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Degree Programme in Business Administration

# Measuring customer satisfaction

Case company TKM TTT Finland

Thien Huong Dinh

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Tikkarinne 9  
80200 JOENSUU  
+358 13 260 600

Author(s)  
Thien Huong Dinh

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**Abstract**

The objective of this thesis was to measure the customer satisfaction level in the case company TKM TTT Finland, and based on that suggest further development and develop a customer satisfaction measuring process for the company. The research covers the topic of developing a customer satisfaction measuring process in a case company by implementing theoretical models.

The thesis was conducted based on the theoretical framework on customer satisfaction in Business to Business, customer satisfaction measuring process, and metrics and tools for measuring customer satisfaction. The data used in the research was collected using mixed research methods. A survey was designed online in Google Forms and delivered to the customers of the company.

In conclusion, the research revealed that the overall level of customer satisfaction was high. A compilation of recommendations and a frequent customer satisfaction level measuring process was offered to the company to improve customer satisfaction levels and maintain strong partnerships.

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# 1 INTRODUCTION

When a company wants to improve the quality of its products, increase customer loyalty, or increase revenue, it needs a goal of continuous improvement. The entire process starts with finding out how customers of a company perceive the company and its product or service (Goldstein 2009, 83).

In the modern-day business world, with fast pace changing market demands, increasing product complexity and talent competition, more and more companies require the need for improving products and understanding customers' preferences. With globalization, the competition for product personalization and customization is even more complex, especially in Business to Business (B2B). The need to have a systematic customer satisfaction measuring process is imperative.

## 1.1 Aim of the thesis

The study focuses on developing a customer satisfaction measuring process for the company TKM TTT Finland. The process will allow the company to gather and analyze the level of customer experience frequently. This will be conducted as a case study of TKM TTT Finland on their focused customer group.

This thesis unites three goals contributing to the development of the customer satisfaction measuring process of the company.

- To determine the satisfaction level of customers with the current service,
- To suggest development to current customer service and the delivery process,
- To introduce a frequent customer satisfaction measuring process and offer suitable recommendations for the current services.

## 1.2 Thesis outline

The thesis consists of five chapters that can be divided into three parts. The first part of the thesis is the introduction. The introduction briefly introduces the aim, the outline of the thesis, and the profile of the case company.

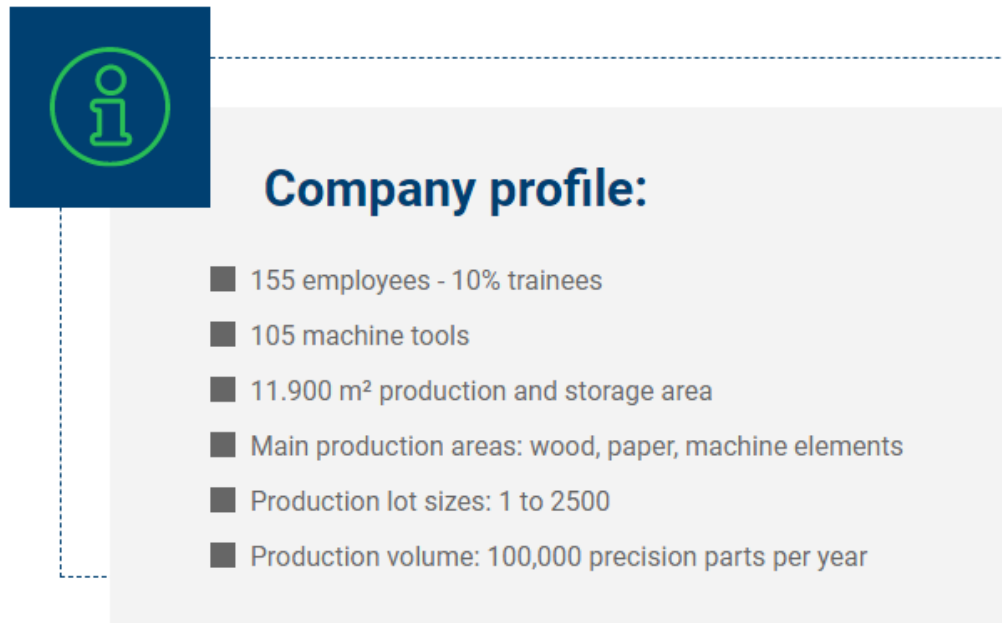
The second part of the thesis includes the theoretical framework and the research plan. The theoretical framework covers the literature that the research is based upon. This consists of the definition of customer satisfaction, the importance of customer satisfaction in a B2B context, and the customer satisfaction measuring process. The research plan covers the methodology for implementing the literature into practice. This consists of the purpose of the research, data collection methods, the metric and tools, survey design and survey execution.

The last part of the thesis contains the results and their analysis and the conclusion. The results and analysis present the survey outcomes, the detailed data analysis, and offers a built customer measuring process and suitable recommendations. The conclusion sums up the work.

## 1.3 TKM TTT Finland

TKM Group is one of the leading manufacturers of high-quality saws, knives and consumables for the wood industry. They have been a family business that focuses on quality and sustainability in products and services. For more than 50 years, partners from the sawmill-, pulp-, plywood and veneer industries have trusted in the tools from the company. Their tools are distributed in around 35 countries worldwide.

TKM TTT Finland is a part of TKM Group. TKM Group has 12 headquarters internationally. In Finland, the company headquarters are in Akaa. Picture 1 shows a few details about the company profile. (TKM TTT Finland 2021.)



Picture 1. TKM TTT Company profile (TKM TTT Finland 2021).

The company wants to develop a customer satisfaction measurement process to apply on an annual basis. The company prefers to have a model of the process so that it can use it to follow and update customer needs and expectations on a frequent basis, then compare the progress of the company before and after the survey, and adjust in time for better future development.

## 2 CUSTOMER SATISFACTION MEASUREMENT

### 2.1 Theories of customer satisfaction

Customer satisfaction indicates the level of fulfillment that the customer derives from a product, or a service based on whether their needs are met. The modern day business world with fast changing market demands and increased competition requires companies to have a competitive edge to outshine competitors. A strong and sustainable customer relationship is one of the key answers. Companies are required to connect with customers by informing and engaging them

into their businesses (Kotler 2016, 379). Customers buy products or services from companies that offer the highest customer perceived value (Armstrong 2012, 18).

However, there is no universally accepted definition of customer satisfaction (McCollough 2000, 423). There are many competing theories based on various standards used to explain customer satisfaction, such as the Expectancy-Disconfirmation Paradigm (EDP), the Value-Precept Theory, the Attribution Theory, the Equity Theory, the Comparison Level Theory, the Evaluation Congruity Theory, the Person-Situation-Fit model, the Performance-Importance model, the Dissonance, and the Contrast Theory. In all the mentioned theories, the two theories widely accepted that best explain customer satisfaction are Expectancy-Disconfirmation Paradigm (Oliver 2009, 302) and the Value-Precept concept (Yuksel & Yuksel 2011, 111).

The Expectancy-Disconfirmation Paradigm theory indicates that customers compare a new service experience with a standard they have developed. Their satisfaction level with the service is determined by how well the service measures up to the standard. The theory presumes that customers make purchases based on their expectations, attitudes, and intentions (Oliver 2009, 302). During or after the purchasing process, the customer will evaluate the service based on the comparison between their pre-purchase standard and their perception of the performance of the product. Figure 1 demonstrates the model of the Expectancy-Disconfirmation Paradigm theory.

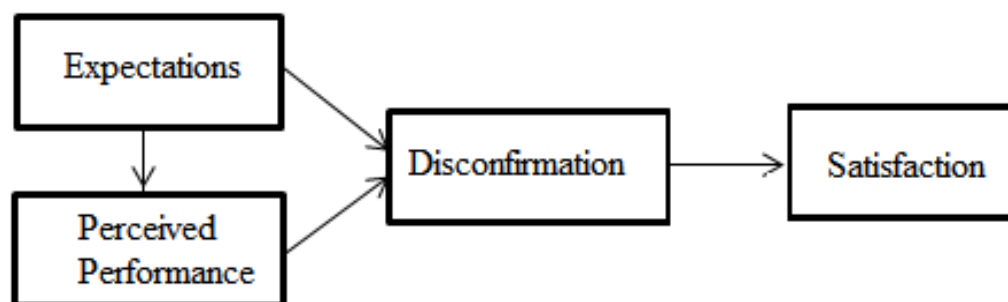


Figure 1. The model of the Expectancy-Disconfirmation Paradigm theory (Oliver 2009, 302).

The Value-Precept theory proposes that satisfaction is an emotional response triggered by a cognitive evaluative process in which the perceptions of an offer are compared to one's values, needs, wants, or desires (Yuksel et al. 2011, 111). Customers often make some judgment about a service, its benefits, and the outcomes of using the service before making the purchase decision. The closer the performance of the service to the pre-purchase judgment, the better the customer satisfaction outcomes. Table 1 shows the comparison between the Expectancy-Disconfirmation Paradigm theory and the Value-Precept theory.

Table 1. The comparison of Expectancy-Disconfirmation Paradigm theory and the Value-Precept theory.

Expectancy-Disconfirmation Paradigm theory	Value-Precept theory
<ul style="list-style-type: none"> <li>• The customer has a set of standards for a service or product.</li> <li>• The customer has expectations, attitudes, and intentions with the service or goods when making the purchases.</li> <li>• The customer makes a comparison between the standard and the perception of the performance of the service or product during or after the purchase.</li> <li>• The customer satisfaction level is based on the difference in the comparison made.</li> </ul>	<ul style="list-style-type: none"> <li>• The customer has a set of values, needs, and wants for a service or product.</li> <li>• The customer makes judgement on the service/products and the outcomes of using the services before purchases.</li> <li>• The customer makes comparison between the pre-purchase judgement and the value given by the service or product after the purchases.</li> <li>• The customer satisfaction level is based on the comparison made.</li> </ul>

In general, the definitions of customer satisfaction in the theories have similarities. All the definitions agree that customer satisfaction is directly connected to personal perceptions and expectations. The definitions presume that the differ-



ence between the reality of the product or services and the perception or expectation of the customer can easily improve or reduce the level of customer satisfaction.

## **2.2 The importance of customer satisfaction in B2B**

Customer satisfaction in B2B is a top priority, because customer satisfaction leads to brand loyalty, and brand loyalty is a sustainable competitive advantage. It is required to serve distinct preferences of customers worldwide. (Kotler 2006, 226.) As B2B relationships are diverse and complex, customer satisfaction in B2B has unique features. The customers of the company in B2B are companies, hence the customers at the same time can be considered as partners. To satisfy the customers in B2B also means to satisfy the partners.

B2B customer satisfaction includes optimizing and inspiring experiences that will help guide customers to purchase. In Business to Customer (B2C) markets, only one person makes buying decisions based on his or her personal interests and motivation. In B2B markets, there are many people taking part in the buying decision-making process, such as the executives, the managers, the dealers, and the competitors. Each of them has their own interests and motivation, and all have an effect on the buying decision of the company. According to Kotler, there are eight distinguished stages in buying process as followed:

- Stage 1: Problem recognition,
- Stage 2: General idea description,
- Stage 3: Product specification,
- Stage 4: Search for and evaluation of potential suppliers,
- Stage 5: Proposal solicitation and analysis,
- Stage 6: Supplier evaluation and selection,
- Stage 7: Order-routine specification,
- Stage 8: Performance review (Kotler 2006, 28-29).

Figure 2 shows more details about the complexity of the B2B buying decision making process. Throughout the process, in every step there is a general agreement within the company on the requirements and quality of the product or service. Therefore, customer satisfaction in B2B can be understood as the level of satisfaction of a company with another company's products or services.

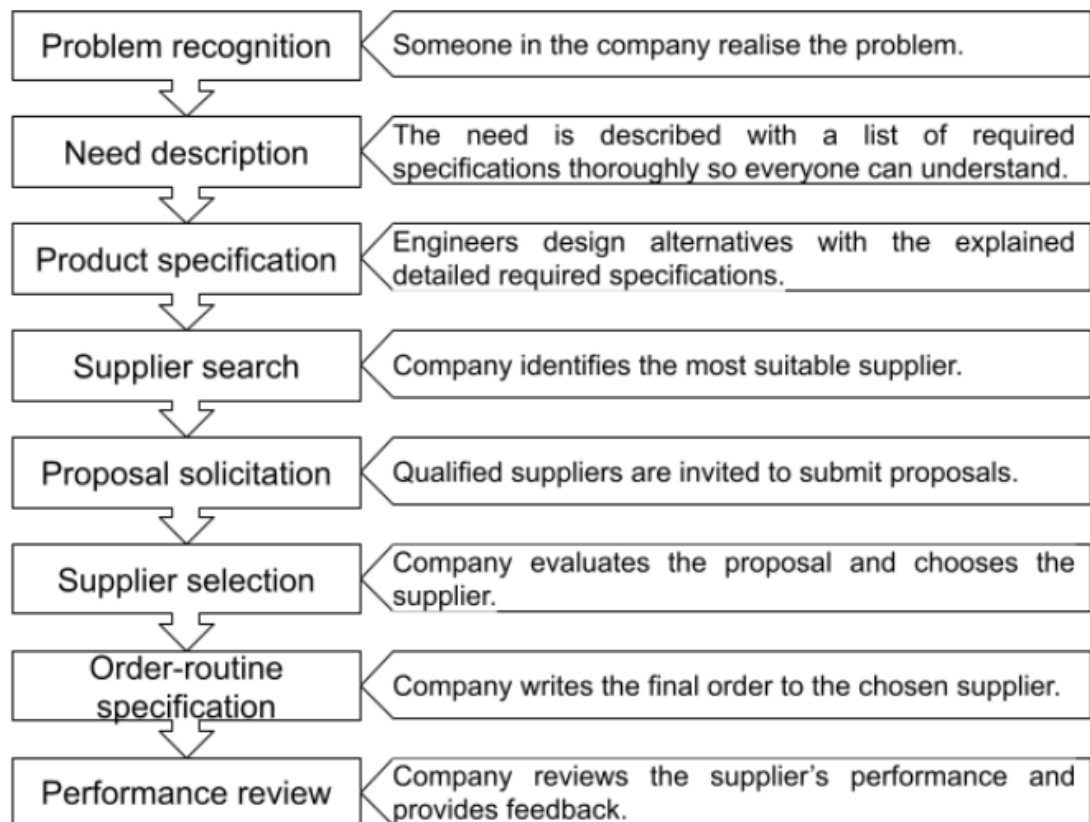


Figure 2. The complexity of the B2B buying process.

B2B customers are more careful in making buying decisions and at the same time more demanding. They are more rational and consider a lot of aspects before making a purchase decision. There are more people who need to be impressed. Moreover, the quantity of products or purchases in B2B is much higher and more complex than those in B2C. Each purchase holds higher stakes, and each contract signed is more valuable. Because a mistake could lead to business failure, a more professional level of purchase takes place (Hague 2015).

It is more complex to measure customer satisfaction in B2B. However, customer satisfaction is becoming increasingly important for B2B companies. In the

modern globalized and digitalized market, and in the customer-driven economy, customers are getting more demanding than ever. They are exposed to many options and various decisions. It is essential for B2B companies to find ways to satisfy customers to increase their loyalty; otherwise, the customers can find someone else who will.

According to a Microsoft Dynamics' study in 2018, 95% of the customers indicated that good B2B customer service is a crucial factor affecting the level of customer loyalty of a company (Microsoft 2018). The same study shows that 61% of the customers stopped doing business with a brand due to a poor customer experience. Measuring customer satisfaction in B2B has become the need for a company to continue growing and develop.

### **2.3 Customer satisfaction measuring process**

Measuring customer satisfaction is a process that companies need to go through to develop and grow. Although the customer satisfaction level cannot be automatically and directly measured like other data such as revenue streams, customer reactions, website visitors, etc., there are still various ways with tools and metrics for the company to approach the customers and analyze the results.

#### **2.3.1 Sources of information and systems**

The use of multiple satisfaction measures is defined by Czarnecki as follows (Czarnecki 1999, 37):

- Satisfaction is related to overall consumer behavior. For this reason, the use of a single measure is not able to provide reliable information.
- The use of multiple satisfaction measures can verify the integrity and accuracy of collected data.

According to Evangelos and Yannis, there are multiple ways for business organizations to collect information. Table 2 shows the examples of available sources of customer information. The information can be collected using research methods, operational data, marketing, and sales, etc. (Evangelos and Yannis 2010, 12-13.)

Table 2. Customer satisfaction sources of information (Evangelos and Yannis 2010, 12).

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

The customer satisfaction measurement can be divided into two categories (Caddote and Woodruff 1987, 305-314). The first category is the direct measurement system. The data collected by using this system comes directly from the customer, and may include, for example a customer satisfaction survey, customer complaints, customer interviews, etc. The company can use diverse types of customer satisfaction surveys to target separate customer demographics and yield different results. There are various kinds of surveys to

consider, such as in-app surveys, post-service surveys, email surveys and volunteer feedback. (Evangelos and Yannis 2010, 13.)

The second category is the indirect measurement system. The information collected by using this system comes from data reflecting the result of sales level, website traffic, the reaction to the publications of contents, etc. Although using this system alone is unable to offer a solution to the problem of customer satisfaction measurement, it is a less intrusive tactic and at the same time a highly valuable approach. It can be used at the same time together with the first measurement system so that the company can yield better results. (Evangelos and Yannis 2010, 13.)

### **2.3.2 The tools and metrics**

Together with the distinct categories, there are some specific tools and metrics designed for companies to measure their customer satisfaction level. In 2019, Forbes listed the 20 best customer experience metrics used in businesses (Morgan 2019). Some of the most used metrics can be listed, such as the Customer Satisfaction Score, Net Promoter Score, Customer Effort Score, Customer Churn rate, Customer Retention rate, etc.

The Customer Satisfaction Score, or CSAT, is one of the most common metrics used to measure the average satisfaction level of customers. It uses variations of a simple question: "How is your experience with our company?" The customer picks the answer with a scale ranging from very unsatisfactory, unsatisfactory, satisfactory, very satisfactory. The more customers give positive answers, the higher the satisfaction score. (Lee and Phillips 2021, 24)

This metric is the most common because it can be used for any kind of interactions of customers with the company in any field (Morgan 2019). The question is simple, and the result is quick to see. The company will get immediate feedback related to their customer experience. They can use this metric to follow changes

in customer attitudes before and after an adjustment was made in the company. Based on the result, the company can figure out what did or did not go well.

However, as quick, and easy as it is, CSAT is unable to give companies predictions of their customer behavior, or the level of their customer loyalty. It can only provide the level of satisfaction of the customer at the time being. To measure the customer loyalty level, the company can use another metric called the Net Promoter Score (NPS). The Net Promoter Score is a metric developed by Bain & Company in 2009 to measure future business growth of the company due to correlation to customer loyalty (Net Promoter System 2009). It is a metric built with variations of the question, "How likely are you to recommend our product or service to a friend?"

The answer comes with a scale ranging from 1 to 10. The NPS will be calculated by subtracting the percentage of detractors (results from 1 to 6) from that of promoters (results from 7 to 9). The higher the score, the higher the loyalty of customers to the company. (Net Promoter System 2009.) The question is straightforward and easy to answer.

However, it is worth noticing that unhappy customers tend to respond more often than satisfied customers. This can sometimes negatively affect the results of a survey. This is simultaneously an opportunity for the company to look back and focus on areas that need improvement. If the company manages to make the right adjustment in time, it can leave a great impression on dissatisfied customers.

Another commonly used metric to measure customer loyalty is the Customer Effort Score (CES). In 2010, Dixon, Freeman and Toman introduced the Customer Effort Score metric (Dixon, Freeman and Toman 2010). It is a new metric built to identify issues occurring in service interactions. It asks the customer variations of the question: "How hard did you have to work to get a problem solved?"

The answer also comes with a scale ranging from 1 (it was easy and quick) to 5 (it was a headache). The lower the score, the better the performance of the company, hence the higher the satisfaction level of the customer. This metric is a good indicator of increasing customers' loyalty by saving them time and effort. (Dixon et al. 2010.)

Additionally, customer churn rate and customer retention rate are two useful metrics that can be considered. Customer churn rate, by definition, is the rate at which customers stop doing business with an entity (Frankenfield 2021). It is most well-known as the percentage of service subscribers discontinuing their subscriptions in a certain time.

The company can keep track of and calculate their customer churn rate in a specific time. This is calculated by dividing the number of customers that they lost to the number of customers that they started with in the given period. The resulting percentage is the customer churn rate. (Frankenfield 2021.)

Meanwhile, customer retention rate measures the number of customers a company retains over a certain period (Peppers and Rogers 2011, 314). It can also be understood as the percentage of existing loyal customers to a company in a certain period. According to Kozielski, the customer retention rate can be calculated using the formula:  $[(E-N)/S] \times 100 = CRR$ , in which:

- E means the number of total customers at the end of the period,
- N means the number of new customers added within the period,
- S means the number of existing customers at the start of the period.

(Kozielski 2017, 47.)

### **2.3.3 The process**

With the information system, tools and metrics described, the design of a customer satisfaction measuring process can be developed. The implementation of

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 (Evangelos and Yannis 2010, 15).

The general rules remain unvarying although the process of collecting customer data can vary following the changes in the set of customers, their expectations, needs and preferences. The customer satisfaction measuring process is also a frequent and non-stop process. Figure 3 illustrates the main steps of the process for designing and implementing a customer satisfaction process. (Evangelos and Yannis 2010, 15.)



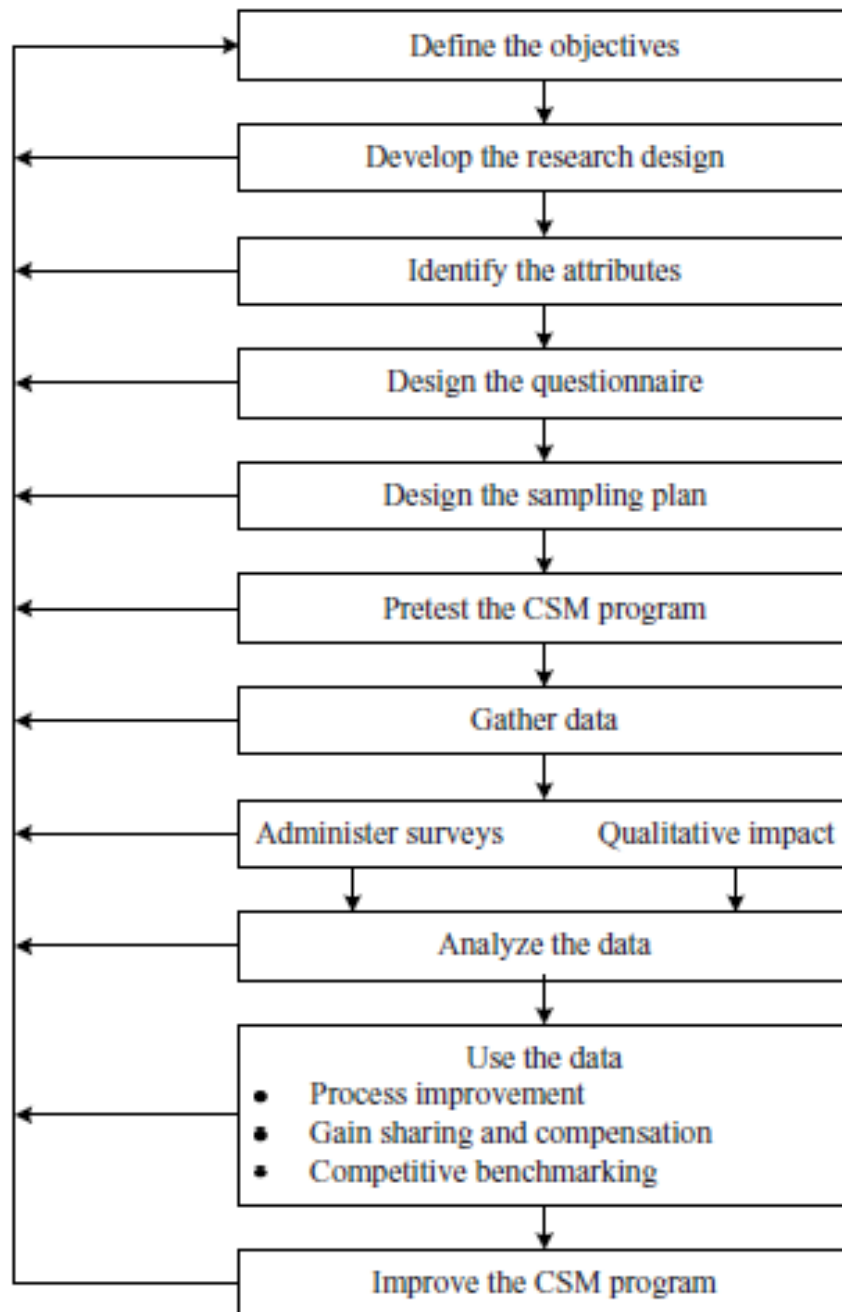


Figure 3. Design and use of a customer satisfaction measurement process.

### **3 RESEARCH PLAN**

#### **3.1 Purpose of the research**

This research aims to measure the level of customer satisfaction toward the company services. At the same time, the research also develops a customer satisfaction measuring process for the company. With the developed process, the company can measure the level of customer satisfaction on a frequent basis. Using the process will allow the company to gather and analyze the level of customer satisfaction of the clients, benchmark competitive advantages and improve customer satisfaction.

The research is conducted as a case study of TKM TTT Finland on their focused customer group. It unites three goals contributing to the development of the customer satisfaction measuring process of the company:

- To determine the satisfaction level of customers with the current service,
- To suggest development to current customer service and the delivery process,
- To introduce a frequent customer satisfaction measuring process and offer suitable recommendations for the current services.

#### **3.2 Research data**

The research data was the answers from the target groups. The company provided a list of the targeted customers. The list consists of contact information of 47 end customers.

The customers are international companies coming from France, Finland, Norway, Sweden, Latvia, Ukraine, Russia, South Africa, and USA. There are 30 customers in the wood industry, 4 customers in the metal industry, 13 customers in machine elements and 5 customers in the paper industry.

### **3.3 Research data collection method**

The data of the research was collected using online surveys. The online survey was made in Google Forms. The collected data was analyzed using CSAT and CES metrics.

Because the target group is considered small (less than 100 respondents), mixed research methods were used in the questionnaire. By using mixed research of both quantitative and qualitative methods, more information was retrieved and analyzed to provide more in-depth understanding of customer needs. A survey was designed and used as a means of data collection. An online Google Form was delivered to groups of customers of the company via e-mail accompanied by a cover letter from the company.

The questionnaire included twelve questions, among which eight were close-ended and four were open-ended. The answers to the eight close-ended questions were analyzed using a quantitative method. Accordingly, the answers to the four open-ended questions were studied under a qualitative method. The results were reported as a combination of the analyzed information.

The survey was sent to the customer using email. It was sent together with a cover letter explaining the background and purpose of the survey to the customer. The respondent was offered a Google Form link to the survey. The email also included an additional confirmation from the company explaining the aims of the research. The survey and the cover letter can be found in the appendices at the end of the thesis.

### **3.4 Metrics and tools**

There are two metrics that were used to measure the customer satisfaction measure in this research: CSAT and CES. These metrics were introduced in

Chapter 2.3.2. They were used in the questionnaire to measure how the customer perceives their experience working with the company, and the level of satisfaction of the customer toward the customer service and delivery accuracy.

In the survey, one of the CSAT questions was formed as “How is your overall experience working with our company?”. The respondents chose one of the options as shown in Picture 2.

How is your overall experience working with our company? \*

	1	2	3	4	
Dissatisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excellent

Picture 2. CSAT metric used in the customer satisfaction survey.

Picture 3 illustrates a modified version of the questions of the CSAT metric in the survey. In this case, aside from the answer options that were included in the metric scale, there was an additional option in case the customer had no experience working with the service provided. With the extra option, the company can exclude the proportion of customers that had no experience with the service.

How is your experience working with our delivery service and delivery accuracy?

Excellent

Good

Somewhat dissatisfied

Dissatisfied

I don't have experience

Picture 3. The modified version of CSAT question with extra option used in the customer satisfaction survey.

The CES questions in the survey were used to measure the proficiency of the services. For example, a CES question in the survey was formed as “How much

time did it take us to address your questions and concerns?” The respondents chose one of the options as shown in Picture 4. In both metrics, the collected customer feedback was analyzed to find the average.

How much time did it take us to address your questions and concerns? \*



Picture 4. CES metric used in the customer satisfaction survey.

### 3.5 Survey design

There were 12 questions in total in the survey (Appendix 1). The survey was designed to be mixed research using a quantitative CSAT and CES module with open questions. The topics of questions were made in accordance with the requirements of the company. The questions were divided into topics with both open-ended and closed-ended questions to make it easier for the respondents to answer.

Questions were related to the areas of customer satisfaction discussed with the company. The questions were designed to focus on customer preferences when choosing products or services. The survey was divided into three parts. The first part aimed at determining the level of customer satisfaction of the clients of the company and improving the product and service based on customer preference. The second part focused on the experiences of customer with customer service and sales departments and at the same time figure out if the service matches with the perceptions of customers. The third part of the survey was designed to measure the satisfaction level of customers with the delivery accuracy and improve the services based on the feedback of the respondents.

There were 12 questions in total. The first question defined the customer industry. The second question defined the preference of customers when choosing a product and/or service. The third, fourth and seventh questions were CSAT type

questions which defined the level of customer satisfaction with the respective department. Other questions such as the fifth, sixth and eighth were essential CES type questions asked to provide additional information about customer experience in different departments. The tenth, eleventh and twelfth questions were open-ended questions which contain empty space, where respondents can write additional comments to discuss any issues which might be actual and current with the company.

### **3.6 Survey execution**

An online questionnaire was a suitable approach for this research. This method allows the company to survey many customers in a time-saving manner. It was also the most efficient approach due to the COVID 19 pandemic situation which does not allow personnel to travel and participate in face-to-face discussions. Questionnaires were sent to targeted customer groups through email with instructions and deadlines.

After one week from the first email, a reminder email was sent to the contact lists. Follow-up emails were sent to the contacts regarding the experience with the survey. Finally, when the survey was closed, a final follow-up and thank you email was sent.

The survey was sent out on 11 October. The reminder email was sent out on 18 October. There were some replies from the customers that included questions and concerns related to the surveys; hence, there were extra follow-up emails sent in time to resolve the issues. The thank you email was sent on 22 October.

## **4 RESULTS AND ANALYSIS**

### **4.1 The results**

The responses of the online survey were collected and analyzed. The online survey response rate accomplished 61.7% of total customers in the group. It is essential to highlight that as a B2B customer satisfaction survey, some customers were busy and did not find time to fill out the questionnaire, while some were out of the office and unavailable to complete the survey. In fact, there were 29 responses gathered online out of a total of 47 customers.

Nevertheless, the available responses provided sufficient information concerning general customer satisfaction. The results were based on the answers of 29 respondents from different industries. The completion rate of the survey was 100%, which meant that 100% of the respondents finished the survey.

### **4.2 Result analysis**

#### **4.2.1 Quality of services**

The first part of the survey was designed to determine the background of the respondents, their overall preference in choosing products and services, and their overall experience with the company. The aim was to find out:

- Which industry is the customer working in?
- What is the most crucial factor affecting a customer's decision in choosing a service?
- What is the level of satisfaction of the clients working with TKM TTT Finland?

Figure 4 shows the working industry of the respondents. TKM TTT Finland's main industry are wood, paper and machine elements. In this survey, 19 respondents are from the wood industry, which made up to 65.5% of the respondents. Six respondents are from the machine element industry, making up 20.7% of the total replies. Meanwhile, all 4 respondents from the metal industry answered the survey, which made up 13.3% of the total result. Unfortunately, there was no answer from the customers in the paper industry.

Which industry are you working in?  
29 responses

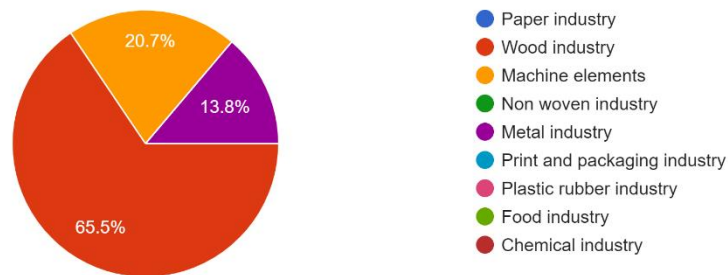


Figure 4. The working industry of respondents.

The second question was not directly connected to the customer satisfaction level but it showed the value of the product and services that the customer found important. The value chosen by the majority is the most important to this group of customers. This can be seen as key value for the future development of the company.

According to the results shows in Figure 5, when it comes to choosing the products and services, customers value product performance most with an average score of 4.4. Delivery accuracy is the second factor in consideration with a score of 3.0. The value of product lifetime and customer service to customers are quite close with scores of 2.7 and 2.6, respectively. Engineering performance is the last factor in consideration with an average score of 2.4.

However, the preference varies for customers in different industries. Customers in the wood industry value product performance and product lifetime most, while



delivery accuracy and engineering performance are the least valuable factors for them. Meanwhile, customers in the machine elements value product performance and delivery accuracy most, and customer service is the last factor in consideration. For customers in the metal industry, delivery accuracy and customer service are the most essential factors, while engineering performance has the least impact on them when choosing a service.

### Factors affecting customer's decision in choosing a product/service

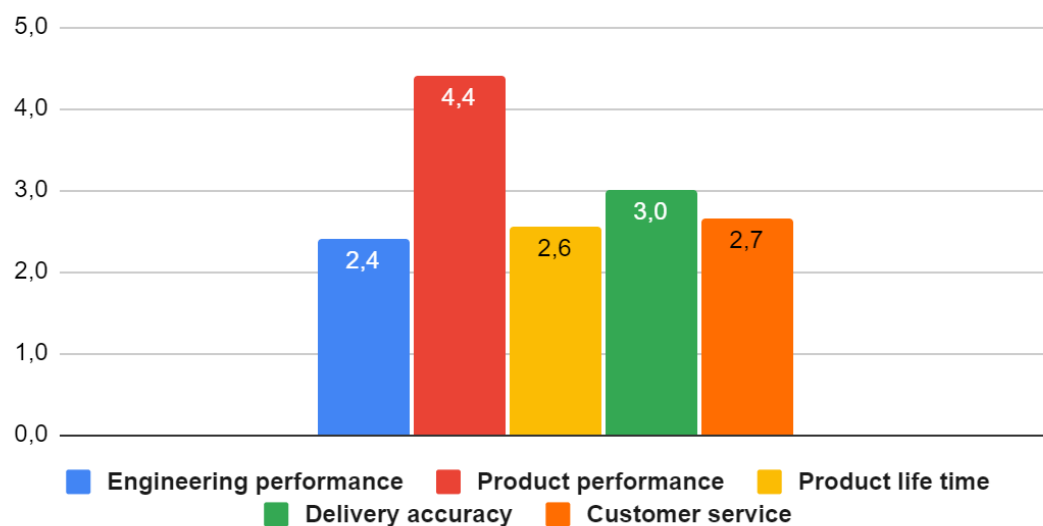


Figure 5. The factors affecting a customer's buying decision.

Figure 6 illustrates the overall experience of customers working with the company. According to the results of the survey, about 55% of the respondents have good experiences working with TKM TTT Finland. About 45% of the respondents feels that the partnership with TKM TTT Finland is excellent.

The overall experience of customers to the company is also high. The average CES of the company is 3.4 out of 4, which is extremely good. It shows that the company has been doing great in maintaining a strong and sustainable partnership with the customers.

How is your overall experience working with our company?

29 responses

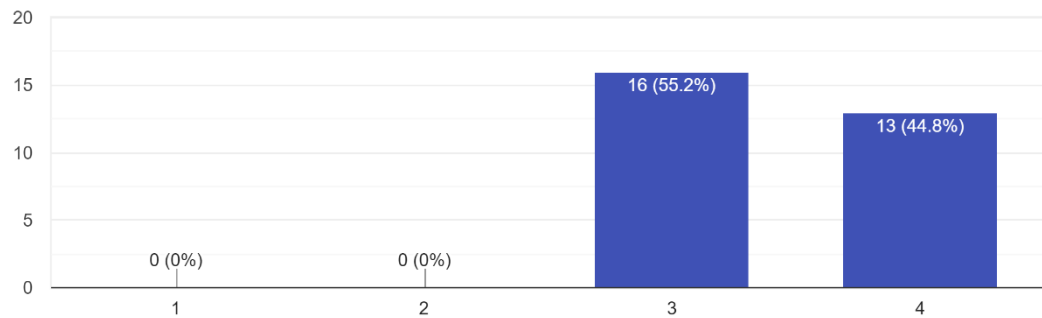


Figure 6. Overall experience of customers working with TKM TTT Finland (1=Dissatisfied, 4=Excellent).

#### 4.2.2 Customer service and sales

The second part of the survey was created to measure the level of customer satisfaction on customer service of TKM TTT Finland. The aim was to find out the overall impression of customers of the customer service department, how well the department has been doing in answering customer concerns, and how long it usually takes for the company to process a question.

Figure 7 shows that most of the customers feel satisfied with the customer service. About 20% of the customers rate the service as excellent, while 80% rate it as good. According to the results, most of the respondents consider the customer service department as a good service. The customer in the wood industry has the highest satisfaction rate, with 8 customers rating the service as excellent. Customers in the metal and machine part industries also have pleasant experience working with the customer and sales department.

How is your experience working with our customer service and sales?  
29 responses

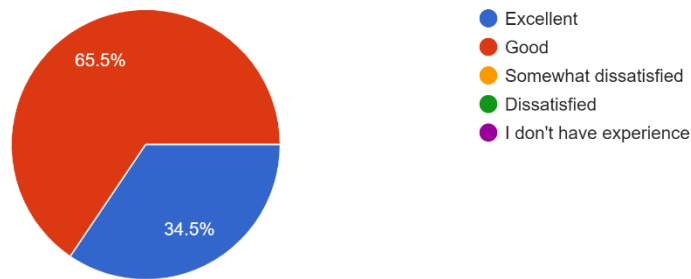


Figure 7. Overall experience of customers working with customer service and sales.

Figure 8 illustrates the level of understanding of customer and sales departments regarding questions and concerns of customers. On average, it was found that most of the communication works well. Nearly 83% of the customers rated the communication as good, and 17% of the group considered the service as excellent.

Customers from the metal industry commented that the relation with the salesperson is great. Respondents from the machine elements industry stated that there was no challenge in communicating with salesperson and there was always prompt response from customer service. Some customers in the wood industry noted that there was some challenges when discussing product information, material price, product terms and knife delivery.

How well did we understand your questions and concerns?  
29 responses

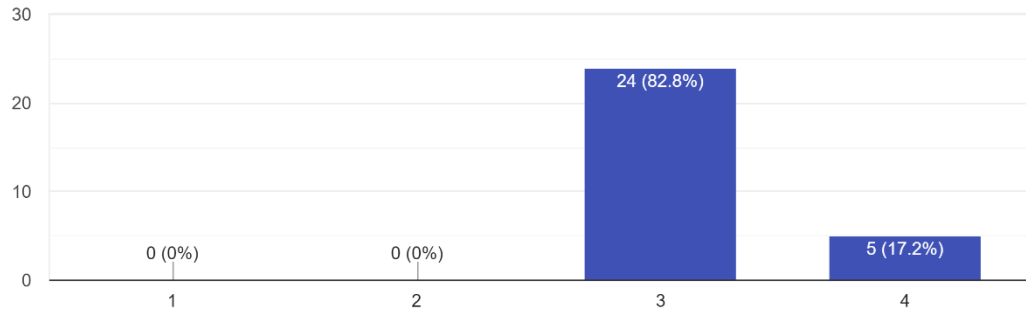


Figure 8. Communication regarding issues of the customer service department (1=Not so well, 4=Extremely well).

Figure 9 shows how the customers felt about the processing time when they contact the department. About 52% of the customers said that the response speed of the service was faster than expected. Just over 30% of the respondents said that the response speed was average.

However, 17% of the respondents said that it takes longer than expected for the service to address their concerns. In the feedback section, there are remarks from customers in the wood industry and metal industry saying there have been delays in answering the questions, but the delay was reasonable.

How much time did it take us to address your questions and concerns?  
29 responses

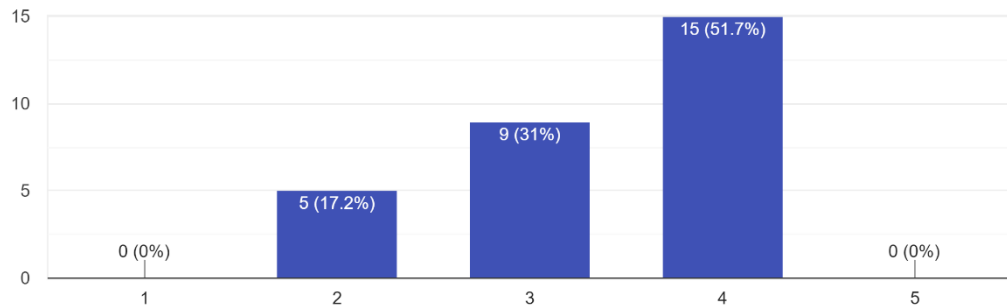


Figure 9. Issue process time in customer service department (1=Much longer than expected, 5=Much shorter than expected).

The respondents stated that there was no challenge in communicating and processing issues in customer service. Most of the customers perceive this as a sign of a good partnership. It is essential that the customer service department keeps up with the good performance, giving out quick and adequate answers to customers in order to maintain strong and sustainable partnerships.

#### **4.2.3 Delivery accuracy**

The third part of the survey was designed with five questions to measure the level of customer satisfaction with the delivery service and delivery accuracy. The aim was to find out the level of satisfaction of the clients with the delivery accuracy, and to what extent does the delivery accuracy match the expectations of customers. One open-end question allowed customers to write down their comments on the delivery services. There were two other open-end questions in which respondents could fill in general feedback to the company and the survey.

Figure 10 shows the overall experience of customers with the delivery service and delivery accuracy. More than half of the respondents (58.6%) felt well with the service. Still, nearly 28% of the customers were somewhat dissatisfied with the delivery time. About 14% of the customers regard the delivery accuracy as dissatisfactory.

How is your experience working with our delivery service and delivery accuracy?  
29 responses

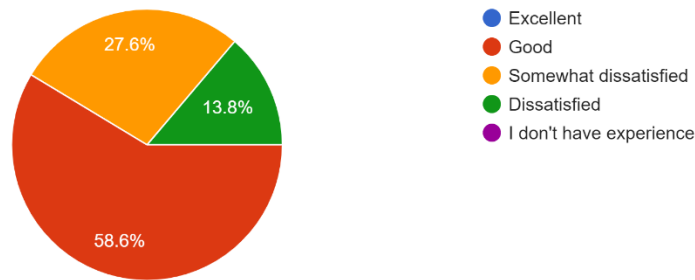


Figure 10. Overall experience of customers with delivery service and delivery accuracy.

Most of the respondents from the wood industry felt that the delivery service and accuracy are good; however there were still three customers in the wood industry who felt somewhat dissatisfied. It is worth noticing that five out of six customers from the machine elements industry and two out of four customers in the metal industry stated that the delivery accuracy underperforms.

This difference might relate to how different groups of customers value different factors in product and services, as customers in the metal and machine elements industry highly value delivery accuracy when choosing partners. They noted that they would want to be informed about the order of late deliveries. They also recommended that the company follow orders that are late on delivery and update the information to the customers on time.

Figure 11 illustrates the satisfaction level of customer with the accuracy of the service. Around 45% of the respondents considered the delivery accuracy to be adequate, and around 52% of the respondents said that delivery accuracy underperforms. Over 3% of the customers stated that it was not well.

The customers from the machine elements industry commented that the deliveries are late and the delivery accuracy is poor. Customers from the metal industry recommended the company to improve the situation by tracking down late orders and updating customers in time with the delivery times. Customers from

the wood industry suggested the company send the invoices after the delivery. They want to be informed about the late deliveries and provided with more information on product terms.

How well did our delivery accuracy match with your expectation?  
29 responses

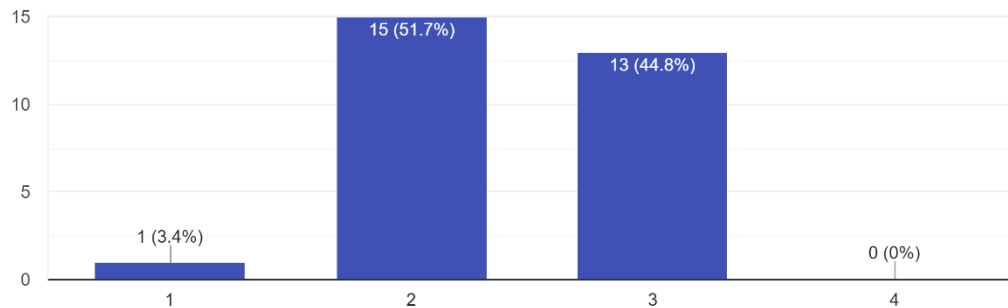


Figure 11. Customer feedback on delivery accuracy performance (1=Not so well, 4=Extremely well).

There are some general recommendations for the company and the survey. A customer from the metal industry commented that the survey could have been sent at a better time. It is recommended that the survey should be sent via company email, or a trusted source so that the respondents feel safe when filling it. A customer from the wood industry also recommended that the company should improve the delivery accuracy and keep up with continuous development.

### 4.3 Customer satisfaction measuring process

The general process was introduced in Chapter 2.3.3. Based on the general process and the implemented survey, a customer satisfaction measuring process for TKM TTT Finland is developed. This is a frequent and non-stop process. Picture 7 shows the customized process with explanations.

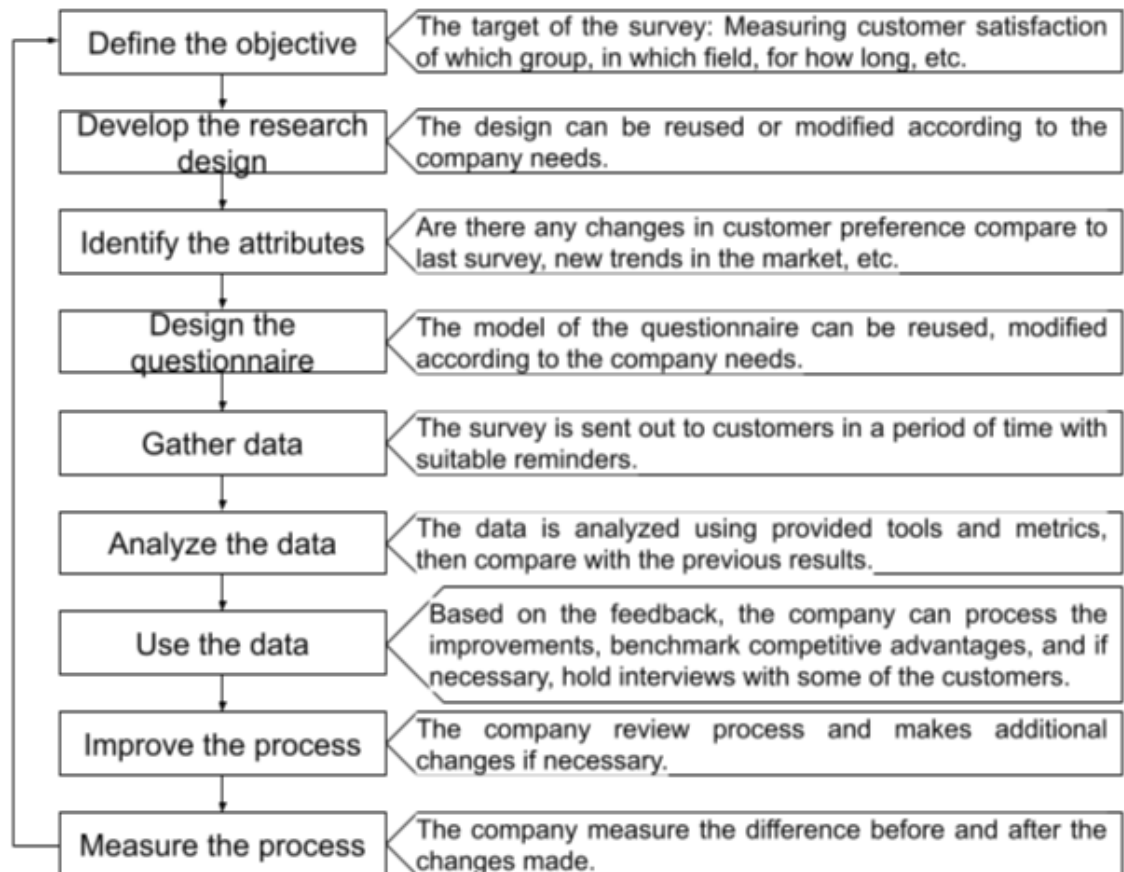


Figure 12. Customer satisfaction measuring process for TKM TTT Finland.

#### 4.4 Recommendation

Based on the results, there are some recommendations for further development. The survey is designed to measure customer satisfaction in a specific department but it can still be customized and improved. There are also noticeable differences in the response rate of the survey before and after it was sent using personal email and company email.

The recommendations are offered to improve the survey and the services of the company. The recommendations for improving the survey are based on the results of the implemented survey. The recommendations for the services of the company are based on the results of the survey and personal knowledge.



#### **4.4.1 Survey recommendation**

The designed questionnaire can be used on a frequent basis. It is suggested that the company implement the process at least once per year. It is also suitable to implement the survey after the company has made adjustments to the product or service. The recommended starting time for the survey implementation is Monday or Tuesday, from 10 am to 11 am, during working weeks for the target group.

The survey should be open for two or three weeks so that the customers have access to and fill in the survey. The survey reminder should also be sent on a frequent basis. For example, if the survey is sent out on Monday, then the reminder should be delivered on Wednesday or Thursday of the same week. After the survey is closed, a message of gratitude should be sent out.

After analyzing the data, if it is necessary, the company may or may not implement personal interviews for more in-depth information. For example, the company can decide to interview the customers from the machine elements due to their comments on the delivery accuracy. The interview can be implemented online with open-ended questions so that the customers can discuss the matter with the company directly.

It is also recommended to add rewards for those who completed the survey. For example, at the end of the survey, customers can leave their contact information to enter a raffle for rewards such as gift cards, small souvenirs, etc. This can help to attract more respondents. At the same time, the company can use this information to contact the customers afterward.

#### **4.4.2 Company recommendation**

According to the feedback, there are a few important notes that the company should focus on. TKM TTT Finland can focus on developing the products and

services based on the preference of the customers. For the wood industry, the focus should be put on the product performance and product life time. For the machine elements industry, product performance and delivery accuracy are essential. For the metal industry, further development can be put on customer service and delivery accuracy.

The company has been doing well in maintaining strong and sustainable partnerships with customers. The customer service and sales should continue to strengthen the current partnership, giving out quick and adequate answers, especially with customers in the metal industry. As there have been comments on product information and terms, the company can consider revising and providing more detailed product information, price and terms. Moreover, with the developed customer satisfaction measuring process, the company can actively measure the customer satisfaction level and bring more value to their partnerships.

The company should also focus on developing and improving the delivery accuracy, especially for customers in the metal and machine elements industry. This is crucial, as delivery accuracy is one of the most valuable factors for customers in these industry. It is recommended to consistently keep track of the delivery order and inform the delivery schedule to the customers on time. The company can consider the requests of the invoice sending time so that the product information, billings and invoices should be sent in suitable order. If the delivery is late, it is also suggested to track down the late order and update it to the customers. If the issues persist, the company can communicate with the customers about the situation and at the same time choose more reliable alternatives for the delivery.

## 5 CONCLUSION

In general, all aims presented in the first chapter of the research have been accomplished. The thesis aims to measure the customer satisfaction level of the company, defines development to current customer service and delivery accuracy, and based on that develop a frequent customer satisfaction measuring process. The findings are essential components for the future development of the company – TKM TTT Finland. With a developed customer satisfaction measuring process, the company can implement the questionnaire on a regular basis and therefore get a better understanding of the customers.

The survey is the main tool used in this research. The answers to the survey were gathered online. According to the results, the current customer satisfaction level with the company, customer services and sales, delivery service and delivery accuracy is strong. The overall satisfaction level with the company is 3.4 out of 4. Customers consider TKM TTT Finland to have good customer services and sales and an average delivery accuracy.

There are several recommendations that can be used to contribute to the future development of the company. The company can focus on developing product performance and delivery accuracy, as they are the two most important values based on customer preference. The company can also customize the development in each industry based on the preference of customers. The current customer service and sales department is valued at a high level. The delivery accuracy needs to be improved.

It is essential that the company maintains the current valuable B2B partnership while keeping up with good communication rates, giving out quick and adequate answers to customers. At the same time, the company should improve its delivery accuracy. It is suggested that the company keeps a closer eye on delivery orders and updates customers with the correct delivery information on time. It is

also recommended that the product information, billings and invoices should be sent to the customers in a suitable order.

In addition, after this research, the company can implement the survey on a regular basis. The key to the development and progress of any successful company is always keep updated information regarding customer satisfaction. The customer satisfaction measuring process in the research is designed with questions that can be used on a frequent basis. The collected data is measured and can be used to compare to prior results for better understanding.

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## Appendix 1 Customer satisfaction survey

Dear customer, this survey would take an average of 5 minutes to complete. Your opinions are extremely valuable to our company.

We would securely protect your personal opinion and information that you have filled in the survey. If you agree with our privacy policy, agree to participate in the survey and let us use your opinion to develop our company, please proceed with the questions below. If you have any questions regarding the content of our survey, please contact us at [tft.sales@tkmttfinland.com](mailto:tft.sales@tkmttfinland.com)

You can check our privacy policy here: <https://www.tkmgroup.com/en/privacy-policy>

### 1. Which industry are you working in?

- a. Paper industry
- b. Wood industry
- c. Machine elements
- d. Non woven industry
- e. Metal industry
- f. Print and Packaging industry
- g. Plastic rubber industry
- h. Food industry
- i. Chemical industry

### 2. Please rate from 1 (least important) to 5 (most important) the factors affecting your decision in choosing product/service?

- a. Engineering performance
- b. Product performance
- c. Product life time
- d. Delivery accuracy
- e. The customer service

### 3. How is your overall experience working with our company?

- a. Excellent
- b. Good
- c. Somewhat dissatisfied
- d. Dissatisfied
- e. I don't have experience

**4. How is your experience working with our customer service and sales?**

- a. Excellent
- b. Good
- c. Somewhat dissatisfied
- d. Dissatisfied
- e. I don't have experience

**5. How well did we understand your questions and concerns?**

- a. Extremely well
- b. Very well
- c. Somewhat well
- d. Not so well

**6. How much time did it take us to address your questions and concerns?**

- a. Much shorter than expected
- b. Shorter than expected
- c. As expected
- d. Longer than expected
- e. Much longer than expected

**7. What challenges do you face using our customer service and sales?**

**8. How is your experience working with our delivery service and delivery accuracy?**

- a. Excellent
- b. Good
- c. Somewhat dissatisfied
- d. Dissatisfied
- e. I don't have experience



**9. How well did our delivery accuracy match with your expectation?**

- a. Extremely well
- b. Very well
- c. Somewhat well
- d. Not so well

**10. What kind of challenges do you face using our delivery service and delivery accuracy?**

**11. What do you recommend us to improve and how?**

**12. Please feel free to leave any comments, feedback or questions here.**

## Appendix 2 Cover letter

Dear customer,

I am a student of International Business at Karelia University of Applied Science. Currently, I am conducting my thesis as a research work measuring the level of customer satisfaction of TKM TTT Finland.

By responding to the questionnaire, you will help to draw conclusions on how to improve the quality of the services offered and to prepare for future development of the company.

You can access the survey in Google form here:

<https://forms.gle/GycYG4EovpLTSQMF7>

The answers will be processed anonymously and confidentially; individual responses cannot be recognized from the results. The results will only be used for research purposes. Please, submit the filled-in questionnaire by 23 October 2021.

Answering the questionnaire will take approximately 5 minutes. If you have any questions concerning the survey and the research, please, do not hesitate to contact me directly via email [huong.dinh@edu.karelia.fi](mailto:huong.dinh@edu.karelia.fi). Or you can contact TKM customer service at [ttt.sales@tkmtttfinland.com](mailto:ttt.sales@tkmtttfinland.com).

Thank you for your participation!

Kind regards,  
Huong Dinh