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**IMPORTANT FACTORS AFFECTING CUSTOMER SATISFACTION
IN E-COMMERCE INDUSTRY: DO PEOPLE GIVE MORE IMPORTANCE
TO SERVICE QUALITY OR WEB-SYSTEM QUALITY IN ESTONIA?**

Master's Thesis

Supervisor: Professor Andres Kuusik

Tartu 2022

We have written this master's thesis independently. All viewpoints of other authors, literary sources and data from elsewhere used for writing this paper have been referenced.

16.05.2022

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Abstract

This thesis examines the effect of important factors on customer satisfaction. Besides the factors affecting customer satisfaction in general, the e-commerce industry-specific factors are also investigated. In order to analyze the findings of the theoretical part, a survey has been conducted in Estonia. The survey has received 232 responses and 223 of them which included those who has done online shopping and are residing in Estonia were used for the empirical stud. By using the findings from the theoretical part, an econometric analysis has been built and a regression method is used to analyze the data gathered from the survey. The results of our analysis have revealed that both service quality and web-system quality have statistically significant effect on customer satisfaction separately. When we compared both factors, we also found out that service quality is statistically more important than web-system quality in the Estonian online shopping context.

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Introduction

In the world of the digitalization economy, where digitalization has become a necessity, growth, and competitiveness are one of the most essential factors. In order to gain a competitive advantage and have sustainable growth, companies should gain more customers. Therefore, in today's competitive world, customer satisfaction can be seen as one of the core elements that increase profit, loyalty, and purchase frequency among companies' customer bases (Castillo, 2017). Yet, there has already been considerable amount of research on customer satisfaction, its core factors, how it can be improved, and how it affects different industries.

For some researchers, such as Wicks and Roethlein (2009), customer satisfaction can be described by the past and present events where a consumer's positive experience results in high satisfaction, when compared to actual expectations and previous interaction results. They also claim that customer satisfaction improves customer loyalty and customer service with its positive relationship.

On the other hand, the rise of internet usage pushed businesses to become more digital rather than the traditional way. Explaining this trend, which is known as commerce, here the advantage of the internet is bringing people together through the electronic environment compared to traditional ways of business where people meet face to face for communication and trading. As Wilson and Christella concluded, e-commerce brought so many benefits, including convenience, time, and money-saving for both stakeholders: vendor and customer. Thus, the companies who provide these benefits to the customers better than others, achieve better customer satisfaction and loyalty scores.

Several studies have been carried out to determine important factors affecting customer satisfaction in e-commerce. Even though several direct and indirect factors are to be discussed, service and web-system quality have been the main topics to be discussed. For example, the same kind of study carried out for the Chinese e-commerce industry has found that service quality brings much value to customer satisfaction scores in compared to website quality (Zhou et al., 2009). Moreover, Maditinos, D. I., & Theodoridis, K. (2010) studied satisfaction determinants in the Greek online shopping context. They found the seven essential factors, including service information quality and user interface quality of the website.

The thesis aims to determine whether service quality or web-system quality is a more important factor in e-commerce customer satisfaction in Estonia.

In order to reach our research goal, we plan to follow the below tasks:

- A. The theoretical background of customer satisfaction will be studied by bringing out its definitions and importance in general.
- B. E-commerce industry specifics will be reviewed, and the final figure of direct influential factors will be mapped
- C. Most known methodologies which are used to measure customer satisfaction will be analyzed by understanding the pros and cons to choose the most suited one for empirical study.
- D. The survey will be carried out using the chosen methodology in the Estonian market to find out whether service quality and web-system quality are statistically significant factors affecting customer satisfaction or not. Additionally, the comparison of the statistical importance of service quality and web-system quality will be investigated.

The end of the study will be covered by conclusions driven by finding and suggestions for the future improvements of the study.

Keywords: Customer satisfaction, E-commerce services, Customer loyalty, Service quality, Product quality, Web-system quality.

Research classification code (CERCS): S191 – Market Study.

1. Defining Customer Satisfaction in E-Commerce

1.1. Definitions and Importance of Customer Satisfaction

Customers play key roles in almost any business. It would be difficult to survive for a company that lacks a customer. Therefore, it is important to understand customers and work closely with them. There are several points that affect a company's success. Customer satisfaction is unsurprisingly one of them. Of course, a word or a phrase can have several meanings or numerous definitions from different perspectives. As it is highly used in almost all industries, customer satisfaction has more than one definition. Before clarifying our definition for our research, we investigated some previously described definitions by several researchers.

According to Kotler (2000), satisfaction can be defined as the feelings of pleasure or disappointment that occur due to the difference between the expectation and the outcome performance of a purchased product or a service. Tse and Wilton (1988) also have similar ideas to Kotler's. They define customer satisfaction as the difference between prior expectations and the received performance of the product or the service that is purchased. In Oliver's (1997) research it is stated that customer satisfaction is the psychological state of a consumer that results from the emotional disappointment that occurs due to their consumption experience of a product and their prior feelings about it.

Based on the article by Hoyer and MacInnis (2001), satisfaction can be described as the feeling of happiness, relief, and acceptance. In the article by Saleem and Rashid (2011), customer satisfaction is defined as the measure of how well a product or a service meets customer satisfaction. On the other hand, from Churchill and Surprenant's perspective (1982), customer satisfaction has the return of expectation of consumption of a product or a service that is based on perception and evaluation.

Satisfaction is dependent on the customer's experience with organizational and personal outcomes (Cengiz, 2010). The same paper also states that for modern management, customer satisfaction can be considered the minimum standard of performance and excellence for any type of organization (Gerson, 1993). Based on Mack and Peter (1989), a satisfied customer can be defined, for both private and public services, as the person who gets an added value.

In the service management industry, customer satisfaction can be concluded from the comparison of customers with the value provided by the comparison and the perceived value they receive when they are in a relationship with the company (Keisidou et al., 2013). In the same paper, it is said that some researchers it has been proven that in the banking sector customer satisfaction is the link between customer behavior and the tendency of a customer to act as their bank are the one that they are interacting with.

It can be highly predictable; customer satisfaction plays a significant role for many businesses and companies. Based on previously presented literature, we can conclude that *customer satisfaction can be described as the feeling of your customers when they are interacting with your brand and has a considerable impact on your company*. As we cannot unitize what all different people like or dislike, it is no surprise to have so many factors affecting customer satisfaction which will be discussed deeply in the following chapters.

In recent years, with the steep increase in the competitive environment in all industries, companies have been forced to be customer-centric. There are numerous approaches that companies can use when building their company cultures, such as customer-centricity, product obsession, competitor obsession, or business model obsession. Even though there are many approaches, some of the biggest companies believe that customer-centricity is the healthiest way to focus on long-term goals. As it is considered the most reliable feedback from customers, customer satisfaction is the most essential issue that drives the firm's vision. (Johnson et al., 2001) According to Hoyer and MacInnis (2001), satisfied customers constitute successful businesses thanks to the customers' repurchases, loyalty, and positive word of mouth. Again, in the same paper, it has been stated that, if customers have

unfulfilled expectations, then they might decide to stop purchasing the products or services, complain or give negative feedback to the company and pass their negative experience to other possible customers through word-of-mouth.

Even the biggest companies world wide have a customer-centric approach among all their departments. Amazon, one of the biggest companies on the planet, is known for its culture based on customer obsession (Amazon's Global Career Site, n.d.). They put customers before everything else and build a bond with their customers. Apart from it, Amazon was the first company to display customer reviews to make the e-retail space more transparent. So, they aim to keep the quality over a certain threshold by making manufacturers aware that consumers may share any experience with each other. Therefore, they believe that meeting their customers' expectations and satisfying them is the key to their success and thus to continuous development. (Vollero et al., n.d.)

Even though we cannot assure that customer satisfaction will increase the number of repurchases, it plays a significant role in customer loyalty and customer retention (Singh, 2006). Customer satisfaction does not only help companies to have happy customers but also increases customer retention (Cengiz, 2010). Evans and Berman (2001) explain this situation by saying that the companies that have satisfied customers have a huge advantage when converting them into loyal customers.

With a higher customer retention rate, companies can experience higher amounts of profit by decreasing their marketing expenses. As the costs of getting new customers are much higher than keeping the existing customers, customer satisfaction gains more importance (Cengiz, 2010). Thus, companies can spend less on marketing their products and save that amount for the development of their products and services. According to Andaleeb & Conway (2006), customer satisfaction is the core of marketing. Besides helping companies to lower their marketing budgets, it also helps companies to gain resource utilization for customer-facing teams in companies in terms of time and risk. As the existing customers become already familiarized with the products and services, there will not be recurring issues about the same problems on the existing customers' side. Therefore, teams who are in charge of the onboarding of the new customers will have more time to focus on the new clients. In terms of risk, customer satisfaction enables companies to have more predictable revenues by keeping the existing customers and securing companies' market share in the industry (Fornell et al., 2006).

Cross-selling can be defined as the practice of marketing additional products to existing customers. Cross-selling is an easy way for firms to grow their businesses and

generate new revenues. It is clear that customers' previous purchases have a positive impact on the increase in cross-selling. Hence, it would not be a surprise to expect happy customers to come back and make other purchases from the company they had good experiences with. (Li et al., 2005)

According to the research done by Ranaweera and Prabhu (2003), satisfaction and trust have an important role in Word of Mouth (WOM). Again, based on the same research, even if a company has satisfied customers, in order to make them say positive things about a product or a service they need to have true loyalty to the product, which comes with trust. WOM is one of the most reliable marketing approaches that every company wants to have. It occurs when a customer talks about a company's product or service to others with whom they are in a close relationship. That way, instead of companies reaching out to new people and familiarizing themselves, existing customers do that for them.

According to the article by Zairi (2000) where they investigated various studies to observe the effect of customer satisfaction on repurchases, customer loyalty, and customer retention, it is concluded that they all have similar statements:

- A. Satisfied consumers are highly likely to communicate their good experiences with other individuals. Likewise, dissatisfied consumers are also most likely to share their bad experiences with other individuals.
- B. Companies need to know that it costs around 25% more to get new customers compared to dealing with complaints coming from customers.

It is clear that the banking & financial sectors strongly rely on the maintenance of long-term relationships with their customers (Sweeney & Swait, 2008). According to Yi (1989), if a bank satisfies its customers over and over again, those customers will be loyal to that bank and continue using it for their transactions. The paper (Keisidou et al., 2013) that is written specifically on the Greek banking sector also confirms that information by saying that customer satisfaction has a positive impact on the brand image of the banks. They claim that the managers should always prioritize customer satisfaction as it has the strongest impact on customer loyalty. However, unlike what we have discussed previously in general discussion, in the banking sector, the profitability of a bank is not affected by customer satisfaction and customer loyalty (Keisidou et al., 2013). In the research of Wakefield and Blodgett (1999), it is confirmed that tangibles play a role in the positive responses from customers. This is because, in a nice environment where people can feel relaxed, customers can feel more satisfied as it also has an impact on brand credibility.

In the article by Castillo (2017), he showed that customers who perceive a state of empowerment tend to be more satisfied when they are in a consultative selling process. He also concluded that companies should strategize the consumer-related issues such as conscientiousness and agreeableness in order to treat customers better and have higher customer satisfaction which then leads to customer loyalty and retention of customers. Garbarino & Johnson (1999), in their research, add this article by saying that customer satisfaction is one of the most essential key roles when gaining a competitive advantage in a rapidly changing business environment.

To sum up, while we concluded *customer satisfaction as the feeling of your customers when they are interacting with your brand and has a considerable impact on your company*. About the importance of customer satisfaction, we can say that there are numerous impacts that customer satisfaction has on the organization. From increasing customer retention to cross-selling, reducing marketing expenses to driving the performance of the company, customer satisfaction is an integral part of firms in today's competitive world.

1.2.Factors affecting Customer Satisfaction

There have been several empirical studies carried out to find out the factors affecting customer satisfaction. During the reviews of different literature, it has been noticed that these determinant factors have been a motive for the focus aspects of different measurement tools of customer satisfaction. In this part, several such findings will be examined deeply by understanding their advantages and disadvantages.

One of the most well-known researchers of customer satisfaction, Fornell with his co-authors identified three determinants which are the *perceived value*, *perceived quality*, and *expectations of customers* (Fornell et al., 1996). They explained the perceived quality as an intuitional process that which customers perceive the quality of the product or service based on their experience. On the other hand, perceived value has been explained as the level relative to the quality of the money spent. Customer expectations are delivered as the prediction of the service quality or product feature based on both consumer's previous experience with the company and future expectancy through the advertisements. These identified determinants have been a basis for the American Customer Satisfaction Index (ASCI) which will be discussed deeper later.

Service quality has been under discussion as a separate topic as a determinant of customer satisfaction over the years. Studies have found that good service quality has led to an increase in customer satisfaction (Taylor et al., 1997; Oh, 1999; Woodside et al., 1989). So, the good service quality brings a better image to the company and increases the retention

rate of customers and the number of word-of-mouth recommendations which also leads to cost reduction in marketing expenses (Berry et al., 1988). Another important piece of literature mentioning the importance of service quality is the research carried out by Parasuraman (1985) who is known as the creator of a methodology known as SERVQUAL which is a widely used measurement tool. They defined service quality as “the global evaluation or attitude of the overall excellence of services”. Based on the study, the main antecedents of customer satisfaction from the perspective of service were mentioned as *reliability* - consistent and accurate service provision ability, *tangibles* - having equipment, work staff, and other facilities which can be used physically, *responsiveness* - agility to respond to customer questions, *assurance* - the competence of workers that help them to make the customers have trust and loyalty, *empathy* - given company's degree of concern and individualized service toward its consumers (Ladhari, 2009; Asubonteng et al., 1996).

It was revealed that *product quality* plays a significant role in customer satisfaction as much as service quality (Gummesson, E., 1988). It has been explained that having better product quality will bring higher levels of customer satisfaction which will lead to an increase in the lifetime value of the customer (Djumarno et al., 2018). Wantara and Tambrin (2019) mentioned that consumer satisfaction would be gained if the person perceives the quality of the product.

On the other hand, based on the quality of service or product, customers define a *price* that has been perceived as a reasonable value accordingly (Oliver, R. L., Rust, R. T., & Varki, S., 1997). Several studies have brought out a direct impact of price on the level of satisfaction (Homburg et al., 2005), while customer satisfaction plays a role as a determinant of price as well (Huber et al., 2001). Furthermore, price fairness's indirect effect on customer satisfaction was explained in Herrmann's study carried out in 2007 (Herrmann et al., 2007).

There have been studies that concluded that *brand or corporate image* plays an influential factor in the formulation of customer satisfaction. Foxall concluded that customers perceive the value through the perception of brand image (Foxall & Goldsmith, 1998). The authors Nguyen, H. T., Nguyen, H., Nguyen, N. D., & Phan, A. C. (2018) found out the importance of *corporate image* while studying the determinants of customer satisfaction in Vietnamese life insurance companies, and elaborated their own framework which also captures Fornell's and Parasuraman's ideas. Furthermore, Morgan, R. P. (2000) explained that a positive brand image leads to better satisfaction, and the customer is prone to recommend the products or services to others.

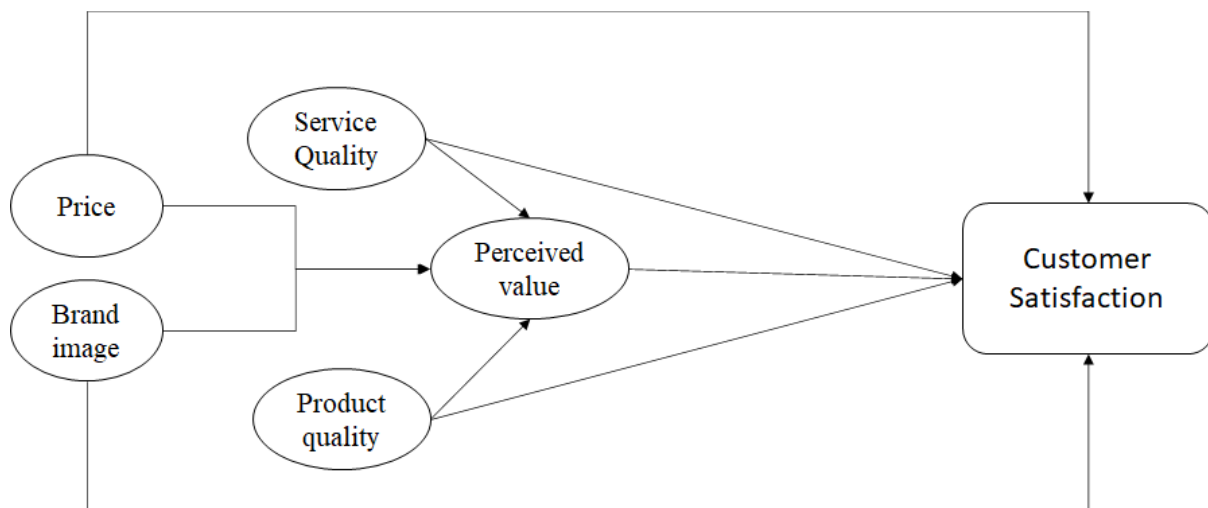


Figure 1. An elaborated framework of factors that has a direct effect on customer satisfaction.

Sources: Fornell et al., (1996); Taylor et al., (1997); Oh (1999); Woodside et al.,(1989); Berry et al., (1988); Parasuraman (1985); Ladhari (2009); Asubonteng et al., (1996); Gummesson, E.(1988); Djumarno, S. A., & Djamaluddin, S., (2018); Wantara, P., & Tambrin, M. (2019); Oliver, R. L. et al., (1997); Homburg et al., (2005); Huber et al., (2001); Herrmann et al., (2007); Foxall, G. R., (1994); Nguyen et al., (2018), Morgan, R. P. (2000).

By summing up the literature reviewed above, we brought out Figure 1, which captures the holistic view of the factors which directly affect customer satisfaction. Here, while the perceived quality was concluded as the only direct influential factor, service quality, product quality, price, and brand image are the ones that have both direct and indirect influence. There are also so many factors that affect customer satisfaction indirectly, but considering the scope of the study, we did not include those factors.

1.3.Approaches to customer satisfaction in E-commerce platforms

As we have discussed in the previous parts, customer satisfaction may have different definitions in different industries. Likewise, even in the same industry, the definitions and approaches to customer satisfaction may vary. This is why in this chapter, we will be talking about these different definitions of customer satisfaction in e-commerce services.

E-commerce, which stands for electronic commerce, is the trading of goods or conducting any transaction through an electronic environment (Gupta, 2014). There are different types of e-commerce such as business-to-business (B2B), business-to-consumer (B2C), and consumer-to-consumer (C2C). (Tian & Stewart, 2006)

- A. Business-to-business: According to Babenko B2B e-commerce is the largest and the fastest-growing market in the e-commerce industry. The same paper also says that

B2B e-commerce is simply conducting businesses on the internet. It is a type of e-commerce that enables deals and relationships among businesses.

B. Business-to-consumer: B2C e-commerce is a type of business where the end-user is an individual and the interaction happens between the consumer and the preferred business.

C. Consumer-to-consumer: C2C e-commerce happens between two different consumers where there are no sellers who are legal companies and there is an intermediary third party who connects consumers to each other. (Babenko et al., 2019)

With its advantages e-commerce also plays a big role in today's e-business world. According to the same paper, by reducing the costs of time and money spent searching for the necessary information about suppliers and products, transparency in the pricing of products, and the improvements in the management of logistics. E-commerce technology also helps many businesses to sell their products all around the world in an easier and more convenient way (Babenko et al., 2019).

Defining what e-commerce is, we should also mention the terms e-market and e-commerce platforms, which are similar and mostly confused with it. E-markets (Gupta, 2014) can be defined as websites that enable the transactions and interactions among buyers and sellers. On the other hand, e-commerce platforms are end-to-end software solutions that allow online businesses to manage their businesses while providing consumers with a variety of options to choose from (Liu et al., 2021).

Clarke (2015), also believes that e-commerce can be described as product or service merchandising through telecommunication tools. Babenko (2019) makes an addition to this by saying that e-commerce can be seen as an electronic contract that helps people to exchange values via communication technologies. This partly overlaps with Babenko's (2009) definition of e-commerce, which agrees that e-commerce is the use of the internet and software tools in order to trade specific goods or purchase orders.

According to Alam and Yasin's (2010) research on e-commerce, customer satisfaction can be defined as how the performance of a product meets the customer's expectations. They also say that customer satisfaction is at the center of the online business environment. According to Grigoroudis and Siskos (2009), customer satisfaction in the e-commerce industry is defined as the measurement that business organizations use to understand how customer-oriented they are. As it is for many other industries, again in e-commerce effectiveness of a business organization relies highly on understanding the customer expectations (Gajewska et al., 2019).

By taking the reference from figure 1 in which we brought out the broader framework of customer satisfaction's antecedents, the following study analyzed the narrower context of the research objective. It was found that while the mentioned determinants of customer satisfaction in figure 1 are more or less the same in e-commerce service, there are other important factors that need to be included in the research framework.

Starting with recalling definitions of e-commerce, logically *website quality* is one the most influential factors which affect customer satisfaction. One of those studies which brought out the importance of website quality is by Bell, H., & Tang, N. K. (1998). They talked about the commercial online websites' performance and the research illustrates the significance of this research aim in an e-commerce business's long-term competitive advantage (Bell & Tang, 1998). In another interesting study, Wilson et al. (2019) investigated the comparison of the effect of *service quality and website design quality* in the e-commerce industry, and it was found that while in Europe, Asia, and Australia service quality is considered much more important than website quality, the situation in North and South American market was vice versa.

Moreover, by investigating the website design factors, it was concluded by Turban & Gehrke (2000) that the key categories of determinants, according to a literature review, are, *user convenience, reliability, commercial information, page loading speed, and brand management focus*. As also Park and Kim (2003) found in their research, as it shows the online service provider's success when using the service, customer satisfaction is impacted highly by the quality of the *user interface*.

Additionally, in the same research, they also found out that the *quality of the information* has a direct effect on customer satisfaction. Eid (2011) also found the positive impact of information and user interface quality on customer satisfaction. It was concluded that customers feel much more satisfied if it is easy to find all the information about the products and basically the quality of the product information helps the user to save time (Alba et al., 1997).

Perceived security and privacy are other important factors that highly affect customer satisfaction as it concerns almost every user nowadays based on different kinds of literature. In comparison to traditional ways of shopping, online shoppers are more conscious of the importance of security and privacy (Friedman et al., 2000). The process of payment especially has been impacted by the perception of security (Kolsaker & Payne, 2002) and if that perception is low, then that may risk the satisfaction level of users (Shih et al., 2004). On the other hand, customers' trust has been affected by the level of perceived privacy about the

handling of their personal information (Park & Kim, 2003), so, as we found above, trust affects satisfaction, accordingly, this also can be concluded that privacy perception has an effect on customer satisfaction.

In the broader context, it was discussed the importance of service quality as an influential factor in customer satisfaction. But, under this naming, it includes many components including conflict resolution, goods choosing and assistance from sales assistants, responses to commonly asked inquiries through e-mail and other channels, etc., (Zeithaml et al., 2002). But for this it was found out logistics-related activities should be discussed separately and especially according to the literature reviewed. Ho & Wu (1999) brought out that activities involving logistics such as *delivery, and the opportunity to refund products, guarantee coverage, and after-sale support* are the most significant determinants of customer satisfaction in new businesses. Moreover, Reibstein, D. J. (2002) concluded that comparing pricing on-time deliveries and shipping and handling are deemed fairly essential in predicting consumer happiness.

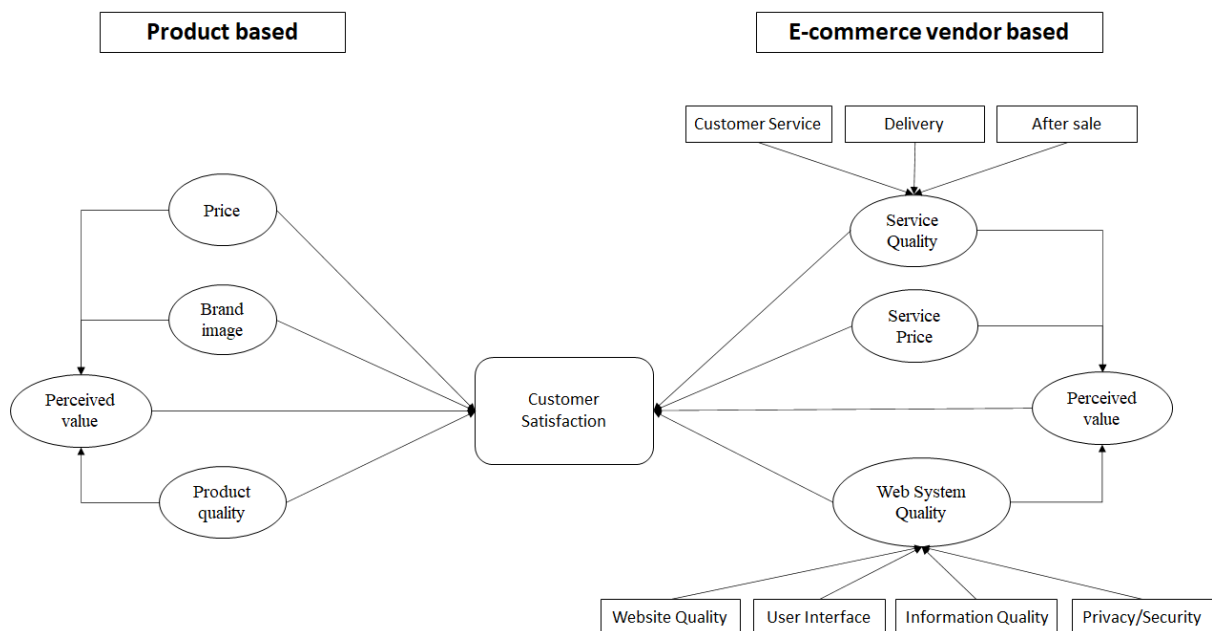


Figure 2. Factors affecting e-commerce customer satisfaction based on authors' conclusion. Sources: Fornell et al., (1996), Taylor et al.,(1997), Oh (1999), Woodside et al.,(1989), Berry et al., (1988), Parasuraman (1985), Ladhari (2009), Asubonteng et al., (1996), Gummesson, E.(1988), Djumarno, S. A., & Djamaluddin, S., (2018), Wantara, P., & Tambrin, M. (2019), Oliver, R. L., Rust, R. T., & Varki, S., (1997), Homburg et al., (2005), Huber et al., (2001), Herrmann et al., (2007), (Foxall, G. R., (1994), Nguyen et al., (2018), Morgan, R. P. (2000), Bell, H., & Tang, N. K. (1998), Wilson et al.(2019), Turban & Gehrke (2000), Park and Kim (2003), Eid (2011), Alba et al., (1997),

Friedman et al., (2000), Kolsaker & Payne, (2002), Shih et al., (2004), Park, C. and Y. Kim, (2003), Zeithaml et al., (2002), Ho & Wu (1999), Reibstein, D. J. (2002), Hidayanto et al., (2014)

To sum up, while factors defined in a broader context, such as price, product, and service quality, can be concluded as much as important in the e-commerce industry, while brand image should be scooped out as the study focus on defining determinants of e-commerce vendor which sells different brands' products. So, the study did not find "vendor image" as a direct influential factor in online shopping although it mainly leads to customer trust (Hidayanto et al., 2014). Taking the reference of "system"¹, the authors combined website quality, user interface, information quality, and privacy/security under the same umbrella which is named web-system quality. Based on the conclusion, the *Figure 2* is introduced above.

1.4. Which methodologies do the e-commerce platforms prefer to use for measuring e-commerce platforms?

The importance of customer satisfaction has been discussed in the previous parts of the research. Today's competitive market rivalry requires companies to focus on timely measurement of customer satisfaction, strengthening weak points, and sustaining the quality of strengths. Whether customers are satisfied with the outcome of services, goods, or not is defined by the means of measurement of customer satisfaction (Pu et al., 2019). Assessing customer satisfaction helps enterprises to identify learning and development needs, compare team performance, create clear goals to strive for, and increase customer happiness. ISO - International Organization for Standardization includes customer satisfaction as one of the main factors of the success of companies. Therefore, the importance of monitoring and measuring customer satisfaction was described in ISO 10004:2018 – "Quality management — Customer satisfaction — Guidelines for monitoring and measuring".

The linkage between different factors and customer satisfaction was discussed in the previous part of the study and it was mentioned that these linkages have been the motive for the measuring methodologies which we are going to review literature here. There have been so many researchers who tried to bring new methodologies that consider different factors while measuring customer satisfaction. During this research, through several works of literature, the below methodologies were chosen as the major ones and the most well-known.

¹ system - combination of interconnected or interacting pieces that follow a set of rules to produce a coherent whole (Definition of system". Merriam-Webster. Springfield, MA, USA. Retrieved 2019-01-16.

Customer Satisfaction Index (CSI). By combining the quantitative calculation technique of customer satisfaction with the psychological perspective of customers, Fornell proposed the Fornell model in the late 1980s, which served as the theoretical foundation for developing customer satisfaction index models (CSI) in a variety of countries (Anderson & Fornell, 2000). Based on the Fornell model, in 1989, the first national customer satisfaction index for the services and goods: **Swedish Customer Satisfaction Barometer (SCSB)** was introduced. The idea behind the index is to measure the output quality of customer experience while the regular performance measures are intended for quantity. The SCSB measured overall 100 organizations from over 30 industries in the Swedish economy annually (Fornell, 1992). This initiative by Swedish Statistic Bureau inspired other countries to establish their own Customer Satisfaction Index (CSI) over the years. Following SCSB, the **American Customer Satisfaction Index (ACSI)** was introduced as a new model for measuring customer satisfaction across United States industries. The index is made up of over 200 enterprises, over 40 industries, and seven distinct key sectors, and it reflects the whole economy (Fornell et al., 1996). Based on the methodology, in the formulation of overall customer satisfaction, while factors like perceived quality, perceived value, customer expectations, and customer loyalty affects in a positive way, customer complaints decrease overall satisfaction. Then, in Europe (European Customer Satisfaction Index), countries like Australia, China, Saudi Arabia, etc., adopted ACSI for their own market (Johnson et al., 2001).

SERVQUAL was designed for measuring service quality through 5 dimensions which form an acronym of RATER using the capital letters of each dimension: Reliability, Assurance, Tangibles, Empathy, Responsiveness. By using a questionnaire, the customers are asked to grade their perceptions compared to expectations. The Servqual method includes 22 items for each sample (Parasuraman et al., 1985).

The table below represents an overall summary of the model.

Table 1

Servqual Model summary

Dimension	No. of Items in Question naire	Sample expectations item	Sample perceptions item
Reliability	5	When excellent telephone companies promise to do	XYZ company provides its services at the promised time

		something by a certain time, they do so	
Assurance	4	The behavior of employees in excellent banks will instill confidence in customers	The behavior of employees in the XYZ bank instills confidence in you.
Tangibles	4	Excellent telephone companies will have modern-looking equipment	XYZ company has modern-looking equipment
Empathy	5	Excellent banks will have operating hours convenient to customers	XYZ bank has convenient operating hours
Responsiveness	4	Employees of excellent telephone companies will never be too busy to help a customer	XYZ employees are never too busy to help you

Source: (Parasuraman et al., 1988)

The overall result comes through the equation in which service quality is equal to the extraction of customer expectations from their perception based on service delivery obtained ($SQ = P - E$) (Buttle, 1996).

Customer Satisfaction Score (CSAT) is one of the most simple survey techniques that companies use to measure client satisfaction. The term is mainly used as a CSAT score for showing the numerical value of the satisfaction rate. The technique gives freedom to the owner of questions and questions are directed to ask to see the level of satisfaction during the experience of the customer with service/product. The scale can be chosen from 1 to 5, 1 to 10, etc., depending on the preference (Kiradoo, 2019).

Examples of CSAT survey-type questions can be stated below:

Example 1.

How satisfied were you with the customer support you received today?

Very Unsatisfied 1 2 3 4 5 Very Satisfied

☐ ☐ ☐ ☐ ☐

Example 2.

How satisfied were you with your experience?

Figure 3. CSAT survey examples.

Source: Retrieved from <https://www.dialpad.com/de/glossary/csat/>

The respondent is required to answer based on scale and then follow-up questions may arise. The overall score is calculated by finding the percentage of positive feedback in regard to overall responses.

Customer Effort Score (CES) is the service metric for measuring customer experience with services or products in which users value their interaction in getting the work done. The scale ranges from 1 to 7 while 1 indicates Very dissatisfied, 7 means “Very Satisfied” (de Haan et al., 2015). The methodology was introduced in 2010 by researchers Matthew Dixon, Karen Freeman, and Nicholas Toman who explained that the amount of effort that customers spend in getting the problem solved indicates customer loyalty better than just delighting customers (Dixon et al., 2010).

Taking an example of the CES type survey question would be:

Overall, how easy was to solve your problem with us today?

Very difficult Difficult Neutral Easy Very easy

Your response: ☐ ☐ ☐ ☐ ☐

Figure 4. Customer Effort Score type survey question.

Retrieved from 5 Call Center Customer Satisfaction Survey Templates That Get Results | Talkdesk (Johnson, n.d.)

We talked about the linkage between customer satisfaction and customer loyalty while defining customer satisfaction and the significance of customer satisfaction in customer loyalty was concluded positively. So, the study found **Net Promoter Score (NPS)** which is a widely used metric for measuring customer loyalty as a suitable metric to be discussed. The metric started to be developed in 2001 by F.Reichheld, who then after 2 years of ongoing research wrote about NPS in his Harvard business review article (Reichheld, 2003).

To get the NPS, companies need to use one single question - “How likely would you recommend us to your friends based on your experience?”, and respondents are asked to choose a value on a scale of 1 to 10 (Owen, 2019). Based on answers, the following groups of respondents are being formalized:

- A. Promoters (scoring 9 and 10)** are devoted customers who will continue to buy and suggest others, hence boosting growth (Grisaffe, 2007).
- B. Passives (scoring 7 and 8)** are the customers who are satisfied with the outcome but also are receptive to choosing other rival offers (Owen, 2019).
- C. Detractors (scoring 6 and below)** are disgruntled consumers who can stifle growth by spreading the poor word of mouth and undermining the brand of the company (Hamilton et al., 2014)

Schneider & Krosnick (2008), explained how Net Promoter Score may be used as below:

- Sort your consumers into different groups based on how committed they are to you.
- Determine which clients are unhappy with your service and will not recommend you.
- Find out what motivates your consumers' loyalty and how you might increase it.
- Compare your results to those of other professionals in your field Schneider & Krosnick (2008).

To sum up the methodologies, overall, 5 well-known methodologies: CSI, SERVQUAL, NPS, CSAT, and CES were found suitable to review. The comparison of the methodologies has brought out different characteristics to mention. Within the methodologies, it can be each technique while focusing on the main aim which is measuring customer satisfaction, separately, each has some unique aspects of their experience.

Generally speaking, the CSI and SERVQUAL methods are the ones that set tougher boundaries to follow while the NPS, CSAT, and CES differ for their simplicity and give flexibility to the experts. By going deeper, it can be said that CES is used in different contexts

in comparison to NPS and CSAT. So, those which we discussed like NPS, and CSAT, are the methodologies that focus on customers' positive experience mainly, while CES cares about the customer's pain points and believes that customer satisfaction will be increased if the customer finds it easy to interact with the product or service. From the other perspective, the advantages of CES and CSAT are to allow the company to measure each resource's capability and allocate them wisely.

2. Determinants of the satisfaction of e-commerce platforms in the context of Estonia

2.1. Methodology of the empirical study

As discussed previously, we have carried out detailed theoretical research on customer satisfaction in e-commerce and different industries, its importance together with its determinants. Based on that theoretical research, we have developed our own ideas on the definition of e-commerce and the most important factors that affect customer satisfaction in the e-commerce industry. Hence, we followed an inductive approach to build our research questions. We have summarized our ideas on those factors in figure number 2. As the authors of this thesis, we developed the below research questions to study in the context of online shopping in Estonia.

- (1) What is the statistical effect of Service quality on e-commerce customer satisfaction?*
- (2) What is the statistical effect of Web-system quality on e-commerce customer satisfaction?*
- (3) Which one is more statistically important in formulation of e-commerce customer satisfaction in Estonia: Service quality or Web-system quality?*

These research questions were decided to focus on, as theoretical found out that in comparison to other industries, e-commerce industry brought out web-system quality concept into the picture while on the other hand service quality concept in e-commerce services came with new sub-concepts as delivery in comparison to other industries. That is why, considering time boundaries and the scope of the study, we decided to empirically study these factors, to check individual statistical effect as well as the comparison statistical effect between them. After developing our research questions, we checked various ways to collect data to study our research questions. Online survey research brings its advantages by enabling access to unique populations and saving time and cost (Wright, 2005). Hence, we decided to make an online survey considering all external factors, especially the current pandemic situation during the research time.

We prepared a survey of 6 parts where we aimed to get to know our respondents and understand their experience with the service quality and web-system quality separately. To

have a better quality of data, we decided to set the first 2 parts of our survey to filter out the non-targeted group of people who do not live in Estonia or who have never had an e-commerce purchase. Afterward, we tried to get to know our respondents better, by asking them some questions to learn about their gender, age group, online purchase frequencies, and the categories they make purchases on.

Based on the figure 2, in the survey we have used for our research, we have asked our respondents to grade the satisfaction on several cases for each category (Service quality, and Web-system quality). In the service quality part, we divided our categories into 3 determinants such as customer service, delivery, and after-sales. For web-system quality, we had 4 categories such as user interface, website quality, information quality, and security.

Although in the theory part (1.4.) we reviewed 5 different methodologies, the CSAT methodology was chosen because it brings simplicity and is much more flexibility for the survey. While CSI method was not used due to its specific focus and complexity, CES type of questions would be more suitable to ask respondents right after the purchase. Additionally, another methodology discussed in the theory part, NPS is used for measuring customer loyalty, so it was scooped out as well.

By asking questions about respondents' latest online purchasing experience, we aimed to be able to calculate the final Customer Satisfaction Score (CSAT) which enables us to study our research questions accordingly and this methodology was also used in a study by Maditinos, D. I., & Theodoridis, K. (2010) which was focused on Greek geographical area and brought valuable outcome. In the beginning, we prepared a draft survey and shared it with 15 respondents to get feedback to make the survey context more understandable and interactive. We used to google forms as it was found as the most convenient and secure way of collecting data. The final survey was shared on different social media channels, including LinkedIn, Facebook, and Telegram.

To estimate the relationship between customer satisfaction and service quality, and between customer satisfaction and web-system quality, we handled regression analysis. When running our regression analysis, we regress our dependent variable both separately and together. All these results will be presented in the next section below.

2.2. Analysis of the Data

Overall, the survey was carried out in Estonia for 1-month, and 232 respondents filled the survey. Out of that, 223 respondents' answers were found suitable for the research as we only considered the ones who are currently residing in Estonia and have ever used the E-commerce services' help for shopping.

Starting with sharing some demographics about the data collected, 54.3% of the respondents were females, while the rest (45.7%) were males. Additionally, we asked respondents whether they were local or not, and the results concluded 44.8% of them were foreigners living in Estonia, while 55.2% were local people of Estonia. Moreover, to understand their experience, we asked them how long they have been shopping online. While most of the respondents (54.3%) had over 5 years of online purchasing experience, others varied between less than 1 year to 5 years (See Figure 5 below). Another interesting question was about the number of purchases done in the last year, in which shoppers who purchased over 15 and 4-8 dominated the survey results (See Figure 6 below).



Figure 5. Pie chart for the answers to our survey question “Since when are you shopping online?”



Figure 6. Pie chart for the answers to our survey question “How many times have you made an online purchase in the past 1 year?”

For doing the proper analysis, the data collected was pre-processed by encoding the labels based on CSAT methodology as shown in Table 2 below: For Encoding, Python programming language was used.

Table 2

Label Encoding based on CSAT methodology

Option given to choose	Encoded to
Not Applicable (you did not have this experience while purchasing)	0
Very Dissatisfied	1
Dissatisfied	2
Neutral	3
Satisfied	4
Very Satisfied	5

Source: Authors' calculations

After pre-processing, we used Minitab Statistical Software to carry out our regression analyses. First, we examined our data quality from the multicollinearity and autocorrelation wise. For checking autocorrelation, we applied Durbin-Watson statistic, and values were within the range of 1.87 – 2.07. On the other hand, variance inflation errors were 1.43 between predictors variables, Service quality and Web-system quality. According to Myers (1990), as the numbers are within acceptable range (VIF is less than 10, and Durbin-Watson-statistics were within the range of 1.5-2.5), we should not be worried about multicollinearity and autocorrelation.

The following regression analyses were carried out, by taking our 3 research focuses into consideration.

(1) *What is the statistical effect of Service quality on e-commerce customer satisfaction?*

The regression analysis was resulted as below:

$$\text{Overall Customer Satisfaction} = 1,210 + 0,7144 \text{ Service Quality satisfaction}$$

Table 3

Values based on the 1st research question

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	1,210	0,187	6,48	0,000	

Service Quality satisfaction	0,7144	0,0449	15,91	0,000	1,00
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Source: Authors' calculations in Minitab

Durbin – Watson Statistic = 1.87

Taking reference of the data provided, P-value states that the relationship between Overall Customer Satisfaction and Service Quality satisfaction is *statistically significant* ($p < 0.05$). Moreover, a perfect positive correlation ($r = 0.73$) has been noticed between variables, meaning that the increase in Service Quality Satisfaction causes an increase in overall customer satisfaction. Additionally, it is worth noting that 53.39 % of the variation explained by the model makes the analysis suitable for academic research. See the comprehensive summary report in Figure 7 under Appendix C.

It can be concluded that *service quality significantly affects e-commerce customer satisfaction*.

(2) *What is the statistical effect of Web-System quality on e-commerce customer satisfaction?*

The regression analysis was resulted as below:

Overall Customer Satisfaction = 1,579 + 0,6441 Web-System quality satisfaction

Table 4

Values based on the 2nd research question

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	1,579	0,180	8,76	0,000	
Web-System quality satisfaction	0,6441	0,0446	14,45	0,000	1,00

Source: Authors' calculations in Minitab

Durbin – Watson Statistic = 2.07

Taking reference from the data provided, P-value states that the relationship between Overall customer satisfaction and web-system quality satisfaction is *statistically significant* ($p < 0.05$). Moreover, a perfect positive correlation ($r = 0.70$) has been noticed between variables, meaning that the increase in web-system quality satisfaction causes an increase in overall customer satisfaction. Additionally, it is worth noting that 48.58 % of the variation explained by the model makes the analysis suitable for academic research. The overall summary report can be found in Figure 8 under Appendix C.

It can be concluded that *web-system quality significantly affects e-commerce customer satisfaction.*

(3) Which one is more statistically important in formulation of e-commerce customer satisfaction in Estonia: Service quality or Web-system quality?

Overall Customer Satisfaction

=

0,584 + 0,4874 Service quality satisfaction + 0,3918 Web-system quality satisfaction

Table 5

Values based on the 3rd research question

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	0,584	0,174	3,35	0,001	
Service quality satisfaction	0,4874	0,0460	10,60	0,000	1,43
Web-system quality satisfaction	0,3918	0,0434	9,02	0,000	1,43

Source: Authors' calculations in Minitab

Durbin – Watson Statistic = 1.99

By referring to the statistics above, it can be concluded that both variables have a statistically significant effect on overall customer satisfaction ($p < 0.10$) while service quality (Coeff=0.4874) has a slightly more effect compared to web-system quality (Coeff= 0.3918). Overall, 65.97 % variation was explained by the model which can be found within the summary report in Figure 9 under Appendix C.

Table 6. summarizes the statistical influence of Service and Web-system quality from different demographical perspectives:

Table 6

Comparison of Service Quality and Web-System Quality for different Coefficients

Overall Customer Satisfaction = Constant + Service Quality satisfaction + Web-System quality satisfaction (“n” shows the number of respondents)	Coefficient							
	Local (n=123)	Non Local (n=100)	Male (n=102)	Female (n=121)	Over 5 year's online shoppers (n=121)	Under 5 year's online shoppers (n=102)	Shopping online 9 and more times in a year (n=109)	Shopping online 1-8 times in a year (n=114)
Constant	0,91	0,573	0,488	0,801	0,335	0,844	0,307	0,769
Service Quality	0,3685	0,5418	0,5465	0,4019	0,5432	0,4124	0,5139	0,4686
Web-system quality	0,4488	0,3251	0,3472	0,433	0,3948	0,4049	0,4368	0,3597

Source: Authors' calculations in Minitab

Based on Table 6, it is visible by looking at the green colors we can see that while *local, female* subgroups find web-system quality a much more important factor in the formulation of overall customer satisfaction in E-commerce services, on the other hand, non-locals and males consider service quality as a more significant one. By looking at the online shopping experience, it has been noticed that people who have under 5 years' purchasing experience do not put that much difference between factors, but the people who have over 5 years' experience think that service quality is much more significant than web-system quality. Almost the same trend has been followed by the means of shopping times in a year. Data visualization in Table 6 clearly showed that there is a possibility of a relationship between being local and female, and non-local and male. So below charts show that indeed while local people are the majority among the females, on the other hand, males are slightly more formulated than locales. Accordingly, this affected the data by bringing out that both locals and females prefer web-system quality, and both nonlocals and males prefer service quality as a matter of customer satisfaction.

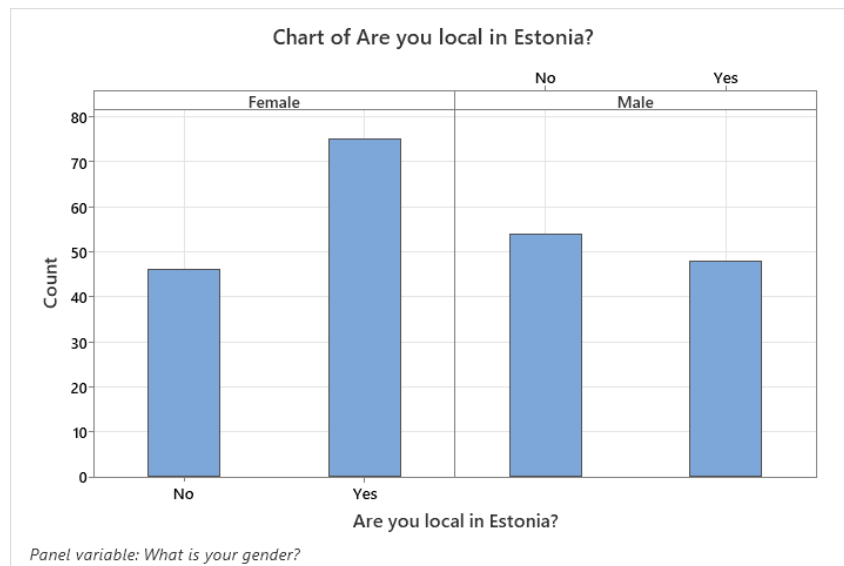


Figure 10. The distribution of survey respondents by their gender and local status

Source: Authors' calculations based on the survey data

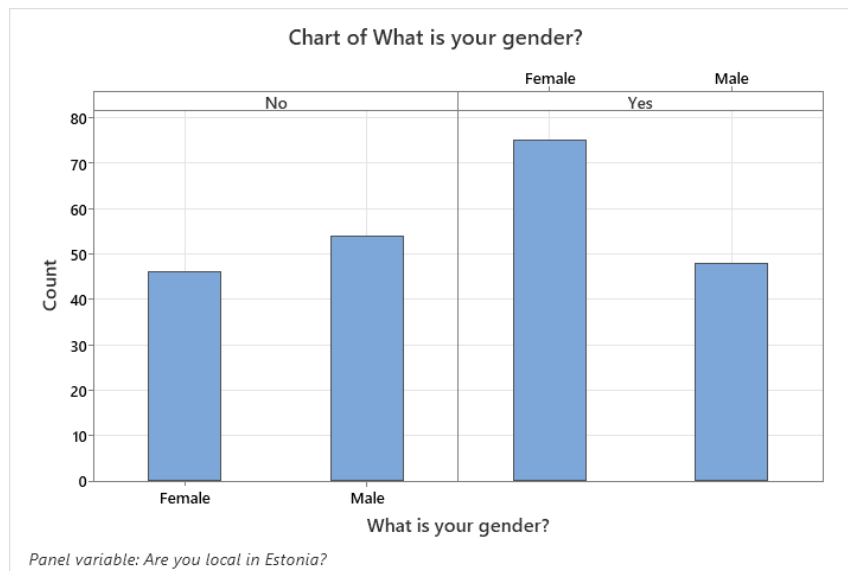


Figure 11. The distribution of survey respondents by their local status and gender

Source: Authors' calculations based on the survey data

It is also worth mentioning that for all subgroups, both service and web-system quality have a statistically significant relationship with overall customer satisfaction.

2.3. Discussion and implications

In our empirical study, we investigated the direct relationship between service quality and web-system quality with overall customer satisfaction. Based on the theoretical study, we put 3 research questions to focus on in the empirical part.

- (1) *What is the statistical effect of service quality on e-commerce customer satisfaction?*
- (2) *What is the statistical effect of web-system quality on e-commerce customer satisfaction?*
- (3) *Which one is more statistically important in the formulation of e-commerce customer satisfaction in Estonia: Service quality or Web-system quality?*

Overall, it can be safely said that both service quality and web-system quality have a statistically significant effect on overall customer satisfaction in e-commerce services. Secondly, by checking the effect of service quality and web-system quality on overall customer satisfaction using multiple regression, it was concluded that service quality is slightly much more statistically significant than web-system quality, while both were found as statistically significant. Moreover, the amount of sample was large enough (n=223) to obtain a precise estimate of the strength of relationships, considering that normality was not an issue in estimation. Additionally, over 50% of variation on average was explained by the model, and that also helped us to come to the proper conclusion.

As the collected data enabled us to look it up from different demographical perspectives, we drew interesting conclusions. Going deeper, it was found out that although local and female subgroups regard web-system quality to be a more relevant component in the construction of total customer satisfaction in e-commerce services, non-locals and males consider service quality to be a considerably more critical factor. When looking at people's online shopping experiences, it was discovered that those with less than 5 years of purchasing experience do not see much of a difference between factors, whereas those with more than 5 years of experience believe that service quality is far more important than web-system quality.

We can summarize findings from the Estonian online shopping context as below:

- It was revealed service quality is more important than web-system quality in Estonia. This is consistent with the study of Wilson et al. (2019) who found that while in Europe, Asia, and Australia service quality is considered much more important than website quality.
- On the other hand, the above statement is not matching for local and female groups meaning that these 2 subgroups gave more importance to web-system quality in comparison to service quality.
- Our findings are essentially similar to those of previous studies. We discovered that the quality of product and service information as a part of service quality, as well as the quality of user interfaces and security perception as a part of web-system quality, all had a substantial influence on overall satisfaction and those finding are also consistent with Park & Kim (2003) and Maditinios, D. I., & Theodoridis, K. (2010).
- It was found out that people residing in Estonia give more importance to service quality than web-system quality. Therefore, e-commerce companies should improve their services by bringing out accessible customer service, fast and quality delivery. They should also take after sale actions by having effective guarantee and return policy.

There are a few flaws in the study that need to be addressed. Recognizing these limits can lead to new research directions. There were methodological weaknesses in the study, which were frequent in survey-based research. Thus, the research should be replicated using other national and international samples. Qualitative research methodologies might be used to understand more about how customers evaluate and perceive the quality of e-services.

Following studies might focus on developing more sophisticated models capable of capturing and explaining changes across product categories or on a specific category, such as eBooks, DVDs, or flight bookings. Furthermore, in the Estonian internet shopping context, the link amongst consumer happiness, trust, and continuous purchasing intention should be investigated.

Conclusion

In our master thesis, we firstly theoretically focused on customer satisfaction by expanding its definition and importance, then methodologies to be used to measure it. The study was carried out from a wide to a narrow perspective, focusing on customer satisfaction in a broader context and then going deeper into the e-commerce industry. To conclude, the study revealed that there are many factors affecting customer satisfaction. Price, brand image, service, and product quality were found as determinants that directly and indirectly affect customer satisfaction. The indirect effect of these factors was followed by the perceived quality, which then affects customer satisfaction directly as well.

By going deeper into the e-commerce industry, the research found that customer satisfaction is formalized by 2 subgroups, product, and vendor-based customer satisfaction factors. While the product-based factors included the determinants from the general perspective elaborated in Figure 1, e-commerce vendor-specific factors added web-system quality formalizing by 4 subgroups including website quality, user interface, information quality, privacy, and security. Also, service quality, such an important factor for e-commerce vendors, was formalized by 3 subgroups including customer service, delivery, and after-sale. All of those were reflected in Figure 2.

Overall, 5 methodologies (CSI, SERVQUAL, NPS, CSAT, and CES) which are widely used to measure customer satisfaction were reviewed in the theoretical study, and among those CSAT was found suitable for the empirical study as it was the most convenient and appropriate to reach study goals.

In the empirical part, we put 3 research questions to focus on in the empirical part.

- (1) *What is the statistical effect of service quality on e-commerce customer satisfaction?*
- (2) *What is the statistical effect of web-system quality on e-commerce customer satisfaction?*
- (3) *Which one is more statistically important in formulation of e-commerce customer satisfaction in Estonia: service quality or web-system quality?*

The survey following CSAT methodology was carried out in Estonia to analyze the responses of those who have at least one-time online shopping experience. Overall, for the 1-

month period and 232 respondents filled the survey. Out of that, 223 respondents' answers were suitable for the research. The econometrical analysis revealed that all of our research questions are true, meaning that service quality and web-system quality has a statistically significant effect on customer satisfaction. On the other hand, it was found out that service quality is statistically more important than web-system quality. Additionally, the data collected enabled us to look at it from different perspectives, such as considering gender, shopping experience, and outcome were collected in Table 6. Briefly mentioning that, while female and non-local Estonian residents found web-system quality more significant than service quality, local men thought the opposite. Furthermore, regardless of the shopping experience, others found service quality more important than web-system quality.

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Appendices
Appendix A - Summary of Importance of Customer Satisfaction

Table 7
Summary of Importance of Customer Satisfaction

	Reliable feedback from customers	Repurchasing	Continuous development	Word of Mouth	Customer Loyalty	Increase Customer Retention	Reducing marketing expenses
Johnson et al. (2001)	✓						
Hoyer and MacInnis (2001)		✓		✓			
Amazon's Global Career Site				✓			
Vollero et al.			✓				
Singh (2006)						✓	
Cengiz (2010)					✓	✓	✓
Evans and Berman (2001)					✓		
Andaleeb & Conway (2006)		✓				✓	✓
Fornell et al. (2006)		✓					
Li et al. (2005)		✓					

Ranawee ra and Prabhu (2003)		✓		✓			
Zairi (2000)				✓	✓		✓
Summary	1	5	1	4	3	3	3

Source: Authors' calculations

Appendix B - Summary Reports of the Analysis



Figure 7. Regression for Overall Customer Satisfaction vs. Service Quality Satisfaction

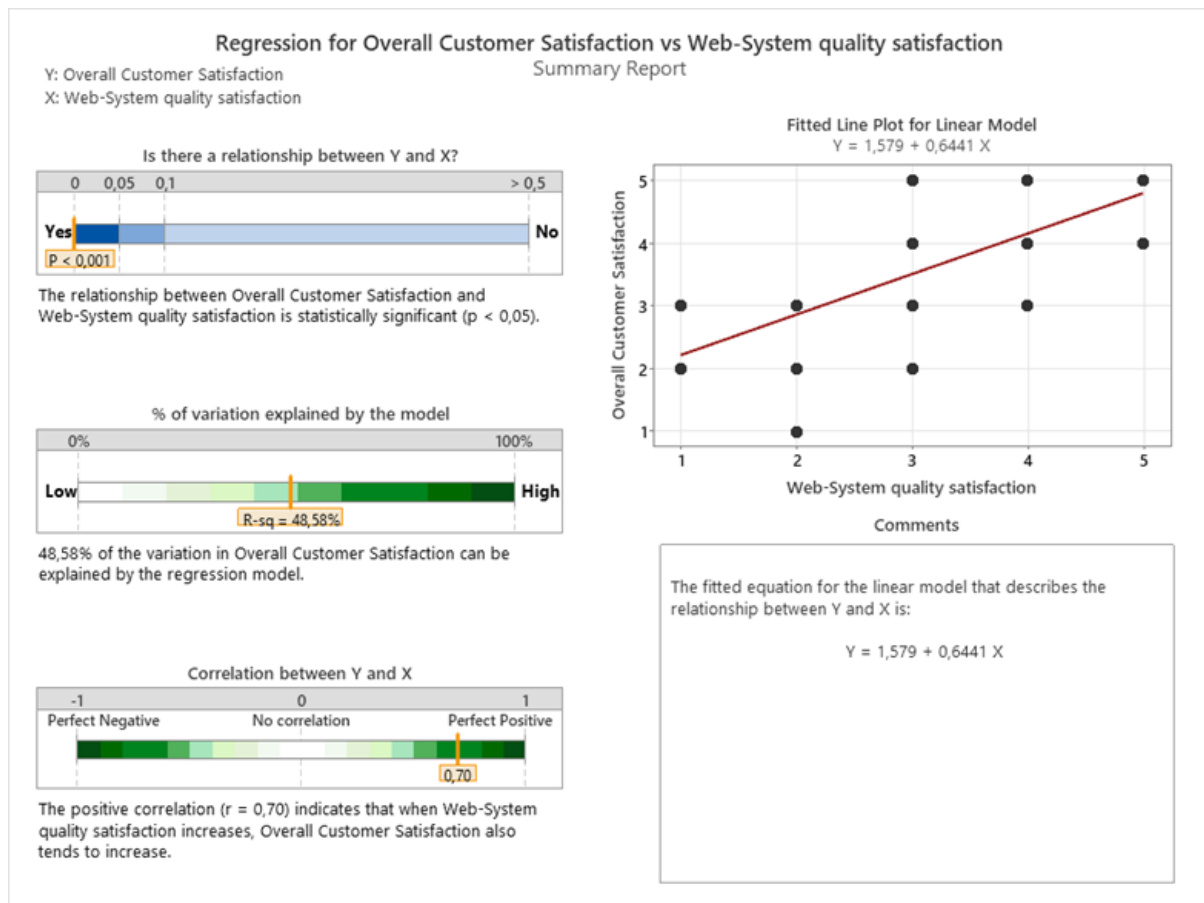


Figure 8. Regression for Overall Customer Satisfaction vs. Web-System Quality Satisfaction

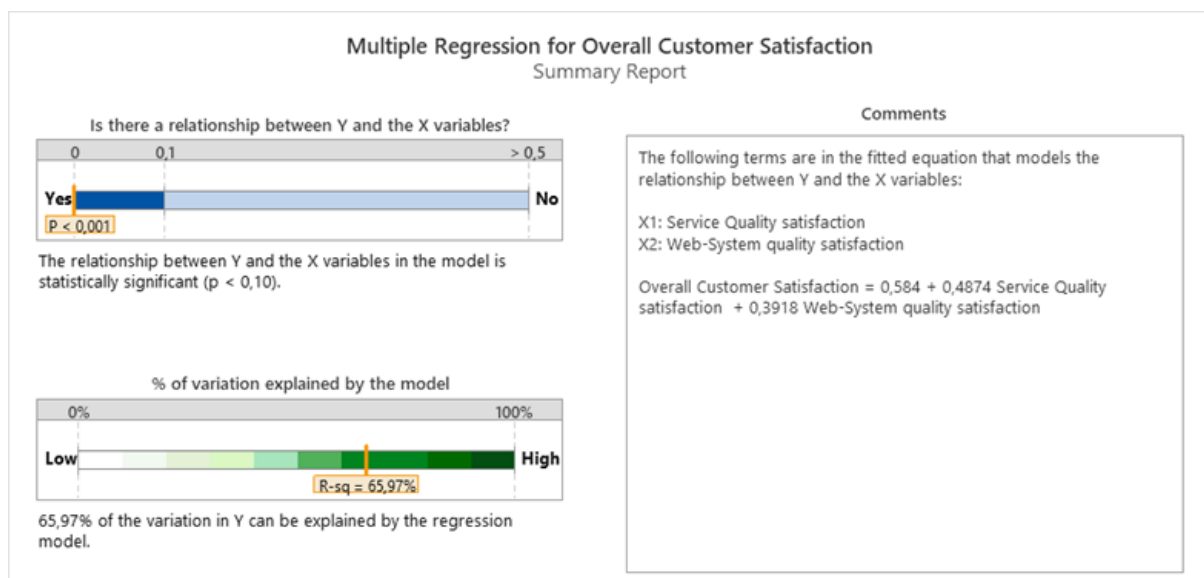


Figure 9. Multiple Regression for Overall Customer Satisfaction

Appendix C - Survey Questions

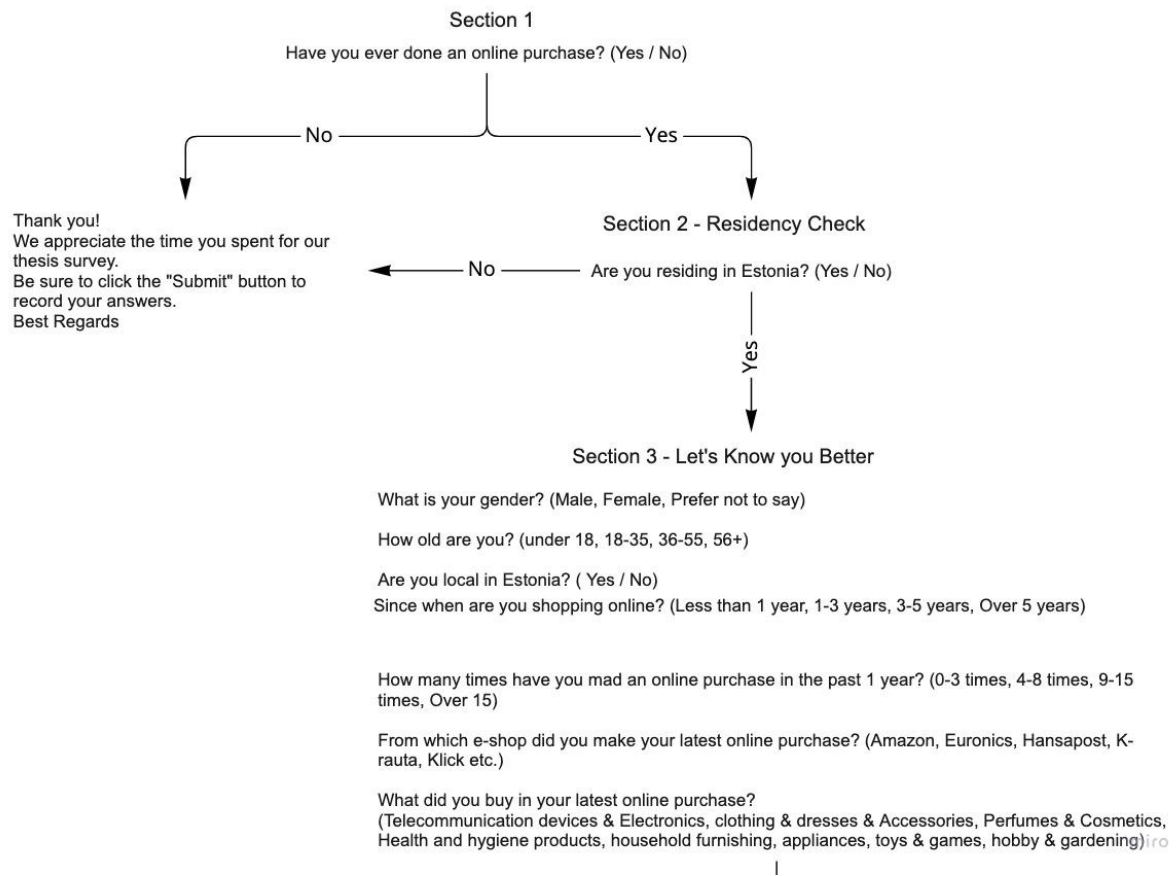


Figure 12. Sections 1,2,3 and thank you message

Section 4 - Service Quality

All the Questions in this section have same options.

(Not Applicable, Very Dissatisfied, Dissatisfied, Neutral, Satisfied, Very Satisfied)

How satisfied were you with the accessibility of customer support in your latest online purchasing experience?

How satisfied were you with the kindness of customer support in your latest online purchasing experience?

How satisfied were you with the help of customer support in solving your problem in your latest online purchasing experience?

How satisfied were you with the delivery quality(quality of packaging) in your latest online purchasing experience?

How satisfied were you with the variety of delivery options offered you by the company in your latest online purchasing experience?

How satisfied were you with delivery speed in your latest online purchasing experience?

How satisfied were you with the kindness of customer support in your latest online purchasing experience?

How satisfied were you with the kindness of customer support in your latest online purchasing experience?

How satisfied were you with the refund service in your latest online purchasing experience?

How satisfied were you with the change policy in your latest online purchasing experience?

How satisfied were you with the guarantee policy in your latest online purchasing experience?

OVERALL, how satisfied were you with Service quality considering customer support, delivery, and after-sales aspects in your LATEST ONLINE PURCHASING experience?

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Figure 13. Sections 4

Section 5 - Web-System Quality

All the Questions in this section have same options.

(Not Applicable, Very Dissatisfied, Dissatisfied, Neutral, Satisfied, Very Satisfied)

How satisfied were you with the loading and processing speed of the website in your latest online purchasing experience?

How satisfied were you with the provided language options of the website in your latest online purchasing experience?

How satisfied were you while navigating on the website in your latest online purchasing experience?

How satisfied were you with being able to find the product you were looking on website in your latest online purchasing experience?

How satisfied were you with the product choices offered to you by the website in your latest online purchasing experience?

How satisfied were you with the reliability of the information provided on the website in your latest online purchasing experience?

How satisfied were you with the understandability of the product description in your latest online purchasing experience?

How satisfied were you with the variety of payment options provided by the website in your latest online purchasing experience?

How satisfied were you with smoothness of the payment process in your latest online purchasing experience?

How satisfied were you with the data protection policy in your latest online purchasing experience?

How satisfied were you with the notification system of the website while tracking your delivery in your latest online purchasing experience?

OVERALL, how satisfied were you with Web-System quality considering web design, privacy/security, and information quality aspects in your LATEST ONLINE PURCHASING experience?

miro

Figure 14. Section 5



Section 6 - Overall Satisfaction

OVERALL, how satisfied were you with your LATEST ONLINE PURCHASING experience?

(Not Applicable, Very Dissatisfied, Dissatisfied, Neutral, Satisfied, Very Satisfied)

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Figure 15. Section 6

Resümee
KLIENDI RAHULOLU MÕJUTAVAD OLULISED TEGURID
E-KAUBANDUSE TÖÖSTUSES: KAS INIMESED TÄHTSUSTAVAD ROHKEM
TEENINDUSKVALITEET VÕI VEEBISÜSTEEMI KVALITEETEESTIS?

Mehmet Işık Eratlı

Mahmud Mahmudlu

Digitaliseerimismajanduse maailmas, kus digitaliseerimine on muutunud hädavajalikuks, selle kasv ja konkurentsivõime üks olulisemaid tegureid. Konkurentsieelise saamiseks ja jätkusuutlikuks kasvuks peaksid ettevõtted hankima rohkem kliente juurde. Seetõttu uurisime käesolevas lõputöös oluliste tegurite mõju klientide rahulolule. Lisaks üldistele klientide rahulolu mõjutavatele olulistele teguritele uuritakse ka e-kaubanduse valdkonnaspetsiifilisi tegureid. Nagu tegurid selgitasid, et e-kaubanduse klientide rahulolu mõjutavad 2 alarühma; toote- ja müüjapõhised kliendirahulolu tegurid, millel on oma alamtegurid.

Pärast tööstusharuspetsiifiliste tegurite analüüsimist tutvustatakse ka 5 laialdaselt kasutatavat metoodikat ning üks neist valitakse uuringu empiiriliseks osaks. Kasutades teoreetilise osa tulemusi, on üles ehitatud ökonomeetriline analüüs ning uuringust kogutud andmete analüüsimiseks kasutatakse regressioonimeetodit. Teoreetilise osa järelduste analüüsimiseks on Eestis läbi viidud küsitlus ja analüüsitud tulemusi. Meie analüüsi tulemused on näidanud, et nii teenuse kvaliteet kui ka veebisüsteemi kvaliteet omavad statistiliselt olulist mõju kliendi rahulolule eraldi. Mõlemat tegurit kõrvutades oleme leidnud ka, et teenuse kvaliteet on Eesti veebiostlemise kontekstis statistiliselt olulisem kui veebisüsteemi kvaliteet.