of customer satisfaction derived from the interviews with EFESO correlates to the settings of customer satisfaction. The second aspect considers when the customer is satisfied, which occurs when EFESO have helped the customer to achieve improved results and organizational development. The third aspect describes how to know when the customer is satisfied and according to EFESO employees, this is when the customer chooses to recommend you to others. A correlation to the idea behind NPS can thus be drawn, focusing on loyalty as a measure for the customer satisfaction level.

In conclusion, customer satisfaction for EFESO is thus when perceived performance and expectations correspond. This occurs when EFESO has helped their customers to improve their performance, and lastly, EFESO knows that a customer is satisfied when the customer recommends EFESO to others.

5.2.2 Measurements Brought up in Literature

To get an understanding of different ways of measuring customer satisfaction, five types of customer satisfaction models were studied. Three of these models were categorized as measurement systems, and two models were categorized as explanatory models. For each measurement system model, its way of measuring, measurement dimensions, and metrics were identified and compiled, see Table 7. The different aspects in SQI and ASCI were added into one column, CSI, since they are built upon the same principle. Irrelevant metrics, not applicable at EFESO, were excluded in the compilation.

Table 7 - A compilation of the selected measurement system models.

	SERVQUAL	NPS	CSI
Way of measuring	Considers the difference between perceptions and expectations.	Finds out if the customer would recommend the company to others.	Presents information about the experienced quality from customers' and stakeholders.
Measurement dimensions	Perceived quality Expected quality	Loyalty	Image/General perception of company Customer expectations Perceived service quality Perceived value Customer satisfaction Loyalty
Proposed metrics	Reliability Responsiveness Tangibles Assurance Empathy	Degree of recommendation	Reliability, Customer service, Value for the money and Competence Range of products, Personal service, Safety, Correctness and Additional services Personal service and Availability The value of product(s), Service and support, Availability, and Safety and security. Satisfaction on a general level, satisfaction in relation to expectations and satisfaction in relation to ideal company How likely it is that the customer will return, How the company is presented talking with friends and colleagues and to what degree the company is recommended

From the compilation, it was concluded that all three models emphasize the difference between customer perceptions and expectations as the foundation for measuring customer satisfaction. The idea serves as the base in SERVQUAL, and CSI also considers it. Furthermore, NPS main idea is to find out to what degree a customer would recommend the company, but, as some of the suggested metrics in CSI pinpoints, a recommendation is built upon customers' perceptions and experience of a company. Hence, NPS circles around the same idea, in line with the previously concluded definition of customer satisfaction.

The explanatory models were compiled separately from the measurement system models since they focus on root causes for customer satisfaction and dissatisfaction, instead of suggesting how to measure it. The explanatory models and their main ideas are presented in Table 8.

Table 8 - A compilation of the selected explanatory models of customer satisfaction.

	GRÖNROOS' MODEL	GAP MODEL
Underlying idea	Parameters affecting the customers' experience.	Possible root causes to customer dissatisfaction.
What to consider	<p>The customer experience is dependent on:</p> <ol style="list-style-type: none"> 1. What has been delivered 2. How it has been delivered 3. The company's image, i.e. previous experience of a company and a company's reputation 	<p>Five gaps are identified as possible root causes of customer dissatisfaction. The gaps correspond to the arrows in the following list:</p> <pre> graph TD A[Customer expectations] --> B[Company perceptions] B --> C[Service quality specification] C --> D[Service delivery] D --> E[External customer communication about service delivery] E --> F[Perceived service] </pre>

In line with the conclusion from the measurement system model compilation, Grönroos' model considers the customers' experience to be the underlying reason for a customer's judgment. The GAP model further elaborates on the difference between perceptions and expectations of customers and companies. Hence, the idea of comparing perceptions and expectations is selected to represent the base of the customer satisfaction measurement system for EFESO.

5.2.3 Measurements Brought up by EFESO

During the interviews, EFESO expressed an interest in being measured upon *Performance*, *Capability Build* and *Inspiration*. Hence, EFESO's view on customer satisfaction needs to be wrapped into these three areas and answered in the measurement. During the interviews, it was further discussed that it would be of value to understand how well EFESO's course of action has worked. EFESO would like to be evaluated upon what is both good and less good in their models and approach.

EFESO further mentioned that they consider it important to measure to what level the business case has been fulfilled. Hence, it is of value to know whether EFESO has underperformed, performed in line with expectations or if EFESO has overperformed. This measurement parameter can be linked to the Kano model, where EFESO needs to understand where in the model they are located. However, since EFESO offers a service it might be difficult to place them in the Kano model, but the underlying idea of it can be good to consider.

At present, EFESO carries out some financial measurements, which are desired to be kept in the future. Since EFESO's offering includes coaching and inspiration of the customer, EFESO wants the measurement system to include non-financial parameters as well. EFESO strives for developing organizations and build capability among their customers, which are parameters they discussed could be hard to measure, but desired to include if possible. EFESO also wants

to understand how the personnel experienced the new working methods they implemented, and to what extent these working methods have been kept after completion of a project.

5.2.4 Measurements Brought up by Customers

The customers had a common positive view of adding a customer satisfaction evaluation to the current collaboration with EFESO. They believed that the evaluation would make it possible for self-reflection of both parties, which has to be considered when designing the evaluation by creating space for comments and reflections. The customers also pinpointed that it would be easier to give good and valuable feedback if having and communicating a clear evaluation process with standpoints to keep in mind during the process. Hence, the measurement system should take this into consideration. The result of the evaluation was also of interest of the majority of the customers, thus the design of the evaluation should be easy and comprehensible to communicate. In addition, EFESO should keep in mind that the time spent on evaluation should be cost neutral for the customer.

Concerning the design of the evaluation, the customers, in general, seemed to prefer to carry out the evaluation through meetings or digital questionnaires. Whether the meetings should take the form of on-site meetings or phone calls, and whether the meetings and questionnaires should be made in groups or individually differed, but no customer seemed to have anything against the other alternative. In any case, the customers desired the evaluation plan to be communicated beforehand. In this way, the customer could keep it in mind during the project and consequently prepare for the evaluations and give more valuable feedback. Further, the customers had different suggestions regarding the frequency of the evaluation, were the different suggestions were correlated to the intensity and extent of their different projects. Therefore, the measurement system should be able to adapt depending on the project. A summary of the different metrics suggested by the customers are presented in Table 9.

Table 9 - A compilation of the customers' suggested metrics.

	SUGGESTED METRICS
1	Financial metrics
2	Prerequisites for adapting new methods and tools
3	Capability build
4	Engagement
5	Preparation level of EFESO consultants
6	Functionality of technical tools used by EFESO
7	Delivery according to plan
8	Discuss the relation between EFESO and the customer

5.2.5 Selected Quality Dimensions

Both EFESO and literature brought up the difference between expectations and perceptions as a measurement of customer satisfaction. As previously concluded, this idea will serve as the base for the measurement system by including the perspective in the different quality dimensions. By searching for similarities and systematically group metrics and dimensions from literature, four main quality dimensions that fit the need of EFESO derived. Table 10 presents these four developed quality dimensions, *Value for Money*, *Working Methods*, *Service*, and *Recommendation*. The four quality dimensions constitute the main areas to measure customer satisfaction upon. The other considered dimensions and metrics were categorized into the four quality dimensions, serving as the first suggestion of parameters and metrics to use for measuring the selected quality dimensions.

Table 10 - Selected quality dimensions with suggested measurement parameters.

VALUE FOR MONEY	WORKING METHODS	SERVICE	RECOMMENDATION
Performance	Tangibles / Product range /	Responsiveness /	Satisfaction on a general
Capability build / Ability to	Toolbox / Experience of	Availability and support	level
maintain new methods	working methods	Personal service	Satisfaction in relation to
Savings	Correctness	Safety and security	expectations
On time delivery	Competence		Satisfaction in relation to
Reliability	Inspiration /Assurance		ideal company
Personal development	Empathy		Word-of-mouth
Organizational development			Likelihood to return
			Degree of recommendation

By a second compilation, the final parameters and metrics to use in the customer satisfaction measurement system were developed. To secure that both parties (the researchers and EFESO) shared the same view and understanding of the parameters and metrics, EFESO was involved in the discussion. As a start, parameters and metrics were grouped into main measurement parameters based on common denominators. Some parameters and metrics were also renamed and compiled into a new parameter or metric.

Since both EFESO and their customers requested to be measured upon their performance, the Performance parameter were kept as an “underlying” metric. Including the metric in a customer satisfaction measurement system is also emphasized by literature, arguing that it is a good additional metric (see for example Grigoroudis & Siskos, 2010). However, since EFESO’s projects result in cost savings and/or improved performance of the organization, the Performance metric was divided into two metrics, *Cost Savings* and *Performance Improvement(s)*. These metrics were thereafter categorized under the parameter *Savings*. In some projects, it is not possible to measure improvements in financial terms, since the improved performance may be for example availability or lead time. The measurement of the Savings parameter should hence be possible to adapt between each project, by including the possibility to measure both Cost Savings and Improved Performance, or just one of them. By including a measure of savings derived from a project, it further ensures that final savings and performance

improvements are calculated. This is of interest for EFESO and, likely, valuable for the customers.

Furthermore, *Personal Development*, *Organizational Development* and *Maintain New Methods* are selected as metrics of EFESO's way of building capability within organizations. These metrics are thus categorized into the parameter Capability Build. This was based on EFESO's approach to Capability Build, defining it as when the customer goes from being unfamiliar to a subject into being able to practically execute it or even becoming an expert within the area. Hence, Personal Development is a part of building capability and Organizational Development comes along the way the organization learns and develops. By building capability, customers should also be able to Maintain New Methods.

Another important part to measure is to what degree EFESO and their customers delivered in time, *On Time Delivery*. The metric was primarily brought up by customers, but the importance was later emphasized by EFESO during a discussion. Hence, the metric was decided to be included in the measurement system. Another part of the delivery process is to deliver according to the agreement, meaning being on time and deliver what has been promised. This is reflected in the *Reliability* metric. Reliability, and On Time Delivery were categorized into a parameter called *Delivery Precision*.

The parameters and metrics assigned to the Working Method dimension concern employees' experiences of EFESO's methods and tools, and the approach EFESO use when teaching their customers. Therefore, the metrics were divided into two parameters, *Toolbox* and *Approach*. Toolbox corresponds to tangibles, which for EFESO means its methods, tools, and way of working. The toolbox parameter aims at analyzing how customers experience EFESO's methods and tools, thus *Correctness* and *Competence* were categorized into this parameter. Toolbox should consider if the tools and methods are suitable for the project (referring to the correctness metric) and whether the tools and methods are perceived to be built upon knowledge and previous experiences (referring to the competence metric). The variation metric was included in the correctness metric, referring to EFESO having a good variation in their offer making it possible for them to find a suitable method for the customer.

The Approach parameter instead considers the approach EFESO uses when applying and teaching the methods and tools. It thus includes whether EFESO succeeds to inspire the customers to change (*Inspiration*), provides caring and individualized attention (*Empathy*) and whether their approach is *Pedagogical*. The assurance metric is considered to be included in the Inspiration metric since its definition in SERVQUAL refers to the ability to inspire and build confidence.

Responsiveness measures whether EFESO are available and provides necessary support and resources. Availability and Support was considered to be a part of Responsiveness, making Responsiveness the main parameter with two metrics *Availability* and *Support*. Further, *Safety and Security* concerns how EFESO employees act at customer sites. It is selected as a parameter and it should evaluate whether customers experience that EFESO consultants follow prescriptions and safety restrictions set up in their organization. Thus, a *Respect to Regulations*

metric was created to capture this aspect. Personal service was removed during the second compilation since it was covered in the dimension working methods.

The parameters and metrics of the Recommendation dimension were categorized into two parameters, *Overall Satisfaction* and *Final Rating*. Overall Satisfaction includes the three metrics *Satisfaction on a General Level*, *Satisfaction in Relation to Expectations*, and *Satisfaction in Relation to an Ideal Company*. Final Rating further includes the last two metrics *Likelihood to Return* and *Degree of Recommendation*. The metric expressed as “Word of Mouth” was removed since it was considered to be covered when asking to what degree the customer would recommend EFESO.

The final measurement parameters and metrics of the four quality dimensions are presented in Table 11, together with suggested metrics. The dimensions and their application are further explained in the following section.

Table 11 - Selected quality dimensions, parameters and associated metrics.

VALUE FOR MONEY	WORKING METHODS	SERVICE	RECOMMENDATION
Savings <i>Cost savings</i> <i>Performance improvement</i>	Toolbox <i>Correctness</i> <i>Competence</i>	Responsiveness <i>Availability</i> <i>Support</i>	Overall Satisfaction <i>Satisfaction on a general level</i> <i>Satisfaction in relation to expectations</i> <i>Satisfaction in relation to ideal company</i>
Capability Build <i>Personal development</i> <i>Organizational development</i> <i>Maintain new methods</i>	Approach <i>Pedagogy</i> <i>Inspiration</i> <i>Empathy</i>	Safety and Security <i>Respect to regulations</i>	Final Rating <i>Likelihood to return</i> <i>Degree of recommendation</i>
Delivery Precision <i>On time delivery</i> <i>Reliability</i>			

5.3 Quality Dimensions

In accordance with the second step in Hayes’s (2008) approach for defining quality dimensions, definitions of the selected quality dimensions were developed to clarify what aspects the quality dimensions aimed at measure, see Table 12. The definitions are based upon the descriptions of the parameters and metrics described in the previous section, that the dimensions are built upon.

Table 12 - Definitions of the selected quality dimensions.

	QUALITY DIMENSIONS AND DEFINITIONS
1	<i>Value for Money</i> : if EFESO’s customers’ perception of the achieved result and working process corresponds to the investment.
2	<i>Working Methods</i> : if EFESO’s approach, methodology, and tools are relevant and up-to-date.
3	<i>Service</i> : if EFESO delivers a professional service suitable for the customer.
4	<i>Recommendation</i> : to what degree customers are willing to recommend EFESO.

In accordance with what was emphasized by literature, several sources of information are included in the customer satisfaction measurement system to provide a more accurate and reliable measurement. The selected metrics of the different measurement parameters are therefore categorized into different collection points and collection methods. Hence, both direct and indirect measurement systems are used for the data collection. Consequently, this enables a check of the current satisfaction level as well as giving data on long term performance. In addition, division of the data collection further creates a more effective data collection by asking the right persons in the first place.

In below sub-sections, the quality dimensions are assigned a person or a group of persons that should be asked to collect information on the different metrics. To facilitate the division, three different groups of respondents were created, *buyer*, *management* and *project participants*. Buyer refers to a person not necessarily being the person responsible for hiring EFESO, but a person involved in the process and cost estimations. This person should on beforehand be defined by EFESO and will in many cases correspond to the customer's corresponding person to EFESO's client lead. Management refers to managers or executives taking part in the training and decision-making concerning EFESO. Project participants are employees taking part in the training and working with the implementation of the new methods and tools taught by EFESO. Below sub-sections will also define how information on the selected metrics should be collected, referring to methods and what questions to ask.

5.3.1 Value for Money

Value for money is defined as:

“if EFESO's customers' perception of the achieved result and working process corresponds to the investment”.

The dimension is built upon the three following parameters and associated metrics.

Savings

The Savings parameter primarily refers to financial terms. It includes the metrics *Cost Savings* and *Performance Improvement(s)*. Based on the definition of customer satisfaction, it would be of interest to collect data on Savings in both the initiation and the closure of a project. In the initiation, data on expected Savings should be collected, whilst data on the perceived Savings should be collected in the closure. This creates an opportunity to compare expectations and perceptions, which could serve as a base for a discussion concerning EFESO's performance.

Information on Savings is most effective to collect via the project buyer since this person is involved in decisions concerning future collaborations with EFESO and takes part in the evaluation of the investment. To gather information regarding the Savings parameter, it is suggested to set up an *Initial meeting* and a *Closure meeting*. The meetings can take the form of a phone call or an on-site meeting, depending on what is suitable for the current situation. However, since both parties probably vary in their expectations of possible Savings, they should discuss and together agree upon reasonable cost savings and performance improvements. Similarly, the buyer and the EFESO representative should in the closure of a project discuss the achieved result and examine whether it is in line with the estimated Savings.

To make it possible for the customer to prepare information for the meetings, EFESO should inform the customer about what is to be discussed by sending out preparatory questions. The questions should ensure that sufficient information for determining the value of the metrics Cost Savings and Performance Improvement(s) is available. The following questions should be mediated before the Initial meeting:

- 1) What is the expected cost saving?
- 2) What is the expected performance improvement(s)?

Similarly, the following questions should be mediated before the Closure meeting:

- 3) What is the final cost saving?
- 4) What is the final performance improvement?

Capability Build

Capability build aims to measure employees' perceptions of the metrics *Personal Development*, *Organizational Development* and *Maintain the New Methods and Tools*. To enable a comparison of expectations and perceptions, Capability Build should be measured in both the initiation and the closure of a project. The data collection in the initiation of a project aims to create an understanding of what the customer expects from EFESO and make it easier for the customer's employees to see their own personal development. The second data collection instead maps the resulting perception of the customer's personal and organizational development. Whether the organization has succeeded to maintain the improvements and new working methods should be included in the second measurement.

Since Capability Build is built upon expectations and perceptions of personal and organizational development, it is reasonable to base the data collection on the people experiencing and seeing the effects from the project. Hence, the data collection should be based on views from management and project participants. Consequently, the number of persons to ask may be too large for using meetings, thus questionnaires would be an effective way to reach the intended respondents.

Based on the descriptions of the three metrics, questions were developed for the questionnaires and adapted depending on whether they were asked in the initiation or in the closure of a project. The following questions should be asked during the project initiation:

- 1) Do you expect to develop your personal skills and knowledge?
- 2) Do you expect the organization's information processes to become more efficient?

Similarly, the following questions should be asked in the project closure:

- 3) Have you developed your personal skills and knowledge?
- 4) Have the organization's information processes become more efficient?
- 5) I experience the organization to have enough prerequisites for maintaining the new working methods.

Question 1, 2, 3 and 4 are statements where the respondent only needs to decide whether they agree or not. Therefore, a Nominal scale should be used to answer these questions.

Contrariwise, question 5 could be hard to fulfill completely, thus the respondent must be given the possibility to partly agree or disagree. Therefore, question 5 should use an ordinal scale.

Delivery precision

The Delivery Precision parameter is built upon the two metrics *On Time Delivery* and *Reliability*. Since the data regards the final delivery of the project, it is decided to be collected in the project closure. Additionally, a reason for not measuring the parameter during the project is due to the possibility that the project occasionally might be late or proceed faster than expected, while not affecting the final delivery. Hence, it should be enough to measure the precision of the final project delivery. Similarly, the reliability of the delivery should be measured in the project closure to get an understanding of whether the customers believe that the delivery meets the expected standards or not.

Since the data relates to overall project deliveries, it could be collected through the project buyer to create an effective data collection. Consequently, the buyer becomes responsible to collect information from persons concerned. Since the data is collected in the closure of the project, it is decided to be a part of the Closure meeting previously described. Equally to the Savings parameter, EFESO should mediate preparatory questions to the customer to make it possible for the customer to prepare for the upcoming meeting. The following questions should be mediated before the Closure meeting:

- 1) To what degree did EFESO deliver on time?
- 2) To what degree did you (the customer) deliver on time?
- 3) To what degree does the delivery meet your expected standards?

5.3.2 Working Methods

Working Methods is defined as:

“if EFESO’s approach, methodology, and tools are relevant and up-to-date”.

The dimension is built upon the two following parameters and associated metrics.

Toolbox

Toolbox is built upon the two metrics *Correctness* and *Competence*. Since EFESO continuously teaches their methods and tools during the project, data on Correctness and Competence should be gathered continuously through the project, and in the closure. By continuously collecting data on these metrics, EFESO is given the possibility to improve their work and resolve potential issues to achieve a more satisfied customer. Thus, “Check Point” measurements are recommended. Due to different extent of projects, the number of Check Point measurements should be possible to adjust according to EFESO’s needs.

To achieve a representative view of people’s perception of EFESO’s toolbox, both management and project participants should be included in the measurement. With the same argument as for Capability Build, the data should be collected through questionnaires to facilitate the measurement. Questionnaires further facilitates the data analysis since it generates data easy to compare. The following questions should be asked during the project:

- 1) I experience EFESO's approach, methodology, and tools to be suitable for the project.
- 2) I experience that EFESO's approach, methodology, and tools are founded in theory and previous experiences.

Similarly, the following questions should be asked in the project closure:

- 3) EFESO's approach, methodology, and tools were suitable for the project.
- 4) EFESO's approach, methodology, and tools were perceived to be founded in theory and previous experiences.

All questions should be answered on an ordinal scale, giving the respondent a possibility to partly agree or disagree to the statement.

Approach

The Approach dimension is estimated by the three metrics *Inspiration*, *Empathy* and *Pedagogy*. All three metrics should, similar to the Toolbox, be measured in the closure of the project, as well as continuously during the project to map the current state of the customers' experience of EFESO's methods. It is thus possible to take corrective actions during projects, to prevent issues from becoming larger problems. Since the data collection could, and is supposed to be made several times, it is preferable to collect this data using a questionnaire. The questionnaire should be handed out to all participants in the project, including the management that take part in the training held by EFESO consultants, with the same argument as for the Toolbox parameter.

The questionnaire sent out during the project should consist of the following questions:

- 1) I experience that EFESO's consultants inspire me to take the steps necessary to change.
- 2) I experience that EFESO provides caring and individualized attention suitable for our organization.
- 3) I experience that EFESO's consultants are pedagogical.

Similarly, the following questions should be asked in the project closure:

- 4) EFESO's consultants inspired me to take the steps necessary to change.
- 5) EFESO provided caring and individualized attention suitable for our organization.
- 6) EFESO's consultants were pedagogical.

For the same reason as for Toolbox, the questions should be answered on an ordinal scale.

5.3.3 Service

Service is defined as:

“if EFESO delivers a professional service suitable for the customer”.

The dimension is built upon the two following parameters and associated metrics.

Responsiveness

The parameter Responsiveness is built upon the two metrics *Availability* and *Support*. Since EFESO needs to be available and supportive during the entire project, the parameter should be measured continuously and in the project closure. Thus, it is added to the previously decided questionnaires to not complicate the data collection by adding more methods. As the main communication between EFESO and the customer goes through the management team, it is recommended to include the measurement of Availability and Support in a questionnaire sent to management.

The questionnaire sent out during the project should consist of the following questions:

- 1) I experience that EFESO is available when I need their support.
- 2) I experience that EFESO provides necessary resources and support for the project.

Similarly, the following questions should be asked in the project closure:

- 3) EFESO was available when I needed their support.
- 4) EFESO provided necessary resources and support for the project.

For the same reason as for the metrics Toolbox and Approach in the dimension Working Methods, the questions should be answered on an ordinal scale.

Safety and Security

The parameter Safety and Security is built upon the metric *Respect to Regulations*. Since Safety and Security is of high importance for customers, it is reasonable to enable a continuous measurement of the parameter. However, it is not always necessary to do the measurement more than once after the initiation of a project, but it should be possible if desired. The data should be collected through a questionnaire sent out to the management, with the same argument as for previous metrics.

The questionnaire sent out during the project should consist of the following questions:

- 1) I experience that EFESO's consultants respect our regulations.

Similarly, the following questions should be asked in the project closure:

- 2) EFESO's consultants respected our regulations.

For the same reason as for the metrics Toolbox and Approach in the dimension Working Methods, the questions should be answered on an ordinal scale.

5.3.4 Recommendation

Recommendation is defined as:

“if EFESO's approach, methodology, and tools are relevant and up-to-date”.

The dimension is built upon the two following parameters and associated metrics.

Overall Satisfaction

Overall Satisfaction is built upon the three metrics *Satisfaction on a General Level*, *Satisfaction in Relation to Expectations* and *Satisfaction in Relation to an Ideal Company*. These metrics should be investigated among all persons involved in the project (participants, management, and the buyer) to get a representative sample. Since the parameter aims to measure the overall satisfaction experienced throughout the entire collaboration, the measurement should be conducted in the project closure. The data should be collected through a questionnaire to make the process as effective as possible while including many perspectives.

The questionnaire sent out in the project closure should consist of the following questions:

- 1) Think of all experience you have with EFESO. On a general level, how satisfied are you with the collaboration?
- 2) In relation to your expectations, how satisfied are you with the collaboration with EFESO?
- 3) Think of a management consultancy firm which is ideal from all perspectives. How close, or how far from such an ideal company, do you think EFESO is?

The questions should be answered on an interval scale, giving the respondent possibility to grade their answer on a scale from one (1) to ten (10) depending on their satisfaction level.

Final Rating

The last parameter, Final Rating, is based upon the two metrics *Likelihood to Return* and *Degree of Recommendation*. Since the metrics reflect the customers' final rating, data should be collected in the project closure. Further, everyone involved in the project (participants, management, and the buyer) should be asked, to give a representative picture and exclude potentially biased data. Hence, questionnaires are once again considered as a suitable method for an effective data collection. The questionnaire sent out in the project closure should consist of the following questions:

- 1) What is the probability that you choose EFESO for future collaborations?
- 2) How likely is it that you would recommend EFESO to a colleague or friend?

The respondents should be asked to rate their likelihood to return and their degree of recommendation on an interval scale, which is in line with the structure of NPS.

5.4 Sampling Plan

Below sub-sections present a sampling plan of how the different metrics within the selected quality dimensions should be measured and collected. The developed sampling plan further serves as a guide when EFESO conducts the measurement. A summary of the sampling plan is presented in Appendix D. As defined above, the different dimensions and respectively metrics are collected at different occasions with different methods. Based on their common denominators, the data collection of the metrics was divided into specified questionnaires or discussion points. The questionnaires and the discussions thereafter serve as input for the resulting measurement system tool presented in Section 0.

Questionnaires shall be used at three occasions, in the initiation of a project, in the closure of a project, or continuously during a project. The questionnaires should be handed out to different persons during these occasions, hence six different questionnaires were needed. Further, to give the respondents a possibility to explain their answers and express their thoughts, a free text answer field was added to all questions in all questionnaires. The questionnaires are attached in Appendix F-K. The arrangement of the questionnaires is described in the following sub-sections.

5.4.1 Questionnaire 1

Questionnaire 1 should be sent to management and participants in the initiation of a project. It should include the following metrics, answered by the question and using the scale defined in Table 13.

Table 13 - Content of Questionnaire 1.

PARAMETER	METRIC	QUESTION	SCALE
Capability Build	Personal development	Do you expect to develop your personal skills and knowledge?	Nominal scale
	Organizational development	Do you expect the organization’s information processes to become more efficient?	Nominal scale

5.4.2 Questionnaire 2

Questionnaire 2 should be sent to management during the project. It should include the following metrics, answered by the question and using the scale defined in Table 14.

Table 14 - Content of Questionnaire 2.

PARAMETER	METRIC	QUESTION	SCALE
Toolbox	Correctness	I experience EFESO’s approach, methodology and tools to be suitable for the project.	Ordinal scale
	Competence	I experience that EFESO’s approach, methodology and tools are founded in theory and previous experiences.	Ordinal scale

Approach	Inspiration	I experience that EFESO's consultants inspire me to take the steps necessary to change.	Ordinal scale
	Empathy	I experience that EFESO provides caring and individualized attention suitable for our organization.	Ordinal scale
	Pedagogy	I experience that EFESO's consultants are pedagogical.	Ordinal scale
Responsiveness	Availability	I experience that EFESO is available when I need their support.	Ordinal scale
	Support	I experience that EFESO provides necessary resources and support for the project.	Ordinal scale
Safety and Security	Respect to regulations	I experience that EFESO's consultants respect our regulations.	Ordinal scale

5.4.3 Questionnaire 3

Questionnaire 3 should be sent to participants during the project. It should include the following metrics, answered by the question and using the scale defined in Table 15.

Table 15 - Content of Questionnaire 3.

PARAMETER	METRIC	QUESTION	SCALE
Toolbox	Correctness	I experience EFESO's approach, methodology and tools to be suitable for the project.	Ordinal scale
	Competence	I experience that EFESO's approach, methodology and tools are founded in theory and previous experiences.	Ordinal scale

Approach	Inspiration	I experience that EFESO's consultants inspire me to take the steps necessary to change.	Ordinal scale
	Empathy	I experience that EFESO provides caring and individualized attention suitable for our organization.	Ordinal scale
	Pedagogy	I experience that EFESO's consultants are pedagogical.	Ordinal scale

5.4.4 Questionnaire 4

Questionnaire 4 should be sent to the buyer in the closure of a project. It should include the following metrics, answered by the question and using the scale defined in Table 16.

Table 16 - Content of Questionnaire 4.

PARAMETER	METRIC	QUESTION	SCALE
Overall Satisfaction	Satisfaction on a general level	Think of all experience you have with EFESO. On a general level, how satisfied are you with the collaboration?	Interval scale
	Satisfaction in relation to expectations	In relation to your expectations, how satisfied are you with the collaboration with EFESO?	Interval scale
	Satisfaction in relation to ideal company	Think of a management consultancy firm which is ideal from all perspectives. How close, or how far from such an ideal company, do you think EFESO is?	Interval scale
Final Rating	Likelihood to return	What is the probability that you choose EFESO for future collaborations?	Interval scale
	Degree of recommendation	How likely is it that you would recommend EFESO to a colleague or friend?	Interval scale

5.4.5 Questionnaire 5

Questionnaire 5 should be sent to management in the closure of a project. It should include the following metrics, answered by the question and using the scale defined in Table 17.

Table 17 - Content of Questionnaire 5.

PARAMETER	METRIC	STATEMENT	SCALE
Capability Build	Personal development	Have you developed your personal skills and knowledge?	Nominal scale
	Organizational development	Have the organization's information processes become more efficient?	Nominal scale
	Maintain new methods	I experience the organization to have enough prerequisites for maintaining the new working methods.	Ordinal scale
Toolbox	Correctness	EFESO's approach, methodology and tools were suitable for the project.	Ordinal scale
	Competence	EFESO's approach, methodology and tools were perceived to be founded in theory and previous experiences.	Ordinal scale
Approach	Inspiration	EFESO's consultants inspired me to take the steps necessary to change.	Ordinal scale
	Empathy	EFESO provided caring and individualized attention suitable for our organization.	Ordinal scale
	Pedagogy	EFESO's consultants were pedagogical.	Ordinal scale
Responsiveness	Availability	EFESO was available when I needed their support	Ordinal scale
	Support	EFESO provided necessary resources and support for the project.	Ordinal scale

Safety and Security	Respect to regulations	EFESO's consultants respected our regulations.	Ordinal scale
Overall Satisfaction	Satisfaction on a general level	Think of all experience you have with EFESO. On a general level, how satisfied are you with the collaboration?	Interval scale
	Satisfaction in relation to expectations	In relation to your expectations, how satisfied are you with the collaboration with EFESO?	Interval scale
	Satisfaction in relation to ideal company	Think of a management consultancy firm which is ideal from all perspectives. How close, or how far from such an ideal company, do you think EFESO is?	Interval scale
Final Rating	Likelihood to return	What is the probability that you choose EFESO for future collaborations?	Interval scale
	Degree of recommendation	How likely is it that you would recommend EFESO to a colleague or friend?	Interval scale

5.4.6 Questionnaire 6

Questionnaire 6 should be sent to participants in the closure of a project. It should include the following metrics, answered by the question and using the scale defined in Table 18.

Table 18 - Content of Questionnaire 6.

PARAMETER	METRIC	QUESTION	SCALE
Capability Build	Personal development	Have you developed your personal skills and knowledge?	Nominal scale
	Organizational development	Have the organization's information processes become more efficient?	Nominal scale
	Maintain new methods	I experience the organization to have enough prerequisites for maintaining the new working methods.	Ordinal scale

Toolbox	Correctness	EFESO's approach, methodology and tools were suitable for the project.	Ordinal scale
	Competence	EFESO's approach, methodology and tools were perceived to be founded in theory and previous experiences.	Ordinal scale
Approach	Inspiration	EFESO's consultants inspired me to take the steps necessary to change.	Ordinal scale
	Empathy	EFESO provided caring and individualized attention suitable for our organization.	Ordinal scale
	Pedagogy	EFESO's consultants were pedagogical.	Ordinal scale
Overall Satisfaction	Satisfaction on a general level	Think of all experience you have with EFESO. On a general level, how satisfied are you with the collaboration?	Interval scale
	Satisfaction in relation to expectations	In relation to your expectations, how satisfied are you with the collaboration with EFESO?	Interval scale
	Satisfaction in relation to ideal company	Think of a management consultancy firm which is ideal from all perspectives. How close, or how far from such an ideal company, do you think EFESO is?	Interval scale
Final Rating	Likelihood to return	What is the probability that you choose EFESO for future collaborations?	Interval scale
	Degree of recommendation	How likely is it that you would recommend EFESO to a colleague or friend?	Interval scale

5.5 Data Compilation and Presentation

In the coming section, data shown in Figures are randomly generated and not connected to EFESO.

To compile and visualize the data collected through questionnaires and discussion meetings, a measurement system tool was developed in Excel. The tool consists of sheets for pasting the data from the questionnaires, discussion guides for the initial and closure meetings and lastly sheets compiling and presenting the collected data. Additionally, an *Instruction sheet* and an *Information sheet* guiding the EFESO consultants in the measurement process were developed.

The Instruction sheet consists of a list with 24 steps that should be completed as a part of the customer satisfaction evaluation process. Each step has an OK/NOK cell to type in when a step is done to monitor the progress, see Figure 9. The complete Instruction sheet can be found in Appendix L and the Information sheet can be found in Appendix M.

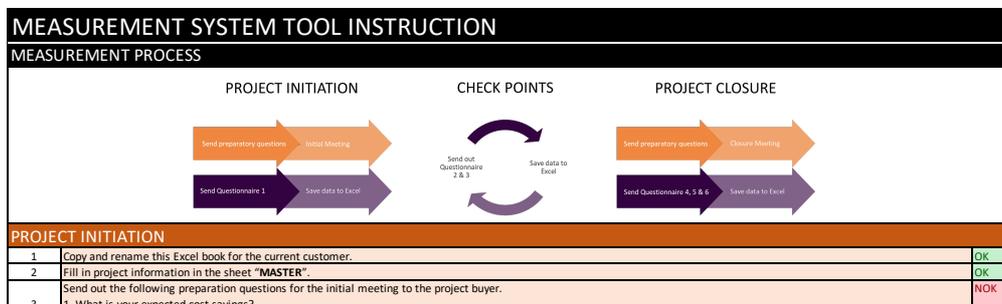


Figure 9 - Extract from Instruction sheet.

Further, the *Initial Meeting sheet* guides the EFESO consultant during the Initial meeting. During the meeting, data should be typed into the orange cells, concerning estimations on the expected cost saving and performance improvement(s), see Figure 10.

INITIAL MEETING		
<i>The initial meeting collects input for the savings parameter.</i>		
Cost savings		
<i>Below, the estimated cost savings for the project should be filled in.</i>		
	Estimated saving	Currency
What is the expected cost saving?	1 000 000	SEK
Performance improvement		
<i>Below, the estimated performance improvement(s) should be filled in. Adapt it depending on the project by adding performance metrics, i.e: Availability, Lead time, Stock level.</i>		
	Estimated value	Unit
Avalibility (example)	2	hours
Lead time (example)	2	days

Figure 10 - Extract of Initial Meeting sheet.

Similarly, a sheet serving as a base for the Closure meeting was developed, a *Closure Meeting sheet*, see Figure 11. In this sheet, data on the achieved performance should be typed into the orange fields after the discussion.

CLOSURE MEETING		
<i>The closure meeting collects input for the savings and the delivery precision parameters.</i>		
Cost savings		
<i>Below, the achieved cost saving for the project should be filled in.</i>		
What is the final cost saving?	Achieved saving	Currency
	1 000 000	SEK
Performance improvement		
<i>Below, the achieved performance improvement(s) for the project should be filled in.</i>		
What is the final performance improvement?	Achieved value	Unit
Availability	2	hours/week
Lead time	2	days
Performance improvement		
<i>Below, the perceived delivery precision of the entire project should be filled in.</i>		
		Perceived value
To what degree did EFESO deliver on time?		98%
To what degree did the company deliver on time?		95%
To what degree does the delivery meet the customer's expected standards		98%

Figure 11 - Extract of Closure Meeting sheet.

For the measures made during the project with Questionnaire 2 and 3, a *Check Point sheet* was created to be able to save historical data. This sheet logs data from the different measurements made during the project, see Figure 12.

CHECK POINTS			
<i>The Check Points collect data for the Toolbox, Approach, Responsiveness and Safety & Security parameters.</i>			
<i>If executing a new measure with Questionnaire 2 or 3, the <u>Current measure</u> value should manually be typed into <u>Measure 1, 2 or 3</u> etc. to save the historical data.</i>			
TOOLBOX			
Correctness		Competence	
The average perception of whether EFESO's tools and methods are suitable for the project:		The average perception of whether EFESO's tools and methods are founded in theory and previous experiences:	
Current measure	2,57	Current measure	3,57
Measure 1	2,57	Measure 1	3,57
Measure 2		Measure 2	
Measure 3		Measure 3	

Figure 12 - Extract of Check Points sheet.

The results from the data collection are compiled and visualized in five Excel sheets, one for each selected quality dimension and one summarizing the overall result. For each quality dimension, a score is calculated. The score was decided to have a range from zero (0) to five (5), five being the most desired value. The score provides a value that is possible to improve and compare between different projects. The score of each parameter further provides an insight into EFESO’s performance within each quality dimension. The following calculation steps were done to achieve the scores:

- 1) Each answer option was rated on a scale from one (1) to five (5), five being the most desired value.
- 2) The percentage of the respondent distribution was calculated for each answer option.
- 3) The percentage of the respondent distribution was multiplied with the rate for each answer option.
- 4) The metric’s score is thereafter calculated by adding the products from step 3.

For example, if giving the statement “*Customer satisfaction is important for business growth*” with the respondent distribution according to Table 19, the percentage of the respondent distribution for “*partly agree*” is calculated as $4/15=0,27$ (step 2). Thereafter, the respondent distribution is multiplied with the rate for partly agree, $0,27*4=1,08$ (step 3). These calculations are made for each answer option. Thereafter, the score (average value) is calculated, which in this example is 3,74 (step 4).

Table 19 - Example calculation

ANSWER OPTION	RATE	NUMBER OF RESPONDENTS	PERCENTAGE OF RESPONDENTS
Strongly disagree	1	2	13%
Partly disagree	2	1	7%
Neutral	3	2	13%
Partly agree	4	4	27%
Strongly agree	5	6	40%

Important to note is that the calculation of the score is not based on any particular theory, but a combination of ideas from different theories with regards to what is relevant for EFESO. The underlying idea of NPS served as a guideline, using the idea of calculating the percentage of different respondent groups. This idea was combined and adapted to the different scales used in the evaluation to generate a rating system.

To compile and visualize the collected data, the different scores and evaluation results are visualized in a “quality dimension sheet”, one sheet for each dimension, using graphs and tables depending on the data. See examples in Figure 13, Figure 15 and Figure 14.

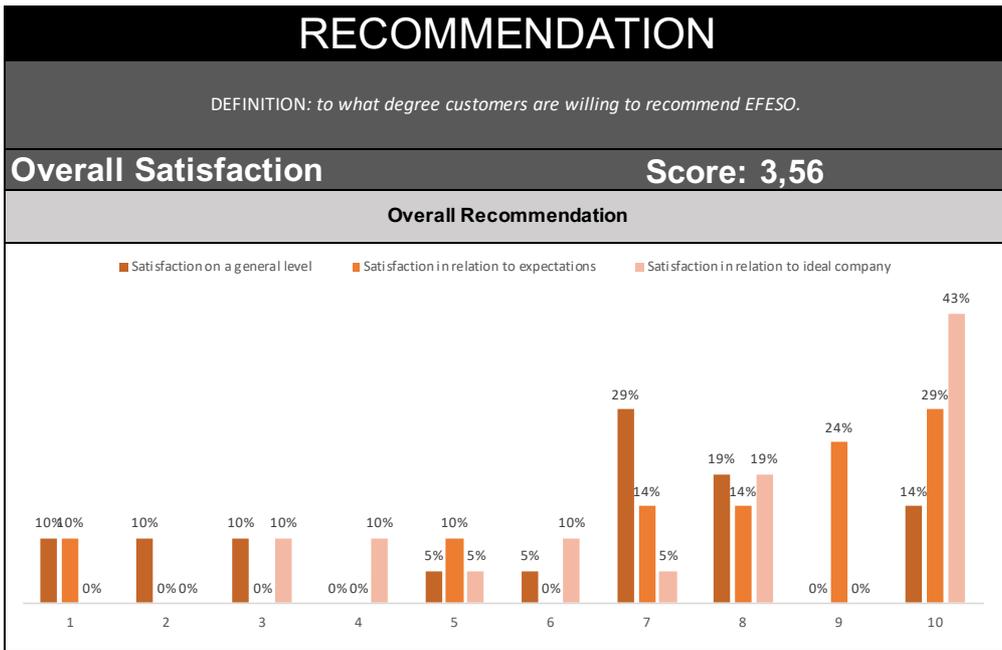


Figure 13 - Extract of Recommendation sheet.

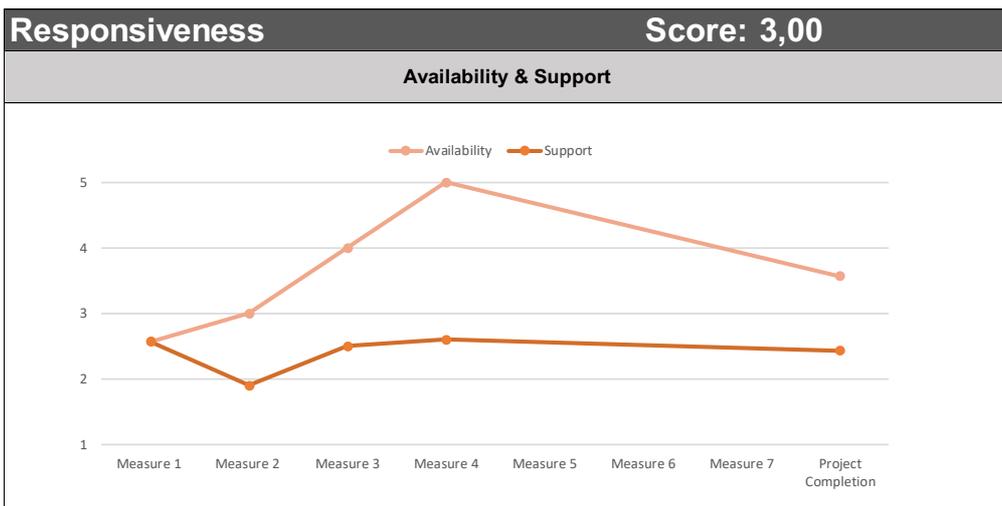


Figure 14 - Extract of Service sheet.

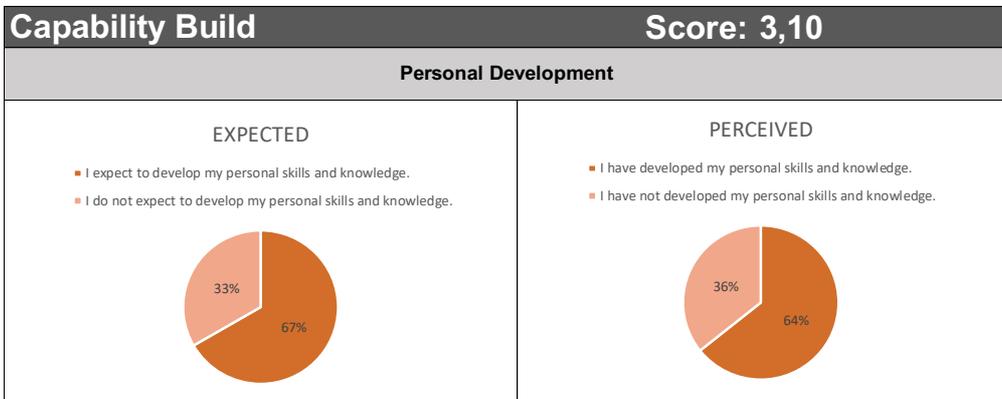


Figure 15 - Extract of Value for Money sheet.

Lastly, there is a *Master sheet* compiling the result of the customer satisfaction measurement. In this sheet, all four dimensions and their parameters are presented together with their score and short descriptions. General information about the project can also be found in this sheet, see Figure 16.

CUSTOMER SATISFACTION		
Project:		
Customer:		
Customer contact:		
EFESO representants:		
File responsible:		
Start date:		
End date:		
VALUE FOR MONEY	WORKING METHODS	SE
DEFINITION: <i>if EFESO's customers' perception of the achieved result and working process corresponds to the investment.</i>	DEFINITION: <i>if EFESO's methods and tools are relevant and up-to-date.</i>	DEFINITION: <i>if EFESO suitable,</i>
Savings 5,00 <i>Includes cost savings and performance improvement(s).</i>	Toolbox 3,25 <i>Measures employees' experiences of EFESO's methods and tools. It considers whether the tools and methods were suitable for the project (correctness) and whether the tools and methods were perceived to be built upon knowledge and previous experiences (competence).</i>	Responsiveness <i>Measures whether EFESO necessary support and res</i>

Figure 16 - Extract of Master sheet.

5.6 Pre-test

A pre-test was set up to test the measurement system internally at EFESO. This was made to ensure that the tool (Excel file), the measurement system, questionnaires, and discussion meeting guidelines were understandable. The pre-test was conducted together with three representatives from EFESO, starting with one person testing the Excel file and its included instructions. The purpose was to test whether the instructions were understandable and easy to follow. The researchers were present when the EFESO representative followed the instructions in the Excel file. During the session, feedback was given and except minor clarification suggestions of text formulations in the instruction, the following improvements were suggested and added:

- 1) Add an "information sheet". This sheet should include more in-depth information about the measurement process, including for instance how the quality dimensions and parameters were developed, and how meetings and questionnaires should be handled.
- 2) Add a flowchart to support the understanding of the evaluation process, as well as complementing the instruction sheet.
- 3) Adapt the Excel file to consider data from previous projects at the current customer, since EFESO often renegotiates projects due to their large extent, and thus the customer satisfaction measurement may partly re-start.

The other two persons involved in the pre-test acted *buyer* and *project participant* at the customer, to test the understanding of all questions used in the different questionnaires. The third person also took part. The closure and initial meeting were not tested in its supposed

settings but instead discussed with all pre-test participants. After completion of the pre-test, a meeting was held with the involved persons to collect and discuss strengths and weaknesses with the system. This led to changes in the formulation of some questions, and one metric concerning confidentiality were removed since it was considered to be a hygiene factor and thus a must to be fulfilled. Further, some more information was added in the start of the questionnaires to ensure that the respondent knew the aim with the questionnaires. Lastly, the information telling the reader that its responds were anonymous were removed with the argument that there may be few people to answer the questionnaires and thus anonymity cannot be guaranteed.

6 DISCUSSION

The measurement system is developed to be simple and general to facilitate future changes and creating a possibility to adapt the system according to future needs. Continuous improvement of a customer satisfaction measurement systems is also emphasized by Naumann and Giel (1995). However, the measurement is built upon a selection of questions and whether the amount of questions is enough, too large or too few, cannot be said until the measurement system has been used and applied at EFESO. Hence, the developed measurement system should serve as a starting point and the tool should thereafter continue to develop and grow in line with the need of EFESO. By not complicating the first version, it is easier to see what works and what does not, how the system is received by customers and the accuracy of included measurements. It is thereafter up to EFESO to add and/or remove questions and measurements they believe are relevant (or not) for measuring the developed quality dimensions within their organization.

The four quality dimensions which serve as the base for the customer satisfaction measurement system are founded in both theory and practice. The basis is a strength that increases the trustworthiness of the measurement system since it takes several aspects into account. This is emphasized by Parasuraman et al (1988), highlighting the benefit of combining SERVQUAL with other models to increase the reliability of the result. The dimensions have been developed by systematically combine different ideas and thoughts, but whether the number of quality dimensions is appropriate or not, is not confirmed by literature. Hayes (2008) provides some guidelines concerning the number of appropriate quality dimensions to use, but since it differs depending on the approach and the situation, the correct number of quality dimensions to use in the EFESO case cannot be ensured. Furthermore, the four selected quality dimensions are developed to be suitable for EFESO and might not be the most appropriate choice of dimensions for other organizations. However, the systematic way of generating quality dimensions can be applied in other cases to find suitable quality dimensions.

Concerning comments given by respondents in the six questionnaires used in the evaluation process, they are not, in a systematic way, handled in the data presentation of the measurement system tool. The comments can instead be found in respectively questionnaire sheet but are not further used since the aim of the tool was to develop a system easy and effective to use. By including free text answers in the summary and data presentation, the simplicity was considered to decrease. To handle comments in a more efficient way, one proposal for EFESO is to use the summary and data visualization tools given in, for example, Google Forms and SurveyMonkey. This, since Google Forms and SurveyMonkey provide a good overview of comments since they are shown under each associated question.

Regarding the scores calculated for the developed parameters, there is, as mentioned in the analysis, no clear connection to theory, but the score has been developed by combining different ideas and thoughts. However, average scores are applied in SERVQUAL as an overall measure of the different dimensions, which partly strengthens the calculation in combination with NPS where the percentage of respondents within each category is used. The aim of the score was to create a value that is possible to compare between projects, monitor, communicate and improve.

Hence, the score serves as a value considering EFESO's performance, whether they delivered what they were expected to deliver or not, which corresponds to the definition of customer satisfaction as the difference between expectations and perceptions. Thus, the score indirectly measures and contributes to an increase in customer satisfaction, since EFESO must know what to improve to increase their performance, which in turn will lead to more satisfied customers.

7 CONCLUSIONS

The purpose of this thesis was to develop a customer satisfaction measurement system. This was made by studying theory, conduct nine interviews with EFESO employees and six interviews with EFESO's customers. The collected data was thereafter systematically combined based on common denominators to create the customer satisfaction measurement system.

The first research question was formulated as "*What are appropriate customer satisfaction measurements for EFESO?*" and served as a guide in the literature research to distinguish possible measurements to include in the customer satisfaction measurement system. By combining findings from literature with data collected from EFESO and their customers concerning their thoughts and ideas on possible measurements, four main quality dimensions to measure upon derived. The process followed Hayes's (2008) quality dimension development approach, resulting in the four quality dimensions *Value for Money*, *Working Methods*, *Service* and *Recommendation*. The selected quality dimensions were thereafter defined by developing associated parameters and metrics found in the data collection. This resulted in a final compilation of dimensions, parameters and metrics EFESO should be measured upon.

When answering the second research question "*How can existing customer satisfaction measurement systems be combined into a customer satisfaction measurement system suitable for EFESO?*", several existing customer satisfaction measurement systems possible to combine into a system suitable for EFESO were identified. The three models SERVQUAL, NPS, and CSI, served as a base for the design of the measurement system, whereas the explanatory models, The Gap model and Grönroos' Model, were used to strengthen what aspects to include. By considering the underlying ideas of the different measurement system models in combination with the defined measurements, the measurement system was developed. Ideas from the studied models concerning how to collect data, visualize it and compile it into comparable results served as a guide in the development process, resulting in a customer satisfaction measurement system compiled into an Excel tool.

For further research, it is suggested to develop procedures for how to take use of and apply the information on customer satisfaction in the EFESO organization and make it a part of the customer satisfaction measurement system. Similarly, a method for how to handle potentially dissatisfied customers could be developed and included in the measurement system. Lastly, since the importance of sustainability within business has grown, it may be of interest for EFESO to consider whether a measure of customer's perception of EFESO's work in terms of sustainability should be added.

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APPENDIX A – Interview Questions EFESO

EFESO individuellt

1. Vad är din roll i företaget? Sales, consultant, admin?
2. Hur länge har du jobbat på EFESO?
3. Nämn 1-3 ord som karaktäriserar EFESO!
4. Vad är/har varit din roll i ett kundprojekt? (pågående, avslutade)
5. Hur ser en arbetsdag ut för dig, har du någon typisk arbetsvecka?
6. Hur mycket tid/energi känner du att det finns möjlighet att lägga på att mäta kundnöjdheten?
7. Hur vet du att du gör ett bra jobb? (Feedback från Chef och medarbetare)
8. Utför EFESO någon mätning av hur nöjda ni som anställda är med ert jobb?
9. Vad är kundnöjdhet för dig?
10. Hur utvärderar kunden samarbetet med dig?
11. Hur känner du av att du kan använda en kund som referens?
 - a. Vilka kunder känner du att du kan lämna som referens?
 - b. Vilka kunder känner du inte att du kan lämna som referens?

EFESO generellt

12. Hur säkerställer du att dina kunder är nöjda?
13. Har du koll på hur nöjda era kunder är?
14. Utför ni någon mätning av hur nöjda era kunder är med ert...
 - a. ...samarbete?
 - b. ...resultat?
15. Hur ofta gör ni dessa mätningar?
16. Hur ofta anser du att man bör mäta kundnöjdhet?
17. Vad gör ni för finansiella och icke-finansiella mätningar hos kund idag?
 - a. Hur går ni tillväga?
 - b. Hur använder ni den insamlade datan? (bra och dåligt resultat)
 - c. Har ni någon plan för hur ni ska hantera missnöjdhet hos kunder?
18. Får ni idag någon feedback från era kunder kring samarbetet?
 - a. Vad för typ av feedback?
 - b. Hur kommuniceras den?
19. Finns det någon koppling mellan era mätetal, strategier och mål i verksamheten?
 - a. Är mätetalen framtagna för att stödja strategin?
20. Hur lär ni upp nyanställda hos EFESO?
 - a. Vad blir deras roll i organisationen?

EFESO hos kund

21. Vad är kundens roll i de projekt som du sitter i just nu?
22. Hur upplever du samarbetet med kunden?
 - a. Motsträvt?
 - b. Entusiastiskt?
23. Hur går ni tillväga för att motivera och engagera era kunder?

Slutprodukt

24. Vad för typ av “kundnöjdhets”-modell ser ni framför er? (utformning)
25. Vill ni ge kunderna möjligheten att utvärdera samarbetet under projektets gång?
26. Har ni önskemål/förslag på vad som ska ingå (KPIer)
27. Hur ska den insamlade informationen från kunden tas tillvara på hos EFESO?
Svenska/Engelska?

APPENDIX B – Interview Questions Customers

Skapa förståelse för hur en undersökning tas emot hos kund

1. Om EFESO efterfrågar feedback kring samarbetet med er, är ni villiga att ägna tid åt detta?
2. Vad tror ni att ni kan få ut av att utvärdera och ge feedback på ert samarbete med EFESO?
3. Ger ni feedback på samarbetet med EFESO idag? Hur?
4. Vill ni ha möjligheten att ge feedback på ett strukturerat sätt till EFESO?
5. Skulle ni vilja ha något i utbyte för att lägga tid på att utvärdera och ge feedback på samarbetet med EFESO, eller det okej för er att lägga till det som en del av samarbetet?

Ta reda på vilket utvärderingsformat som passar kunden

6. Föredrar du att ge feedback via ett formulär eller ett möte med en representant från EFESO?
7. Om feedback ges via ett formulär, ska formuläret...
 - a. ... vara digitalt eller utskrivet?
 - b. ... fyllas i individuellt eller i grupp?
8. Om feedback ges via ett möte, föredrar du att detta görs...
 - a. ... i grupp eller enskilda möten?
 - b. ... på plats eller via telefon?
9. Hur ofta och vilket tidsomfång anser du är rimligt att lägga på att ge feedback på samarbetet med EFESO?
10. Vill ni ta del av resultatet från EFESO's utvärderingar av samarbetet? På vilket sätt?

Avslutning

11. Vilka parametrar/mätetal föreslår du att EFESO kan inkludera i sin utvärdering? Utgå gärna ifrån deras "Tandem-modell" som bygger på att skapa performance, bygga förmåga och entusiasmera/motivera.

Vill du ha möjlighet att läsa igenom våra anteckningar från intervjun? Vi skickar i sådana fall dessa i ett mail till dig inom 1 dag.

APPENDIX C – Interview Information

Information inför intervjuer

Denna intervju genomförs som en del av vårt exjobb på EFESO, vars syfte är att ta fram ett arbetssätt för hur EFESO ska utvärdera samarbetet med sina kunder. Genom att systematiskt samla in feedback på sitt arbete hoppas EFESO kunna utvecklas som samarbetspartner och således skapa förutsättningar för ännu bättre resultat hos sina kunder.

Syfte

Syftet med intervjun är att skapa en förståelse kring vilken mät- och uppföljningsmodell som skapar mest värde för kund och EFESO för att ytterligare utveckla samarbetet, samt hur mycket tid och resurser EFESO's kunder är villiga att lägga på utvärdering och feedback.

Dina rättigheter under intervjun

Under intervjun har du möjlighet att avböja att svara på frågor och även dra tillbaka ditt svar. Du har också rätt att stoppa intervjun om du inte vill fullfölja den. Efter intervjun kommer vi att ge dig möjligheten att godkänna informationen som vi har samlat in.

Anonymitet

Informationen från intervjun kommer inte att gå att koppla till dig eller ditt företag. Generella slutsatser kommer att dras mellan svar från flera kunder. Den information som samlas in kommer endast att användas i detta exjobb som stöd för att besvara våra forskningsfrågor.

Praktisk information

Intervjun kommer att ske via Skype och beräknas ta max 20 minuter. Mötesinbjudan kommer att skickas ut i ett separat mail från EFESO.

Stort tack för att du tar dig tid att ställa upp! Hör gärna av dig om du har ytterligare frågor och funderingar.

Med vänliga hälsningar,

Elin Gerdin & Hanna Hagström

APPENDIX D – Measurement System Sampling Plan

DIMENSION & METRICS		FREQUENCY			RESPONDENT & METHOD		
		INITIATION	CONTINUOUSLY	CLOSURE	BUYER	MANAGEMENT	PARTICIPANTS
VALUE FOR MONEY							
SAVINGS	Cost savings	X		X	Initial meeting, Closure meeting		
	Improved performance	X		X	Initial meeting, Closure meeting		
CAPABILITY BUILD	Personal development	X		X		Q1, Q5	Q1, Q6
	Organizational development	X		X		Q1, Q5	Q1, Q6
	Maintaining new methods			X		Q5	Q6
DELIVERY PRECISION	On time delivery			X	Initial meeting, Closure meeting		
	Reliability			X	Initial meeting, Closure meeting		
WORKING METHODS							
TOOLBOX	Correctness		X	X		Q2, Q5	Q3, Q6
	Competence		X	X		Q2, Q5	Q3, Q6
APPROACH	Inspiration		X	X		Q2, Q5	Q3, Q6
	Empathy		X	X		Q2, Q5	Q3, Q6
	Pedagogy		X	X		Q2, Q5	Q3, Q6
SERVICE							
RESPONSIVENESS	Availability		X	X		Q2, Q5	
	Support		X	X		Q2, Q5	
SAFETY AND SECURITY	Respect to regulations		X	X		Q2, Q5	
	Confidentiality handling		X	X		Q2, Q5	
RECOMMENDATION							
OVERALL SATISFACTION	Satisfaction on a general level			X	Q4	Q5	Q6
	Satisfaction in relation to expectations			X	Q4	Q5	Q6
	Satisfaction in relation to ideal company			X	Q4	Q5	Q6
FINAL RATING	Likelihood to return			X	Q4	Q5	Q6
	Degree of recommendation			X	Q4	Q5	Q6

APPENDIX F – Questionnaire 1

Denna enkät genomförs som en del av EFESOs kundnöjdhetsmätning. Genom att delta bidrar du till att ge värdefull feedback som EFESO använder för att utvecklas som samarbetspartner och således skapa förutsättningar för bättre resultat hos sina kunder. Kundnöjdhet mäts inom de fyra dimensionerna beskrivna nedan och frågorna i specifikt denna enkät bidrar till att skapa en uppfattning av EFESOs prestation inom dimensionen Value for Money.

- **Value for Money:** if EFESO's customers' perception of the achieved result and working process corresponds to the investment.
- **Working Methods:** if EFESO's approach, methodology, and tools are relevant and up-to-date.
- **Service:** if EFESO delivers a professional service suitable for the customer.
- **Recommendation:** to what degree customers are willing to recommend EFESO.

Den här enkäten berör specifikt dina förväntningar på samarbetet med EFESO. Enkäten består av två frågor och beräknas ta max 5 min att besvara. I slutet ges du även möjlighet att lämna övriga kommentarer till EFESO. Informationen kommer endast användas i internt utvecklingssyfte och behandlas med konfidentialitet.

1. PERSONLIG UTVECKLING

Denna fråga bidrar till att uppskatta dimensionen Value for Money (if EFESO's customers' perception of the achieved result and working process corresponds to the investment).

Förväntar du dig att utveckla din kompetens och personliga förmåga genom samarbetet med EFESO?

- Ja
 Nej

Varför/varför inte?

2. ORGANISATORISK UTVECKLING

Denna fråga bidrar till att uppskatta dimensionen Value for Money (if EFESO's customers' perception of the achieved result and working process corresponds to the investment).

Förväntar du dig att er organisation kommer att utvecklas och bli mer effektiv?

- Ja
 Nej

Varför/varför inte?

KOMMENTARER

Avslutande kommentar

APPENDIX G – Questionnaire 2

Denna enkät genomförs som en del av EFESOs kundnöjdhetsmätning. Genom att delta bidrar du till att ge värdefull feedback som EFESO använder för att utvecklas som samarbetspartner och således skapa förutsättningar för bättre resultat hos sina kunder. Kundnöjdhet mäts inom de fyra dimensionerna beskrivna nedan och frågorna i enkäten bidrar till att skapa en uppfattning av EFESOs prestation utifrån dessa.

- **Value for Money:** if EFESO's customers' perception of the achieved result and working process corresponds to the investment.
- **Working Methods:** if EFESO's approach, methodology, and tools are relevant and up-to-date.
- **Service:** if EFESO delivers a professional service suitable for the customer.
- **Recommendation:** to what degree customers are willing to recommend EFESO.

Den här enkäten berör specifikt din upplevelse av samarbetet med EFESO. Enkäten består av 8 frågor och beräknas ta cirka 10 min att besvara. I slutet ges du även möjlighet att lämna övriga kommentarer till EFESO. Informationen kommer endast användas i internt utvecklingssyfte och behandlas med konfidentialitet.

1. KORREKTHET

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

Jag upplever att EFESOs angreppssätt, metodik och verktyg är lämpliga för projektet.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

2. KOMPETENS

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

Jag upplever att EFESOs angreppssätt, metodik och verktyg är väl grundade i teori och tidigare erfarenheter.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

3. INSPIRATION

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

Jag upplever att EFESOs konsulter skapar engagemang som leder till utveckling av vår organisation.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

4. EMPATI

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

Jag upplever att EFESOs stöd och tillvägagångssätt är anpassat efter våra behov.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

5. PEDAGOGIK

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

Jag upplever att EFESOs konsulter är pedagogiska.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

6. TILLGÄNGLIGHET

Denna fråga bidrar till att uppskatta dimensionen Service (if EFESO delivers a professional service suitable for the customer).

Jag upplever att EFESO är tillgängliga när jag behöver deras support.

Tar helt avstånd från

Tar delvis avstånd från

Neutral

Instämmer delvis

Instämmer helt

Kommentar

7. SUPPORT

Denna fråga bidrar till att uppskatta dimensionen Service (if EFESO delivers a professional service suitable for the customer).

Jag upplever att EFESO erbjuder tillräckliga resurser och support för projektet.

Tar helt avstånd från

Tar delvis avstånd från

Neutral

Instämmer delvis

Instämmer helt

Kommentar

8. RESPEKT FÖR ORGANISATIONEN

Denna fråga bidrar till att uppskatta dimensionen Service (if EFESO delivers a professional service suitable for the customer).

Jag upplever att EFESO respekterar våra regler, standarder och säkerhetsförfordningar.

Tar helt avstånd från

Tar delvis avstånd från

Neutral

Instämmer delvis

Instämmer helt

Kommentar

KOMMENTARER

Avslutande kommentar

APPENDIX H – Questionnaire 3

Denna enkät genomförs som en del av EFESOs kundnöjdhetsmätning. Genom att delta bidrar du till att ge värdefull feedback som EFESO använder för att utvecklas som samarbetspartner och således skapa förutsättningar för bättre resultat hos sina kunder. Kundnöjdhet mäts inom de fyra dimensionerna beskrivna nedan och frågorna i enkäten bidrar till att skapa en uppfattning av EFESOs prestation utifrån dessa.

- **Value for Money:** if EFESO's customers' perception of the achieved result and working process corresponds to the investment.
- **Working Methods:** if EFESO's approach, methodology, and tools are relevant and up-to-date.
- **Service:** if EFESO delivers a professional service suitable for the customer.
- **Recommendation:** to what degree customers are willing to recommend EFESO.

Den här enkäten berör specifikt din upplevelse av samarbetet med EFESO. Enkäten består av 5 frågor och beräknas ta cirka 5 min att besvara. I slutet ges du även möjlighet att lämna övriga kommentarer till EFESO. Informationen kommer endast användas i internt utvecklingssyfte och behandlas med konfidentialitet.

1. KORREKTHET

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

Jag upplever att EFESOs angreppssätt, metodik och verktyg är lämpliga för projektet.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

2. KOMPETENS

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

Jag upplever att EFESOs angreppssätt, metodik och verktyg är väl grundade i teori och tidigare erfarenheter.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

3. INSPIRATION

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

Jag upplever att EFESOs konsulter skapar engagemang som leder till utveckling av vår organisation.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

4. EMPATI

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

Jag upplever att EFESOs stöd och tillvägagångssätt är anpassat efter våra behov.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

5. PEDAGOGIK

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

Jag upplever att EFESOs konsulter är pedagogiska.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

KOMMENTARER

Avslutande kommentar

APPENDIX I – Questionnaire 4

Denna enkät genomförs som en del av EFESOs kundnöjdhetsmätning. Genom att delta bidrar du till att ge värdefull feedback som EFESO använder för att utvecklas som samarbetspartner och således skapa förutsättningar för bättre resultat hos sina kunder. Kundnöjdhet mäts inom de fyra dimensionerna beskrivna nedan och frågorna i enkäten bidrar till att skapa en uppfattning av EFESOs prestation utifrån dessa.

- **Value for Money:** if EFESO's customers' perception of the achieved result and working process corresponds to the investment.
- **Working Methods:** if EFESO's approach, methodology, and tools are relevant and up-to-date.
- **Service:** if EFESO delivers a professional service suitable for the customer.
- **Recommendation:** to what degree customers are willing to recommend EFESO.

Den här enkäten berör specifikt din upplevelse av samarbetet med EFESO. Enkäten består av 5 frågor och beräknas ta ca 5 min att besvara. I slutet ges du även möjlighet att lämna övriga kommentarer till EFESO. Informationen kommer endast användas i internt utvecklingssyfte och behandlas med konfidentialitet.

1. KUNDNÖJDHET PÅ EN GENERELL NIVÅ

Denna fråga bidrar till att uppskatta dimensionen Recommendation (to what degree customers are willing to recommend EFESO).

Tänk på hela samarbetet med EFESO, hur nöjd är du med EFESO?

	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd									

Kommentar

2. KUNDNÖJDHET I RELATION TILL FÖRVÄNTNINGAR

Denna fråga bidrar till att uppskatta dimensionen Recommendation (to what degree customers are willing to recommend EFESO).

I relation till dina förväntningar, hur nöjd är du med samarbetet med EFESO?

	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd									

Kommentar

3. KUNDNÖJDHET I RELATION TILL IDEALT FÖRETAG

Denna fråga bidrar till att uppskatta dimensionen Recommendation (to what degree customers are willing to recommend EFESO).

Tänk på ett management konsultföretag som är idealt ur alla perspektiv, hur nära eller hur långt ifrån ett sådant idealt företag befinner sig EFESO?

	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd									

Kommentar

4. SANNOLIKHET ATT KÖPA TJÄNSTER IGEN

Denna fråga bidrar till att uppskatta dimensionen Recommendation (to what degree customers are willing to recommend EFESO).

Hur stor är sannolikheten att ni väljer att samarbeta med EFESO i framtiden?

	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd									

Kommentar

5. REKOMMENDATION

Denna fråga bidrar till att uppskatta dimensionen *Recommendation* (to what degree customers are willing to recommend EFESO).

De olika svarsalternativen innebär följande:

- 0-6: du är missnöjd med samarbetet med EFESO och skulle inte rekommendera EFESO till andra.
- 7-8: du är nöjd med samarbetet med EFESO, men rekommenderar dem inte aktivt till andra.
- 9-10: du är mycket nöjd med samarbetet med EFESO och rekommenderar andra att anlita EFESO.

Hur troligt är det att du skulle rekommendera EFESO till en kollega eller vän?

	0	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd										

Kommentar

KOMMENTARER

Avslutande kommentar

APPENDIX J – Questionnaire 5

Denna enkät genomförs som en del av EFESOs kundnöjdhetsmätning. Genom att delta bidrar du till att ge värdefull feedback som EFESO använder för att utvecklas som samarbetspartner och således skapa förutsättningar för bättre resultat hos sina kunder. Kundnöjdhet mäts inom de fyra dimensionerna beskrivna nedan och frågorna i enkäten bidrar till att skapa en uppfattning av EFESOs prestation utifrån dessa.

- **Value for Money:** if EFESO's customers' perception of the achieved result and working process corresponds to the investment.
- **Working Methods:** if EFESO's approach, methodology, and tools are relevant and up-to-date.
- **Service:** if EFESO delivers a professional service suitable for the customer.
- **Recommendation:** to what degree customers are willing to recommend EFESO.

Den här enkäten berör specifikt din upplevelse av samarbetet med EFESO. Enkäten består av 16 frågor och beräknas ta ca 10 min att besvara. I slutet ges du även möjlighet att lämna övriga kommentarer till EFESO. Informationen kommer endast användas i internt utvecklingssyfte och behandlas med konfidentialitet.

1. PERSONLIG UTVECKLING

Denna fråga bidrar till att uppskatta dimensionen Value for Money (if EFESO's customers' perception of the achieved result and working process corresponds to the investment).

Har du utvecklat din kompetens och personliga förmåga genom samarbetet med EFESO?

- Ja
 Nej

Varför/varför inte?

2. ORGANISATORISK UTVECKLING

Denna fråga bidrar till att uppskatta dimensionen Value for Money (if EFESO's customers' perception of the achieved result and working process corresponds to the investment).

Har organisationen utvecklats och blivit mer effektiv?

- Ja
 Nej
 Vet ej

Varför/varför inte?

3. BIBEHÅLLANDE AV NYA ARBETSSÄTT

Denna fråga bidrar till att uppskatta dimensionen *Value for Money* (if EFESO's customers' perception of the achieved result and working process corresponds to the investment).

Jag upplever att det finns förutsättningar för organisationen att bibehålla de nya arbetssätten.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

4. KORREKTHET

Denna fråga bidrar till att uppskatta dimensionen *Working Methods* (if EFESO's approach, methodology, and tools are relevant and up-to-date).

EFESOs angreppssätt, metodik och verktyg var lämpliga för projektet.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

5. KOMPETENS

Denna fråga bidrar till att uppskatta dimensionen *Working Methods* (if EFESO's approach, methodology, and tools are relevant and up-to-date).

EFESOs angreppssätt, metodik och verktyg upplevdes som väl grundade i teori och tidigare erfarenheter.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

6. INSPIRATION

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

EFESOs konsulter skapade engagemang som ledde till utveckling av vår organisation.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

7. EMPATI

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

EFESOs stöd och tillvägagångssätt var anpassat efter våra behov.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

8. PEDAGOGIK

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

EFESOs konsulter var pedagogiska.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

9. TILLGÄNGLIGHET

Denna fråga bidrar till att uppskatta dimensionen Service (if EFESO delivers a professional service suitable for the customer).

EFESO var tillgängliga när jag behövde deras support.

Tar helt avstånd från

Tar delvis avstånd från

Neutral

Instämmer delvis

Instämmer helt

Kommentar

10. SUPPORT

Denna fråga bidrar till att uppskatta dimensionen Service (if EFESO delivers a professional service suitable for the customer).

Jag upplever att EFESO erbjuder tillräckliga resurser och support för projektet.

Tar helt avstånd från

Tar delvis avstånd från

Neutral

Instämmer delvis

Instämmer helt

Kommentar

11. RESPEKT FÖR ORGANISATIONEN

Denna fråga bidrar till att uppskatta dimensionen Service (if EFESO delivers a professional service suitable for the customer).

EFESO respekterade våra regler, standarder och säkerhetsföreskrifter.

Tar helt avstånd från

Tar delvis avstånd från

Neutral

Instämmer delvis

Instämmer helt

Kommentar

12. KUNDNÖJDHET PÅ EN GENERELL NIVÅ

Denna fråga bidrar till att uppskatta dimensionen Recommendation (to what degree customers are willing to recommend EFESO).

Tänk på hela samarbetet med EFESO, hur nöjd är du med EFESO?

	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd									

Kommentar

13. KUNDNÖJDHET I RELATION TILL FÖRVÄNTNINGAR

Denna fråga bidrar till att uppskatta dimensionen Recommendation (to what degree customers are willing to recommend EFESO).

I relation till dina förväntningar, hur nöjd är du med samarbetet med EFESO?

	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd									

Kommentar

14. KUNDNÖJDHET I RELATION TILL IDEALT FÖRETAG

Denna fråga bidrar till att uppskatta dimensionen Recommendation (to what degree customers are willing to recommend EFESO).

Tänk på ett management konsultföretag som är idealt ur alla perspektiv, hur nära eller hur långt ifrån ett sådant idealt företag befinner sig EFESO?

	1	2	3	4	5	6	7	8	9	10	
Mycket långt ifrån	<input type="checkbox"/>	Mycket nära									

Kommentar

15. SANNOLIKHET ATT KÖPA TJÄNSTER IGEN

Denna fråga bidrar till att uppskatta dimensionen *Recommendation* (to what degree customers are willing to recommend EFESO).

Hur stor är sannolikheten att ni väljer att samarbeta med EFESO i framtiden?

	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd									

Kommentar

16. REKOMMENDATION

Denna fråga bidrar till att uppskatta dimensionen *Recommendation* (to what degree customers are willing to recommend EFESO).

De olika svarsalternativen innebär följande:

- 0-6: du är missnöjd med samarbetet med EFESO och skulle inte rekommendera EFESO till andra.
- 7-8: du är nöjd med samarbetet med EFESO, men rekommenderar dem inte aktivt till andra.
- 9-10: du är mycket nöjd med samarbetet med EFESO och rekommenderar andra att anlita EFESO.

Hur troligt är det att du skulle rekommendera EFESO till en kollega eller vän?

	0	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd										

Kommentar

KOMMENTARER

Avslutande kommentar

APPENDIX K – Questionnaire 6

Denna enkät genomförs som en del av EFESOs kundnöjdhetsmätning. Genom att delta bidrar du till att ge värdefull feedback som EFESO använder för att utvecklas som samarbetspartner och således skapa förutsättningar för bättre resultat hos sina kunder. Kundnöjdhet mäts inom de fyra dimensionerna beskrivna nedan och frågorna i enkäten bidrar till att skapa en uppfattning av EFESOs prestation utifrån dessa.

- **Value for Money:** if EFESO's customers' perception of the achieved result and working process corresponds to the investment.
- **Working Methods:** if EFESO's approach, methodology, and tools are relevant and up-to-date.
- **Service:** if EFESO delivers a professional service suitable for the customer.
- **Recommendation:** to what degree customers are willing to recommend EFESO.

Den här enkäten berör specifikt din upplevelse av samarbetet med EFESO. Enkäten består av 13 frågor och beräknas ta ca 10 min att besvara. I slutet ges du även möjlighet att lämna övriga kommentarer till EFESO. Informationen kommer endast användas i internt utvecklingssyfte och behandlas med konfidentialitet.

1. PERSONLIG UTVECKLING

Denna fråga bidrar till att uppskatta dimensionen Value for Money (if EFESO's customers' perception of the achieved result and working process corresponds to the investment).

Har du utvecklat din kompetens och personliga förmåga genom samarbetet med EFESO?

- Ja
 Nej

Varför/varför inte?

2. ORGANISATORISK UTVECKLING

Denna fråga bidrar till att uppskatta dimensionen Value for Money (if EFESO's customers' perception of the achieved result and working process corresponds to the investment).

Har organisationen utvecklats och blivit mer effektiv?

- Ja
 Nej
 Vet ej

Varför/varför inte?

3. BIBEHÅLLANDE AV NYA ARBETSSÄTT

Denna fråga bidrar till att uppskatta dimensionen *Value for Money* (if EFESO's customers' perception of the achieved result and working process corresponds to the investment).

Jag upplever att det finns förutsättningar för organisationen att bibehålla de nya arbetssätten.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

4. KORREKTHET

Denna fråga bidrar till att uppskatta dimensionen *Working Methods* (if EFESO's approach, methodology, and tools are relevant and up-to-date).

EFESOs angreppssätt, metodik och verktyg var lämpliga för projektet.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

5. KOMPETENS

Denna fråga bidrar till att uppskatta dimensionen *Working Methods* (if EFESO's approach, methodology, and tools are relevant and up-to-date).

EFESOs angreppssätt, metodik och verktyg upplevdes som väl grundade i teori och tidigare erfarenheter.

Tar helt avstånd från Tar delvis avstånd från Neutral Instämmer delvis Instämmer helt

Kommentar

6. INSPIRATION

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

EFESOs konsulter skapade engagemang som ledde till utveckling av vår organisation.

Tar helt avstånd från	Tar delvis avstånd från	Neutral	Instämmer delvis	Instämmer helt
<input type="checkbox"/>				

Kommentar

7. EMPATI

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

EFESOs stöd och tillvägagångssätt var anpassat efter våra behov.

Tar helt avstånd från	Tar delvis avstånd från	Neutral	Instämmer delvis	Instämmer helt
<input type="checkbox"/>				

Kommentar

8. PEDAGOGIK

Denna fråga bidrar till att uppskatta dimensionen Working Methods (if EFESO's approach, methodology, and tools are relevant and up-to-date).

EFESOs konsulter var pedagogiska.

Tar helt avstånd från	Tar delvis avstånd från	Neutral	Instämmer delvis	Instämmer helt
<input type="checkbox"/>				

Kommentar

9. KUNDNÖJDHET PÅ EN GENERELL NIVÅ

Denna fråga bidrar till att uppskatta dimensionen Recommendation (to what degree customers are willing to recommend EFESO).

Tänk på hela samarbetet med EFESO, hur nöjd är du med EFESO?

	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd									

Kommentar

10. KUNDNÖJDHET I RELATION TILL FÖRVÄNTNINGAR

Denna fråga bidrar till att uppskatta dimensionen Recommendation (to what degree customers are willing to recommend EFESO).

I relation till dina förväntningar, hur nöjd är du med samarbetet med EFESO?

	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd									

Kommentar

11. KUNDNÖJDHET I RELATION TILL IDEALT FÖRETAG

Denna fråga bidrar till att uppskatta dimensionen Recommendation (to what degree customers are willing to recommend EFESO).

Tänk på ett management konsultföretag som är idealt ur alla perspektiv, hur nära eller hur långt ifrån ett sådant idealt företag befinner sig EFESO?

	1	2	3	4	5	6	7	8	9	10	
Mycket långt ifrån	<input type="checkbox"/>	Mycket nära									

Kommentar

12. SANNOLIKHET ATT KÖPA TJÄNSTER IGEN

Denna fråga bidrar till att uppskatta dimensionen *Recommendation* (to what degree customers are willing to recommend EFESO).

Hur stor är sannolikheten att ni väljer att samarbeta med EFESO i framtiden?

	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd									

Kommentar

13. REKOMMENDATION

Denna fråga bidrar till att uppskatta dimensionen *Recommendation* (to what degree customers are willing to recommend EFESO).

De olika svarsalternativen innebär följande:

- 0-6: du är missnöjd med samarbetet med EFESO och skulle inte rekommendera EFESO till andra.
- 7-8: du är nöjd med samarbetet med EFESO, men rekommenderar dem inte aktivt till andra.
- 9-10: du är mycket nöjd med samarbetet med EFESO och rekommenderar andra att anlita EFESO.

Hur troligt är det att du skulle rekommendera EFESO till en kollega eller vän?

	0	1	2	3	4	5	6	7	8	9	10	
Mycket missnöjd	<input type="checkbox"/>	Mycket nöjd										

Kommentar

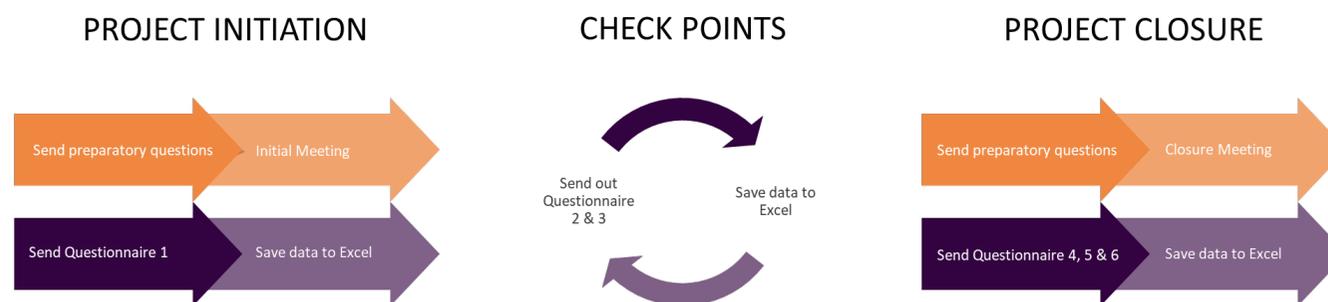
KOMMENTARER

Avslutande kommentar

APPENDIX L – Measurement System Instruction Sheet

MEASUREMENT SYSTEM INSTRUCTION

MEASUREMENT PROCESS



PROJECT INITIATION

1	Copy and rename this Excel book for the current customer.	OK
2	Fill in project information in the sheet " MASTER ".	OK
3	Send out the following preparation questions for the initial meeting to the project buyer. 1. What is your expected cost savings? 2. What is your expected performance improvement of ... (e.g. Availability, Lead time and Stock level)? N.B. This question should be adapted depending on the project.	NOK
4	Set up an initial meeting with the project buyer.	NOK
5	Execute the Initial meeting. Discuss and answer the questions in the sheet " INITIAL MEETING ".	NOK
6	Send out Questionnaire 1 to management and project participants.	NOK
7	Paste the result from Questionnaire 1 into sheet " Questionnaire 1 ".	NOK

CHECK POINTS

8	Send out Questionnaire 2 to management.	NOK
9	Send out Questionnaire 3 to project participants.	NOK
10	Paste the result from Questionnaire 2 into sheet " Questionnaire 2 "	NOK
11	Paste the result from Questionnaire 3 into sheet " Questionnaire 3 "	NOK
12	Go to sheet " Check Points " after each collection with Questionnaire 2 and 3. Type in the <u>Current measure</u> value into an empty Measure 1, 2, 3 etc. row to save the historical data.	NOK
13	Repeat step 8 to 12 if desired.	NOK

PROJECT CLOSURE

14	Send out " Questionnaire 4 " to the project buyer.	NOK
15	Send out " Questionnaire 5 " to management.	NOK
16	Send out " Questionnaire 6 " to the project participants.	NOK
17	Paste the result from Questionnaire 4 into sheet " Questionnaire 4 ".	NOK
18	Paste the result from Questionnaire 5 into sheet " Questionnaire 5 ".	NOK
19	Paste the result from Questionnaire 6 into sheet " Questionnaire 6 ".	NOK
20	Send out the following preparation questions for the closure meeting to the project buyer. 1. What is the final cost saving? 2. What is the final performance improvement of ... (e.g. Availability, Lead time and Stock level)? N.B. This question should be adapted depending on the project.	NOK
21	Discuss EFESO's delivery precision internally with involved consultants.	NOK
22	Set up a closure meeting with the project buyer.	NOK
23	Execute the closure meeting. Discuss and answer the questions in the sheet " CLOSURE MEETING ". Discuss the overall result.	NOK
24	Review the result internally.	NOK

APPENDIX M – Measurement System Information Sheet

INFORMATION

This Excel book is part of a customer satisfaction measurement system developed by Elin Gerdin and Hanna Hagström during spring 2019, as a part of their master thesis at Chalmers University of Technology conducted at EFESO Consulting.

WHY MEASURE CUSTOMER SATISFACTION?

Based on a literature review, interviews with EFESO and interviews with six different customers to EFESO, five reasons for why EFESO should measure customer satisfaction derived:

R1: Create an overview of EFESO's current customer satisfaction level.

R2: Get numbers and facts on customer satisfaction to know what to improve and how much EFESO has improved its performance.

R3: Use the information as a tool for gaining new business and predict future performance.

R4: Efficient resource planning.

R5: Increased employee motivation.

WHAT SHOULD BE MEASURED?

Four quality dimensions to measure customer satisfaction upon were developed by following methods suggested in literature. These quality dimensions were based on studied theory on the current subject and interviews with EFESO and their customers. From the collected data, the different suggested dimensions, measurement parameters and metrics were compared and compiled into the following measurement system with three levels.

DIMENSION	VALUE FOR MONEY	WORKING METHODS	SERVICE	RECOMMENDATION
PARAMETER	Savings	Toolbox	Responsiveness	Overall Satisfaction
METRICS	Cost savings Performance improvement	Correctness Competence	Availability Support	Satisfaction on a general level Satisfaction in relation to expectations Satisfaction in relation to ideal company
PARAMETER	Capability Build	Approach	Safety and Security	Final Rating
METRICS	Personal development Organizational development Maintaining new methods	Pedagogy Inspiration Empathy	Respect to regulations Confidentiality handling	Likelihood to return Degree of recommendation
PARAMETER	Delivery Precision			
METRICS	On time delivery Reliability			

HOW TO MEASURE?

The measurement system consists of three phases: *Project Initiation, Check Points and Project Closure.*

Project Initiation

In the initiation of a new project, an initial meeting is to be held with the project buyer. During this meeting, the expected cost saving and performance improvement(s) should be discussed. The buyer should be given the possibility to prepare data for the meeting by sending out preparatory questions of what is to be discussed. Further, questionnaires should be handed out to project participants and involved management concerning their expectations on personal and organizational development deriving from the project. The data collected during this phase is hence used to visualize the customers overall expectations of the project.

Check Points

During the project, EFESO has the possibility to send out questionnaires aiming at measuring the current perceptions of EFESO's working methods and service. It should be handed out to project participants and relevant management. Depending on the project, its extent and intensity, the number of measures conducted during the project can vary.

Project Closure

In the closure of a project, a closure meeting should be held with the project buyer. During this meeting, the actual cost savings and performance improvement(s) derived from the project should be discussed. Also, the delivery precision of both parties should be brought up, as well as the customer's perception of whether EFESO delivered according to agreement or not. The buyer should be given the possibility to prepare data for the meeting by sending out preparatory questions of what is to be discussed. Further, questionnaires should be sent out to participants, management and the buyer. The questionnaires collect data on the customers' overall perceptions of the project, including personal and organizational development, final perception of working methods and service, general satisfaction and to what extent the customer would recommend EFESO to others.