

# Understanding Customer Experience through Methodological Triangulation - Case: Repair Services in Finland

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Asiakaskokemuksen ymmärtäminen menetelmätriangulaation avulla. Case: Huoltopalvelut Suomessa

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Tämän opinnäytetyön tarkoitus on kuvata menetelmätriangulaation avulla erilaisten tutkimusmenetelmien käyttöä asiakaskokemuksen ymmärtämisessä tietyssä liiketoimintaympäristössä. Yleisen ymmärryksen mukaan, usein ihmiset, jotka työskentelevät asiakastukiyksiköissä eivät ymmärrä tai tiedä, mitä tutkimusmenetelmää: laadullista tai määrällistä, tulisi käyttää ymmärtääkseen paremmin asiakas-ja palvelukokemusta.

Menetelmätriangulaatio käsittää laadullisen ja määrällisen tutkimuksen. Määrällinen tutkimus voi olla lähtökohtana asiakaskokemusten ymmärtämisen määrittelyssä. Aluksi voidaan asiakastyytyväisyyskyselyn avulla saada tietoja asiakaskokemusten ongelmakohdista. Laadullinen tutkimus pureutuu syvemmälle ongelmakohtiin. Se voi paljastaa puutteita palveluprosessissa ja auttaa ymmärtämään paremmin asiakaskokemusta. Joskus laadullista tutkimusta käytetään, jotta ymmärretään paremmin määrällisen tutkimuksen löydöksiä.

Tämä tutkimus on tehty suomalaiselle yritykselle vuonna 2010. Tutkimuksessa yrityksen nimeä ei paljasteta, ja siksi siitä käytetään nimeä Yritys XX. Yritys XX:n asiakastukiyksikkö on tilannut tämän työn, koska asiakastukiyksiköllä on ollut tarve parantaa ja ymmärtää paremmin huoltopalveluiden asiakaskokemusta. Laadullista tutkimusta oli mietitty kokeiltavaksi huoltopalveluiden osalta.

Tutkimus jakaantuu neljään pääosaan, joita ovat johdanto, teoreettinen viitekehys, tutkimusmenetelmät ja empiirinen osuus. Teoriaosuudessa käsitellään palvelua, asiakaskokemusta ja menetelmällistä triangulaatiota. Tieto on kerätty kirjoista ja artikkeleista, osa pohjautuu yleiseen tietämykseen. Määrälliset tutkimus- ja kyselymenetelmät ovat olleet jo käytössä Yritys XX:ssä, joten myös niiden prosessien vaiheet kuvataan. Tutkimuksessa on käytetty menetelmätriangulaatiota, jossa tutkimusaineistoa on kerätty seuraavien menetelmien avulla: haastattelu, havainnointi, Mystery Shopping ja kyselylomake. Tutkimuksen tulokset on saavutettu yhdistämällä jo olemassa oleva määrällinen tutkimus laadullisen tutkimuksen kanssa.

Empiirinen osuus koostuu laadullisesta tutkimuksesta, tutkimuksen tavoista, työn vaiheista ja tutkimustuloksista.

Lopputyön tuloksena on annettu suosituksia hyvistä tutkimusmenetelmistä, kuten haastattelusta ja havainnoinnista, joita voidaan käyttää asiakaskokemuksen ymmärtämisessä, ja näytetään toteen, miksi kannattaa käyttää menetelmätriangulaatiota, kun tutkitaan asiakaskokemuksia. Yritys XX:n tulee jatkossakin käyttää sekä määrällisiä että laadullisia menetelmiä asiakaskokemuksen ymmärtämisessä. Jotkut suositukset ovat jo toteutuneet tutkimuksen aikana Yritys XX:ssä.

Asiasanat: palvelu, asiakaskokemus, menetelmätriangulaatio, Mystery Shopping, huoltopalvelut

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**Abstract** 

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Understanding Customer Experience through Methodological Triangulation - Case: Repair Services in Finland

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The purpose of this study is to describe and analyze a good mixed method package, and understand the customer experience through methodological triangulation in a certain business environment. Very often people, who work in the customer support units, do not know what methods and researches, quantitative or qualitative, are suitable to understand overall customer service experience. To get deeper information on why the customer is not satisfied or why the customer experience is not good, there is a need to utilize different researches and methods.

Methodological triangulation encompasses both qualitative and quantitative methods. Quantitative research can be a starting point to define problems in the customer experience area. Qualitative research can reveal gaps in the service process, or provide better understanding about customer experience. Sometimes qualitative research is conducted to explain the findings of quantitative research or qualitative research can bring added value to quantitative research.

This study has been implemented for a Finnish company in year 2010. Because of legal reasons, the company has named as Company XX. The thesis has been assigned by Company XX customer support team, which was seeking for implementation of qualitative research. The business environment, in this context, was repair services.

Theoretical background is based on literature about services, customer experience management and formation of methodological triangulation. The data for the theoretical section was collected from literature, such as books and articles, and internet sources. There is quantitative approach already in use in Company XX, so the process steps of quantitative research has been described in the research method section.

The empirical section was conducted by qualitative research. There was already data available from quantitative research. Data for methodological triangulation has been gathered by using the following methods: interviews, observations, Mystery Shopping and questionnaire. Study results were achieved by using a combination of quantitative and qualitative research methods.

The outcome of this study is a recommendation for good methods, such as interview and observation that could be used in a repair business environment to understand the customer service experience better. Some of the recommendations have already been implemented in Company XX.

Keywords: services, customer experience, methodological triangulation, Mystery Shopping, repair services

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#### 1 Introduction

How well do customer satisfaction surveys explain the customer experiences? What kind of research methods would be needed to understand the customer service experiences better? These are the questions that people responsible for customer experience management are thinking on daily basis. Frequently people, who are working in the customer experience management teams, do not know what research approaches, quantitative or qualitative, should be used to understand the overall customer service experience.

I have a case company in this study and I have named it as Company XX, due to legal reasons. All the case study material, analyses and presentations are under non-disclosure agreement, and will not be published.

#### 1.1 Background of the study

I have worked many years in different marketing units and customer experience teams in a global Company XX. During this study, I was working as a Customer Experience Manager in Company XX's customer support team taking care of the repair customer experience management. My own understanding, based on my own work experience, is that many companies are using customer satisfaction surveys as methods to measure the customer experience. However, there should be a comprehension; is it possible to use qualitative research beside quantitative research, and is it possible to get more information about customer experience by using both the researches?

At the same time with this study, I was studying User-Centered Design at Laurea University of Applied Sciences, and got the comprehension about qualitative research, and how to use different research methods, qualitative and quantitative, side by side. I decided to implement some of the qualitative research methods in Company XX, and described those and quantitative research in this study; what methods are needed to understand the overall customer experience? The combination of qualitative and quantitative approaches is called methodological triangulation.

Methodological triangulation has not been implemented before in Company XX's customer support team, so the study is unique. I have not seen the usage of methodological triangulation either in other companies who have outsourced the repair network. Also Mystery Shopping as a method in the repair context is not an ordinary method. My opinion is that Mystery Shopping is not used in the repair channels due to complex repair processes. Mystery Shopping is often used in a retail environment, but not in a repair environment.

#### 1.2 The purpose of the study

The purpose of this study is to describe and analyze a good mixed method package and understand the customer experience through methodological triangulation in a certain business environment. The business environment, in this context, is the repair services in one company in Finland.

The customer satisfaction surveys were already in use in Company XX's customer support team. The surveys gathered a large amount of data from a variety of respondents within a relatively short period of time. However, one of the common criticisms of satisfaction survey data was that it does not penetrate deeply below the surface. The survey results were usually numeric values or averages, and thus it was difficult to understand the customer experiences. Only through the satisfaction surveys and numeric values it was not possible to describe the experiences that entail emotional and intellectual issues. The customer satisfaction surveys provided basic information: was the customer satisfied or not, would s/he recommend the services to friends based on the service experience and what were the expectations towards services e.g. service waiting time?

Unfortunately, a survey will rarely find out the customer's reasons for satisfaction or dissatisfaction in detail. Numerical values from surveys (e.g. satisfaction rate, fully fix rate) can be set up for customer support team objectives and the trend of these rates can be followed up monthly. However, customer satisfaction rate (e.g. 3.5) does not tell a lot of customer experience and the reason for giving such a rate.

To get deeper information on why the customer is not satisfied or why the customer's service experience has failed, there is a need to utilize more time and different researches and methods. Qualitative research can reveal the gaps in the service process, or provide better understanding about customer experience. Sometimes qualitative research is conducted to explain the findings of quantitative research or qualitative research can bring added value to quantitative research. Methodological triangulation encompasses both qualitative as quantitative methods. According to Ghauri and Gronhaug (2005, 221-222), methodological triangulation refers to the combination of methodologies in the study of the same phenomenon. According to them, through methodological triangulation it is possible to improve the accuracy of judgments and thereby results, by collecting data through different methods. It can be useful to use qualitative methods in a pilot study to build hypotheses and then to use quantitative methods to test these hypotheses.

This study has been assigned by Company XX customer support team, which was seeking for implementation of qualitative research. In this study the focus was on implementing qualita-

tive research to Company XX, and understanding the benefits of methodological triangulation. It is important to see qualitative and quantitative researches used together, not separately. Qualitative research may seem burdensome, but it adds value for understanding the customer experience.

#### 1.3 Goals of the study

The research question can be defined as following:

• What research methods (either qualitative or quantitative) should be used when trying to understand the customer service experiences in a repair environment?

The outcome of this study is a research method package that could be recommended to be used in the repair business environment to understand the customer service experience better. Repair channel in this context can be any repair channel that customer is utilizing when they need a get for a device or product fixed.

#### 2 Theoretical Background

Theoretical background is based on literature about services, formation of customer experience management and methodological triangulation. Research method section contains the quantitative approach, existing research methods, theory of qualitative approach, and research methods used in the case study. There is specialized literature about qualitative and quantitative researches, but not about methodological triangulation related to repair services. Customer experience management and services area is also covered well.

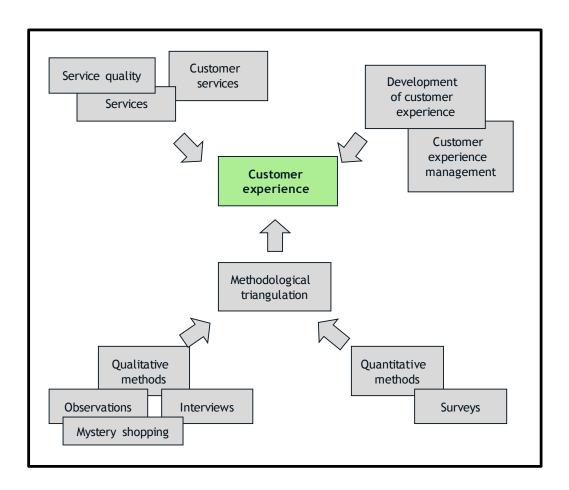


Figure 1: Theoretical background

#### 2.1 Services

Services are part of each everyday life. There are many definitions of services, not right or wrong. According to Bateson and Hoffman (1999, 6-9), services cover every aspect of our lives. Services also allow people to budget their own time as well as money. People are using some services to generate increased time in order to buy other services.

Service definition is difficult to define. It can be pure good or pure services. A pure good implies that the customer obtains benefit from good alone, without any added value from service. Pure services assume that there is no goods element to the service that the customer receives. (Bateson and Hoffman 1999, 6-9.) In reality most services contain some goods element, e.g. the garage that repairs cars adds new parts to cars. And most goods offer some service - even if it is only delivery of the goods.

Grönroos (2000, 47-54) defines services as "a process consisting of a series of more or less intangible activities that normally, but not necessarily always, take interactions between the customer and the service employees or physical resources or goods or systems of the service provider, which are provided as solutions to customer problems".

Services should be understood as processes. In this study repair services include many different processes. According to Grönroos (2000, 47-54), there are three basic characteristics of service.

- Firstly, services are processes consisting of activities.
- Secondly, those services are to some extent produced and consumed simultaneously.
- Finally, in the service production process the customers have a moderate influence on the process.

Grönroos (2000, 47-54) explains that further services are normally perceived in a subjective manner as can be described by customer with such words as experience, trust, feeling, and security. Nowadays, customer services have become a major matter as they help to keep business operations actively. Currently the main view is that companies are more interested in service management in order to gain competitive advantage.

The repair process includes many elements like the main service itself, the brand and all extended services which are connected to main service. Rissanen (2005, 21-22) has distinguished services into three parts (Figure 2). According to Rissanen, service consists of the core products, formal products and extended products. Core advantage is the reason why the customer has come into the market, to find a solution to a problem. The customer is looking for a product, service or a combination of those two that could help to solve a problem. The formal product is the visible part like brand, quality or price. Warranty and product security belongs to extended product layer.

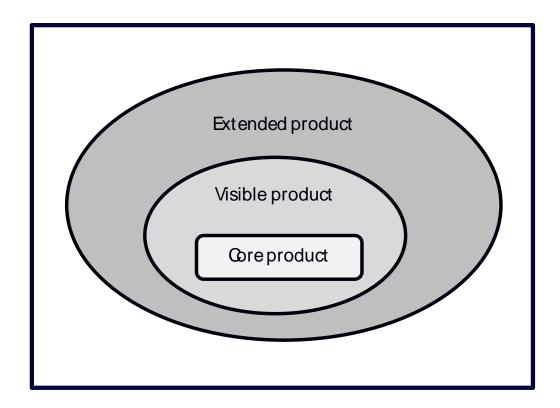


Figure 2: Service product structure (Rissanen 2005, 21)

Services can be deeds, processes, and performances provided or coproduced by one entity or person for another entity or person. One new service dimension is self-services. Customers are using services by themselves, independently. Customers are using self-services much more now than before. According to Normann (2007, 8), a steady shift is taking place in the structure of the service sector. Companies have to look at customers in different ways. The new creative service company must consider the customers as part of its workforce. The innovative service company sells knowledge, organization and management addition to services.

#### 2.1.1 Customer service

Customer service is the most common service category according to many authors like Harris (2006, 2-3), who explained that the customer service enhances the customer experience. Customers have varying ideas of what they expect from customer interaction. The main role is on customer service provider who should know the customer needs and provide them excellent customer service.

Customer service is the service provided in support of a company's core products. Companies are not typically charged for customer service. Sometimes companies can charge for extended customer support. Customer service can occur on-site where e.g. retailers or repair channel people help a customer find a desired item or it can occur over the phone or via the

Internet or in the actual place where service experience is happening. Based on Harris (2006, 15), quality customer service is essential to building customer relationships. The primary objectives of services producers are to develop and provide offerings that satisfy customer needs and expectations, thereby ensuring their own economic survival. To achieve these objectives, service providers need to understand how customers choose, experience, and evaluate their service offering. All services are experiences - some are long in duration and some are short; some are complex and others are simple. Creating and managing effective processes and experiences are essential management tasks for service organizations. When a company knows customer expectations, it is possible to create service standards to service processes such as first time fix rate in repair channel related to devices or products.

It is important to understand also the role of service employees. The company cannot influence the situation when the moment of truth happens. Normann (2007, 21) has used moment of truth term when the service provider and the service customer confront one another in the service arena. The perceived quality is realized at the moment of truth. Based on Harris (2006, 15) and Zeithaml, Bitner & Gremler (2006, 5, 50-60, 289, 352), very often service providers are the service, they are the organization in the customer's eyes, they are the brand and they are marketers. According to them, it is important that service employees perform their marketing functions well. It can be the first touch to company via the personnel in repair front-end, and the repair service that customers are getting from repair service personnel, has an either positive effect or negative effect on customer experience.

Customer service is such a valuable concept, but in a real situation it is not. Assessing the customer service level is one of the most important phases to develop the customer service. After assessing their strengths and weaknesses, customer service providers will begin to understand the customers they are serving. (Harris 2006, 15.)

Rissanen (2005, 20-21) and Normann (2007, 19-20) are explaining customer service with five features:

- 1. Intangibility
- 2. Coexistence
- 3. New products and new distribution channels
- 4. Heterogeneity and unique variation
- 5. Creativity

These features have been noticed also in this study and during Company XX repair process. There are many different ways and channels how the customer service can happen, and the company cannot influence actual service situation much. According to Rissanen (2005, 20-21),

intangibility means that service happens with the customer and each time it can be a bit different. Customer cannot return a service like tangible products or services cannot be stocked. According to Rissanen (2005, 20-21), coexistence means that the user and the service producer are in interaction. This interactive process might take just a few seconds or it might last forever. The service can happen through many channels (phone, Internet, physical place). According to Rissanen (2005, 20-21), the service is intangible, and unique. Monitoring quality and pricing is difficult. Each service situation is unique and it gives the service provider space for being creative.

In this study, the lack of communication between service provider and customer has been one of the findings from customer satisfaction surveys. Good communication to customer in service situation can influence on loyalty and sales positively. According to Rowson (2009, 12-19), delivering an exceptional customer service is a complex, and never-ending task, but its rewards can be huge in terms of job satisfaction, motivated staff and increased profits. Poor communication is often at the heart of poor customer service. Along with poor communication as one of the causes of poor customer service, are weak management and disaffected staff. Good customer service starts at the top of the organization. Good customer service is important, because satisfied customers become advocates, repeat purchases and increase your sales and profits. It is recommended to encourage the customer to give a feedback or participate to satisfaction survey after the service experience. In the worst case the customers say nothing.

It is important to have good personnel serving the customers. According to Reinboth (2008, 82-105), the base for good customer service is the personnel with adequate skills and talent to manage customer service situations properly. The foundations for good customer service may be acquired by studying, training and getting practical work experience. Good customer service skills also develop positive attitude towards the customers and customer service work as the employee experiences success in his /her work. It is important to understand how much power a good customer service has in purchase situation.

The customer service is an interaction between the customer and the employee. The customer service exists at all levels of the company. The employee understands the company policies and customer service plans do serve customers better. The company image should be positive and truthful towards the customers. Company reputation effects on customer decisions. (Reinboth 2008, 82-105.) If the customer has a positive opinion of the company, then unsuccessful customer service situation is seen as an individual occasion and a new opportunity will be given to the company. Negative opinion about the company leads to experience that disappointments are due to low level of customer service in the company and no good service will be available in the future either. Negative opinions are created by own experiences,

word-of-mouth, and by information received via public. Customer can change even brand or company, if there has been bad service experience between customer and customer service personnel. It is easy to spread bad service experience via Internet and social media. It is important to collect and use all received feedback to develop the customer service to better meet the needs of the customers as the customer experiences. To improve customer service is a long process requiring total and long-term development, management support and leadership commitment (Reinboth 2008, 82-105).

# 2.1.2 Measuring service quality in repair channel

There are many ways to differentiate the services to customer. One option is to benchmark competitors and other companies, and evaluate the best practices to differentiate service elements and change service processes. According to Bateson & Hoffman (1999, 339-340), service quality offers a way of achieving success among competing services. When several companies offer identical services, and compete with each other, service quality may be the only way of differentiating themselves. Service quality can deliver repeat purchases as well as new customers. Service provider must be focused on service quality, and the processes must be designed to support that mission. It needs to be an ongoing part of all management and service production. Customer satisfaction and service quality are intertwined. The relationship of these two concepts is unclear. Some believe that customer satisfaction leads to perceived service quality, whereas others believe that service quality leads to customer satisfaction. One explanation can be that satisfaction assists customers in revising service quality perceptions

There are many other authors who also emphasize the importance of service quality. According to Normann (2007, 78), service quality is a critical element of customer perceptions. Customer expectations and customer perceptions play a major role in services marketing. According to Grönroos (2000, 74-106) and Zeithaml et al. (2006, 81-116), customer expectations are what a customer needs and expects from a company that are the driving force behind the customer's behavior. Expectations or needs are not just about product usage, but about an expanded need set or the combination of product, cross-buy product and service opportunities, delivery channels, communication style and channels, invoicing methods and so on. In a relationship, what the company most wants is to influence the customer's behavior in a way that is financially beneficial to the company. Therefore, understanding the customer's basic need is critical. In the case of pure services, service quality will be the dominant element in customer's evaluations.

According to Grönroos (2000, 63-65), a perceived service quality contains two different dimensions, technical quality which tells about the outcome and functional quality which re-

lates to the processes. On the other hand it means: what the customer receives is firmly combined to how he receives it. The functional quality dimension is not as easy to evaluate as a technical quality. Technical quality outcome could be: What the customer is left with, when the service production process and interactions (customer-front-end) are over. Functional quality of the process can be described as following: Customer is influenced by how he receives the service and how he experiences the simultaneous production and consumption process.

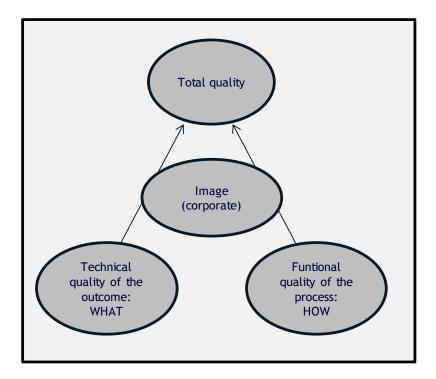


Figure 3: Two service quality dimensions (Grönroos 2000, 65)

It is a challenge to a service company to find a way to keep the customers satisfied. However, the company needs to understand that a customer is not always right. According Grönroos (2000, 74-106) and Zeithaml et al. (2006, 81-116), customers can be unreasonable, or do not know what they expect or do not know what would be the best for them. It is not uncommon to put demands and have expectations which are in reality inconsistent with their self-interest. It is important to understand that it is easy to raise customer expectations, but very difficult to reduce them again.

Price and Jaffe (2008, 30-31) suggest eliminating useless contacts. It is important to improve in-comprehensive processes and incorrect communications. According to them, besides eliminating dumb contacts, other principles to deliver the best service are:

Create engaging self-service

- Be proactive
- Keep customers informed instead of waiting for them to contact you with queries
- Make it really easy to contact your company
- Own the actions across the organization
- Listen and act
- Deliver great service experiences

Company XX has taken into account these elements in the customer support channel development work and processes. Figure 4 shows the different principles to deliver the best service. The starting point is to challenge customer demand for service.

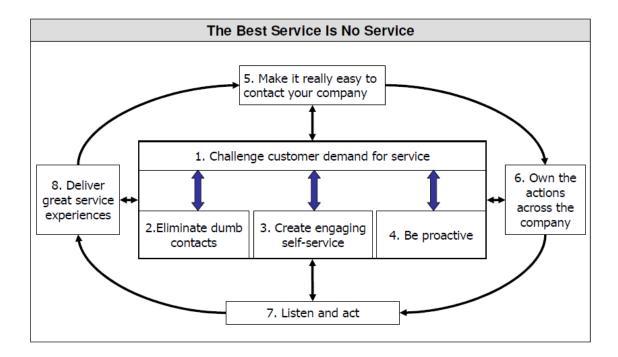


Figure 4: Service principles (Price and Jaffe 2008, 1)

Many researches, such as Parsu Parasuraman, Valarie Zeithaml, and Leonard Berry (2006, 81-116), have suggested that customers do not perceive quality in a one-dimensional way but rather judge quality based on multiple factors relevant to the context. The dimensions of service quality (SERVQUAL) have been identified through the pioneering research of Parsu Parasuraman, Valarie Zeithaml, and Leonard Berry. Their research identified five specific dimensions of service quality that apply across a variety of service contexts. In this study the focus is on methods that should be used to understand the customer experience. However I want to introduce the SERVQUAL model and the dimensions, because these can be implement either by using qualitative or quantitative approaches. This model is especially suitable for understanding the repair service quality.

Company XX is not using this model actively when measuring repair service quality. However SERVQUAL is the model that can be used when measuring holistic understanding about service quality. Grönroos (2000, 74) and Zeithaml et al. (2006, 81-116) describe the dimensions of SERVQUAL. These five dimensions (RATER) are reliability, responsiveness, assurance, empathy and tangibles. These can be taken into in use when planning satisfaction surveys or SERVQUAL surveys. SERVQUAL was originally measured on 10 aspects of service quality: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding or knowing the customer and tangibles. With the help of the SERVQUAL, it is possible to examine the customer's opinions about the quality of services, and to measure the gap between customer expectations and experience. In repair world reliability means that problem has been fixed in 1st time and it is ready when promised. Responsiveness means accessible; no waiting time, willingness to help the customer and responds to requests. Assurance means knowledgeable mechanics that has been used for repair. It can also mean employees' behavior which can give customer confidence in the company. Empathy can be show by that service personnel remember a customer by name; remember previous problems, understand customer's problems and performs by giving customers individual personal attention and having convenient opening hours. It is very important to understand customer's needs and communication. The customer may believe that she or he has told exactly what the problem has with device, but repair personnel have understood the customer's explanation wrongly. Tangible is all about the repair facility, waiting area, uniforms and other elements.

Table 1 describes the principal customer's expectations. These expectations are valid in all type of repair services, not only in an automobile repair. Customer satisfaction survey answers can reveal some of the expectations, e.g. the device has been fixed in the first time. If the answer is negative, qualitative research can clarify the reasons in detail level.

Type of service	Type of customer	Principal expectations
Automobile repair	Consumers	<ul> <li>Be competent (fix it right in the first time)</li> <li>Explain things (why there is a need for repair, what have been done in repair)</li> <li>Listen to customer and provide good communication</li> <li>Be respectful (don't treat like a dumb female)</li> </ul>

Table 1: Customer wants the basic service (Zeithaml et al. 2006, 92)

There are also different gaps defined in SERVQUAL model. A gap analysis helps to identify the causes of service quality shortfalls in each or all of the dimensions from provider and customer point of view. The gaps have been described in Figure 5 based on Antonides & Van Raaij (1999, 483) observation.

Gap 1 means customers' expectations versus management perceptions. This can be as a result of the lack of a marketing research orientation, inadequate upward communication and too many layers of management.

Gap 2 means management perceptions versus service specifications. Known customer expectations cannot be matched or exceeded because of difficulties in responding to customer demands.

Gap 3 is related to services - service specifications versus service delivery. This can be caused by employees who are unable or unwilling to perform the service at the desired level.

Gap 4 is service delivery versus external communication gap. This is as a result of inadequate horizontal communications and propensity to over-promise.

Gap 5 means the discrepancy between customer expectations and their perceptions of the service delivered. In this case, customer expectations are influenced by the extent of personal needs, word of mouth recommendation and past service experiences. (Antonides & Van Raaij 1999, 483.)

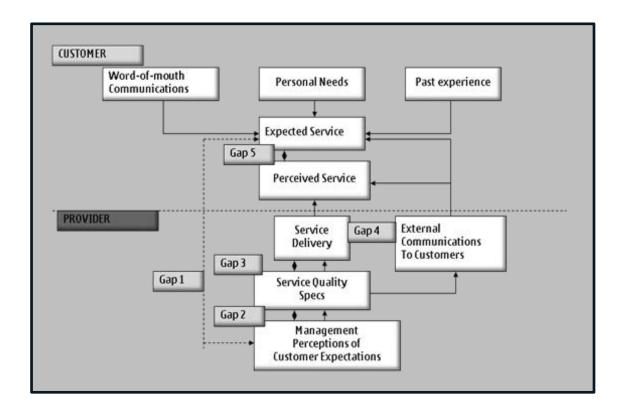


Figure 5: The SERVQUAL model and the gaps (Antonides & Van Raaij 1999, 483)

#### 2.2 Customer Experience

I have used the term, Customer Experience (CX), in this study. These same processes and definitions are in use in both Customer Experience (CX) term and User Experience (UX) term. However, my own opinion is that User Experience is about; how a person feels about using a product or service, and Customer Experience is covering on all experiences a customer has with a supplier of goods or services.

There are authors who have described the user experience concepts. Roto (2006, 66) proposed to use term user experience when the person is using, not only experiencing a system or object. Alben (1996) has defined user experience as follows: "by "experience" means all the aspects of how people use an interactive product: the way it feels in their hands, how well they understand how it works, how they feel about it while they're using it, how well it serves their purposes, and how well it fits into the entire context in which they are using it."

Schmitt (2003, 17-18) defines the customer experience management (CEM) as the process of strategically managing a customer's entire experience with a product or a company. CEM is truly customer focused management concept and process-oriented satisfaction idea. The customer experience encompasses every aspect of a company's offering—the quality of customer care, advertising, packaging, product and service features, ease of use, and reliability. The

customer experience is the internal and subjective response customers have to any direct or indirect contact with a company. Direct contact generally occurs in the course of purchase, use, and service and is usually initiated by the customer. Indirect contact most often involves unplanned encounters with representations of a company's products, services, or brands and takes the form of word of-mouth recommendations or criticisms, advertising, news reports, reviews, and so forth.

Pine and Gilmore (1999, 11-12) summarize the customer experience definition. According to them, the customer experience is the sum of all experiences a customer has with a supplier of goods or services, over the duration of their relationship with that supplier. While commodities are fungible, goods tangible, and services intangible, experiences are memorable. The customer experience can be described as a customer journey which starts from first contact and through the whole relationship.

#### 2.2.1 Development of customer experience

The concept of customer experience was first introduced by in Pine and Gilmore in 1998. Pine and Gilmore (1999, 1-6) believe that successful businesses influence people through engaging, authentic experiences that offer personal value. It can also be used to mean an individual experience over one transaction. Providing experiences requires a new supplier perspective. Suppliers of goods typically see themselves as manufacturers and service suppliers as providers. Those companies that wish to offer their customers an experience need to see themselves as stagers of events.

Pine and Gilmore (1999, 1-6) defined four stages. The earliest commodity economy was concerned with the extraction of various substances from the world around us. This type of economy dominated the world of the hunter-gatherer, where the primary job was extracting useful (and thus economic) materials from the environment. The next step was the manufacturing economy, where the primary economic offering was the making of products. This did not, of course, totally replace the commodity economy, but rather added a new kind of economic offering to the mix. The next stage was the service economy, where the offerings of highest value were the delivery of intangible services. The last one is experience economy.

The differences between these four different types of economy are summarized in the table 2 below:

Economic Distinctions										
Economic Offering	Commodities	Goods	Services	Experiences						
Economy	Agrarian	Industrial	Service	Experience						
Economic Function	Extract	Make	Deliver	Stage						
Nature of Offering	Fungible	Tangible	Intangible	Memorable						
Key Attribute	Natural	Standardized	Customized	Personal						
Method of Supply	Stored in bulk	Inventoried after production	Delivered on demand	Revealed over a duration						
Seller	Trader	Manufacturer	Provider	Stager						
Buyer	Market	User	Client	Guest						
Factors of Demand	Characteristics	Features	Benefits	Sensations						

Table 2: Types of economic offering (Pine & Gilmore 1999, 6)

I have worked in the customer experience management and customer relationship management teams in Company XX. In this section, I wanted to highlight marketing process development, because I have been in many discussions about differences between Customer Relationship Management (CRM) and Customer Experience Management (CEM). It is a common approach to have the customer experience management team inside the company along the Customer Relationship Management team. However CEM is more related to service experience while CRM is related to service delivery (Figure 6). Company XX has also separate CEM team and CRM team. Table 3 shows the difference between CRM and CEM.

According Meyer and Schwager (2007, 2-5), the difference is that CRM captures what a company knows about a particular customer—his or her history of service requests, product returns, and inquiries, among other things—whereas the customer experience data capture customers' subjective thoughts about a particular company. CRM tracks customer actions after the fact; CEM captures the immediate response of the customer to its encounters with the company.

	What	When	How Monitored	Who Uses the Information	Relevance to Future Performance
Customer Experience Management (CEM)	Captures and distributes what a customer thinks about a company	At points of customer interaction: "touch points"	Surveys, targeted studies, observa- tional studies, "voice of customer" research	Business or functional leaders, in order to create fulfillable expecta- tions and better experiences with products and services	Leading: Locates places to add offerings in the gaps between expectations and experience
Customer Relationship Management (CRM)	Captures and distributes what a company knows about a customer	After there is a record of a customer interaction	Point-of-sales data, market research, Web site click- through, automated tracking of sales	Customer-facing groups such as sales, marketing, field service, and customer service, in order to drive more efficient and effective execution	Lagging: Drives cross selling by bundling products in demand with ones that aren't

Table 3: CEM versus CRM (Meyer & Schwager 2007, 4)

#### 2.2.2 Business benefits

Experiences can be something else than just services or goods. According to Pine and Gilmore (1999, 6-30), economists have typically lumped experiences in with services, but experiences are a distinct economic offering, as different from services as services are from goods. Today we can identify and describe this fourth economic offering because customers unquestionably desire experiences, and more and more businesses are responding by explicitly designing and promoting them. As services, like goods before them, increasingly become commoditized—think of long-distance telephone services sold solely on price—experiences have emerged as the next step in what we call the progression of economic value. From now on, leading-edge companies—whether they sell to customers or businesses—will find that the next competitive battleground lies in staging experiences. "Staging experiences is not about entertaining customers, it is about engaging them". (Pine and Gilmore 1999, 6-30.)

According to Pine and Gilmore (1999, 6-30), in today's service economy, many companies simply wrap experiences around their traditional offerings to sell them better. To realize the full benefit of staging experiences, however, businesses must deliberately design engaging experiences that command a fee. This transition from selling services to selling experiences will be no easier for established companies to undertake. Unless companies want to be in a commoditized business, however, they will be compelled to upgrade their offerings to the next stage of economic value.

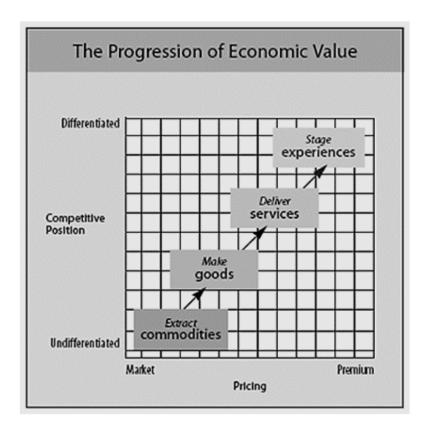


Figure 6: The progression of economic value (Pine & Gilmore 1999, 22)

Some companies do not understand why they should worry about customer experience. According to Meyer and Schwager (2007, 2-4), some companies collect and quantify data on it but do not circulate the findings. Still others do the measuring and distributing but fail to make anyone responsible for putting the information to use. Such attention to customers requires a closed-loop process in which every function worries about delivering a good experience, and senior management ensures that the offering keeps all those parochial conceptions in balance and thus linked to the bottom line. Workable process should include three kinds of customer monitoring: past patterns, present patterns, and potential patterns. There are also three different frequencies which are measured: persistent, periodic, and pulsed. By understanding the different purposes and different owners of these three techniques—and how they work together—a company can turn pipe dreams of customer focus into a real business system.

Company XX has conducted quantitative research by using satisfaction surveys for measuring the customer experience. When conducting methodological triangulation, it is difficult to understand when and how to use different methods, and qualitative research beside with quantitative research. It would be beneficial to use the process that Meyer and Schwager (2007, 7) suggest. According to them, there are three patterns of customer experience information, each with its own pace and level of data collection. When companies monitor transactions

occurring in large numbers and completed by individual customers, they are looking at past patterns. Surveys are the tool used most often for gathering data on past patterns, customers are sometimes approached through online forums and blogs. Present patterns are collected through surveys or face-to-face interviews, studies tailored to the subject, or some combination thereof. It helps to prepare customers for the inquiry by telling them the purpose of the survey, how they will hear about the findings, and what role they might play in addressing them. Potential patterns are uncovered by probing for opportunities, which often emerge from interpretation of customer data as well as observation of customer behavior.

Table 4 describes what kind of methods is needed in different pattern and purposes. Usage of present and potential patterns demonstrates the need of methodological triangulation, because these patterns are combining qualitative and quantitative approaches.

Pattern and	Owner	Data collection	Collection and	Discussion and
purpose		frequency and scope	analysis	action forums
Past Patterns: Captures a recent experience. > Intended to improve transactional experiences > Tracks experience goals and trends > Assesses impact of new initiatives > Identifies emerging issues Examples: Post-installation or customer service follow-up, new- product-purchase follow-up	Central group or functions	Persistent:  > Electronic surveys linked to high volume transactions or an ongoing feedback system  > Automatically triggered by the completion of a transaction  > Focused, short-cycle, timed data collection  > Feedback volunteered by users in online forums	>Web-based, in- person, or phone surveys > User forums and blogs	> Analyzed within functions, central survey groups, or both > Cross-functional issues directed to general managers > Strategic analysis and actions directed by general managers
Present Patterns: Tracks current relationships and experience issues with an eye toward identifying future opportunities.  > Keeps a consistent yet deeper watch on state of relationship and other factors  > Looks forward / backward  > Used with more critical populations and issues	Central group, business units, or functions	Periodic:  > Quarterly account reviews  > Relationship studies  > User experience studies  > User-group polling	>Web-based surveys > Direct contact in person or by phone > Moderated user forums > Focus groups and other regularly scheduled formats	> Initial analysis by sponsoring group > Broader trends and issues forwarded to general managers' strategic and operating forums > Deeper analysis of emerging issues at the corporate, business unit, or local level
Potential Patterns: Targets inquiries to unveil and test future opportunities. Examples: Ethnographic design studies, special-purpose market studies, focus groups	General management or functions	Pulsed: > One-off, special purpose driven > Interim readings of trends	> Driven by specific customers or unique problems > Very focused > Incorporates existing knowledge of customer relationship	> Centered within sponsoring group, with coordination by and support from central group

Table 4: Pattern and purposes (Meyer & Schwager 2007, 5)

# 2.2.3 Measuring customer experience

Although few companies have zeroed in on customer experience, many have been trying to measure customer satisfaction and have plenty of data as a result. Customer satisfaction rate, e.g. 3.5, does not tell a lot of customer experience and the reason for giving such a rate. According Meyer and Schwager (2007, 2-11), the problem is that measuring customer satisfaction does not tell anyone how to achieve it. Customer satisfaction is essentially the culmination of a series of customer experiences or the net result of the good ones minus the

bad ones. It occurs when the gap between customers' expectations and their subsequent experiences has been closed. To understand how to achieve satisfaction, a company must deconstruct it into its component experiences. Customer dissatisfaction is widespread and, because of customers' empowerment, increasingly dangerous. Although companies know a lot about customers' buying habits, incomes, and other characteristics used to classify them, they know little about the thoughts, emotions, and states of mind that customers' interactions with products, services, and brands induce. Yet unless companies know about these subjective experiences and the role every function plays in shaping them, customer satisfaction is more a slogan than an attainable goal.

Sometimes there is a need to get numerical values such as satisfaction rate to be able to follow up the satisfaction or loyalty trends. According to Bateson and Hoffman (1999, 293-294), the justification for customer satisfaction comes from three broad sources: the cost of new versus old customers, the competitive demand for satisfaction, and the lifecycle value of customers. It has been estimated that it costs three or five times less to keep a customer than to acquire a new customer. Economic justification for customer satisfaction should be made explicit in organizations.

Schmitt (2003, 25-85) describes five steps in CEM framework:

- 1. Analyze the experiential world of the customer
- 2. Build the experiential platform
- 3. Design the brand experience
- 4. Structure the customer interface
- 5. Engage in continuous innovation

Schmitt (2003, 25-85) suggests a set of steps for doing analyses. First you need to identify the target. Then divide the experiential world - four layers which can provide different experiences to customers. Those layers are: the experience provided by the brand, the product category experience, experience provided by the usage or consumption situation and sociocultural or business context. Third step is to track the entire experience along the touch points, and survey the competitive landscape. Experiential research needs to occur, whenever possible, in the customer's natural environment; there is a need to ask customers to respond realistic stimuli that successfully simulate the world, and there is a need to encourage them to look into the future and imagine a different reality. The fourth step is structuring the customer interface. Customer interface is usually dynamic and interactive, and when structuring the content and style of this dynamic interaction carefully, is possible to give to customer desired information and service in right manner. Finally, the company's innovations must reflect the experimental platform. Innovations include anything that improves custom-

ers' personal lives. Innovations demonstrate to customers that the company is a dynamic enterprise that can create new and relevant experiences.

According to Zeithaml et al. (2006, 65), following the service experience, customers form an evaluation that determines to a large degree whatever they will return or continue to patronize the service organization. Post experience evaluation is captured by companies in measures of satisfaction, service quality, loyalty, and sometimes emotional engagement.

It is important to understand which are the important drivers and factors that should be analyzed and explained also by using qualitative approach. In Company XX it was analyzed reasons for dissatisfaction from satisfaction survey data. According to Antonides and Van Raaij (1999, 489-494), measure of customer (dis)satisfaction refer to the subject - problems, satisfaction or dissatisfaction - the method - objective or subjective - and the time - before or after the supplier has had the opportunity to solve the problem. Satisfaction objective indicators are e.g. complaints. Subjective methods refer to inhibition, facilitation, problems and dissatisfaction experienced by the customer. This means asking the customer about problems regarding services. Dissatisfaction may result several customer actions. Customer can boycott a retailer or service provider, can produce negative word-of-mouth or raise complaints.

According to Dixon, Freeman and Toman (1-6, 2010), companies must delight customers by exceeding service expectations. Studies from other service channels like contact centers find what customer really wants is just a satisfactory solution to the service issues. It is important to reduce the effort customers must make in service situation. Doing so increases the likelihood that customers will return, speak positively about company and coming more loyal to the company. It is critical to focus on problem solving not speed. Corporate leaders must focus their service organizations on mitigating disloyalty by reducing customer effort and improve the customer experience.

### 3 Research methods

# 3.1 Methodological triangulation

Combination of qualitative and quantitative approaches is called methodological triangulation or multi-method approach. In this approach researcher can combine methods from qualitative and quantitative research. In this study I compare these approaches, and collect suitable methods for Company XX.

It is relatively easy to understand quantitative research, because it focuses on precise numerical measurements of customer attitudes and behavior. Qualitative research explores ques-

tions such as what, why and how; rather than how many or how much. According to Keegan (2009, 11-16) and Eskola & Suoranta (1998, 69-71), qualitative research is concerned with meaning rather than measuring. Understanding customer behaviors formulate the heart of qualitative research. It is often claimed that quantitative research is more objective than qualitative research, because there is less human involvement; questions are standardized and statistically analyzed. However, in quantitative research, the questions are chosen and phrased by human beings in a certain way that cannot but influence the response; there is no such thing as a neutral question.

# 3.1.1 Formation of methodological triangulation

During the last 50 years, authors have used different names related to mixed method research. According to Creswell and Plano Clark (2007, 3-7), it has been called:

- multitrait/multimethod research (Campbell & Fiske 1959)
- multi-methods; multi-strategy, mixed methods, mixed methodology (Bryman 2007)
- triangulation, mixed methods, multiple strategies (Layder 1998)
- methodological triangulation; mixed methods research, mixed methodology; combined research (Creswell & Plano Clark 2007)
- Multimethod strategy; multimethod approach (Brewer & Hunter 1989).

Also the name integrated or combined method has been used as well hybrids or methodological triangulation. Mixed method term is probably the term that will be used by an increasingly larger scholarly community. In this study, I am using terms methodological triangulation and mixed method. Creswell and Plano Clark (2007, 3-7) define mixed method research as a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone. By mixing the datasets, the researcher provides a better understanding of the problem than if either dataset has been used alone.

In this study, Company XX's customer support team has a need to utilize both quantitative data and qualitative data. According Creswell and Plano Clark (2007, 3-7), there are three ways to do that:

- merging two datasets by bringing them together
- connecting two datasets by having one build on the other
- embedding one dataset within the other so that one type of data provides a supportive role for the other dataset

Figure 7 shows the ways to use different datasets. In this study, I have used the last option, embedding one dataset within the other.

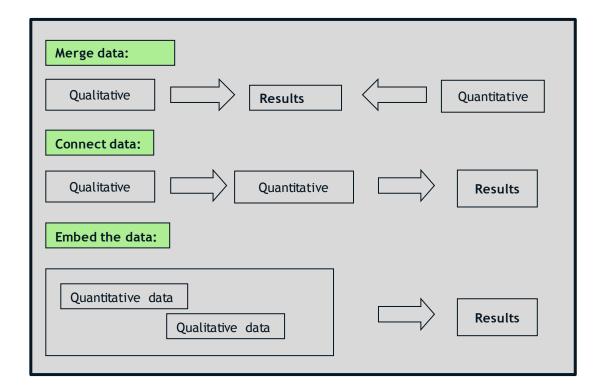


Figure 7: Mixing quantitative and qualitative data (Creswell & Plano Clark 2007, 7)

According to Denzin (2009, 301-310), there are four main categories for triangulation. Denzin extended the idea of triangulation beyond its conventional association with research methods and designs. He distinguished four forms of triangulation:

- 1. Data triangulation: involves time, space, and persons
- 2. Investigator triangulation: involves multiple researchers in an investigation
- 3. Theory triangulation: involves using more than one theoretical scheme in the interpretation of the phenomenon
- 4. Methodological triangulation: involves using more than one method to gather data, such as interviews, observations, questionnaires, and documents.

In this study, the methodological triangulation was used. Denzin (2009, 301-310) drew a distinction within-method and between-method triangulation. The former involves the use of varieties of the same method to investigate a research issue; for example, a self-completion questionnaire might contain two contrasting scales to measure emotional labor.

This study focuses on methodological triangulation - combination of many different methods from qualitative and quantitative researches. This approach may be time consuming, but it gives a good opportunity to expand and deepen target data.

Many authors have criticized the methodological triangulation, especially when using and analyzing the results. According to Ghauri and Gronhaug (2005, 221-222), sometimes it can be difficult to estimate, if the results from different methods are consistent or not. Sometimes the different methods come up with contradictory results. The researcher can effect on the method usage by preferring other method more. However triangulation on the same study object can be useful even if the results are not the same. It can still give better understanding or give new questions that can be answered by later research. Triangulation usage enhances the confidence in the analysis and result phase. Results are often useful providing more evidence for a study.

In the other hand there is a criticism for the fact that different methods contain a variety of human perceptions and are therefore non-coordinated. With this view, triangulation can lead to a conceptual confusion, conflicts and the adoption of non-theory information. (Eskola & Suoranta 1998, 69-71; Vilkka 2005, 53-55.)

Figure 8 shows how to use qualitative data to explain quantitative data. In Company XX phase 1, quantitative data collection, was in use, and phase 2, qualitative data collection, studies have been implemented in this study. Qualitative study findings can explain the quantitative findings deeply. Also qualitative study findings can bring new questions to quantitative surveys.

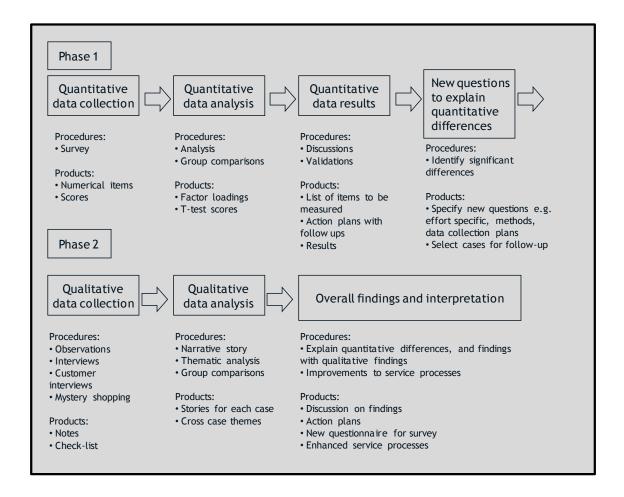


Figure 8: Using qualitative methods to explain quantitative results (Creswell & Plano Clark 2007, 51-53)

#### 3.2 Qualitative and quantitative research

Many companies are using quantitative research. This type of research reaches many people, and contact with those people is quicker than it is in qualitative research. According to Dawson (2006, 15, 48), quantitative research generates statistics through the use of survey research. Common methods are questionnaires and structured interviews. Sampling is also important in quantitative research. If the sample is chosen carefully using the correct procedure, it is then possible to generalize the results to the whole of the research population.

In this research study, quantitative data collection was in use and qualitative approach has been implemented in Company XX. Qualitative research has been piloted to complement the quantitative research. The purpose of this study is to understand, if it is possible to use also qualitative research regularly in the future in addition to quantitative research, and to see the possible benefits of methodological triangulation in the customer experience area.

The idea in qualitative research is to define what is happening within a smaller group of people. The aim is to understand customer behavior more deeply by using qualitative approach. According to Mäntyneva, Heinonen and Wrange (2003, 69-70), qualitative research is becoming popular because it is commonly cheaper due to smaller samples. However when thinking about time, for example in-depth interviews take more time than filling up a simple questionnaire. Qualitative research enables better understanding of target groups; how customers relate to a single product or service or to a single feature of a product/service, or which factors affect their purchasing decisions. These examples describe the research problems which are difficult to assess out by conducting qualitative research. Table 5 presents the differences between qualitative and quantitative research according to Ghauri & Gronhaug (2005, 204) and Mäntyneva et al. (2003, 32).

Qualitative	Quantitative
Flexible	Fixed
Paradigm: subjectivism, interpretive, constructivism	Paradigm: positivism, empiricism
Stories, meanings	Numerical
Why? Through what thought process? In what way?	Quick How many? How much? How often?
Questions vary in order and phrasing from group to group and interview to interview.	Should be the same questionnaire in use for each interview. Order and phasing of questions carefully controlled
Develop hypotheses, gain insight, explore language options, refine concepts	Test hypotheses, prioritize factors, provide data for mathematical modeling
Small sample size	Large sample size
Analysis conducted through the use of conceptualization, thematic exploration	Analysis conducted through the use of diagrams and statistics

Table 5: Differences between qualitative and quantitative research (Ghauri & Gronhaug 2005, 204; Mäntyneva et al. 2003, 32)

# 3.3 Research approach

In this study I was using a case company and I have named it as Company XX.

The business environment, in this context, is repair services. Company XX has conducted satisfaction surveys to customers by call for several years and by e-mail and SMS for two years. In this study the focus is on implementing qualitative research to Company XX, and understanding the benefits of using methodological triangulation. However, I wanted to describe also the quantitative approach to give better understanding about the need of methodological triangulation.

The order of this study was to check data from quantitative approach first, mainly the results from satisfaction surveys and understand deeper the reason for dissatisfaction, and possible problems e.g. why the device or product has not been fully fixed, why there is lack of communication and understand other comments from satisfaction survey by using qualitative approach. Because of the legal reasons, it is not possible to publish the quantitative results in this study.

Qualitative research has been conducted by using different methods such as interview, observation and Mystery Shopping during year 2010 in Company XX. Table 6 shows the different tasks and time-schedule for each task.

	2010 Jan	2010 Feb	2010 Mar	2010 April	2010 May	2010 June	2010 July	2010 Aug	2010 Sept	2010 Oct	2010 Nov	2010 Dec	2011 Jan	2011 Febr	2011 Mar	2011 april
Groundwork	XX	XX	XX													
Literature review	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX				
Defining methods		xx	xx													
Data collection			XX	XX	XX											
Data analysis					XX	XX	XX									
Writing conclusions													XX	XX		
Editing the text													XX	XX	XX	
Language checking													XX	XX	XX	ХХ
Thesis ready																XX

Table 6: Time schedule for qualitative studies

I have described the different methods through hermeneutic circle. It referred to the idea that when understanding the text as a whole is established by reference to the individual parts and when understanding of each individual part by reference to the whole. Each process phase is described by using the method, outcome and the need of future information. At the end of the study, I have described the "package of good methods" that should be used to understand the customer experience better in repair service.

It is possible to use another selection of methods in similar studies, when qualitative and quantitative approaches have been mixed. However, in this study the following methods have been chosen (table 7):

- 1. Customer satisfaction surveys by e-mail or SMS to customers
- 2. Structured or semi-structured call interviews to customers
- 3. In-depth interviews with repair personnel
- 4. Observation in repair places and customer service situation
- 5. Mystery shopping in repair place

Methodological triangulation											
(	Qualitative researc	Quantitative research									
In-depth interviews with repair personnel	Observation in repair places and customer service situation	Mystery shopping in repair place	Structured or semi-structured call interviews to customers	Customer satisfaction surveys by e- mail or SMS to customers	Partly Mystery shopping						
Implementation and needed information											
	Conclusions										

Table 7: Methods and categories for methodological triangulation

In the following sections, I describe the reasons for selecting these methods, and explain existing quantitative research operations in Company XX. Qualitative research has been implemented for this study, and qualitative data findings are explained in empirical part.

## 3.3.1 Customer satisfaction surveys by e-mail or SMS to customers

Customer satisfaction surveys by e-mail or SMS to customers were chosen, because these were existing methods in Company XX, and these methods were using the same customer satisfaction questionnaire. That is the reason, why the satisfaction survey process phases have been described in this section.

There are many channels to get the customer experience data. Spontaneous feedback can be complaints, wishes from customer, and thus is important to offer many different feedback channels to customers. Company XX gathered the customer experience about repair service from many channels, but the common way was to conduct customer satisfaction surveys to

customers. There were also separate channels for customer feedback, complaints and other service experiences. According to Hayes (1997, 7), customer can give feedback by face to face in the service situation, by call to company's customer support team, send SMS or e-mail to company's customer support team or using company's web site. Before creating the customer satisfaction questionnaire, there should be knowledge about customer requirements. It provides a better understanding of the way your customer define the quality of the service. In the case company the customer satisfaction survey has been in use many years.

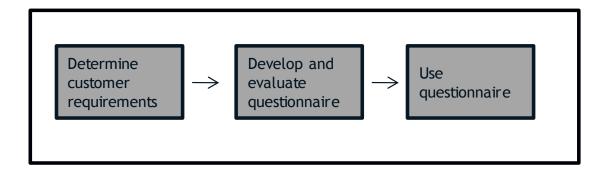


Figure 9: General model of customer satisfaction questionnaire development (Hayes 1997, 7)

Satisfaction surveys were conducted to customers who visited at repair places by using random sampling. In some countries customers who answered to satisfaction surveys were rewarded, but not in Finland. According to Dawson (2006, 32-33), satisfaction surveys should be conducted to company's current customers. By using the surveys, it is possible to define desired services level with relation to customer expectation. One way is to reward customers for answering the questions, to get better sample size. Many market research companies distribute the questionnaires via Internet and pay customers when they response to the questionnaire.

Company XX's satisfaction survey questionnaire structure was a combination of closed ended and open-ended questions. Company XX's customer support team created the satisfaction survey questions by using common belief of good set of questions and by benchmarking questionnaire material from other companies who were conducting satisfaction surveys in outsourced repair channel. Dawson (2006, 32-33) has defined three basic types of questionnaire: closed ended, open-ended or a combination of both. Closed ended questionnaires might be used to find out how many people use a service, and open-ended questionnaires might be used to find out what people think about a service. Many questionnaires begin with series of closed questions, with boxes to tick or scales to ranks, and then finish with a section of open questions for more detailed response.

In Company XX there were traditional e-mail and modern SMS survey in use. Survey methods were in this context e-mail and SMS surveys. Satisfaction surveys were conducted by e-mail or SMS within a couple of days after repair experience. SMS surveys contained overall satisfaction question and free-text information. SMS surveys were sent to customers after repair service experience. SMS survey was an excellent way to measure also repair personnel performance especially when these services were provided by 3rd party supplier. SMS survey contained mainly satisfaction and recommendation questions. E-mail survey contained the following questions: overall satisfaction, satisfaction or dissatisfaction drivers, recommendation, and customer's expectations.

Company XX's questionnaire contained the following questions:

- Overall satisfaction with repair experience?
- Satisfaction reasons?
- Dissatisfaction reasons?
- Was the device fixed?
- Customer expectations toward services?
- Turnaround time, waiting time?
- Willingness to recommend company based on the repair experience?
- Overall Feedback?

It was relatively easy to analyze and handle the closed end questions from satisfaction survey. Salmela (1997, 81) and Meyer & Schwager (2007, 8) suggest to keeping surveys mercifully brief avoid asking about matters like recent purchases that the company already has a record of. Nor should they be triggered by the transactions of regular customers such as purchasing agents. Those customers, who are more critical towards services, do not want to answer to the surveys at all. By the same token, corporate sanctions imposed on dealers who receive low scores shouldn't be so harsh that retailers try to discourage customers from responding by offering to fix any problem on the spot. Surveys do have their limitations. Focus groups, usergroup forums, blogs, and marketing and observational studies can yield insights that surveys cannot.

### 3.3.2 Structured or semi-structured call interviews to customers

Structured or semi-structured call interviews to customers were chosen, because these were existing methods in Company XX, and these methods were using the same satisfaction questionnaire that was used in e-mail or SMS surveys.

There were two kinds of interview techniques in this study. The first was survey research or structured interview by call where there was used the standard questionnaire format. This was related to a quantitative process. The second type interview was unstructured interview; where there were no defined questions. This was related to a qualitative process. In this section I have explained the structured/semi-structured interview via phone calls.

In Company XX call interviews happened on a monthly basis to customers who visited repair centers or repair places, or they used repair service. According to Mäntyneva et al. (2003, 71), interviews can be structured or loosely open interviews. In well structured interviews the researcher can focus on specific themes. If the interview is open and loose, the interviewer must be experienced and skillful. In order for the interview to be successful, both the interviewer and interviewee must be focused. Interviews can be conducted face to face or by telephone. Some interviews can also be computer-assisted. Most of the errors come from changing the question form, the time point, leading the interviewee and marking the answers wrongly.

In Company XX, like in many other companies, there were customers who were not satisfied. Dissatisfaction was caused by several factors, but whatever the reason was, it was always equally important to solve the cause of dissatisfaction. If the cause was not solved properly, the company might lose customers or might gain a bad reputation or both. By using satisfaction surveys it was possible to understand customer satisfaction and recommendation willingness, and thus get numerical values that were possible to follow up on monthly basis and set a level of customer satisfaction rate for each month.

In Company XX, it was possible to combine satisfaction survey results with repair places, which enabled possibility to measure the performance of the repair place and network. SMS surveys were good methods for measuring service performance in repair network. Thus satisfaction surveys brought numerical values and rates; there was a need to understand more customers' dissatisfaction reasons, customer behavior and customer experience in real repair service situation and repair process itself.

Figure 10 shows the starting point for hermeneutic circle, the outcome of information and the need for other information in detail level. Survey and call interviews were in used in Company XX. The next step was to investigate, if it is possible to get missing information and details by using Interview-method.

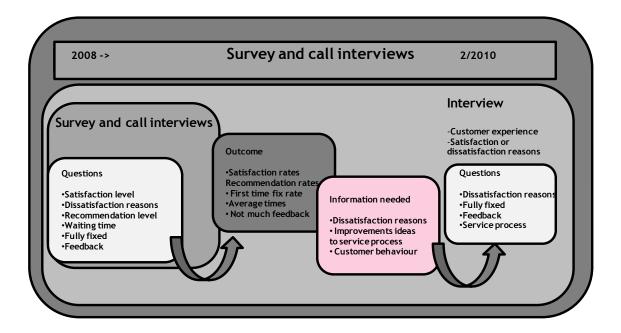


Figure 10: Structured or semi-structured call interview through hermeneutic circle

## 3.3.3 In-depth interviews with repair personnel

Qualitative research such as interviews for repair personnel and observation in repair places were decided to take in use in spring 2010 at Finland. In this section the main focus is on unstructured, one-to-one depth interviews. Interviews with repair personnel were implemented to get repair personnel opinions about satisfaction and dissatisfaction reasons. Repair personnel are own area experts and are the first contact point to customer. According to Kvale and Brinkmann (2009, 147), elite interviews are with persons who are experts in a community e.g. in repair network. Elites are used to ask about their opinions and thoughts about the key problem in a certain community.

Interviews demand real interaction between the researcher and the respondent. According to Ghauri & Gronhaug (2005, 138-140) and O'Leary (2004, 163-165) and Keegan (2009, 73-78), it would be good to know the respondents background before the interview, to be able to conduct it efficiently. It is possible to gain more accurate and clear picture about respondent's position and behaviour in-depth interview. This is because of open ended questions; respondents are free to answer according to their own thinking. The interviewer is there just to give the lead questions and to record the responses in order to later understand the responses. The questions and answers are often unstructured and not systematically coded in advance. It is useful to send the final report to the interviewee afterwards to be able to prevent the misunderstanding. Depth interviews are one-to one sessions with a research participant, recruited according to specific criteria, and moderated by a trained qualitative researcher. Often depth interviews are conducted in the participant's home or work place. The duration of

depth interviews vary according to research needs. Depth interviews can be used when trying to understand e.g. the context by interviewing individuals in their work place providing invaluable insight into the research issues. Ideally, group- and depth interviews should be used to enrich and complement one another.

### 3.3.4 Observation in repair place

Observation happened at the same repair place where an interview session happened in this study. Observation was the supporting method for interviews. According to Sinkkonen, Nuutila and Törmä (2009, 100-102), observation can be used as value adding method for other methods. Observation can be the supporting method for interview method. Most common mixing is interviewing-observation where researchers are conducting interview and observation in the same place at the same time. First the researcher interviews personnel and then observes how they are doing the job in a real environment. A key advantage of observation research is that often the customer is unaware that he is being observed, allowing his behavior to be observed naturally.

In this study the observation was a supporting method for interview, but also there were participant observation and field observation elements. Vilkka (2006, 42) has separated the observation methods as following:

- Outsider or control observation
- Participant observation
- Active based observation
- Ethnography
- Covert observation

Observation means listening and watching other people's behavior in a way that allows some type of learning and analytical interpretation. According to Dawson (2006, 33-34), the main advantage is a possibility to collect first-hand information in a natural environment. There are two main ways in which researchers observe - either direct observation or participant observation: Direct observation can be used e.g. in area such as psychology. It involves the observation of a "subject" in a certain situation and often uses technology help such as video cameras. In participant observation the researcher becomes involved in the lives of the people being observed. The observer is a natural part of the situation or event. Participant observation or field observation can be viewed as both a method and a methodology. Participant observation always takes place in community settings, in locations believed to have some relevance to the research questions. It is popular for researchers who wish to understand another community, culture or context. Through participant observation, researchers

can also uncover factors that are important for a thorough understanding of the research problem. In non-participant observations, the observer observes, but it is not a part of the situation her/himself. (Ghauri & Gronhaug 2005, 120-121.)

### 3.3.5 Mystery Shopping in repair place

Company XX used Mystery Shopping method mainly in retail places to measure retail service quality. However there was a need to understand, if it is possible to use this method also in repair places. My opinion was that Mystery Shopping was not used in the repair channels due to a complex repair process. Mystery Shopping is often used in a retail environment, but not in a repair environment, because it is time-consuming and requires different process phases to describe the whole repair journey by using Mystery Shopping method. Mystery shopping can be named as covert observation. Some researchers have named it as a form of participant observation like Wilson (2001, 722): "Mystery Shopping, a form of participant observation, uses researchers to deceive customer service personnel into believing that they are serving real customers or potential customers."

The Market Research Society (MRS, 2003, 2-3) defines Mystery Shopping or 'mystery customer research' as: 'The use of individuals trained to experience and measure any customer service process, by acting as potential customers and in some way reporting back on their experiences in a detailed and objective way.' According to Market Research Society (MRS, 2003, 2-3), Mystery Shopping is a long-established research technique and is used extensively in many industry sectors, such as retail and the motor trade, to measure the quality of service provided. We are not alone in undertaking financial services with Mystery Shopping.

According to Newhouse (2004, 1), a person, who is conducting this method, is Mystery Shopper also known as secret shopper, service evaluator or customer researcher. Mystery Shopping is an anonymous act of posing as an ordinary customer, and evaluating the service situation for a fee. The use of participant observation, where the researcher interacts with the subject(s) being observed, has its origins in the field of cultural anthropology. Anthropologists would take part in a tribe's daily life in order to understand the norms, attitudes, and behaviors that were neither documented nor communicable via language. Such observation also allowed the researcher to overcome some of the potential weaknesses of interviewing and survey research.

Mystery Shopping can be used for various purposes. In this study the main purpose was identifying reasons for dissatisfaction. According to Hesslink & Van der Wiele (2003) and Wilson (2001, 732), in particular, Mystery Shopping results are used for three main purposes: to act as a diagnostic tool identifying failings and weak points in an organization's service delivery;

to encourage, develop, and motivate service personnel by linking performance measurement tools directly with appraisal, training, and reward mechanisms; and to assess the competitiveness of an organization's service provision by benchmarking it against the offerings of others in an industry.

One of the Mystery shopping goals in this study was to measure the quality of the service delivery to the customer. According to Hesslink & Van der Wiele (2003), in this situation the Mystery guest can be focused on the compliance to specific standards, guidelines or demands, or the mystery guest can be instructed to position the quality of the service on a scale. If a mystery guest is also used to visit not only the own service locations but also locations of competitors, benchmarking becomes a way to judge own activities against competitors activities. The first step in the design is to define the goals for Mystery Shopping. The goals have to be made transparent and be used as the input for the checklist that will be used to measure against those goals. The checklist has to be developed for example by going through the process of the service delivery and paying attention to failure points in those processes and complaints that have been made in earlier customer contacts and surveys (Hesslink & Van der Wiele 2003).

Mystery Shopping techniques may include: Mystery observation, Mystery visits, Mystery telephone calls, e-mails, mails or web-site visits. Mystery Shopping studies may cover the client's own organization, intermediate agents and competitors. Mystery Shopping process can be conducted also by expert evaluation, and not using the real customers. (ESOMAR 2000.) In this study all above elements were in use.

## 3.3.6 Expert based evaluation versus real users

Normally expert evaluation is used in usability evaluation. However, in this study, expert based evaluation was used as a qualitative study inside the Mystery Shopping process. This was done by using expert based evaluation type, walkthrough guidelines. Expert based evaluation normally looked at the complete system from many perspectives and revealed potential problems such as inconsistency, support for different ways of working, visibility of information and language use. It also enabled elements such as error messages to be thoroughly investigated. In a user test, many potential error messages simply do not appear because no users make the error. Expert based evaluation technique revealed the current process strengths and weaknesses, and thus it was easier to create improvement suggestions or innovative development ideas.

Scholtz (2010) has described in his article the differences between user-centered evaluation and expert based evaluation. The chief advantage of user-centered evaluation is the involve-

ment of users. Results are based on actually seeing what aspects of the user interface cause problems for representative users. Expert based evaluations include heuristic evaluation, guideline reviews, pluralistic walkthroughs, consistency inspections, standards inspections, cognitive walkthroughs, formal usability inspections, and feature inspections.

According to Scholtz (2010), expert based evaluation is quick and cost-efficient comparing to usage of real user, but it is time consuming process for person who is conducting it. The cognitive walkthrough can be accomplished using only a text description of the user interface and therefore can be used early in the software development process. Table 8 shows the types of expert based evaluations.

Checklist usage	Scenario usage	Type of expert based evaluation
No	No	Expert review
No	Yes	Expert walkthrough
Short checklist	No	Heuristic evaluation
Short checklist	Yes	Heuristic walkthrough
Long checklist	No	Guidelines
Long checklist	Yes	Guidelines walkthrough
User perspective in walkth- rough	Yes	Cognitive walkthrough

Table 8: Expert based evaluation differences (Gray & Salzman 1998, 214)

Real users can be more neutral and independent than experts. When conducted study in one country or in one repair place, then expert based evaluation was better and a quick way, but in larger scope, if the aim was to visit many repair places, it would be reasonable to use real users than expert evaluation. However, it is possible that the real customers are not neutral observers. For example, they have goals, time constraints, and expectations.

#### 3.3.7 Data analyzing

The main idea for qualitative and quantitative data is to move raw data to meaningful understanding. According to O'Leary (2004, 195-196), in quantitative methods, this is done through statistical tests of coded data that assess the significance of findings. In qualitative analysis, understanding is built by a process of uncovering or discovering themes that run through raw

data, and by interpreting the implication of those themes for the research questions. Qualitative data can be explored for the words that are used, the processes that are discussed and the non-verbal cues noted by the researcher.

Quantitative data was analyzed by Company XX's customer support team, but I was analyzing the qualitative data. Though there were same questions in the e-mail survey and call interviews, I noticed one difference. Satisfaction rates were much lower in e-mail and SMS surveys than in call interviews, and customers were willing to tell more about experiences by using traditional surveys than in call interview. The call interview was a very personal experience, and some people didn't want to give negative feedback to other person during call interview. Also there were cultural differences about telling the truth during interview. My belief was that this was one reason for better satisfaction level in call interviews. Another reason for better satisfaction rates in call interviews was the lead-time. Surveys were conducted to customers on a monthly basis, and not after the repair experience. If the customer had negative experience at the repair place, it was in fresh memory, when traditional surveys were conducted right after the repair experience. When the interview calls were made to these customers with negative experience, they did not properly remember the repair situation anymore. Visiting in repair channel was, to most of the customers, "negative experience", because the device was already broken, and thus they gave low scores for the satisfaction question.

Quantitative data can be analyzed in many different ways. For quantitative data analysis, issues of validity and reliability are important. According to Dawson (2006, 111-114), quantitative researchers endeavor to show that their chosen methods succeed in measuring what they purport to measure. They want to make sure that measurement is stable and consistent and that there are no errors or bias present. One common approach to measure quantitative data and most common package for that is SPSS (Statistical Package for the Social Sciences software). When there is a need for proper data analysis, then six sigma methods can be taken into account. Six sigma analyses aim at revealing the root causes of problem.

Company XX used six sigma methods for analyzing quantitative results, and to be able to improve the business processes. Survey responses were linked by repair identification code to repair place where customer has visited. Thus it was possible to see the satisfaction results by repair place. Six sigma projects revealed some of the root causes why customers are dissatisfied for service experience. It has been a problem-solving approach, which has produced action plans and improvement suggestions to service processes. Action plans were created based on the data findings.

According to Watson (2004, 1-3), Six Sigma is a business management strategy originally developed in 1981 in United States. Six Sigma seeks to improve the quality of process outputs by identifying and removing the causes of defects (errors) and minimizing variability in manufacturing and business processes. It is more of a business strategy than a quality program. This method contains both management and technical components. It concentrates on finding on the right process metrics and goals, as well as the right projects and the right people to work on them. On technical side, it focuses on enhancing process performance using process data, statistical thinking and methods, and a disciplined approach to process-improvement methodology. This approach has four principal steps: measure, analyze, improve and control.

Creswell and Plano Clark (2007, 129) presents one way to analyze qualitative data. In this study, I used some of the procedures that Creswell and Plano Clark have described. Creswell identifies five general procedures in data analysis which can be suited also for quantitative data:

- Preparing the data for analysis
- Exploring the data
- Analyzing the data
- Representing the data analysis
- Validating the data

When the interview-session in Company XX study was analyzed, a couple of topics were checked from the interviewees to understand the interview result correctness. Kvale and Brinkmann (2009, 197) presents that it is possible also to re-interview, if there is a need for check or correct the interview. Interviewees can get opportunity to comment interviewer's interpretations as well as to elaborate on original statements.

Preparing the data for analysis can include: transcribing the text, preparing the data for computer analysis and organizing documents and visual data. In exploring the data procedure phase there are tasks like reading through the data, writing memos and developing qualitative codebook. Analyzing the data includes data coding, grouping codes into themes or using qualitative software programs. Representing the data analysis means presenting visual models, figures and tables. Validating the data means using researcher or reviewer standards and employing validation strategies if needed. (Creswell and Plano Clark 2007, 129.)

Hesslink and Van der Wiele (2003) presents one way of measuring Mystery Shopping data that model has been used also in Company XX study. According to Hesslink and Van der Wiele (2003), Mystery Shopping checklist contains about one hundred single items, and it has been

divided into seven different categories. Every item can be rated on a yes/no scale or a 1-5 in rating scale. In table 9 some examples of questions are presented.

Question no.	Question	Scale
36	The opening hours are clearly visible	12345
64	The employees wear nametags.	no yes
83	The employee show they have a lot of knowledge	12345

Table 9: Example of questions (Hesslink & Van der Wiele 2003)

The average results of the different categories are achieved by multiplying the weighted averages of the categories with an 'importance factor'. The categories, the number of underlying items and the accompanying importance factors are shown in table 10.

Category	N items	Importance factor
Search phase	16	1
Making appointment	11	2
Branch outside	11	1
Branch inside	26	1
First contact	15	5
Intake	13	5
General opinion	8	5

Table 10: Categories and weights of the criteria (Hesslink & Van der Wiele 2003)

Now the following tables showed how to utilize the scoring in Mystery Shopping process. In table 11 the example scores of the visits are presented, where a distinction is made between the seven categories of criteria.

Branch	Search phase	Making appointment	Branch outside	Branch inside	First contact	Intake	General appointment	Total (weighted)
А	2.94	4.83	4	3.16	4.82	4.83	-	4.43
В	4	4	3.7	4.13	4.64	4.17	-	4.28
С	2.67	5	4	3.83	4.64	3.83	-	4.14
D	3.56	-	3	4.14	4.36	4.17	-	4.13
Е	3.91		3.4	4.04	4.18	4.17	-	4.07
F	2.83	4.33	3.5	3.11	2.55	2.15	-	2.57

Table 11: Categories and weights of the criteria (Hesslink & Van der Wiele 2003)

Table 12 shows the variation between branches. In this example it seems that the tangibles (2/3/4) show a less wide variation and maybe are easier to repair; the issues related to people are the most important items with the heaviest weight in the overall score and also show a wider variation. First of all it seems more difficult to have control over the employees; secondly, every customer might be different and thus perceptions of customers will always be difficult to define. (Hesslink and Van der Wiele 2003.)

1. Search phase	2.67 – 4
2. Making appointment	4.00 – 5.00
3. Branch outside	3 - 4
4. Branch inside	3.11 – 4.14
5. First contact	2.55 – 4.82
6. Intake	2.15 – 4.83

Table 12: Variation between branches by category (Hesslink & Van der Wiele 2003)

## 3.4 Disadvantages and advantages of different methods

There were several data collection methods in use, each have either advantages or disadvantages. This chapter includes the conclusion of my literature review and my own and customer support team experiences about advantages and disadvantages of different methods. Literature review about methods reinforces the customer support team findings. There is a collec-

tion of author comments about disadvantages and advantages of different methods, and also a summary table at the end of this chapter.

Sometimes the customer's and the company's views may differ a lot, and that can cause problems when creating satisfaction surveys. The questions can mean different things to different people. Reinboth (2008, 107) explained that a word, customer satisfaction, is actually a feeling and it is difficult to express it by numbers. Also customers are understanding numbers in a different way. Part of customers are not willing to give high scores like 5 or 4, on 1-5 scale, even if the customer is happy with the service, because in their opinion there is always something to improve. Other respondents give always high scores like 5 or 4, if they do not have any complaints about matters. The results can be superficial, and cannot tell all details. A neutral figure, usually number 3, does not tell anything about customer experiences. There is always a danger to get poor answers when creating poor surveys. Also the survey does not take into account customer feelings. Sometimes the customer has left the building before his or her response will be handled. The ideal situation could be to react right away when the customer is still in the repair place or store. A survey is demanding and laborious, and occasionally produces wrong results and sometimes frustrates respondents.

Interviewing has obvious advantages as a methodology. It can reveal a lot more than only the findings for research problem. According to Keegan (2009, 73-82) and Dawson (2006, 31), the researcher feels in control, and can set the agenda, choose the questions. It is a relatively efficient, effective and versatile methodology. There are many advantages for focus group interviews. It is possible to reach wide range of responses in one meeting; participant can ask questions of each other. Also the group effect is a useful resource in data analysis. Disadvantages can be getting an individual view during the interview. Some people may be uncomfortable in group settings, and might not contribute. Also a good moderator is needed. There are also doubts about the validity of interview data. There can be the issue that what people say they do, think or feel may not be true. Also an interview situation can skew the responses.

Observation can be covert or overt. Especially covert participant observation has caused bad publicity; because observers have entered organizations and participating in their activities without anyone knowing that they were conducting research. An advantage of the method is the real live situation. The main disadvantage is that the most observations are made by individuals who systematically observe and record a phenomenon, and it is complicated to translate the happenings into scientifically useful information. The interpretation can be rather subjective. Sometimes the researcher who is interpreting data is not familiar with the cultural conditions in which the data is collected. (Anttila 2005, 191-193; Dawson 2006, 33-34.)

According to Wilson (1998, 415), unlike customer-satisfaction surveys, the Mystery Shopping approach is used to measure the process rather than the outcomes of a service encounter. The emphasis is on the service experience as it unfolds, focusing on activities and procedures that do or do not occur rather than gathering opinions about the service experience. Wilson continues that some of the service organizations stated that customer-satisfaction surveys on their own do not provide sufficiently detailed information to allow management to identify and correct weaknesses in the service-delivery process.

My own opinion, based on my experience of working with users and experts, is that real users are more neutral than experts. Szwarc (2005, 52-53) has seen that in different way. She criticizes Mystery Shopping, because it will fail to produce reliable data if researchers engage in poor population sampling from the population of stores or customers, and the Mystery Shopping scenario lacks external validity. She continues that real customers are not neutral observers, and the average Mystery Shopping procedure requires extraordinary memory -much beyond the capabilities of normal individuals.

I choose Mystery Shopping, because it suits to use in repair channels, and can give the real understanding about the repair process and real customer service situation.

Table 13 is the conclusion of my literature review and my own experience about advantages and disadvantages of different methods. I explain more about the advantages in chapter 5.1. Next I will explain some advantages and disadvantages of different methods. An e-mail survey is easy, low-cost method to implement, but the response rates especially in Finland are low. SMS disadvantages are costs to customers and limitations of questions that can be asked. However the response rate is much higher than in e-mail survey. Call interviews are more personal, but expensive method to implement. Deep interviews, observations and Mystery Shopping are good qualitative approaches to get more detailed level information than what satisfaction surveys can provide. However these methods are time-consuming.

Method	Advantages	Disadvantages
E- mail survey	Easy for a researcher to administer     Wide geographical areas can be reached     Low cost     Quick     Respondents can complete in a time to suit them     Lot of free text feedback	<ul> <li>Computer literacy is a must</li> <li>Respondents must be willing to complete the survey</li> <li>Low response rates</li> </ul>
SMS survey	Fast     More useful for measuring repair service performance	Can generates costs also to customers     Cannot ask many questions
Call interview	<ul> <li>Quick</li> <li>Ability to clarify questions</li> <li>High control of interviewer standards</li> <li>Easy to ask for ratings using simple scales</li> <li>More personal</li> </ul>	Can be boring for respondents when there are dozens of attributes to rate Some consumers are hard to access by phone Cannot show explanatory visuals Expensive Slow
Deep interview	<ul> <li>Provides in -depth and detailed information than questionnaire</li> <li>Can reveal some other items at the same time</li> </ul>	Time-consuming In terview situation may skew the results Strong moderator role needed Subjective Cultural differences can influence on the answers
Observation	Good way to follow customer actions and behavior in real environment - real live situation Can reveal some other items at the same time Allows for insight into contexts, relationships, behavior	<ul> <li>Can raise ethic discussion</li> <li>Subjective</li> <li>Time-consuming</li> <li>Documentation relies on memory</li> </ul>
Mystery shopping as expert evaluation	<ul> <li>Fast way to do the exercise</li> <li>Not expensive technique</li> <li>Can reveal some other items at the same time</li> <li>Effective method to reinforce service standards</li> </ul>	Time-consuming     Documentation relies on memory
Mystery shopping by real customers	Real users are more neutral than experts     Can reveal some other items at the same time     Effective method to reinforce service standards	Expensive     Demandsometimes training     Documentation relies on memory

Table 13: Advantages and disadvantages of different methods

## 4 Empirical part - Case: Repair services

## 4.1 Background

This case study has been done for Company XX which is a globally operated company. Because of legal reasons I name the company as Company XX. I have worked in Company XX many years in different marketing units and customer support teams. When the study was done, I was working as a customer experience manager in a customer support team, improving and managing the customer experience in repair channels globally. There was quantitative research in use, but not qualitative research in use at that time. It was logical to take one country as a pilot country to investigate the benefits of qualitative approach. The pilot country was selected by the customer support team and the country was Finland.

Company XX has own customer support unit who was taking care of the customer support activities in Finland's customer support channels. In Company XX there were customer support channels like contact centers, online (support web site), outsourced repair network and other support channels e.g. user guide and social media.

Figure 11 shows the different channels. The repair network has been outsourced in Company XX to subcontractors, and thus it was important to understand; how the repair service process was working. Part of the repair network places served also the customers of our competitors.

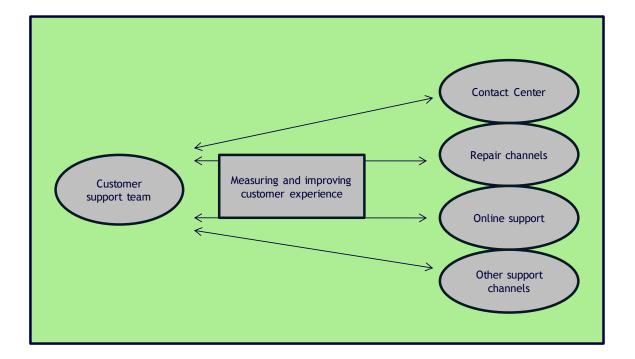


Figure 11: Customer support channels in Company XX

There were a couple of high level repair process phases in Company XX, which I want to explain. When a device was broken, it was possible to check first via other support channels, if it is be possible to get the device fixed by them or ask advice how to proceed with the broken device, e.g. calling to contact center. Sometimes the device was not broken, but customer did not have the understanding of how to use the device or what settings needed to install or how some elements were operating in device. In these cases, customers were able to use support channels like Company XX's support website, contact center support services, user guide or searching information via social media channels e.g. from discussion boards. The last option was to send the device for repair or visit at a repair place.

Customer support unit of Company XX sent customer satisfaction surveys or called to customers, who had visited repair places, to understand customer service experience better. The repair personnel asked the customer permission for conducting the customer satisfaction survey after the repair service experience. If the customer gave permission to the survey, the customer information was sent to Company XX's database, and then the satisfaction survey was conducted to customer within agreed period. Survey answers were stored to Company XX database and the data analysis took place. Customer satisfaction rates from customer satisfaction survey were reported inside Company XX on a monthly basis.

Repair channels in the Company XX were comprised of two set-ups: front end and back end. The front end was the place that was visible to customer and where the device or product was received, and the communication between repair personnel and customer happened. Back-end was the place where the actual repair happened, and this was not visible to customers. Back-end was able to send some difficult repair cases to Central repair. Figure 12 describes the different set-ups.

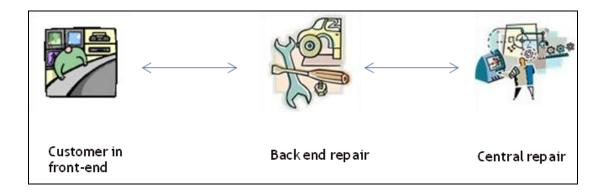


Figure 12: Repair set-up

Communication to customer about what has been done to the devices happened usually via front-end at repair place. Sometimes the problem was so difficult, that it was not possible to

fix it in the back-end and then the device or product was sent to a central repair factory. Then the communication about what has been done to the product, happened between central repair and back-end, and from back-end to front-end and finally to customer. The communication process was lengthy in some cases. Figure 13 describes the repair process steps in Company XX.

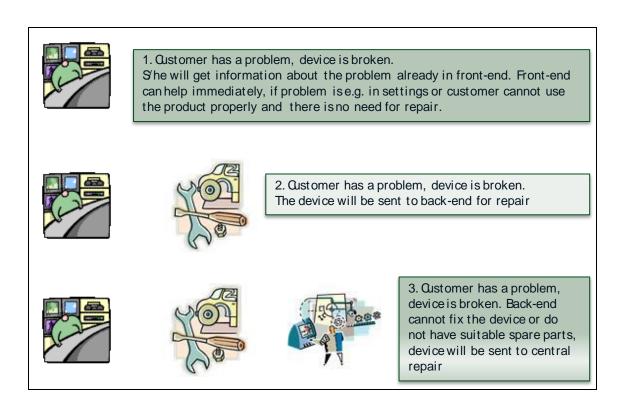


Figure 13: Repair services in nutshell

In the Company XX has an own team for service quality management who were responsible for data audits, and quality audits in customer support channels. This unit was taking a deeper look for service quality problems using some of the SERVQUAL methods. However in some small companies these quality audits can be part of customer satisfaction surveys.

#### 4.2 Earlier studies

There was no information about previous studies related to customer service experiences in customer support area by using methodological triangulation (qualitative and quantitative approaches together). Company XX's customer support unit has only used quantitative approach, customer satisfaction surveys, implemented in different ways. I have not seen the usage of methodological triangulation either in other companies who have outsourced repair network. Also Mystery Shopping as a method in repair context is not an ordinary method. My opinion is that Mystery Shopping is not used in repair channels due to complex repair process.

Some studies were implemented of service culture and customer service experiences in Company XX, but not studies where qualitative and quantitative methods were combined, and explained how to use these methods.

#### 4.3 Roles

When the study was done, I was working as customer experience manager in a customer support team improving and managing the customer experience in repair channels globally. I had knowledge of an existing repair process, and I wanted to investigate in this study; what methods and researches we should use to understand the customer experience better. At the same time I was studying user-centered design and I was also teaching my colleagues; how to conduct qualitative research as expert evaluation, and how to use different qualitative methods. I also created an article about Mystery Shopping usage in repair channels based on these study findings. My role was to organize and lead the qualitative study in customer support team, and also analyze and document the results by using quantitative and qualitative data findings. I analyzed also quantitative data by using Six Sigma methodology to be able to define root causes for dissatisfaction reasons from satisfaction surveys.

In this study, the main purpose is to show how to use methodological triangulation by combining qualitative and quantitative researches.

In this study there were three people, customer support experts, from the Company XX, who conducted the interview and observation researches with my help. Two of them conducted also the Mystery Shopping research. These people worked as my colleagues in Company XX's customer support team, and they had good knowledge about Company XX's repair process. All customer support experts got a short introduction and training from me; how to conduct qualitative research such as observation and interviewing in repair places and how to act as a Mystery shopper in dedicated repair place.

The customer support experts were using checklist walkthrough in the interview and observation researches. I created the checklist and it contained different customer experience categories, which were defined earlier based on the discussion with Company XX stakeholders and based on customer satisfaction survey results and findings. The result of the qualitative research was reported widely inside the Company XX among all stakeholders and service process improvement action plans for different areas were created.

## 4.4 Qualitative research in Company XX

Customer satisfaction surveys and call interviews have been conducted regularly for many years in Company XX. The questionnaires were renewed two years ago, in order to understand not only customer satisfaction or dissatisfaction, but also the reason for satisfaction and dissatisfaction. Dissatisfaction and satisfaction reasons were studied in 2009 in Company XX, and satisfaction levels improved using Six Sigma methodology, so there were some ideas about root causes already. Because there were a lot of data already from satisfaction surveys, the main purpose was to define with qualitative methods the reason for dissatisfaction and satisfaction deeper. Qualitative methods such as interviews, observations and Mystery Shopping were decided to take in use in spring 2010 in Finland.

The idea was to implement these qualitative methods with using expert evaluation technique, not using real users. Expert evaluation can look at the complete system from many perspectives and might reveal potential problems such as inconsistency or gaps in the process. There were three main methods in use: interviews, observation and Mystery Shopping. Observation took place in the same repair place where the interview happened. The same person who conducted the interviews made also the observation. Observation targets were repair place, front-end and back-end, and customers. Actually this was more combination of interview-observation where interviewing and observation will be conducted at the same time. Interview-observation is the common mixing that should be used more often according to Sinkkonen et al. (2009, 100-102).

When results from interview and observation methods were ready, Mystery Shopping research was conducted in a certain repair place in Finland. The idea of the Mystery Shopping exercise was to evaluate also service quality in different customer support channels. The checklist for Mystery Shopping was created based on repair personnel interviews, repair place observation and survey data findings.

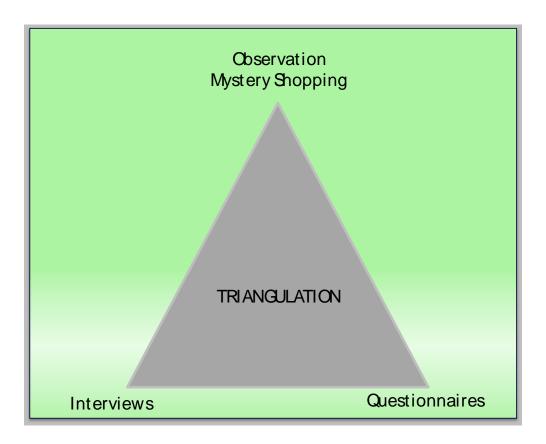


Figure 14: Methodological triangulation dimensions in Company XX

### 4.4.1 Interviews

There were already structured interviews in use in Company XX. However they related to quantitative method (call interviews to customers) and it did not reveal the customer experiences so well. The purpose was to understand the repair process properly first to be able to understand the customer experiences. Therefore next step was to set up interviews with repair personnel. Interviews were implemented as depth interview method in one repair place in Finland.

The purpose of this interview study was to understand customer's service experience and behavior in repair situation, and understand the reasons for dissatisfaction or satisfaction. Also because the repair personnel, in outsourced repair channel, were the first contact point to customers, the aim was to understand how to improve current service process between customer and repair personnel.

There was a checklist with questions for interview process. Satisfaction survey results were also a baseline for checklist and some of the questions for checklist were defined by customer support experts and other Company XX stakeholders before interview sessions. During and after the interview session, interviewer entered the findings to checklist.

It is not possible to show all the questions or explain all the findings because of legal reasons. Some of the questions are presented here, but a complete list is in appendix and will not be published because it is under non-disclosure agreement:

- Repair place details (name, date, address)?
- What is the most critical reason from repair place point of view; why customer is satisfied with service?
- What is the most critical reason from repair place point of view; why customer is dissatisfied with service?
- Opinions about repair process or comments about own process?
- What are the most critical faults to fix?
- What is the communication to customers?
- What is the communication process between front end, back end and customer?
- What is the content of communication?
- Additional comments, what you want to share & on any questions?

Three customer support experts from Company XX visited one repair place at a different time and interviewed different personnel. One person was interviewing the manager of repair place, one person was interviewing the front end where the customers was serviced and one was interviewing back-end personnel, who were actually doing the repair actions in obvious repair cases. The interview results were analyzed afterwards, and all three persons went through the interview results and findings in a meeting where the problem areas were listed to report.

There were partly same findings that satisfaction survey and call interview data had revealed, but also new findings and service gaps in the service repair process. It was obvious that inside Company XX there are several opinions of how the field work or repair service process work, but when asked from repair personnel, the insight was a bit different. One finding from interview results was the lack of communication between Company XX, outsourced repair network, and customers. One clear action point was to improve communication between different stakeholders, and give to customer clear understanding of what has been done with the device in repair. This was one reason for customer dissatisfaction. This gave input to use also observation method to understand the communication and service process better, and how customers, repair service personnel were acting in real situation. Based on the results, action plan list of problems and checklist for observation study was made. The results were reviewed also with interviewed repair personnel.

Figure 15 shows the interview method findings and suggestion for next method to use, which was observation-method.

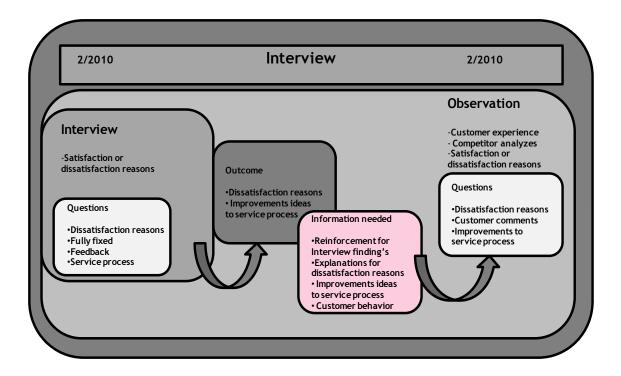


Figure 15: Interview method through hermeneutic circle

## 4.4.2 Observation

The purpose of this observation study was to understand customer's experience and behavior in repair situation, and understand the reasons for dissatisfaction or satisfaction drivers. Also because repair personnel in front end were first contact point to customers, the aim was to understand how to improve current service experience and define competitors process; were they doing some of the repair process steps in different way or using different kind of repair policy.

The observation was made in the same repair place where the interview study also happened. The same customer support experts, who conducted the interviews, conducted also the observations in the repair place. Observation targets were overall repair place, front-end and back-end, and customers.

There was a checklist with questions for observation process. The satisfaction survey results and interview findings were also baseline for checklist. During and after the observation, customer support experts entered the findings to the checklist.

It is not possible to show all the questions or explain all the findings because of legal reasons. Some of the questions are presented here, but a complete list is in appendix and will not be published because it is under non-disclosure agreement:

- Repair place details (name, date, address)?
- How many staff members were in repair place?
- Location of ticket machine?
- Did the staff member show interest by asking questions and listening actively? Willingness to listen customer explanation about the fault?
- Repair personnel communication about repair policies, warranty terms, back-up to customer?
- Customer behaviour in repair place?
- Repair personnel behaviour in repair place?
- Friendliness and helpfulness of repair personnel?
- Helping with settings without repair action?
- Repair place location, look and feel?
- Repair tool processes in use?
- Did the repair personnel recommend Company XX or other brand to customer?
- Communication to customer about pick-up?
- When the product was ready for pick-up, testing process, and communication to customer?
- Show initiative to clarify his/her understanding of the customer's complaint, what is the process for complaints?
- Competitor's repair process and policy elements?
- Additional comments. Please explain the first impression?

Two customer support experts from Company XX were checking the overall repair environment, e.g. ticket machine location, front end desk, back end premises. One customer support expert from Company XX was in front end and observed the customers who visited at repair place. This was also informed to the customers.

Observation was actually revealing process, because at the same time it was possible to understand competitor processes such as repair policies, and possible to understand the usage of other customer support channels such as contact centers or Company XX's web-site before repair place visit. The observation results were analyzed in the same way than interview results, and all three persons went through the findings in a separate meeting.

Outcomes of the observation were new findings about customer expectations and behavior e.g. how customers were acting in a repair place, and how they communicated the problem

to the repair personnel. The observation study brought good information for dissatisfaction reasons and improvement ideas to repair service process, e.g. the customer was not able to explain the detail level faults to the repair personnel. Sometimes the device was not broken, but the customer did not have the understanding of how to use the device.

At the same time the experts gained a good understanding about a competitor's repair process. However there was a doubt that repair personnel acted in different way when they were aware that somebody made observation when they were serving customers. That was one reason, why there was a need to understand the real live situation acting as a real customer. Next phase was to use Mystery Shopping method.

Based on the interview results, action plan list and checklist for Mystery Shopping project was made. Figure 16 shows the observation method findings and suggestion for next method to investigate, which was Mystery Shopping method.

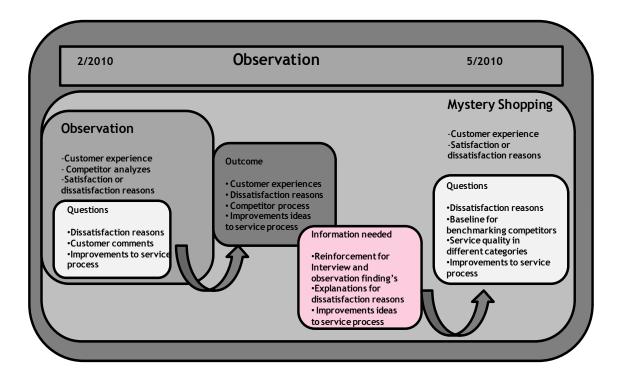


Figure 16: Observation method through hermeneutic circle

#### 4.4.3 Mystery Shopping

Mystery Shopping was the most useful qualitative method in Company XX. This is my own opinion based on the results. It was more time-consuming method than interview or observation. Mystery Shopping was a very effective way to reinforce service standards and observe service quality. Mystery Shopping study was conducted after depth interviews and observation studies

in defined repair place. This repair place was not the same repair place where interview and observation methods were implemented.

A structured checklist form for Mystery Shopping was created based on the interview and observation findings. Mystery Shopping study was conducted to Company XX's all customer support areas, such as contact center, online, repair services, and thus there was created different categories for different support areas. This category separation gave a better picture about whole customer journey in support areas.

I was naming all the categories in this Mystery Shopping study. The categories were:

- Search for solution
- Get information
- Experience
- Closing

Figure 17 shows all the support categories. All the categories were related to repair.

- Category 1 was related to searching solution from different customer support channels before visiting at repair place
- Category 2 was referred to information received from different customer support channels
- Category 3 was related to repair place visits and repair experience
- Category 4 was related to closing the repair case.

In this study I was concentrating more on the findings which were gathered from visiting at actual repair place.

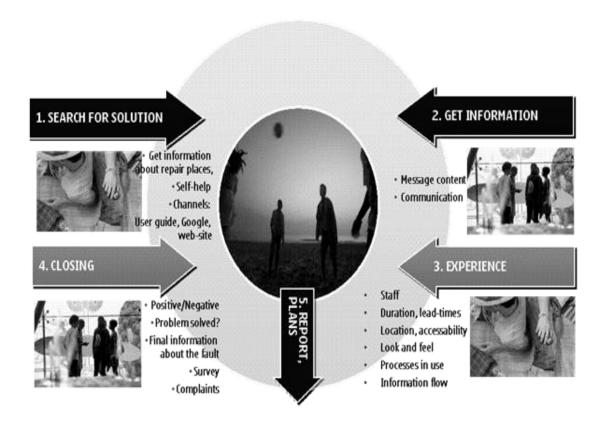


Figure 17: Mystery Shopping categories

It was important to understand from the ethical point of view that by communicating and reminding through the whole organization and outsourced service partners the use of Mystery Shoppers, it already gave a signal to pay more attention to the perception of real customers and service quality. These reminders were sent to outsourced repair service partners regularly.

# 4.4.4 Mystery Shopping implementation

The goal of the study was to define how well repair place is able to help in case when there is problems in device that they cannot fix and when there is a problem that the repair place can fix. The repair place was able to do small fixes in back-end, but some of the repairs were sent to central repair. Another goal was to understand reasons for dissatisfaction and real customer service situation in repair place.

The Mystery Shopping was conducted as expert evaluation. It was possible to use also real users, but in this study there was a need to understand the repair process to be able to see the service gaps in the repair process and suggest improvements based on the findings. Also the idea was to understand the customer experience: how a customer experiences the repair experience and customer journey during repair process.

There was a checklist with questions for Mystery Shopping process. Satisfaction survey results and interview and observation findings were also baseline for checklist.

It is not possible to show all the questions or explain all the findings because of legal reasons. Some of the questions are presented here, but a complete list is in appendix and will not be published because it is under non-disclosure agreement:

- Repair place details (name, date, address)?
- How many staff members were in repair place?
- Location of ticket machine?
- Did the staff member show interest by asking questions and listening actively? Willingness to listen customer explanation about the fault?
- Repair personnel communication about repair policies, warranty terms, TAT, back-up to customer?
- Friendliness and helpfulness of repair personnel?
- Helping with settings?
- Repair place location, look and feel?
- Repair tool processes in use?
- Did the repair personnel recommend Company XX or other brand to customer?
- Communication to customer when pick-up the device?
- Original problem solved?
- When the product was ready for pick-up, testing process, and communication to customer?
- Promoting other company products?
- Show initiative to clarify his/her understanding of the customer's complaint, what is the process for complaints?
- Additional comments. Please explain the first impression?

The expert evaluation was conducted by two Company XX's customer support experts, who visited in defined repair place. They both had a device which was broken. The starting point was searching help, and finds the solution for fixing the device or finds a repair place. When there was understanding that it was not possible to fix the problem by them, the next step was actual visit in the repair place and left the device for repair.

The pre-work for Mystery Shopping implementation took two months. Interview and observation was done before Mystery Shopping implementation. Mystery Shopping results were also planned to use as a base for benchmarking competitor's process. It was not possible to do a

proper benchmark process, if there is no understanding about own company's performance and scores first.

Most of the improvement proposals were related to actual communication between front-end, back-end and customer. There was an action plan list in use and for each actions/improvements was searched an owner inside the Company XX. There were differences about different Mystery Shopping cases, if the device was fixed in back-end or central repair, and also new findings about small things, which can improve the customer experience a lot. Mystery Shopping results were communicated widely inside Company XX.

The outcome from all qualitative methods was to give input and question suggestions to customer satisfaction surveys. All qualitative methods brought improvement ideas to repair service process. The qualitative methods explained deeply dissatisfaction reasons and customer experiences and customer needs. Mystery Shopping method was used to formulate the benchmarking platform for further competitor analyzes.

Figure 18 shows the Mystery Shopping method findings and suggestion for next tasks such as survey questionnaire renewal and Mystery Shopping benchmarking platform creation.

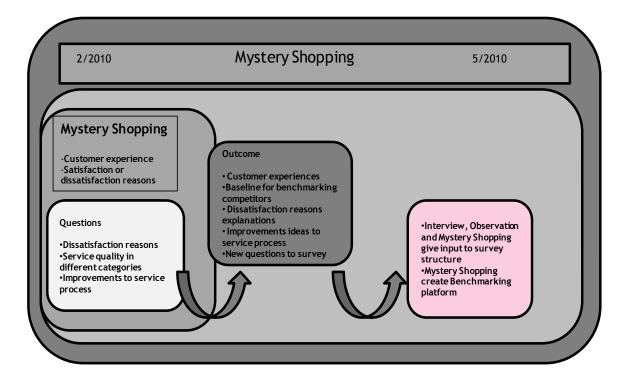


Figure 18: Mystery Shopping method through hermeneutic circle

## 4.4.5 Qualitative data analyzing

It is not possible to show the phases of data analyzing or the results because of legal reasons, but there were some basic phases in analyzing process. The complete version is in an appendix and will not be published because it is under non-disclosure agreement.

Analyzing qualitative data can set up some challenges when there are a lot of different kinds of material available. In this study, there was no recording in interview or observation sessions. All comments were written down as a field notes during and at the end of interview and observation. In Mystery Shopping study the field notes were created after the Mystery Shopping visit.

Qualitative approach formulated not numerical data but more of presentations or reports. The instrument that the Company XX used to conduct the interview, observation and Mystery Shopping visits as objective and measurable as possible, was a multi-item checklist, which has to be filled in by the experts after the visit. This checklist contained many single items. It was divided into different categories such as repair process, dissatisfaction reasons and improvement ideas.

I was leading the qualitative analyzing process. All the customer support experts from Company XX's customer support team made the field notes and wrote down all the main points from interview, observation and Mystery Shopping studies. The next step was to read all material that there was available from interview and observation sessions. Then all the findings were collected to one presentation by all experts, and first level of coding was created. When the coding was done, all customer support experts identified the themes and removed the duplicates from other customer support expert's findings. Finally all interview material grouped, and the outcome was a presentation including excellent areas in repair process, improvement needed areas in repair process and future action plans. This presentation is under non-disclosure agreement, and was sent to the advisor.

Mystery Shopping results were quantitative and qualitative. The outcome was a presentation, and a score-list. According to Newhouse (2004, 83-84), Mystery Shopping can produce both quantitative and qualitative reports. There are basically four types of reports from Mystery Shopping process: simple yes or no, full narrative, rating scale, or a combination of all three. Most reports are a combination of all three. Simple yes or no report is the most basic report as well as easiest to produce. Full narrative is most complicated, and most difficult to acquire and complete. Rating scale is measuring the service on a scale of 1 to 10, with 10 usually being the best. The combination report is most common and is moderately easy to acquire with a minimal amount of experience.

After the Mystery Shopping, customer support experts, who conducted the Mystery Shopping, entered the findings to checklist. The checklist was created to survey software application where the importance categories and answers for each questions and categories was weighted. I developed the survey software questions and categories. Then all the answers and scoring were entered to survey software application which enabled automated and fast reporting. It was possible to use the software directly via Internet browser to insert answers.

Table 13 shows the sample of Mystery Shopping scoring. In this study each Mystery Shopping categories got different score based on the importance of category. The mean results of the different categories were achieved by multiplying the weighted averages of the categories with an 'importance factor'. The importance factor was coming from discussions with Company XX's stakeholders. The Mystery Shopping scoring was implemented based on Hesslink and Van der Wiele (2003) proposal of scoring implementation in Mystery Shopping.

Closing - category	Answer options and scores	Repair Service
	N=2	
Repair personnel pick-up	Confirm customer's initial issue with	1,5
communication?	the device and explain technician	
	analysis, findings= 2	
	Confirm customer's initial issue with	
	the device OR explain technician	
	analysis, findings=1	
	Nothing above=0	
Promoting xx account,	Yes=1	1
other services?	No=0	
Original problem solved	Yes=1	1
(repair)or solution	No=0	
available in other channels		
Show initiative to clarify	Yes=1	1
his/her understanding of	No=0	
the customer's problem?		

Table 14: Sample of Mystery Shopping scoring

In both qualitative and quantitative methods, it was possible to create an action plan where all the process phases which need improvements are marked. It is not possible to show the action plans. The complete version of action plans is in an appendix and will not be published because it is under non-disclosure agreement.

When the action plan was created, the owners for each action were nominated, and regular follow-ups were set-up among the owners. Based on Dawson (2006, 111-114), findings qualitative data analysis can include thematic analysis, comparative analysis, discourse analysis and content analysis. Qualitative data is not related to fact or statistic. It refers to behavior, thoughts, opinions, meaning and the like.

One finding from analyzing observation and Mystery Shopping data was difficulty of documenting the data - it is difficult to write down everything that is important while the observation is on-going. Writing down the field notes should happen right after the observation. Then the information is in fresh memory. The person, who is conducting observation and Mystery Shopping methods, need to have a good memory.

## 4.5 The ethic of study

Normally the critical ethic questions are coming from qualitative research. Quantitative research also demands customer consent for surveys. Sometimes it is not needed consent for customer satisfaction surveys, if the surveys are related to measure only customer service experience. However, it is recommended to ask customer consent in these cases. According to Keegan (2009, 202), changes in social patterns and in nature of qualitative methodologies have meant that ethical codes have needed to be revised. Black and whites have turned grays.

Careful communication is essential to inform repair service personnel about the role of Mystery Shopping, the service elements to be measured, and the actual mystery-shopping results. All of the respondents stated that they followed the ESOMAR/ICC guidelines on the provision of information and reassurances to service personnel. ESOMAR, the World Association of Opinion and Marketing Research (4000 corporate members in 100 countries) state in their guidelines that "it is good practice (and in some countries, a legislative requirement) to inform staff (and also any relevant staff association, works council, etc.) if the organization proposes to carry out Mystery Shopping studies (but not necessarily the timing or precise details of these)" (ESOMAR, 2000).

ESOMAR (2000) also states that "If individuals or individual outlets/branches are to be identified respondents must have agreed to this in advance." Employee acceptance of Mystery Shopping is seen as being critical if the results are to be taken seriously by the service personnel and if industrial relations within the organization are not to suffer. Therefore, a significant amount of effort is put into positioning the Mystery Shopping research within an organization prior to the research being undertaken.

Conducting research in Finland, it was important to review all applicable laws in Finland which was a pilot country. In this study, the communication was done to outsourced repair channels and places about the purpose of the study: understand the customer experiences better. All the results were shared also with repair personnel who participate to the interview session. The reports were sent first to them and they had a possibility to comment the findings. Mystery visit reminders were sent outsourced service partners regularly, so they were aware of Mystery Shopping activities, but they did not know the actual date and venue.

According to Dawson (2006, 154-156), a short code of ethics should be given to everyone who takes part in the research. This should be including the following issues like: anonymity, confidentiality, right to comment, the final report and data protection. One should remember that research would not be possible without the help and co-operation of other people.

In customer satisfaction surveys there was a legal disclaimer that data can be stored or moved between databases, and data can be used for analyses purposes, but data will not send to any third party companies or outside the case company. The customer was able to answer to the survey as anonymous person.

My learning from the qualitative research was to remember and practice careful and good communication to repair personnel, but also to customers when observing them. It is important to inform subcontractors carefully about the study purposes and objectives when conducting qualitative studies, especially interviews, observation and Mystery Shopping. After the interview study analysis, it is also important to check the statements and interpretations from interviewee, so that the interviewee can give own comments or corrections, when the interview analyzed has done.

Table 15 describes ethical issue points. In this study, all the aspects of ethical issues have been kept on mind when qualitative research conducted in repair places.

# Ethical issues in the researcher-participant relationship

- 1. Preserving participant's anonymity
- 2. Exposing participant to mental-stress
- 3. Asking participants questions detrimental to their self-interest
- 4. Use of special equipment and techniques, e.g. tape recorder
- 5. Involving participants in research without their consent
- 6. Use of deception
- 7. Use of coercion to get information
- 8. Depriving participants of their rights, e.g. of self-determination

Table 15: Ethical issues in research methods (Ghauri & Gronhaug 2005, 21)

## 4.6 Validity

Validity differs in quantitative and qualitative research, but in both approaches, it serves the purpose of checking on the quality of the data and the results. When using multi-methods or methodological triangulation as in this study, the validation was confirmed by using multiple methods. Methodological triangulation produced a more complete and holistic picture of the object under study. That was also one target in Company XX study, to validate the findings from quantitative research.

There are many views for validation from different authors. These validity point of views are valid both qualitative approach and quantitative approach. According to Hayes (1997, 60), Creswell & Plano Clark (2007, 133) and Hirsjärvi, Remes and Sajavaara (1997, 231-233), quantitative research validity means that the researcher can draw meaningful inferences from the results to a population. Validity means measuring that what was supposed to measure. In practice this means that with the chosen research method and questions provide information that answers the research problem. In a customer satisfaction questionnaire there are three methods of providing evidence for validity of scores. A content related strategy focuses on the sample of items in the questionnaire, and how well they represent the entire domain of customer satisfaction items. A criterion-related strategy focuses on statistical relationships between measures and whatever the scores predict that they should predict. A construct-related strategy is composed of two previous one, and more of a theory-driven method. It specifies to what the measure should and should not relate.

In qualitative research using e.g. interview method, it is difficult to see the situation as black and white and believe truly what the interviewers are telling.

In this study there were many types of validity that were taking into account during the study. Especially after an interview session it is possible that the findings are not telling the truth or "the correct truth". Ghauri and Gronhaug (2005, 217-218) have described the following types of validity:

- Descriptive
- Interpretative
- Theoretical
- Generalizable

Descriptive validity refers to the degree to which the actual description holds true. Interpretative validity refers to level of interpretation; is it good or bad, and is it the correct one. Theoretical validity means an evidence of suggested theory; does the suggested theory hold

true. Generalizable means that is it possible to extend study findings to other settings. Validity must also be demonstrated. (Ghauri and Gronhaug 2005, 217-218.)

It can be problematic to use a satisfaction question in this repair context. When customer has a problem with the device or product, s/he can be already in a negative mood when visiting at repair places. If there is a question: how satisfied you were at repair experience, customer can reflect the current feeling, and scores satisfaction low though s/he gets good service. That's why there is the danger that the satisfaction question is not the right question in this context. A more relevant question would be effort-question, e.g. how much effort did you personally have to put forth to handle your request?

When the interview method was conducted with repair service personnel there were some misleading comments about the process itself. People do not always say what they mean and mean what they say. Also in the Mystery Shopping results when using both checklist and narrative reports it can be problematic, if service was rated as poor in checklist and later in narrative section as positive service experience. Then, in that case, the report is not valid.

The study was conducted in Finland, and the suggested findings were suitable for one country, Finland's repair services. There can be minor changes, if the country is other than Finland or if the study has been conducted globally. Cultures, habits and norms vary country by country, and it is important to understand people's expectations and cultural behaviors in a research context. This should be taken into account when conducting similar study in a different country. Changing the business environment e.g. to retail environment can influence on study results.

## 4.7 Reliability

Reliability of results may change between different research methods, by using e-mail survey or interviewing customers via phone. In an e-mail survey, it was not possible to ask additional questions from customers. Customer were sometimes in a negative mood because the device was broken, and s/he scored a low satisfaction scores in customer satisfaction survey, but then when somebody called her/him afterwards, and asked the reasons for dissatisfaction, customer were scored differently, because then s/he understood the context better. Also survey lead-time was affected on that. When customer scored right after the repair experience, the result was different than if s/he answered to the survey later e.g. participated to call interview. Right after the repair experience, customer had a vivid memory of a repair experience. According to Creswell & Plano Clark (2007, 133-135) and Hirsjärvi et al. (1997, 231-233), reliability in qualitative research means that scores received from participants are con-

sistent and stable over time. Reliability means the stability of the results. This means that if the study is carried out again similar results will be achieved.

In this study there were three customer support experts who conducted the interview and observation methods, and two of customer support experts conducted Mystery Shopping method. Qualitative data analysis can be a very personal process. Two researchers can give different results. It is important that the researcher should be neutral when analyzing results and not express own feelings or beliefs to final report. This was taken into account when the results were analyzed. According Hayes (1997, 60) and O'Leary (2004, 59-60), reliability has limited meaning in qualitative research, but it is popular in qualitative research when there is interest in comparing coding among several coders. Reliability is the extent to which a measure, procedure, or instrument provides the same result on repeated trials. Reliability means also that results are not dependents on things like who administrated the questionnaire, what kind of day respondents were having. The indicator of reliability gives an assurance that the tools in use will generate consistent findings. Findings may be wrong, but they are constant. Reliability of scales is important when studying the relationship between variables. Low reliability decreases the observed correlation between two variables.

In terms of any research approach, the reliability of a technique can be defined so that similar observations made by different researchers would provide the same results. This is important, if repair personnel or service provider are rewarded based on the results. This study did not contain any reward elements to repair service personnel based on the study results. It is important that there is no own feelings impact on the process when conducting interviewing, observation or Mystery Shopping methods.

## 5 Recommendations

This section includes method package recommendation to Company XX and the study conclusions.

## 5.1 Method package recommendation to Company XX

The outcome of this study was a research method package that could be recommended to be used in a repair business environment to understand the customer service experience better.

The research question was:

• What methods (either qualitative or quantitative) should be used when trying to understand the customer service experiences in the repair channels?

Next I will explain all the suggested research methods to Company XX's customer support unit that should be used to understand the customer service experience in the repair channels.

First, it is reasonable to continue with satisfaction surveys, and use only the SMS method for that purpose. Satisfaction surveys by SMS can give understanding of satisfaction levels that should be followed regularly. Survey sending lead time should be after 24 hours of service experience, so that the service situation is in fresh memory. The SMS surveys should be more focused on repair service provider measurement. The reasons for dissatisfaction or high effort scores should be investigated deeper by using other methods. It is not recommended to conduct many different surveys to customers, so there should be proper sampling in place. Thus the recommendation is to continue with the SMS survey, and stop the e-mail surveys.

The call interviews should be conducted twice a year for the dissatisfied customers, and not to all customers. The interviews should be taken into use within one week from service experience. When trying to understand deeper the dissatisfaction reasons, the call interviews or the face to face interviews with customers in the repair places are best methods for that. The call interviews should be used for investigating deeper the reasons for low effort or satisfaction scores.

The satisfaction surveys, the questionnaires, should be revised twice a year. Qualitative study results and findings will give input when revising the questionnaire.

Qualitative methods should be taken into use: the interviews at repair places either with the personnel and/or with the customers (face-to-face), the observations at repair places and Mystery Shopping at repair places.

The interview session with customers should be happening right after the repair experience in repair place. Then customer has a service experience in fresh memory. However, if the interview is happening immediately after repair service experience, the customer does not have understanding about the functionality of the device yet. Because of that, it is good to conduct the SMS surveys or the call surveys to the customers.

Interviews with the repair personnel can take place twice a year. The purpose of the interview with the repair personnel should be the deeper understanding of customer's service experience and behavior in repair situation, and understand the reasons for dissatisfaction or satisfaction. It is also recommended to interview or visit repair places to make observation after launching new services or new elements to repair service process. The observation can be the supporting method for interview method.

Mystery Shopping is a good method beside surveys, interviews and observation. Mystery Shopping activities can be done in the repair places where overall satisfaction is low or effort score is low, and the customers are complaining about the repair place, the repair personnel, the repair atmosphere, the repair service quality or other service process elements. These answers can be checked first from the satisfaction survey answers, and then understand the reasons by using qualitative research. Mystery Shopping can be conducted also to competitor's repair places or other companies repair places to understand the repair process steps in those companies. Mystery Shopping method can be used as a benchmarking method to Company XX or a benchmark base for understanding competitors repair processes.

Mystery Shopping can be conducted by help of expert evaluation or by real customers. Real customers are more neutral, as they do not know the repair process. Mystery Shopping is a good instrument to create an in-depth insight in perception of customers. It adds value and explains satisfaction and dissatisfaction reasons from satisfaction surveys. Mystery Shopping can be used as an instrument to gather qualitative as well as quantitative information. It is also an instrument to gather objective as well as subjective data.

Figure 19 describes the suggested method package selection.

Method	How often and why?
SMS survey	<ul> <li>Response rate very good in Finland</li> <li>Regularly after the repair visit to measure quickly the experience and satisfaction</li> </ul>
Call interview	More detail level questionnaire in use     Twice a year to customers who have visited at repair place, and low satisfaction scores
Deep interview	<ul> <li>Interviews with repair personnel after launching new services or new elements to repair service process</li> <li>Interviews with customers</li> <li>2-4 times per year</li> </ul>
Observation	Can be done at the same time with interview - supporting method for interview  2-4 times per year
Mystery shopping by real customers	<ul> <li>This should be conducted once a year</li> <li>To get neutral overview about service situation</li> <li>Benchmarking baseline</li> </ul>

Figure 19: Method suggestion to Finland

Combining quantitative methods with qualitative methods ensure to get sufficient understanding on customer service experience. Quantitative methods always require sampling criteria that should be used. Qualitative method is aiming at understanding the customer experience and dissatisfaction or satisfaction reasons from the surveys better. Thus qualitative method does not need strict sampling criteria.

Qualitative study in Company XX revealed some of the missing experience elements which can give added value and positive experience to customer. Qualitative studies revealed also more service process and service quality gaps than traditional surveys. Qualitative results may explain quantitative differences better, and can provide input to new questions in customer satisfaction survey. It would be beneficial to store also qualitative results and findings to the same database where quantitative results are.

Figure 20 shows the package of different methods following the hermeneutic circle idea and what information has been gained by using methods. This circle is endless, because at the end, Mystery Shopping and other qualitative methods give input to surveys.

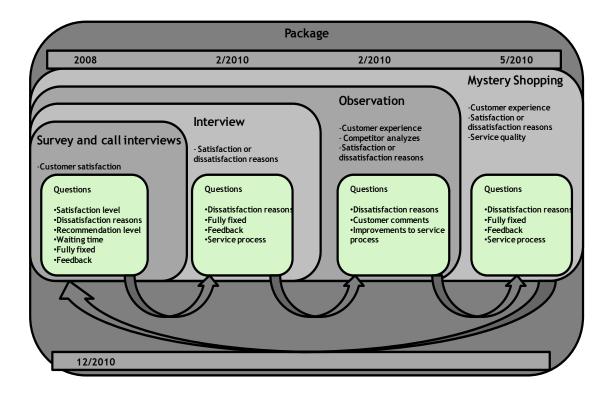


Figure 20: Method package defining by hermeneutic circle

### 5.2 Conclusions

In conclusion, the methodological data triangulation approach in measuring customer service experience offered the opportunity to better understand the customer experiences. My belief is that currently many customer support teams conduct the customer satisfaction surveys to understand the customer experiences in the repair environment. To be able to understand the customer experiences broader, there is a need to use also other methods than only quantitative methods.

In this study the qualitative methods such as interviews, observations and Mystery Shopping gave a good package to complement and explain traditional survey findings such as dissatisfaction reasons. These methods also gave more information about the Company XX's repair process as well as competitors repair process, customer service and service quality in repair context. Repair personnel were delighted that Company XX wanted to know their opinion about repair processes, repair policy and their understanding about customers' dissatisfaction reasons.

Because of the legal reasons, it is not possible to tell all the findings, but I have taken one example from the study. This finding was originally from the customer satisfaction surveys,

where customers complained about the lack of the communication between customer and repair channel. The customers rated that one reason why they are dissatisfied for the service experience is insufficient communication. There was no understanding what customers meant by insufficient communication. By using the qualitative methods such as an interview, it seemed that the insufficient communication problems started already between Company XX and outsourced repair network. Insufficient communication can lead to disaffected staff, and thus to bad customer service. Observation and Mystery Shopping revealed the insufficient communication also between customer and front end (repair personnel). There was not enough information to customers what was done to the device in the repair place.

The improvements to the communication process were easy to implement when all the stake-holders were aware of these communication problems. Improvements meant, in this context, communication improvements between Company XX and outsourced repair network, and between front-end and back-end and customer. Company XX must inform more often to outsourced repair network about the changes which affected repair process. Repair network must improve the communication to customer, and add more information to repair ticket or receipt, what has been done with the device in repair after the customer's repair visit.

Mixing the dataset (qualitative methods and quantitative methods) provides a better understanding of the problem than if either dataset had been used alone. The customer experience does not improve until it becomes a top priority and a company's work processes, systems, and structure change to reflect that. It is important to incorporate different research methods and understanding the customer experience to company's and unit's strategy. Currently understanding the customer experience has valued high in Company XX's strategy, but taking methodological triangulation actively in use in Company XX, requires constant communication about the value of different methods and methodological triangulation.

The results of this study also showed small elements which can improve the customer experience. Sometimes a little extra gesture after repair service process, e.g. car wash after repair or charging the battery after repair, can increase the customer experience and brand loyalty to the company.

Based on this study and the methodological triangulation results, Company XX's customer support team decided to take qualitative research in use to be able to understand the customer experience better. During this study, there was an organizational change in Company XX, and the team structure was changed. A new customer support unit was set up and a new position was opened for managing qualitative research and benchmarking. Currently I'm working as Customer Insight manager and taking care of that position.

## 6 Suggestions for further studies

Company XX has conducted quantitative research by using satisfaction surveys for measuring the customer experience. When conducting methodological triangulation, it is difficult to understand; when and how to use different methods and qualitative research beside with quantitative research. One suggestion is to take in use past, present and potential patterns in the customer experience area according to Meyer and Schwager (2007, 6). A company can monitor various patterns of interaction with customers to gain a better understanding of the customer experience they are providing. Depending on the precise information a company is seeking, it may choose to analyze past patterns, present patterns, potential patterns, or a combination. Each pattern requires a distinct method of generating and analyzing data and will yield different types of insights. This set up requires also a combination of quantitative methods and qualitative methods.

One possibility is to take Zeithaml et al. (2006, 81-116) suggested SERVQUAL model more actively in use for understanding the repair service quality in a repair network. Currently there are some repair service dimensions in use in Company XX which are based on SERVQUAL model.

Customer journey definition, interaction between customer and company, has taken major role in many companies strategy. Company XX's customer support team wants to reduce customer effort to solve problems and interact effectively with customer and maximize value both for the customer and for the company. By using methodological triangulation, quantitative and qualitative researches, it is possible to understand customer journey in holistic way. Customer satisfaction surveys are not telling the whole truth about customer journey, but when there is possibility to add qualitative research methods such as interview or observation to scope, the customer journey steps are visible more transparent. Company XX's should use different research methods actively to define all customers journey process.

It would be good to pilot and test as well other qualitative methods and innovative methods such as focus groups, drama-methods, card-sorting or story-telling. These methods enable interactions with people, and would be beneficial, if Company XX customer support experts, repair personnel and customers can together think the reasons for good repair service, service experiences and service quality.

Although companies know a lot about customers' buying habits, incomes, and other characteristics used to classify them, they know little about the thoughts, emotions, and states of mind that customers' interactions with products, services, and brands induce. In the future

there should be more focus on understanding these "soft" values better to be able to increase brand loyalty, and improve the customer experience.

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## **Appendices**

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Appendix 2: Mystery Shopping, Interview and observation open responses template. This is under non-disclosure agreement (between Laurea and Company XX).

Appendix 3: Care point visit checklist for observation and interview, and scorings. This is under non-disclosure agreement (between Laurea and Company XX).

Appendix 4: Mystery shopping checklist and scorings.

This is under non-disclosure agreement (between Laurea and Company XX).