Mika Eronen

Analysis of Online Food Delivery

Service quality during the COVID-19 pandemic

School of Technology and Innovations
Industrial Management
Pro Gradu

Vaasa 2024

UNIVERSITY OF VAASA
School of Technology and Innovations
Author: Mika Eronen
Title of the Thesis: Analysis of Online Food Delivery : Service quality during the COVID-19 pandemic
Degree: Master of Science (Economics and Business Administration)
Programme: Industrial Management
Supervisor: Ville Tuomi
Year: 2024 **Pages:** 65

ABSTRACT:

Technological innovations have allowed platform-based services to gain a prominent position in the business landscape. One of the most well-known types of these services is online food delivery services. These gained significantly more popularity worldwide and in Finland, especially during the global COVID-19 pandemic from late 2019 to early 2022. For companies offering services as their core business model service quality and customer satisfaction are core capabilities. This thesis analyzes how well service quality and customer satisfaction were achieved in Finland-based Wolt during the timeframe among a customer group of young adults. In the study, the data was gathered with a SERVQUAL online questionnaire from which the service gaps between customer expectations and service outcomes were calculated with gap analysis. From this data, the service quality model of customer satisfaction was revised to pinpoint in what aspects should Wolt improve its service if another pandemic-like situation occurs again. The findings indicated that in many areas the service gap was not significant, but in the service dimension of reliability, which was the most important section for the participants, the service quality had major issues.

Tiivistelmä:

Teknologiset innovaatiot ovat mahdollistaneet alustapohjaisten palveluiden saaneen merkittävän jalansijan yritysmaailmassa. Yksi tunnetuimmista tämäntyyppisistä palveluista on ruoan lähettipalvelut. Ne kasvattivat merkittävästi suosiotaan ympäri maailman ja myös Suomessa etenkin COVID-19 pandemian aikana, joka kesti vuoden 2019 lopusta vuoden 2022 alkuun. Yrityksille jotka tarjoavat palveluita ydinliiketoimintanaan, palvelun laatu ja asiakastyytyväisyys ovat tärkeimpiä kyvykkyyksiä. Tämä pro gradu -tutkielma analysoi kuinka hyvin palvelun laatu ja asiakastyytyväisyys saavutettiin Suomessa perustetussa Wolt-palvelussa kyseisenä aikavälinä nuorten aikuisten asiakasryhmässä. Tutkielman data kerättiin SERVQUAL internet-kyselyllä, jonka tuloksista asiakkaiden oletusten ja palvelun lopputuloksen välinen palvelun kuilu laskettiin kuiluanalyysin avulla. Saadusta datasta uudistettiin asiakastyytyväisyyden palvelun laatu-malli, joka korostaa kuinka Wolt voisi kehittää palveluaan, jos pandemian tapainen tilanne tapahtuisi tulevaisuudessa. Tutkimustulokset osoittivat, että monilla palvelun laadun osa-alueilla palvelun kuilu ei ollut merkittävä, mutta luotettavuuden palvelu ulottuvuudella, joka oli kohderyhmälle tärkein, palvelu laadussa oli merkittävämpiä ongelmia.

KEYWORDS: Platform-based service, Online food delivery service, Service quality, Customer satisfaction, COVID-19, SERVQUAL

Contents

Pictures

Figures

Tables

Abbreviations

Online-to-Offline = O2O

Platform-to-Consumer = P2C

Restaurant-to-Consumer = R2C

Expectations = E

Outcome = O

1 Introduction

Platform economies have gained widespread recognition, especially with the help of advancements in digital technologies (Lehdonvirta et al, 2019, p. 569; Xue et al., 2020 p. 1-2). One of the most well-known platforms for consumers can be named to be online food delivery platforms, which saw substantial growth, especially during the COVID-19 pandemic (Li et al., 2020, p. 1-2; Bonfanti et al., 2023, p. 164). The Finnish-based Wolt was one of these fast-growing companies during the pandemic (Asiakastieto, 2023). For businesses in the service industry, service quality can be seen as a core capability for the longevity of the company (Park et al., 2021, p. 92).

1.1 Background and purpose

The COVID-19 pandemic was a significant disruptive event, influencing every industry globally (Majerova & Vartiak, 2021, p. 1). There have been many studies conducted about service quality during the pandemic time period, including studies about online food delivery services. There were no studies conducted on the service quality and customer satisfaction of these services from the viewpoint of Finland during the pandemic, so I decided to take a closer look at the phenomenon from that point of view. As Wolt is a well-known company founded in Finland, I delimited the study to be about their service quality. By using the framework SERVQUAL, the research question became:

RQ1: *"How was service quality achieved in the online food delivery platform Wolt during the COVID-19 pandemic?"*

To view the phenomenon from a wider scale, in order to study what customers view as the most important quality dimension in these types of services, the first sub-question is:

SQ1: *"What aspect of service do customers value most in these kinds of services?"*

As COVID-19 started very unexpectedly and became a pandemic, businesses in the online food delivery industry have to readjust their operation fast, if this type of scenario happens again. Therefore the second sub-question is:

SQ2: *"If another pandemic-like scenario were to occur, what areas should companies providing these services focus on for improvement?"*

1.2 Scope and limitations

The study is limited to Wolt and its Finland operations specifically, in order to ease up the data collection process. The other big company in the same business in Finland is Foodora, but collecting data from both of these companies would have been a very big task with the limited schedule I had. As Wolt was founded in Finland and is very familiar to most consumers in the target age range, it was ultimately chosen for this study. As the global trend of online food delivery rose during the COVID-19 pandemic and the primary users for these services being young adults, I chose to observe the service quality and customer satisfaction from the point of view of this customer audience during the timeframe. The scope of the study is to find out how service quality could be improved in an unexpected situation like a pandemic.

1.3 Structure of the study

The thesis paper starts with a literature review part in chapter 2 where the theory of the paper will be established. First, the platform-based services as a concept will be introduced, in order to understand what these services are, then the online food delivery platforms which are the focus of this study. After the chapter about the effects of the COVID-19 pandemic, which is the time frame of this study, Wolt will be introduced, which is the company whose service quality during the pandemic is investigated. As service

quality and customer satisfaction are important to service businesses, these concepts will be introduced before investigating them in the context of online food delivery services during the COVID-19 pandemic. After this, the theoretical framework of SERVQUAL is explained before the methodology and results parts of the study. The thesis paper will end with a chapter about conclusion and discussion.

2 Literature review

The theory of the thesis is presented in the literature review chapter. In this chapter we take a deeper look at platform-based services as a concept to further the understanding of their essence and contemporary relevance, then focusing on online food delivery services. After this, the concept of online food delivery platforms is introduced, and after that the COVID-19 pandemic's effects on the restaurant business and customer behavior are established, before introducing Wolt. Customer satisfaction, service quality, them in the context of online food delivery services during the COVID-19 pandemic and the theoretical framework of the study will then be introduced.

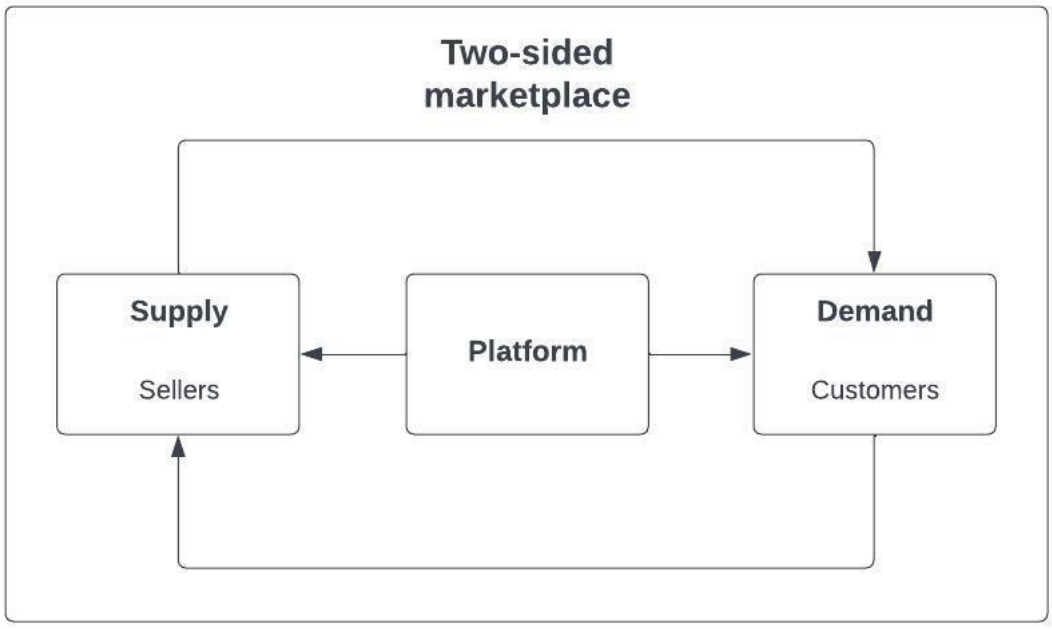
2.1 Platform-based services as a concept

According to Xue et al. (2020 p. 1-2) the rapid advancement of digital technologies has been remarkable over the past decades. Besides the Internet and the Internet of Things among others, they continue that these innovations have opened possibilities for new business models. Especially with the fast development of information technology, a new market relationship of two-sided operation and production has came to life in the form of platform-based services. Subsequently, these platforms serve as a basis of the digital economy, with new businesses facing a decision whether to offer their services or products through a platform or not (Cutolo & Kenney, 2021, p. 600-601). Acs et al. (2021, p. 1635) described that the increasing significance these platforms offer in terms of value creation can also be labelled as "*platformization"*. The evolving business landscape has made possible the availability of a variety of digital services and products to be offered to consumers. These service offerings might not have been feasible without the platforms acting as intermediaries, enabling seamless connections between providers and users of the platform (McIntyre & Srinivasan, 2017, p. 141).

According to Lehdonvirta et al. (2019, p. 569), the concepts of platform and sharing economy have gained widespread recognition and prominence. These concepts can often be confused with each other and used as synonyms as they lack precise definitions. However, typically sharing economy refers to non-commercial or non-professional transactions, whereas platform economy implies that commercial transactions are involved in the service. Due to the absence of a precise definition, platforms can be characterized in various different ways (Cutolo & Kenney, 2021, p. 585). The key characteristics can still be identified to be the emphasis on individual consumers, rather than bigger organizations, as their primary users and customer base. Consequently rather than from companies, most of the revenue generated comes from individuals who are matched both as customers and suppliers in these online platforms (Lehdonvirta et al., 2019, p. 569). In general terms, a platform can be characterized to often be an application, where economic and social interactions can be performed (Acs et al., 2021, p. 1635).

In a nutshell, platform services have three main capabilities: they coordinate the users to innovate and compete with each other, enable value creation and offer a technological architecture for the service to be provided. The platform consists of actors who supply products and services that create value for the platform business as a whole (Cutolo & Kenney, 2021, p. 585). Unlike in the more traditional business models, where products are sold directly to customers, in the platform-based model the buyers and sellers are just two sides of a platform that brings them together. This emphasizes the role of digital technologies in platform ecosystems, underscoring the global nature of these services (Acs et al., 2021, p. 1636). As described by Xue et al. (2020, p. 2) and Acs et al. (2021, p. 1636), in this business model price and quality are not the only factors attracting customers. Within platforms, the greater the number of sellers they have, the more likely the customers are to find the platform in the first place. They continue, that this dynamic creates a positive feedback loop known as platform-mediated network effects, where an increase in the number of sellers also increases the number of customers, which then helps attract more sellers to the platform, creating a two-sided market. Gathering users is crucial for platform businesses in order to create appropriate matches of customers

and sellers, as they are heavily demand-side driven, giving the users an important role in the business model (Acs et al., 2021, p. 1636). The primary premise of a platform-mediated network is that the users view the platform as of higher value, the bigger its user base is. This is because the higher the number of participants, the more opportunities there are for interactions within the platform (McIntyre & Srinivasan, 2017, p. 141). As in industries where network effects play a significant role, the business model tends to exhibit an "all or nothing" dynamic, customer retention becomes a key priority for the businesses (Acs et al., 2021, p. 1636). In the Picture 1 below, the two-sided marketplace is illustrated. The supply and demand side are connected by the platform and interactions between the two sides are done within the digital platform service.



Picture 1. Two-sided marketplace (Storm, 2023)

Cutolo & Kenney (2021, p. 589) describe that platform services often encounter challenges during the beginning phase of their operations**.** In the early stages of a new platform service, it often becomes essential to provide incentives, even if they are unprofitable, in order to attract customers for the new service. Given the competitive landscape against other businesses in the same industry, enticing terms of service must be in place. These terms must appeal to both the entrepreneurs providing the services and to potential customers as favorable conditions enable the platform to grow. Shroff et al. (2022, p. 2852) explain that in some platform services, such as online food delivery, the operating margins are very narrow, making them rely heavily on high levels of customer traffic. Consequently, balancing the financial dynamics among all stakeholders, including restaurants, delivery drivers, consumers and the platform itself, becomes so much more important. In order to entice new service providers, the platform providers offer the supplier side many resources such as sales and marketing information, technical support and training (Cutolo & Kenney, 2021, p. 589).

As digital technologies are driving a transformative change in reshaping product and service markets, asset sets of individuals can be more easily monetized with platforms connecting businesses and customers (Farrell et al., 2018, p. 6). Cutolo & Kenney (2021, p. 584) explain that this gives the digital platforms a chance to claim a larger slice of overall economic activity, with their growth attracting a surge of entrepreneurs to participate as sellers in the ecosystem. Due to the networking effects, successful actors can amass significant positions in their industry. Consequently, service providers can find it essential to offer their services through these platforms in order to stay competitive. Xue et al. (2020 p. 2) continue that the platform provides a framework for effective and rapid connections between customers and sellers as a bridge between the two parties. Leveraging networking effects, the platform boosts trade efficiency and transaction frequency by reducing search costs. This enables the sellers to have access to a large customer pool even early in their operations. Digital platforms introduce novel ecosystems, opening new business opportunities and as a result, numerous sellers, producers and service

providers have found their livelihoods in the platform ecosystems (Cutolo & Kenney, 2021, p. 586).

2.2 Online food delivery platform

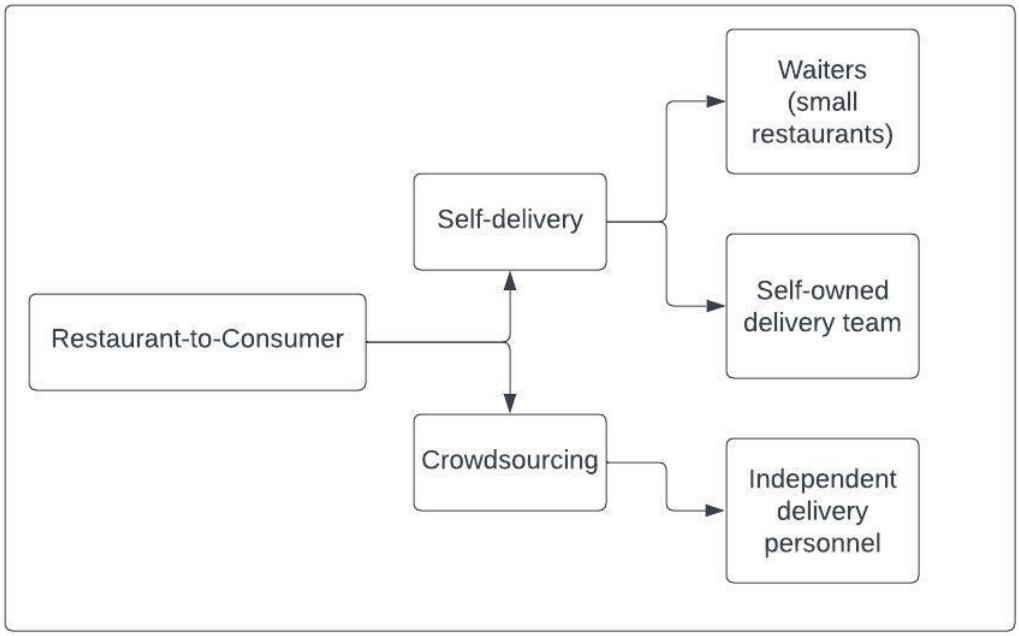
Rapid advancements in information technologies have significantly expanded the global e-commerce market, with developments such as enchanted safety in electronic payments, widespread customer awareness of e-commerce and the popularity of smartphones having a significant contribution. Among the beneficiaries has been the Online-to-Offline (O2O) form of e-commerce, where the service attracts customers online and the transaction is completed in an offline setting. One of the most prominent forms of O2O services is online food delivery platforms (Li et al., 2020, p. 1-2;, Wang, 2023, p. 316; Chen et al., 2020, p. 1; Habib et al., 2022, p. 1). Online food delivery platforms can be characterized as a service with a transaction of monetary value through a mobile handheld device, like a smartphone involving the delivery of food (Prasetyo et al., 2021, p. 1). It is a technological model that lets consumers connect to different restaurants with the use of the platform's smartphone application (Chen et al., 2020, p. 1).

The online food delivery platforms are formed by three distinct groups, which are platforms, customers and restaurants (Wang, 2023, p. 316-317). These delivery services have grown to be an important part of the lifestyles of many customers in recent years, which has increased the amount of competition on the supplier side as well. Many countries nowadays have at least one of these platforms available, with an especially receptive group of customers to their convenience being young adults (Li et al., 2020 p. 4-5). Prasetyo et al. (2021, p. 2) explain that online food delivery platforms allow customers to easily order a wide range of pretty much anything food and beverages related, without the need to leave their homes or directly contact the restaurants themselves. These applications also give the added benefit of showing all the menus of close by restaurants, which with the integrated payment options makes using these apps very seamless. These

services also provide customers access to important data affecting their buying decisions, such as reviews of the restaurants available on the app (Habib et al., 2022, p. 2).

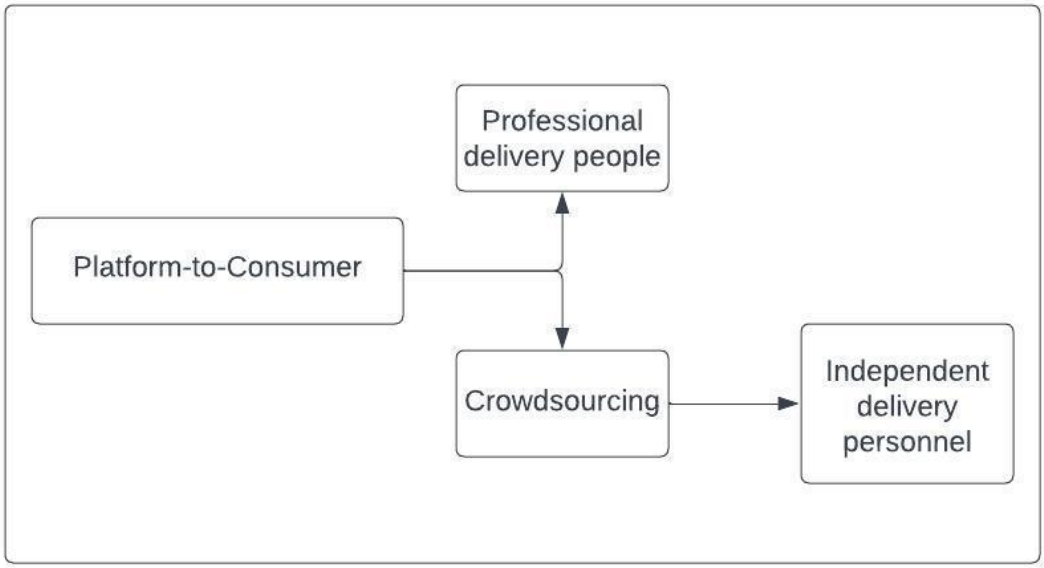
Online food delivery platforms operate by allowing customers to place food orders online, which are then prepared by a restaurant and then delivered to the assigned location (Li et al., 2020, p. 2-3). Chen et al. (2020, p. 1) describe that during the ordering process, the customer receives an estimated delivery time based on the distance between the delivery location and the restaurant. Once the order is placed and the restaurant is ready with the order, a delivery driver collects it and delivers it to the correct location. Simultaneously, the delivery status and precise location can be tracked using the smartphone application. Real-time order tracking eliminates the need for customers to interact with the restaurant staff, which reduces the awareness of the time waited for food arrival, making the service more compelling to use (Habib et al., 2022, p. 2). The mentioned factors have significantly contributed to the popularity of online food delivery platforms, with the global revenue from these services increasing from 91 billion dollars in 2018 to 152 billion dollars in 2019 prior to the COVID-19 pandemic occurred (Shroff et al., 2022, p. 2852-2853). The global market size for online food delivery is predicted to grow to 182 billion dollars in 2024 (Raza et al., 2023, p. 475).

According to Li et al. (2020, p. 2-3), online food delivery services can be categorized into two different models, which are Platform-to-Consumer (P2C) and Restaurant-to-Consumer (R2C) services. In the Restaurant-to-Consumer model, the restaurant itself provides its own platform and delivery services to the customers. This method is more common with larger chain restaurants such as McDonald’s and Domino’s in the bigger markets where they are present, as they have significant resources to manage these operations. The Restaurant-to-Consumer service model is depicted on the next page in Picture 2. In smaller markets like Finland, these chain restaurants can manage their own mobile applications, but the delivery itself is made by crowdsourced delivery drivers provided for example by Wolt.



Picture 2. Restaurant-to-Consumer delivery model (Li et al., 2020, p. 4)

Li et al. (2020, p. 2-3) continue that in Platform-to-Consumer services, the platform and its functions are offered as a service to the usually smaller and independent partner restaurants. The service provided includes handling and accepting the payments, coordinating the delivery and giving the customer the ability to real-time tracking in the platform's smartphone application. Delivery arrangements can be handled by the platform either by recruiting their own professional delivery people or by crowdsourcing it to be performed by independent delivery drivers. In Picture 3 on the next page, the Platform-to-Consumer model is visualized. In Finland the online food delivery platform Wolt uses the crowdsourcing method of independent delivery drivers (Wolt Enterprises Oy, 2023A). Utilizing a crowdsourced network of independent delivery riders is an efficient and affordable method for the platform to deliver orders (Habib et al., 2022, p. 3).



Picture 3. Platform-to-Consumer delivery model (Li et al., 2020, p. 4)

Online food delivery platforms have been very driven to alternate the consumption habits of customers (Li et al., 2020, p. 4). With the networking characteristics typical to all platforms, leveraging them helps the participating restaurants to draw a larger customer base, optimizing food ordering operations and gaining overall visibility (Wang, 2023, p. 317). Customers are also beneficiaries, as they obtain comprehensive information about the pricing and the menu items available in a variety of restaurants through the platform (Chen et al., 2020, p. 1). Li et al. (2020, p. 4-5) explain that even though these services have seen substantial growth, in order to continue on the same path, significant investments in promotion are needed. Currently, this has been achieved by subsidizing participating restaurants or by offering customers free deliveries and other benefits (Li et al., 2020, p. 4-5). Participating in an online food delivery platform has its downsides too. Wang (2023, p. 317) writes that platforms require delivery fees and commissions from the participants, leading to economic impacts on restaurant profits. He continues, that as menu changes and food presentations are often required, the costs can become noteworthy. Habib et al. (2022, p. 2) still see participating in them overall a beneficial decision, as the business model allows them to generate a new source of revenue without

necessarily having to hire additional staff or expand the physical seating capacity in the restaurant. Especially during the pandemic, the delivery services provided by platforms became a crucial lifeline for all parties involved.

2.3 COVID-19 pandemic's effects on online food delivery

In December of 2019, a new virus named COVID-19 emerged in Wuhan, China. The rapid spread of the virus globally led to the international isolation of entire countries and lockdown mandates for ordinary citizens. Soon enough the effects were seen on the business landscape, as people were unable to leave their homes due to health concerns, channeling them to e-commerce options instead (Nishat Khan et al., 2021, p. 1755). The COVID-19 pandemic stands out as a significant disruptive event in the field of economics, destroying established theories and practices, and influencing every single industry worldwide (Majerova & Vartiak, 2021, p. 1). With the shifts prompted by the pandemic to consumer behavior, the resulting economic changes lead also to new business opportunities and not only issues (Nistor, 2021, p. 153).

With consumers having economic and health concerns, they responded to the pandemic in several different ways, the least of these not being with changes in consumption habits (Majerova & Vartiak, 2021, p. 4). During the global lockdowns of spring 2020, when mandatory social distancing and the closure of many physical locations became the norm, normal everyday activities shifted to be performed online, strengthening the importance of e-commerce (Raza & Khan, 2022, p. 195-196). Yu & Chao (2022, p. 722-723) explain that especially with the shift to staying at home and remote working surged the trend of home delivery and online shopping globally. Notably in China, there was a remarkable increase in home deliveries across numerous product segments, with a 400% increase in the grocery segment. During the initial two months of the COVID-19 pandemic in the United States, according to Westerman (2022, p. 1), digital transactions experienced substantial growth. He further explains, that prior to the pandemic, e-commerce had seen an annual growth of approximately 1% over the past two decades. However, the surge

in online transactions during the pandemic demonstrated that people are increasingly willing to purchase diverse kinds of products and services without the need for direct human interaction. With the adoption of chatbot- and algorithm-based processes, the need for actual human interference in online services keeps decreasing.

The start of the pandemic was arguably difficult for the restaurant industry as a whole. Microbusinesses, which constitute a significant portion of the industry, faced considerable challenges when they were prohibited from offering dine-in services during the lockdown period. In response, several Western countries, including Finland, implemented business support grants to decrease the financial losses incurred during the COVID-19 pandemic (Arslan et al., 2022, p. 449). Companies could apply for business support from Valtiokonttori with there being six different rounds to apply for during the pandemic years. There were overall 2466 unique companies registered as practicing restaurant business, which applied for the support grants during the six rounds. In Figure 1 on the next page, the distribution of companies which didn't receive the aid in green and the number of companies that received it in blue are shown. It can be seen that especially during the first two rounds, for which could be applied during 1.4.2020-15.4.2020 and 1.5.2020-15.5.2020, many of the applications were denied (Valtiokonttori, 31.12.2023).

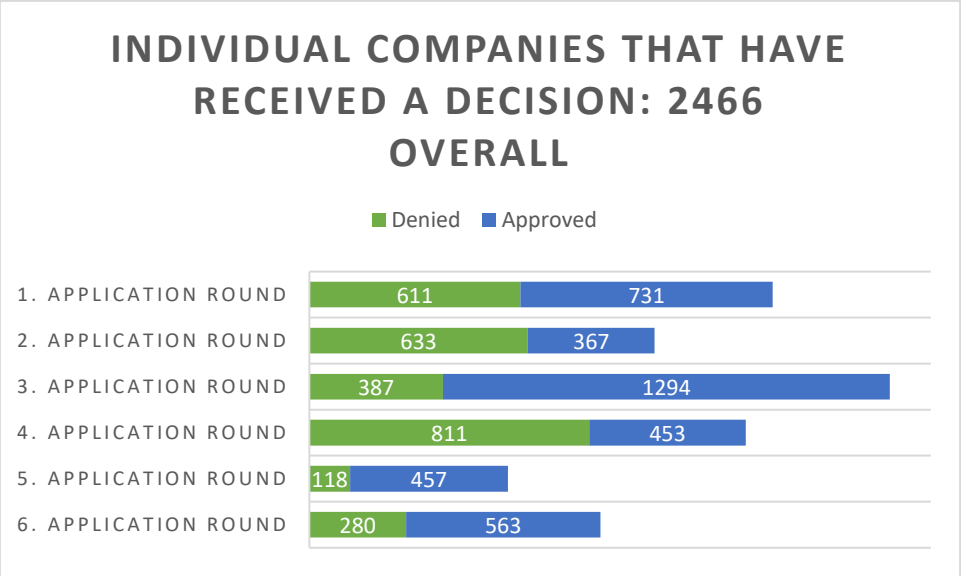


Figure 1. Number of restaurant companies applied for COVID-19 business aid (Valtiokonttori, 2023)

As during the initial two rounds of COVID-19 support grants, obtaining assistance proved challenging and the third round opened for applications half a year later on October 30, 2020, the restaurants had to innovate and explore additional revenue sources during the uncertain times. With remote work and online school lectures also becoming the new norm, organizations had an extra incentive to reconsider how they deliver their services during this time period (Westerman, 2022, p. 1). Due to the regulations restricting ordinary life, many catering companies and restaurants moved towards online food delivery platforms, strengthening their position in them or newly joining them (Bonfanti et al., 2023, p. 164). During the pandemic, the advantages offered by online food delivery platforms became evident, as they remained capable to deliver orders made by restaurants to customers despite the dine-in restrictions (Wang, 2023, p. 316). The online food delivery platforms' success in this time period became clear, as the revenue from these services saw remarkable growth (Habib et al., 2022, p. 1). The key figures of Wolt will be introduced in the next chapter.

2.4 Wolt

Wolt, officially Wolt Enterprises Oy, is a limited company founded in 2014, with its headquarters in Helsinki, Finland (Finder, 2023). It is a global technology company that develops and manages its “Wolt” online food delivery platform, which connects customers, participating restaurants and delivery drivers with each other (Wolt Enterprises Oy, 2023B; Wolt Enterprises Oy, 2023C). Wolt’s service is currently available in 25 countries across Europe and Asia, with a presence in 89 cities in Finland (Wolt Enterprises Oy, 2023D). In late 2021, the company announced it would be bought by DoorDash, the United States-based food delivery company, making this one of the biggest acquisitions of a Finnish company in history (Wolt Enterprises Oy, 2023B).

Wolt’s operations also reflect the surge in online food delivery services during the COVID-19 pandemic. According to financial data from Asiakastieto (2023), Wolt Enterprises Oy experienced significant turnover growth. Their turnover doubled from 2019’s €81,224,398 to €164,340,000 and €164,481,000 in the worst COVID-19 pandemic years of 2020 and 2021. The company grew to several new cities in Finland during the pandemic, with its staff size multiplying from 150 people in 2019 to 854 at the end of 2022. Even with the impressive growth numbers in many sectors, the company has been making huge losses of over 40 million euros in 2020 to almost 200 million in 2021. The key figures of Wolt Enterprises Oy from 2018 to 2022 are demonstrated next page in Table 1. By observing the table, it can be seen that the company has had a rough time after the impressive growth figures from the COVID-19 years, as their turnover dropped almost 60% with losses of over €422,000,000.

Table 1. Key figures of Wolt Enterprises Oy from 2018-2022 (Asiakastieto, 2023)

Summary of key figures	December 2018	December 2019	December 2020	December 2021	December 2022
Turnover (1000 €)	20 019	81 224	164 340	164 481	66 587
Change in turnover %	166,10 %	305,70 %	102,30 %	0,10 %	-59,50 %
Profits (-losses) (1000 €)	-9 612	-37 291	-44 243	-192 075	-422 039
Profits %	-43,60 %	-43,20 %	-26,20 %	-111,20 %	-633,80 %
Personnel	78	150	312	647	854

2.5 Service quality and customer satisfaction

Over the past three decades, service quality has garnered significant attention both from businesses and researchers studying the phenomenon (Park et al., 2021, p. 92). Park et al. (2021, p. 92) continue that it is believed by both of these parties to be indispensable for the long-term survival and growth of companies and organizations. Zhrou et al. (2019, p. 2) see that quality serves as the cornerstone of business success, defining it as:

> *"The overall evaluation of a specific service firm that results from comparing that firm's performance with the customer's general expectations of how firms in that industry should perform."*

Service quality plays a crucial role in achieving significant objectives, such as building trust, improving satisfaction and loyalty, which are widely acknowledged as significant contributors to overall success and competitiveness in business (Zhrou et al. 2019, p. 2). Businesses in the service industry can also use the improvement of service quality strategically to increase their market share, leading to overall company growth (Park et al., 2021, p. 92). Since e-commerce has become the most popular mode of conducting business, the service quality in online platforms can also be referred to as e-service quality (Khan et al., 2019, p. 283). E-service quality refers to a website's ability to facilitate an effective shopping, delivery and purchasing experience, in all the stages: pre-purchase,

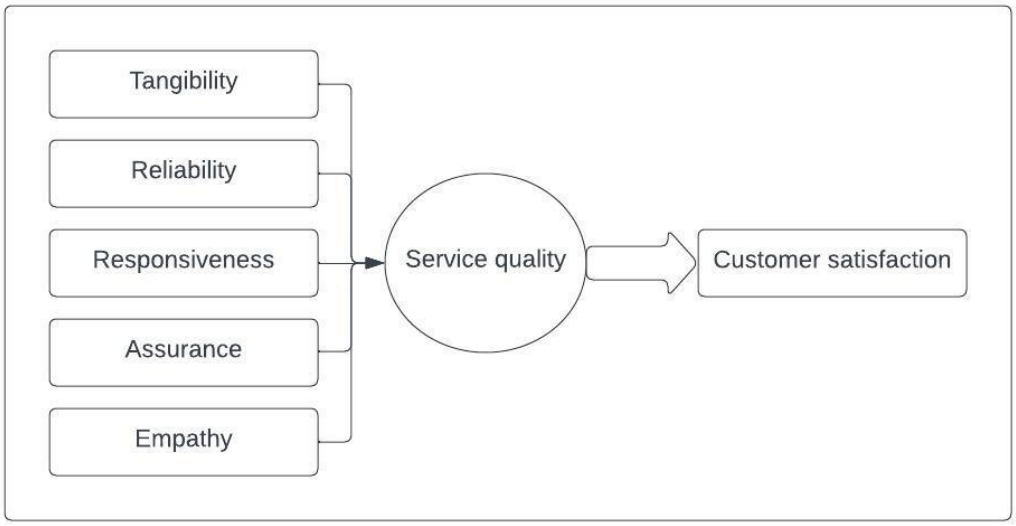
service-encounter, and post-encounter (Kaur et al., 2023, p. 953). Khan et al. (2019, p. 284) explain that there are risks associated with online purchasing. These can be in the likes of limited customer service responsiveness, the gap between customer expectations and actual service outcomes, delivery issues and risks associated with ordering online. They continue that e-service quality emerges as a critical factor for the success of online businesses and achieving excellence in e-service quality is crucial in capturing customer satisfaction and loyalty.

Customer satisfaction is in direct correlation with customer loyalty and overall profitability (Zygiaris et al., 2022, p.2). Hsieh & Yuan, (2021, p. 511) describe that when a customer receives a satisfactory service that leads to a pleasant experience, it attracts more customers through positive word-of-mouth. When evaluating a service experience, customer expectations play a critical role (Hsieh & Yuan, 2021, p. 513). It can briefly be characterized as the specific outcomes or benefits the customer anticipates receiving from the service (Bonfanti et al., 2023, p. 167). Tukiran et al. (2021, p. 482) give a more precise definition for it, as they describe it as the predictions a customer makes about the transaction, based on past experiences, current circumstances or information gained from other sources.

Hsieh & Yuan (2021, p. 511) writes that managing these expectations is crucial for creating a service experience that meets the requirements given by the service user. Additionally, customer retention is a key capability in service performance. To retain existing customers and attract new ones, creating satisfactory customer experiences becomes a vital aspect of the service. The service experience comprises a series of service encounters, where the service evokes emotional, cognitive and behavioral responses in the customer during the process. These interactions contribute to customer satisfaction, resulting in positive memories and overall perceptions of the provided service (Hsieh & Yuan, 2021, p. 511). The focus on creating engaging customer experiences can be encapsulated in the concept of the experience economy (Pine II, 2023, p. 31). In today's experience economy, service providers must continually enhance their services to invoke high

customer satisfaction. While the significance of customer experience in the service industry is widely acknowledged, constantly providing high-quality service can still be challenging in real-life situations (Hsieh & Yuan, 2021, p. 513).

To deliver high-quality service, anticipating and understanding the preferences of the customer base is essential (Foroudi et al., 2018, p. 271). According to Hsieh & Yuan (2021, p. 513), customer expectations can be divided into two categories, which are adequate and desired. From these, the adequate expectation refers to the level of service that the customer can tolerate, which roughly means that the service's quality is "good enough". With the desired expectations the level of service quality is higher and this is the kind of service experience the customer is hoping to receive. Customer satisfaction is accomplished when the service quality is between these two in the zone of tolerance. When it comes to evaluating the quality of a service experience, there are some common factors in effect (Tukiran et al., 2021, p. 482). These dimensions can be identified as tangibility, reliability, responsiveness, assurance and empathy, which can be illustrated with the Service quality model of customer satisfaction (Karim, 2020, p. 119). The Picture 4 below depicts this service quality model, explaining the factors affecting the service quality, which if executed properly, leads to customer satisfaction.



Picture 4. Service quality model of customer satisfaction (Karim, 2020, p. 119)

According to Tukiran et al. (2021, p. 482), by considering these five factors, we can determine the level of service quality needed to meet customer expectations. Customers will always compare the actual service received to the expectations they had beforehand. When those expectations are successfully met, customer satisfaction will be achieved. If this satisfaction is constantly accomplished, the current customers can be retained and new ones to be gained through positive word-of-mouth, contributing to overall sustainability in the business. They continue that as wants and needs can evolve rapidly, companies must stay attuned to changing expectations to ensure a satisfactory service experience in the future. By doing so, the services provided can match or even exceed what was originally promised.

2.6 Customer satisfaction in online food delivery platforms during the COVID-19 pandemic

As previously stated, the dynamics of customer-business interactions have evolved due to the widespread adoption of technology and the emergence of new information sources (Bonfanti et al., 2023, p. 166). Oliveira et al. (2023, p. 226) write that the digital transformation process has led many services to shift online, additionally, adoption of e-commerce platforms has increased among consumers. While this expanded user base offers companies numerous advantages, it also presents new challenges. As the COVID-19 pandemic swept across the globe, it had a great impact on traditional brick-and-mortar services, consequently leading online sales to experience a significant increase (Vollero et al., 2023, p. 1064). With the travel restrictions and fear of social interactions, a significant change in the restaurant industry was seen. In order to adapt, restaurants turned to online food delivery services with a network of delivery drivers, which allowed them to overcome the physical distancing regulations (Bonfanti et al., 2023, p. 166).

As the online food delivery market continues to expand, so does the number of service providers in the industry (Raza et al., 2023, p. 475). The landscape of online food delivery

platforms is increasingly becoming uniform. Whether it's pricing, delivery, or market positioning, the fundamental features offered by different platforms are remarkably similar (Wang et al., 2021, p. 2). At the same time platform preference has become a widely recognized concept, referring to a customer's evaluation of a service being more favorable in comparison to its competitors (Habib et al., 2022, p. 3). Wang et al. (2021, p. 2) see that online food delivery platforms must strategize in order to retain the customer base from switching to the competing platforms. As these services consist of many different actors, from the customer's perspective, not only the platform's own service quality matters but also the quality of the restaurant and the delivery plays a role. With customer-company interactions continuing to increase, new challenges have arisen in providing service guarantees within the online setting (Oliveira et al., 2023, p. 225).

Despite the significant increase in sales volumes during the COVID-19 pandemic, the production systems and logistical distribution channels for companies remained unchanged (Oliveira et al., 2023, p. 226). As with other services too, in an online setting customer satisfaction hinges on aligning customer expectations with the actual service outcome after a purchase (Vollero et al., 2023, p. 1064). Considering the long-term impact of the pandemic on consumption habits, online food delivery platforms must remain responsive to any potential shifts in customer expectations (Bonfanti et al., 2023, p. 165). Customers hold varying expectations regarding the service quality of different online food delivery platforms, which are shaped by individual perceptions and preferences, resulting in a diverse range of perceived value across customers (Habib et al., 2022, p. 3). Overall, consumers are growing more conscious of their rights and seeking value in the services they utilize, with the undertone of these services surpassing their quality expectations (Oliveira et al., 2023, p. 226). In an online setting, both the purchase environment and the logistics post-purchase are key factors in determining customer satisfaction (Vollero et al., 2023, p. 1064). In these services the three critical components impacting the overall quality are platform quality, content consistency and service workers (Wang et al., 2021, p. 2). Managing the various independent components of online food delivery services, from the platform itself to restaurants and delivery drivers, can be challenging.

However, these very components significantly impact customer satisfaction, making their effective management crucial for customer satisfaction, which in itself is one of the main factors affecting the usage of a specific platform (Habib et al., 2022, p. 3).

2.7 Framework: SERVQUAL

In my master's thesis, I opted to utilize the SERVQUAL framework. SERVQUAL is one of the most widely used and recognized tool for calculating service quality, used in various industries related to service, such as retail, travel and hotel businesses (Park et al., 2021, p. 92). It was revealed by Professor A. Parasuraman et al. (1988) in their article *"SERVQUAL: A multiple-Item Scale for measuring consumer perceptions of service quality"*. The foundation for this model was already created by the same Parasuraman et al. in the (1985) article *"A Conceptual Model of Service Quality and its Implication for Future Research",* where the gap theory was conceptualized. The SERVQUAL framework classifies service quality into five distinct dimensions: reliability, responsiveness, assurance, empathy and tangibles (Parasuraman et al., 1988, p. 23). In-depth explanations of the dimensions are explained in Table 2 on the next page.

SERVQUAL has also been utilized in studies about online food delivery services. Tezerjany & Fatemeh (2024) used it in their study "*Appraise the role of novelty-seeking on consumers' satisfaction using online food delivery applications",* where they aimed to investigate how customer satisfaction is affected by novelty-seeking in online food delivery services. Lin et al. (2024) used SERVQUAL in their paper *"Service quality of online food delivery mobile application: an examination of the spillover effects of mobile app satisfaction"* in order to examine how the service quality in online food delivery platforms affects repurchase intentions and mobile app and food satisfaction. Alghamdi et al (2023) also utilized the framework in their article *"Antecedents for online food delivery platform leading to continuance usage intention via e-word-of-mouth review adoption",* where their objective was to examine how service quality affects the perceived ease of use and impact on

e-word-of-mouth. As Wolt is also an online food delivery platform, and therefore in the service industry, SERVQUAL was chosen as the theoretical framework in my study as well.

Table 2. Dimensions of SERVQUAL (Parasuraman et al., 1988, p. 23)

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

SERVQUAL studies can be carried out using a 22-item scale, which serves as an effective tool for evaluating customer perceptions and service quality (Parasuraman et al., 1988, p. 12). In addition to creating the scale, the study's aim was to prove the scale's reliability, validity and factor structure. This was achieved by analyzing data samples they had gathered. Table 1 introduces the scale's questionnaire on the next page. Each of the categories are divided into four or five questions, which aim to give an understanding of the category's service quality. In the SERVQUAL model, it is argued that customers' perception of service quality is created by the gap between the service outcome and the customer's expectations of it beforehand (Park et al., 2021, p. 93). In the framework service quality and customer satisfaction can be seen to be achieved, if the expectations of the customer are fulfilled or exceeded (Gregory, 2019, p. 790).

Table 3. SERVQUAL 22-item scale (Parasuraman et al., 1994, p. 207)

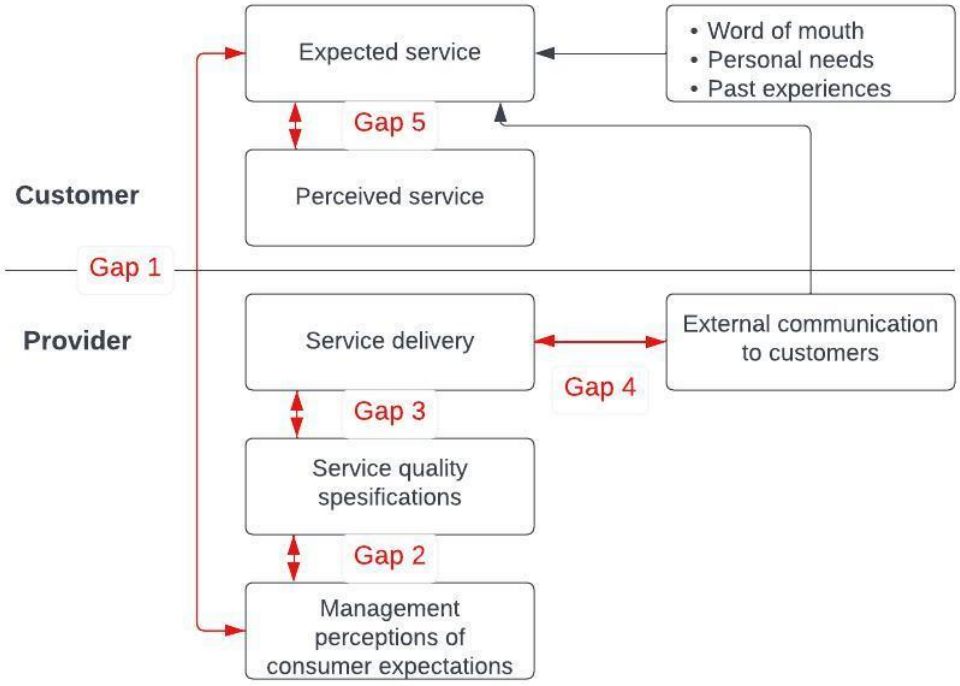
SERVQUAL 22-item scale
Reliability
1. Providing services as promised.
2. Dependability in handling customers' service problems.
3. Performing services right the first time.
4. Providing services at the promised time.
5. Maintaining error-free records
Responsiveness
6. Keeping customers informed about when services will be performed.
7. Prompt service to customers.
8. Willingness to help customers.
9. Readiness to respond to customers' requests.
Assurance
10. Employees who instill confidence in customers.
11. Making customers feel safe in their transactions.
12. Employees who are consistently courteous.
13. Employees who have the knowledge to answer customer questions.
Empathy
14. Giving customers individual attention.
15. Employees who deal with customers in a caring fashion.
16. Having the customer's best interest at heart.
17. Employees who understand the needs of their customers.
18. Convenient business hours.
Tangibles
19. Modern equipment.
20. Visually appealing facilities.
21. Employees who have a neat, professional appearance.
22. Visually appealing materials associated with the service.

By using the 22-item scale, the customer's expectations and actual performance of the service can be measured. To do this, a 5-point Likert scale can be utilized. In this model, the responder to the questionnaire can answer with a number from 1-5 that resembles how much they agree with the statement in the survey. The numbers signify the respondent's perception as follows:

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

2.8 The 5 gap model of service quality

As previously mentioned, professor Parasuraman et al. (1985, p. 44-46) introduced the 5 gap model of service quality, which was the foundation for the SERVQUAL model. They identified the gaps to be: Consumer expectation-management perception gap, Management perception-service quality specification gap, Service quality specifications-service delivery gap, Service delivery-external communications gap and Expected service-perceived service gap, which are also illustrated on the next page in Picture 5. The authors explained the gaps as followed:



Picture 5. The 5 gap model of service quality (Parasuraman et al., 1985, p. 44).

Gap 1: Consumer expectation-management perception gap

Parasuraman et al (1985, p. 44) explain that Gap 1 is used to measure what customers are expecting from the service and what the company's management thinks they want. Leadership in service firms don't always understand what are the characteristics that customers perceive as high-quality beforehand, what the features have to be to fulfill the customer needs and in what quality these have to be in order to offer high quality service. They continue that this indicates that the companies don't often fully understand what the customers' expectations really are. This gap will impact the customer's evaluation of what the service quality is.

Gap 2: Management perception–service quality specification gap

According to Parasuraman et al. (1985, p. 45), companies may have difficulties to match or exceed the expectations of customers. In many situations the knowledge of the customer expectations is apparent, but the perception of having the means to fulfill them does not. There can be many reasons for this gap to exist, these being the lack of

resources or insufficient commitment from the company's management to improve the service quality. They explain that number of factors can affect this gap, resulting in a disparity between the perceptions of management of the customer expectations and the real specifications that are established for the service. This can affect the customer's perception of the service quality.

Gap 3: Service quality specifications–service delivery gap

Parasuraman et al. (1985, p. 45) write that high quality in service isn't always certain, even though there would be guidelines to follow in order to treat the customers right. As service usually involves a person, the qualities of the individual can affect the service quality a lot. As the performance of the said individual can have this significant of an effect, these procedures can be difficult to standardize. This variability in employee performance can create a gap between the service quality specifications and the real service quality, which from the viewpoint of the consumer affects service quality.

Gap 4: Service delivery–external communications gap

According to Parasuraman et al. (1985, p. 45-46), this gap can be created by overpromising. As advertising and communication can have an impact on customer expectations, the company can't communicate promises about the service that it can't be certain to be able to actually deliver. Promises will raise the customers' expectations, but the perception of the quality will be lower if these are not delivered. They continue, that there can also be a problem of the customers not knowing the steps that a company is taking to deliver quality in service, as they can in many cases be hidden by nature. Overall, external communication can influence the expectations and perceptions of the customer, creating a gap that can affect the customer's perception of the service quality.

Gap 5: Expected service-perceived service gap

Parasuraman et al. (1985, p. 45-46) write, that an important factor in ensuring service quality is to meet or even exceed the customers' expectations. The perceptions of the service can vary significantly from customer to customer and depending on what type of

service is in question. For these reasons, the service provider doesn't necessarily have anything else to do, but trying to meet the expectations they think the customers have from the service. This gap is explained as the function of the magnitude and direction between expectations and perception of the quality from the customer's standpoint.

2.9 Summary of literature review

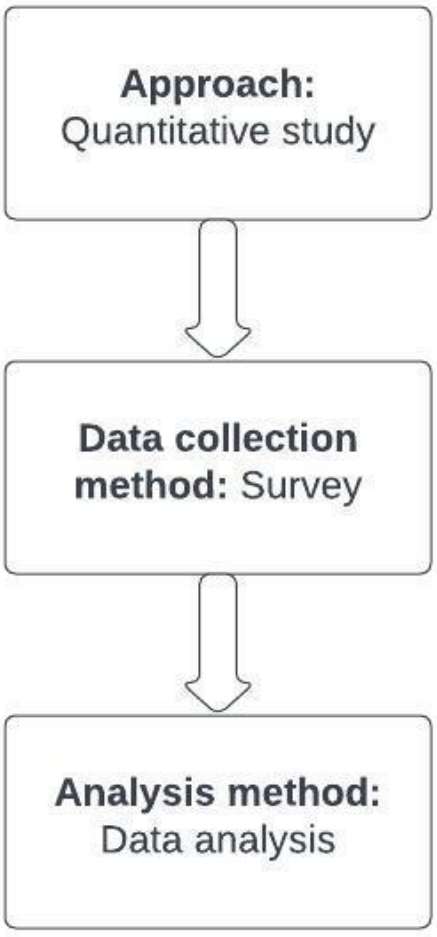
Advancements in digital technologies in the past decades have enabled new kinds of business models to emerge, one of these being platform services (Xue et al., 2020 p. 1-2). Platform services have evolved into a highly valuable business model, and their expansion can also be characterized as the phenomenon of "*platformization*" (Acs et al., 2021, p. 1635). These platforms are provided in the form of mobile applications, where the platform acts as an intermediary connecting sellers and buyers in the ecosystem (Acs et al., 2021, p. 1635-1636). One of the platform services that has gained significant growth in recent years has been online food delivery services, with rising popularity especially among young adults (Acs et al., 2021, p. 1636; Li et al., 2020 p. 4-5). These services enable customers to conveniently order food and beverages for home delivery, as they come equipped with features like integrated payment options, restaurant menus, and customer reviews, enhancing their usability (Prasetyo et al., 2021, p. 2; Habib et al., 2022, p. 2). In online food delivery platforms, the food is ordered online, prepared by the restaurant and delivered to the customer, with the added benefits such as providing estimated delivery times for orders and real-time tracking (Li et al., 2020, p. 2-3; Chen et al., 2020, p. 1). Especially during the COVID-19 pandemic, these services were an important lifeline for all parties involved, as dine-in was not allowed (Habib et al., 2022, p. 2).

Companies in the service business have the key interest of keeping their existing customers and gaining more, which can be achieved with satisfactory customer experiences from the service provided (Hsieh & Yuan, 2021, p. 511). The customers evaluate service quality by comparing the expectations they had before the experience, with the actual

outcome of the service. Customer satisfaction is obtained if these expectations can be met (Tukiran et al., 2021, p. 482). In online food delivery platforms, this can be more challenging to achieve, as they consist of many different actors: restaurant, platform and delivery drivers (Wang et al., 2021, p. 2). As e-commerce has become the most popular way of conducting business, the service quality in them can also be referred to as e-service quality, which aim is to facilitate good experiences for customers in the pre-purchase, service-encounter and post-encounter phases of the purchasing experience (Khan et al., 2019, p. 283; Kaur et al., 2023, p. 953). One of the most popular measuring instruments for service quality is the SERVQUAL model, where 22 questions are divided into five categories of tangibles, reliability, responsiveness, assurance and empathy (Parasuraman et al., 1988, p. 12). With the use of the 5 gap model of service quality, the expected service-perceived service gap in service quality can be measured, revealing if service quality was achieved or not (Parasuraman et al., 1985, p. 44-46).

3 Methodology

The third chapter of this study is about the methodology used. Quantitative methodology, survey as a data collection method, analysis of the data gathered and the research process will be introduced. After this chapter, the reader will have an understanding of how the study was conducted. Picture 6 below provides an illustration of the methodology used.



Picture 6. Methodology of the study

3.1 Quantitative methodology

The study employed a quantitative methodology. Qualitative and mixed methodologies are also commonly used in research. Quantitative methodology emphasizes the use of numerical, mathematical, and statistical analysis and focuses on objective measurements. Data for quantitative studies is typically gathered through surveys, questionnaires, or polls, with the aim of explaining phenomena or making generalizations across groups of people (University of Southern California, 2024). Qualitative methodology, on the other hand, places greater emphasis on understanding the contextual meaning of why something is in the particular way it is (Eriksson & Kovalainen, 2015, p. 120). Qualitative research is also usually conducted using observation, interviews or visual methods (Hennink et al., 2020, p. 11). Mixed methodology, on the other hand, leverages the strengths of both quantitative and qualitative methods while mitigating their weaknesses. However, one limitation of this approach is that it demands additional time, as researchers must collect and analyze two distinct types of data. Consequently, expertise in both qualitative and quantitative research methods is essential for the researcher (McKim, 2017, p. 202-213).

For my study, which focuses on collecting numerical data for analysis, I opted for quantitative methodology. Incorporating qualitative methods like interviews alongside the survey would have extended the time required and potentially discouraged participants from responding due to the lengthier interview process. Additionally, most of the SERVQUAL studies I reviewed primarily employed quantitative methodology, so I maintained consistency by following this approach in my master's thesis.

3.2 Survey as a data collection method and analysis

I opted to conduct a survey as my data collection method. Specifically, I employed a questionnaire of the SERVQUAL 22-item scale to investigate how service quality and customer satisfaction were achieved in the online food delivery platform Wolt during the

COVID-19 pandemic. The target group for the study was “young adults” aged between 18-38 who had used this service during the COVID-19-pandemic. A survey is a method used to collect measurable data for the purpose of comparing, describing, or explaining different subjects (Fink, 2003, p. 1-2). Fowler Jr (p. 1-2 & p. 92) explains that surveys typically collect information from a sample of individuals rather than the entire population. The data obtained is then generalized. Surveys can be used to measure various phenomena, such as transportation needs, political behavior, or mental health. However, survey studies may encounter challenges. Respondents may not fully comprehend the questions, leading to inaccurate answers. To minimize this, survey questions should be straightforward and easily understandable. Additionally, respondents might lack knowledge on the subject, forget the correct answer, or choose not to respond due to personal reasons.

Given that surveys can be an expensive data collection method, it should always be explored whether readily available information exists already (Fowler Jr, 2013, p. 2). My topic of service quality and customer satisfaction in Wolt specifically was not something that was already studied, so there was a need for a new questionnaire. The questionnaire was conducted using Webropol, which is provided by the university’s IT services to students for free. The link for the questionnaire was shared on social media, where I believed people in the correct demographic would respond to it. Before the questionnaire was released to the public, it was tested with a small focus group in order to make sure, it was easy to understand to someone who is not familiar with a SERVQUAL questionnaire beforehand. The decision was made to ensure that false data would not arise due to respondents misunderstanding the questions. After receiving feedback from the focus group, I decided to modify the SERVQUAL questionnaire to better suit the topic at hand. This change was made to ensure the claims were easier for participants to understand, as feedback suggested there were difficulties with some of them. The modified questionnaire also had claims better suited for the topic at hand. The questionnaire itself consisted of 22 questions divided into five categories of tangibles, reliability,

responsiveness, assurance and empathy of the SERVQUAL framework. The questions were then answered with a Likert scale from 1-5, where the numbers represented:

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

Before the 22 questions, participants were asked four basic demographic questions related to their gender, age, educational background, and frequency of using services during the COVID-19 pandemic. In the questionnaire participants would first rate their expectations, reflecting the level of service they would have desired in an ideal, yet realistic situation. Following this, participants provided a score for the realized outcome of the service experience. After the required 100 responses were acquired, the Gap 5: Expected service-perceived service gap from the 5 gap model of service quality was calculated using gap analysis. This analysis allowed to assess the discrepancy between participants' expectations and the actual service quality outcome.

3.3 Research process

I started working on my Master's thesis on December 2023 by first searching databases for relevant articles about online food delivery, COVID-19 effects on different industries, service quality and customer satisfaction. As I got more familiar with the topic, I chose the framework SERVQUAL, as it was widely used in research about service quality. While I was working on the literature review part, I published the questionnaire and it took a little over two weeks to gather the needed amount of answers. I was on a really tight schedule, so I chose to not try to get more responses than that. As the target group for the study, I chose people aged approximately 18-38 years, as the primary customers for online food delivery platforms are young adults (Li et al., 2020, p. 4-5). I made this

decision, as I have personally observed an increase in the usage of these services within my age group during the COVID-19 pandemic. Every respondent were in the correct age group, so I did not have to screen any answer out of the resulting data. The data used was primary data collected using a convenience sampling technique with a Webropol questionnaire. I shared the questionnaire link with people who could be potential participants in the study. The sample sizes can be roughly evaluated as very poor – 50, poor – 100, fair – 200, good – 300, very good – 500 and excellent – 1000 (Malik & Malik, 2015, p. 309). As I was able to gather 101 responses in total, this can be seen as quite a small sample, but enough for the research purposes of this study. After the sample was gathered, I closed the Webropol link to the questionnaire and exported data to Excel for further inspection and analysis. The findings of the study are introduced in the next chapter.

4 Results

In this chapter, the results of the study are introduced. First, the demographics of the participants in the survey are demonstrated, more specifically their gender, age, employment status and usage frequency distribution during the COVID-19 pandemic. After this the results of the gap analysis of the questionnaire are calculated using mean numbers, showcasing the service gap in each claim. The SERVQUAL scores of each service dimension will be showcased with the information, which was the most important service dimension for the participants. Finally, the revised framework will be introduced.

4.1 Demographics

4.1.1 Gender

During a time span of a little over two weeks, I collected 101 responses, whose gender distribution is demonstrated below in Table 4. Among these respondents, the majority identified as male, accounting for 58 individuals or 57.4% of the total. Females constituted 42 respondents, making up 41.6% of the overall participant pool. Additionally, 1 person identified as a gender other than male or female, representing 1% of the total. Notably, no respondent chose to withhold their gender information.

Table 4. Gender distribution of the participants

Gender	**n**	**%**
Male	58	57,4%
Female	42	41,6%
Other	1	1,0%
Don't want to disclose	-	0%

4.1.2 Age in years

As can be seen in Table 5, the largest age group among the participants consisted of 18-24-year-olds, making up 67 respondents or 66.3% of the total. The next significant group was 25-31-year-olds, comprising 32 respondents or 31.7%. Additionally, there were 2 respondents in the 32-38 age range, while no participants fell within the 39-50 age bracket. Given that the term “young adults” often comprises individuals aged over 18 but under 40, I included all responses from the 32-38 age group in the dataset.

Table 5. Age distribution of the participants

Age	**n**	**%**
18-24	67	66,3%
25-31	32	31,7%
32-38	2	2,0%
39-50	-	0%

4.1.3 Employment status

The majority of participants fell into two categories: full-time students or individuals who were both studying and employed simultaneously, as can be seen from Table 6 below. These two groups accounted for over 84% of the total sample. Additionally, 12 respondents were employed, while four reported neither being employed nor unemployed. The large amount of students in the demographics was expected, given that many young people within the specified age brackets are students. Furthermore, the channels through which the questionnaire was shared reached many students, which consequently influenced the overall amount of students.

Table 6. Employment status of the participants

Employment status	**n**	**%**
Full-time student	39	38,6%
Student and employed	46	45,5%
Employed	12	11,9%
Neither student nor employed	4	4,0%

4.1.4 How often did you use online food delivery platforms during COVID-19?

Most respondents indicated that they use online food delivery services 0-1 times per month, with 47 participants selecting this option. The next popular choice was 2-3 times per month, chosen by 31 respondents. Additionally, 23 participants reported using these services 3 or more times per month. These findings are interesting because, despite substantial growth in online food delivery during the pandemic and the global trend favoring this service, the questionnaire respondents do not appear to be frequent users. The Data is presented below in Table 7.

Table 7. Online food delivery service usage of participants

	n	**%**
0-1 times per month	47	46,5%
2-3 times per month	31	30,7%
More than 3 times per month	23	22,8%

4.2 Questionnaire and gap analysis

In Table 8 the results from the modified SERVQUAL questionnaire I made is illustrated. I chose claims from different sections of online food delivery service to make it represent the areas of restaurants, delivery drivers and the platform as well as possible. The Webropol questionnaire is also found in the appendices. The service gap between expectations and service outcome was calculated from the mean values of each claim:

outcome-expectations=service gap

From the Table 8 it can be observed that the mean value of service quality outcome was lower than the expectations in all but two instances. With claims 15 *"The customer service dealt with you in a caring manner"* and 16 *"You felt valued as a customer during the COVID-19 pandemic"* the gap was 0, meaning that customer expectations were met, therefore service quality and customer satisfaction in these areas were achieved. The largest gap of -0,6 was found in the claim *"Your orders were delivered in the promised time frame"*, following a gap of -0,5 *"Safety measures like masks were used by delivery personnel"*. As with many claims the gap was pretty insignificant, I implemented the significant gap to be -0,3, meaning that with gaps that big or bigger, there is room for improvement in the service quality. With six claims a significant gap was reached. As with four claims out of the five in the category of reliability felt under the significant gap, that seems to be the area to improve the most. The other significant gaps were found in the category of responsiveness and tangibles, with both having one claim reaching the gap, confirming the problems in the area of reliability were the greatest. The claims in this area consisted of all the participants in the online food delivery platform: restaurants, delivery drivers and the platform had quality issues in their service. To get a better understanding of the overall quality of the five service dimensions, SERVQUAL scores must be calculated.

Table 8. Service gap of expectations (E) and outcomes (0)

		Claim	E (Mean)	O (Mean)	Gap
Reliability	**1**	The food quality was consistent	3,9	3,6	**-0,3**
	2	You could depend on the customer service to solve possible problems	3,9	3,7	**-0,2**
	3	The correct food items were delivered to you at the first try	4,5	4,2	**-0,3**
	4	Your orders were delivered in the promised time frame	4,0	3,4	**-0,6**
	5	Your orders were correctly delivered consistently	4,3	4,0	**-0,3**
Responsiveness	**6**	You were informed of possible delays to your order during the delivery process	4,1	3,8	**-0,3**
	7	Wolt was prompt in possible special instructions you had	4,0	3,8	**-0,2**
	8	Issues with wrong or missing items were efficiently resolved	4,1	3,9	**-0,2**
	9	The customer service was fast to respond to possible complaints or other enquiries	4,0	3,8	**-0,2**
Assurance	**10**	You could be confident in hygiene practices during food preparation and delivery	4,0	3,8	**-0,2**
	11	The delivery precautions were adequate to ensure safety during COVID-19	4,3	4,1	**-0,2**
	12	The delivery personnel seemed trained in safety guidelines during delivery	3,7	3,5	**-0,2**
	13	The customer service personnel had knowledge to answer possible questions	3,9	3,7	**-0,2**
Empathy	**14**	You got individual attention from the customer service personnel	3,5	3,4	**-0,1**
	15	The customer service dealt with you in a caring manner	3,6	3,6	**0**
	16	You felt valued as a customer during the COVID-19 pandemic	3,7	3,7	**0**
	17	The communication from the service was clear about the safety measures they had to ensure safety during COVID-19	3,9	3,7	**-0,2**
	18	The service had convenient business hours	4,2	4,0	**-0,2**
Tangibles	**19**	Safety measures like masks were used by delivery personnel	4,0	3,5	**-0,5**
	20	Packaging for your food was clean and sanitized	4,1	3,9	**-0,2**
	21	The delivery personnel had a neat and professional appearance	3,5	3,3	**-0,2**
	22	Packaging for your order looked visually appealing	3,6	3,5	**-0,1**

The SERVQUAL scores of each dimension of reliability, responsiveness, assurance, empathy and tangibles are calculated below in the Table 9. The score is calculated by summarizing each gap score and dividing it by the number of questions in the category. As could be observed from the gap analysis, the lowest score of -0,340 was in the category of reliability, followed by tangibles (-0,250), responsiveness (-0,225) and assurance (-0,200). The area with the narrowest gap was empathy, which also had the two claims that managed to meet customer expectations with the service outcome. The other categories had not that high scores, but reliability was the only one that reached a significant gap of -0,3 with the overall score also.

Table 9. SERVQUAL scores of service dimensions

Service dimension	**SERVQUAL scores**
Reliability	[(-0,3)+(-0,2)+(-0,3)+(-0,6)+(-0,3)]/5= **-0,340**
Responsiveness	[(-0,3)+(-0,2)+(-0,2)+(-0,2)]/4= **-0,225**
Assurance	[(-0,2)+(-0,2)+(-0,2)+(-0,2)]/4= **-0,200**
Empathy	[(-0,1)+(-0)+(-0)+(-0,2)+(-0,2)]/5= **-0,100**
Tangibles	[(-0,5)+(-0,2)+(-0,2)+(-0,1)]/4= **-0,250**

After the 22 SERVQUAL questions, the participants had to choose which one of the five service dimensions they found the most important for them. The ratings are illustrated on the next page in the Figure 2. The overwhelming majority of 75 % felt that reliability was the most important category, followed by responsiveness gaining 16% of the votes. The dimensions of assurance, empathy and tangibles were not seen as that important, gaining 4%, 3% and 2% of the votes respectively. With the significance of reliability to the customers of Wolt during the COVID-19 pandemic and the low SERVQUAL score of the dimension, this is the area requiring the most improvement in a special situation like a global pandemic, where the order rates skyrocket and the platform should try to keep up with the demand with the limited delivery capacity they have especially during the early stages of the situation.

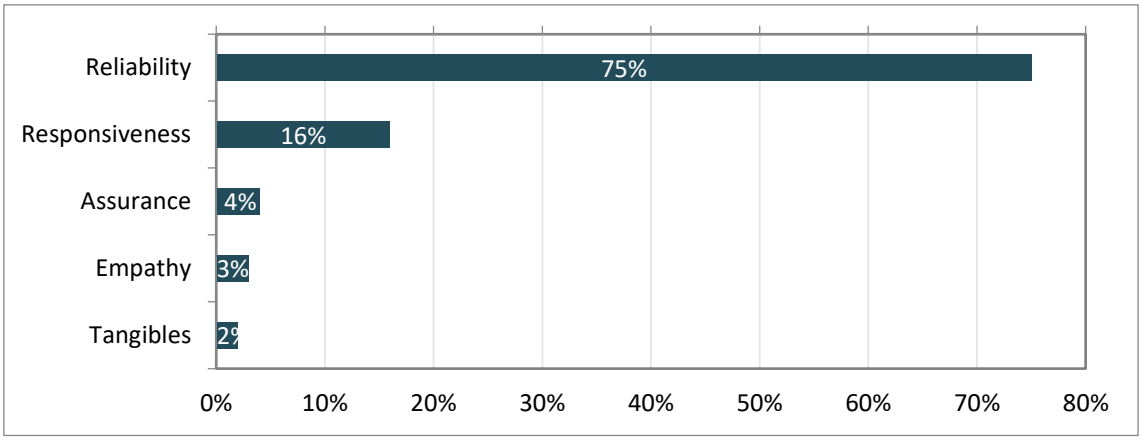


Figure 2. Most important service dimensions for participants

4.3 Revised framework

As the results of the questionnaire have been analyzed, the service quality model of customer satisfaction can be revised. This is introduced in Picture 7 *"Revised service quality model of customer satisfaction of Wolt during the COVID-19 pandemic"*. The gaps indicated issues with most of the claims, but as the gaps were quite small in most instances, the significant gap was drawn to be -0.3. Ultimately six claims had the score of the significant gap or higher. In the revised model claims 3 and 5 were joined together, as of their similar nature, leading to five key aspects of improvement. Most of the claims with values equal or higher than the significant gap were found in the service dimension of reliability. This was also the area which was the most important to customers of Wolt during the COVID-19 pandemic and it is marked red in the Picture 7. Ultimately there were significant enough issues with all participants of the online food delivery platform, indicating that the restaurants, the platform itself and the delivery drivers need to improve their service quality.

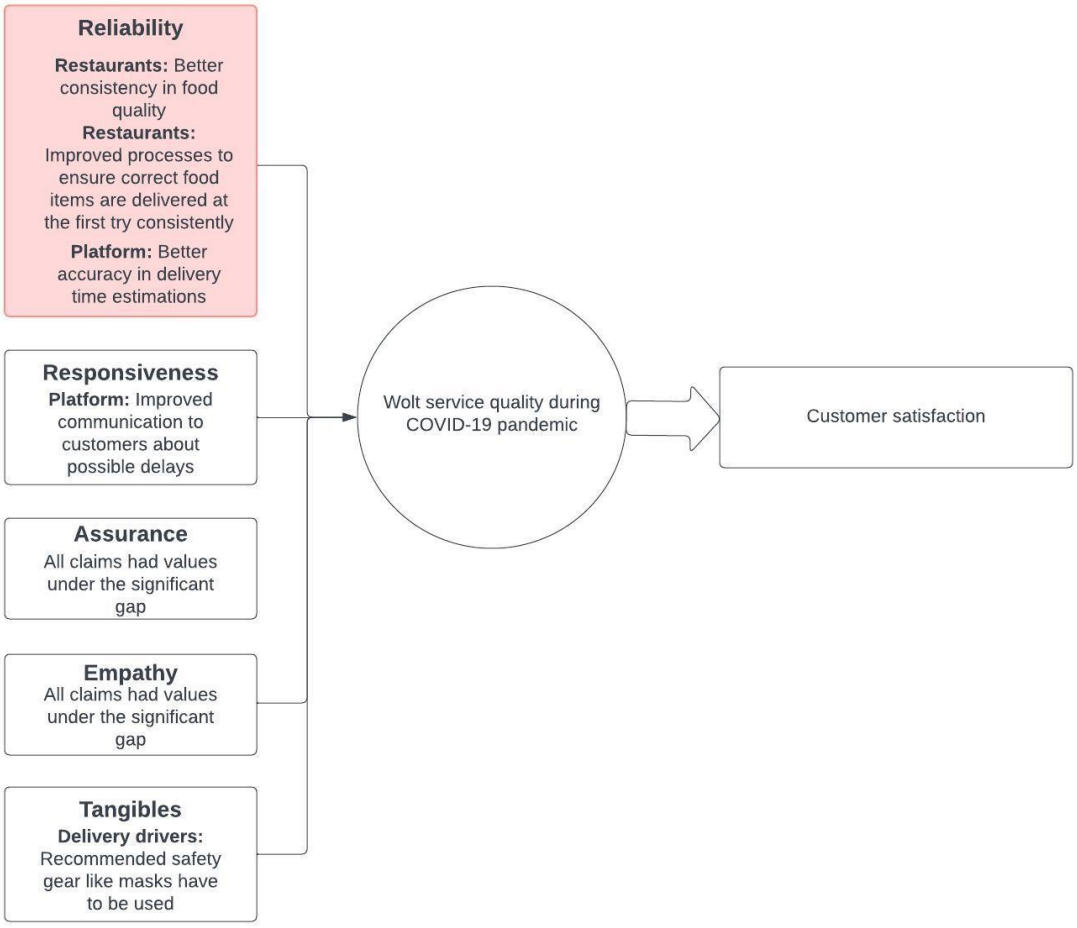
Restaurants should have higher consistency in the quality of food they provide. This can be a tough issue to solve, as the order rates can be high, especially during certain parts of days or weeks, such as lunchtimes and weekend evenings. As there is usually limited space in the professional kitchens of these establishments, hiring more people is not

always a viable option to solve the issue. Most restaurants are also usually small family-owned businesses, so there are not necessarily resources to even do this. Many restaurants which are part of online food delivery services are also fast food restaurants, which have pretty high turnover rates in employees, which can also affect the quality of the food they offer. One way to solve this issue could be to provide better hourly wages for the workers, but this solution would require more orders from the customers to keep the prices the same with better economies of scale. Otherwise, the prices of food items would almost certainly rise, which could potentially turn away customers, leading to smaller profits even if the food quality is higher.

The problem with food quality can also in some cases be due to the delivery drivers as if the food delivery takes long, the food quality will also suffer, as it can get soggy and cold. There were also problems with the correct items not being delivered to the customers. This can be very frustrating for the people who have waited for their food and not getting what they had ordered. Usually, Wolt offers refunds if this happens, which can get costly for the platform, and usually, it is too little too late from the customer satisfaction point of view. The platform could cease cooperation with restaurants that have constant issues with food quality and delivering correct items, but as Wolt is a heavily unprofitable company, this may not be the route they take. In the dimension of reliability, Wolt itself can improve the accuracy of delivery time estimations, which could be done with artificial intelligence calculating average delivery times of different distances according to the means of transport the delivery driver is using. As Wolt's delivery drivers have GPS tracking already to show the customer where they are located, there should be large amounts of data existing.

This constitutes also to the responsiveness category, where Wolt should improve their communication if a delay to the order is going to happen. In the dimensions of assurance and empathy, there were no claims in the significant cap, so in these categories, the service quality can be seen to be provided in "good enough" quality or in the zone of tolerance. In tangibles-related claims, there were issues with delivery drivers not necessarily

using masks during the delivery. Even if contactless delivery was implemented during the COVID-19 pandemic era, there are no guarantees that contamination would not happen. The delivery drivers have to be in contact with many surfaces, like restaurant door handles and the steering wheel of their own car and the situation does not improve if masks are not used, adding an extra way to contaminate the food delivered.



Picture 7. Revised service quality model of customer satisfaction of Wolt during the COVID-19 pandemic

5 Conclusion and discussion

In the final chapter of this study, the paper will be concluded. First the research question and two sub-questions introduced in the introduction will be answered. After this in the discussion part, the validity and reliability of the study are analyzed and the limitations of the research are investigated. Finally, the generalizability of the study and future research suggestions are introduced.

5.1 Conclusion

In the introduction section at the start of the paper, the research questions were introduced. The main question aimed to study how well customer satisfaction and service quality were achieved in Wolt during the COVID-19 pandemic. With sub-questions, there was an effort to get a wider picture of service quality with an intention to know which service dimension the customers of these services value the most and what changes could online food delivery services do if a scenario of this magnitude would ever occur again. The research question was:

RQ1: *"How was service quality achieved in the online food delivery platform Wolt during the COVID-19 pandemic?"*

With sub-questions:
SQ1: *"What aspect of service do customers value most in these kinds of services?"*

SQ2: *"If another pandemic-like scenario were to occur, what areas should companies providing these services focus on for improvement?"*

From the questionnaire, it was clear to see, that customers had mixed feelings about the service quality of Wolt during the pandemic. With only two claims reaching the score of 0, indicating that service quality and therefore customer satisfaction was achieved in the

areas. No claim managed to reach a positive service gap, but as the gaps were pretty insignificant in most of the claims, a significant gap was drawn to -0,3. After this, only six claims had significant issues in relation to service quality. Especially in the service dimension of reliability all but one claim had a negative gap of significance or even higher. As this dimension was also by far the most important to customers, in this area service quality was not achieved. However as 16 out of the 22 claims were under the significant gap, Wolt was able to achieve overall service quality and customer satisfaction. Addressing RQ1, the overall service quality was achieved by Wolt during COVID-19, except in the dimension of reliability. This answers also SQ1, as the most important aspect for customers was the service dimension of reliability. In Picture 7's the revised service quality model of customer satisfaction of Wolt during the COVID-19 pandemic, we can assess that there are places for improvement in all areas of online food delivery platforms, so restaurants, the platform and delivery drivers should improve their service quality output. This should be done especially in the service dimension of reliability. So for SQ2, in a pandemic-like scenario, Wolt and other online food delivery platforms should especially focus on improving their reliability in all aspects of their operations, if they want to deliver service in better quality.

5.2 Discussion

In research the concepts of validity and reliability are important. Internal validity can be defined by how well the subject of the study and causality can be measured within the study (Jiménez-Buedo & Russo, 2021, p. 9558). External validity refers to the generalizability of a study's findings beyond the specific context of the study, assessing whether conclusions drawn from one study holds also with a broader audience (Findley et al., 2021, p. 365). Reliability on the other hand refers to how well the chosen method is able to give results that are consistent when used by different groups (Sainani, 2017, p. 622).

I was able to gather a sample of 101 respondents, while a sample of 100 can be thought of as the minimum in terms of generalizability. The participants for the questionnaire

were all in the age group the study was aimed for with roughly 60% being male and 40% female. As there aren't factual numbers of how many people actually used Wolt or other online food delivery services in Finland during the COVID-19 pandemic, the sample size needed was hard to calculate. For this reason and time concerns, I closed the questionnaire as soon as the minimum required respondent numbers were achieved. As the questionnaire link was shared with many people and responses were anonymous there can be also no way to prove if the responses they gave were genuine or not. It is also possible that many respondents don't remember correctly the service experience they had, as it has already been a few years since the pandemic occurred. These reasons can cause problems with external validity. The SERVQUAL framework and questionnaire have been widely used for decades now to measure service quality. I used a modified version of it for research purposes, which is found in Appendix 1, but as in several SERVQUAL studies I researched had also used modifications, this should not be a significant problem for the reliability of the study. As the framework I used is so widely known, this also enhances the internal validity of my master's thesis paper. I also tested the questionnaire with a focus group before releasing it to the public, in order to confirm that the claims were understandable to respondents not familiar with a SERVQUAL questionnaire. The findings are also not necessarily generalizable outside an exceptional situation like the COVID-19 pandemic because the service quality Wolt provides could have already improved as demand is not as high anymore.

The findings of the study can be generalized specifically to a customer group of young adults in the age bracket of 18-38 years, who have used Wolt during the COVID-19 pandemic. As the age of the respondents was the focus in the study, other characteristics like employment status were not the focus in terms of generalizability. The study was limited to viewing a certain timeframe when order rates were high and also limited to a single company, Wolt in this instance. This also limits the generalizability to only customers who used Wolt specifically during the COVID-19 pandemic. At the time of writing, there were no studies conducted about the service quality of online food delivery services in Finland, but cases from abroad existed. My research paper can be viewed as a

base for further studies if a situation like the COVID-19 years would happen again when demand peaks from natural health concerns of customers or mandatory closures of dine-in services. If this type of research will be done in the future, my master's thesis can be used to compare the results with cross-tabulation, as there is now existing data to compare the new findings with.

References

Acs, Z. J., Song, A. K., Szerb, L., Audretsch, D. B., & Komlósi, É. (2021). The evolution of the global digital platform economy: 1971–2021. *Small business economics, 57*(4), 1629-1659. https://doi.org/10.1007/s11187-021-00561-x

Alghamdi, S. Y., Kaur, S., Qureshi, K. M., Almuflih, A. S., Almakayeel, N., Alsulamy, S., & Qureshi, M. R. N. (2023). Antecedents for online food delivery platform leading to continuance usage intention via e-word-of-mouth review adoption. PloS one, 18(8), e0290247. https://doi.org/10.1371/journal.pone.0290247

Arslan, A., Kamara, S., Zahoor, N., Rani, P., & Khan, Z. (2022). Survival strategies adopted by microbusinesses during COVID-19: An exploration of ethnic minority restaurants in northern Finland. *International journal of entrepreneurial behaviour & research, 28*(9), 448-465. https://doi.org/10.1108/IJEBR-05-2021-0396

Asiakastieto. (2023). Wolt Enterprises Oy. Retrieved 2023-12-22 from https://www.asiakastieto.fi/yritykset/fi/wolt-enterprises-oy/26466749/taloustiedot

Bonfanti, A., Rossato, C., Vigolo, V., & Vargas-Sánchez, A. (2023). Improving online food ordering and delivery service quality by managing customer expectations: Evidence from Italy. *British food journal (1966), 125*(13), 164-182. https://doi.org/10.1108/BFJ-08-2022-0694

Chen, H., Liang, C., Liao, S., & Kuo, H. (2020). Consumer attitudes and purchase intentions toward food delivery platform services. *Sustainability (Basel, Switzerland), 12*(23), 1-18. https://doi.org/10.3390/su122310177

Cutolo, D., & Kenney, M. (2021). Platform-dependent entrepreneurs: Power asymmetries, risks, and strategies in the platform economy. *Academy of management perspectives*, *35*(4), 584-605. https://doi.org/10.5465/amp.2019.0103

Eriksson, P., & Kovalainen, A. (2015). Qualitative methods in business research: A practical guide to social research. Sage.

Farrell, D., Greig, F., & Hamoudi, A. (2018). The online platform economy in 2018: Drivers, workers, sellers, and lessors. JPMorgan Chase Institute. Available at SSRN: https://ssrn.com/abstract=3252994

Finder. Wolt Enterprises Oy. Retrieved 2023-12-22 from https://www.finder.fi/Ruoan+verkkokauppa/Wolt+Enterprises+Oy/Helsinki/yhteystiedot/3036929

Findley, M. G., Kikuta, K., & Denly, M. (2021). External Validity. *Annual review of political science, 24*, 365-393. https://doi.org/10.1146/annurev-polisci-041719-102556

Fink, A. (2003). How To Design Survey Studies. India: SAGE Publications.

Foroudi, P., Gupta, S., Sivarajah, U., & Broderick, A. (2018). Investigating the effects of smart technology on customer dynamics and customer experience. *Computers in human behavior, 80*, 271-282. https://doi.org/10.1016/j.chb.2017.11.014

Fowler Jr, F. J. (2013). Survey research methods. Sage publications.

Gregory, J. L. (2019). Applying SERVQUAL. Journal of applied research in higher education, 11(4), 788-799. https://doi.org/10.1108/JARHE-12-2018-0268

Habib, A., Irfan, M., & Shahzad, M. (2022). Modeling the enablers of online consumer engagement and platform preference in online food delivery platforms during COVID-19. *Future Business Journal*, *8*(1), 6. https://doi.org/10.1186/s43093-022-00119-7

Hennink, M., Hutter, I., Bailey, A. (2020). Qualitative Research Methods. the United Kingdom: SAGE Publications.

Hsieh, Y., & Yuan, S. (2021). Toward a theoretical framework of service experience: Perspectives from customer expectation and customer emotion. *Total quality management & business excellence, 32*(5-6), 511-527. https://doi.org/10.1080/14783363.2019.1596021

Jiménez-Buedo, M., & Russo, F. (2021). Experimental practices and objectivity in the social sciences: Re-embedding construct validity in the internal–external validity distinction. Synthese (Dordrecht), 199(3-4), 9549-9579. https://doi.org/10.1007/s11229-021-03215-3

Karim, M. M. (2020). SERVQUAL model for measuring customer satisfaction: An analysis of quantitative data. *Noble International Journal of Business and Management Research*, *4*(12), 117-125. https://napublisher.org/?ic=journals&id=2

Kaur, B., Kaur, J., Pandey, S. K., & Joshi, S. (2023). E-service Quality: Development and Validation of the Scale. *Global business review, 24*(5), 953-971. https://doi.org/10.1177/0972150920920452

Khan, M. A., Zubair, S. S., & Malik, M. (2019). An assessment of e-service quality, e-satisfaction and e-loyalty: Case of online shopping in Pakistan. *South Asian Journal of Business Studies, 8*(3), 283-302. https://doi.org/10.1108/SAJBS-01-2019-0016

Lehdonvirta, V., Kässi, O., Hjorth, I., Barnard, H., & Graham, M. (2019). The Global Platform Economy: A New Offshoring Institution Enabling Emerging-Economy Microproviders. *Journal of management, 45*(2), 567-599. https://doi.org/10.1177/0149206318786781

Li, C., Mirosa, M., & Bremer, P. (2020). Review of online food delivery platforms and their impacts on sustainability. *Sustainability (Basel, Switzerland), 12*(14), 5528. https://doi.org/10.3390/su12145528

Lin, P. M., Au, W. C. W., & Baum, T. (2024). Service quality of online food delivery mobile application: An examination of the spillover effects of mobile app satisfaction. International journal of contemporary hospitality management, 36(3), 906-926. https://doi.org/10.1108/IJCHM-09-2022-1103

Ma, B., Wong, Y. D., Teo, C., & Wang, Z. (2024). Enhance understandings of Online Food Delivery's service quality with online reviews. *Journal of retailing and consumer services, 76*, 103588. https://doi.org/10.1016/j.jretconser.2023.103588

Majerova, J., & Vartiak, L. (2021). Before Corona and After Corona as New Global Milestones in The Theory and Practice of Consumer Behaviour: Evidence from Vending Industry. SHS Web of Conferences, 92, 6021. https://doi.org/10.1051/shsconf/20219206021

Malik, S. A., & Malik, S. A. (2015). SERVQUAL to measure perceptions and expectations of library users: A case study of a public university library of Pakistan.

International journal of management in education, 9(3), 303-322. https://doi.org/10.1504/IJMIE.2015.070124

MCINTYRE, D. P., & SRINIVASAN, A. (2017). NETWORKS, PLATFORMS, AND STRATEGY: EMERGING VIEWS AND NEXT STEPS. *Strategic management journal, 38*(1), 141-160. https://doi.org/10.1002/smj.2596

McKim, C. A. (2017). The Value of Mixed Methods Research: A Mixed Methods Study. *Journal of mixed methods research, 11*(2), 202-222. https://doi.org/10.1177/1558689815607096

Nishat Khan, F., Rakesh Uddin, S., Arafat Shampod, Y., & Sattar, A. (2021). *The Impact of Corona Pandemic on the E-Commerce Industry Using Data Mining*. https://doi.org/10.1109/ICCMC51019.2021.9418369

NISTOR, A. (2021). THE INFLUENCE OF THE COVID-19 PANDEMIC ON E-COMMERCE. TRENDS AND CHALLENGES BEFORE AND AFTER COVID-19. Revista economică (Sibiu, Romania), 73(3), 151-161. https://doi.org/10.56043/reveco-2021-0028

Oliveira, A. S. d., Souki, G. Q., Silva, D. d., Rezende, D. C. d., & Batinga, G. L. (2023). Service guarantees in an e-commerce platform: Proposition of a framework based on customers' expectations, negative experiences and behavioural responses. *Asia-Pacific journal of business administration, 15*(2), 225-244. https://doi.org/10.1108/APJBA-06-2021-0249

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of marketing, 49*(4), 41. https://doi.org/10.2307/1251430

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of retailing, 64*(1), 12 https://www.proquest.com/scholarly-journals/servqual-multiple-item-scale-measuring-consumer/docview/228609374/se-2?accountid=14797

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Alternative scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. Journal of retailing, 70(3), 201-230. https://doi.org/10.1016/0022-4359(94)90033-7

Park, S., Yi, Y., & Lee, Y. (2021). Heterogeneous dimensions of SERVQUAL. *Total quality management & business excellence, 32*(1-2), 92-118. https://doi.org/10.1080/14783363.2018.1531700

Pine II, B. J. (2023). Exploring the future of the “Experience Economy”. *Strategy & leadership, 51*(1), 31-34. https://doi.org/10.1108/SL-10-2022-0101

Prasetyo, Y. T., Tanto, H., Mariyanto, M., Hanjaya, C., Young, M. N., Persada, S. F., . . . Redi, P. (2021). Factors affecting customer satisfaction and loyalty in online food delivery service during the COVID-19 pandemic: Its relation with open innovation. *Journal of open innovation, 7*(1), 1-16. https://doi.org/10.3390/joitmc7010076

Raza, A., Asif, M., & Akram, M. (2023). Give your hunger a new option: Understanding consumers' continuous intention to use online food delivery apps using trust transfer theory. *International journal of consumer studies, 47*(2), 474-495. https://doi.org/10.1111/ijcs.1284

Raza, S. A., & Khan, K. A. (2022). Corona fear and e-commerce adoption in an emerging economy: Paradigm shift of consumer intention. *Foresight (Cambridge), 24*(2), 195-209. https://doi.org/10.1108/FS-02-2021-0034

Sainani, K. L. (2017). Reliability Statistics. PM & R, 9(6), 622-628. https://doi.org/10.1016/j.pmrj.2017.05.001

Shroff, A., Shah, B. J., & Gajjar, H. (2022). Online food delivery research: A systematic literature review. *International journal of contemporary hospitality management, 34*(8), 2852-2883. https://doi.org/10.1108/IJCHM-10-2021-1273

Storm, A. (2023, 16. March). What is a two-sided marketplace?. *Zapier.* Retrieved 2024-04-14 https://zapier.com/blog/two-sided-marketplace/

Tezerjany, K. & Fatemeh, S. (2024). Appraise the role of novelty-seeking on consumers’ satisfaction using online food delivery applications. The International journal of quality & reliability management, 41(4), 1142-1164. https://doi.org/10.1108/IJQRM-11-2022-0341

Tukiran, M., Tan, P. H. P., & Sunaryo, W. (2021). Obtaining customer satisfaction by managing customer expectation, customer perceived quality and perceived

value. *Uncertain supply chain management, 9*(2), 481-488. https://doi.org/10.5267/j.uscm.2021.1.003

University of Southern California. (8.3.2024). Quantitative Methods. Retrieved 2024-03-10 from https://libguides.usc.edu/writingguide/quantitative

Valtiokonttori. (31.12.2023). Koronatuet yrityksille. Retrieved 2024-01-30 from https://www.valtiokonttori.fi/palvelut/korvaus-ja-vahinkopalvelut/yritysten-kustannustuki/#tilastot

Vollero, A., Sardanelli, D., & Siano, A. (2023). Exploring the role of the Amazon effect on customer expectations: An analysis of user-generated content in consumer electronics retailing. *Journal of consumer behaviour, 22*(5), 1062-1073. https://doi.org/10.1002/cb.1969

Wang, H. T. (2023). The construction of the strategy selection behavior of online food delivery platform based on the tripartite evolutionary game model. *Asia Pacific management review, 28*(3), 316-326. https://doi.org/10.1016/j.apmrv.2022.12.004

Wang, J., Shen, X., Huang, X., & Liu, Y. (2021). Influencing Factors of the Continuous Usage Intention of Consumers of Online Food Delivery Platform Based on an Information System Success Model. *Frontiers in psychology, 12*, 716796. https://doi.org/10.3389/fpsyg.2021.716796

Westerman, G. (2022). Developing Strategy for New Customer Expectations. *MIT Sloan management review, 63*(2), 1-4. https://www.proquest.com/scholarly-journals/developing-strategy-new-customer-expectations/docview/2623611227/se-2?accountid=14797

Wolt Enterprises Oy. (2023A). Why deliver with Wolt?. Retrieved 2024-03-08 from https://explore.wolt.com/en/fin/couriers

Wolt Enterprises Oy. (2023B). About. Retrieved 2023-12-22 from https://explore.wolt.com/fi/fin/about?_gl=1*17hjmkx*_gcl_au*NDEzMDIyNjA2LjE3MDMxNTU4ODY.*_ga*ODc1Nzg0NzgxLjE3MDMxNTU4ODg.*_ga_CP7Z2F7NFM*MTcwMzI0NDcyNS4yLjEuMTcwMzI0NDczMi41My4wLjA

Wolt Enterprises Oy. (2023C). User Terms of Service – Finland. Retrieved 2024-02-13 from https://explore.wolt.com/en/fin/terms

Wolt Enterprises Oy. (2023D). Tutustu Wolt-kaupunkeihin. Retrieved 2023-12-22 from https://wolt.com/fi/fin

Xue, C., Tian, W., & Zhao, X. (2020). The literature review of platform economy. *Scientific Programming*, *2020*, 1-7. https://doi.org/10.1155/2020/8877128

Yu, E. S. H., & Chao, C. (2022). Online sales, home delivery, and the platform economy. *Bulletin of economic research, 74*(3), 722-736. https://doi.org/10.1111/boer.12316

Zhou, R., Wang, X., Shi, Y., Zhang, R., Zhang, L., & Guo, H. (2019). Measuring e-service quality and its importance to customer satisfaction and loyalty: An empirical study in a telecom setting. Electronic commerce research, 19(3), 477-499. https://doi.org/10.1007/s10660-018-9301-3

Zygiaris, S., Hameed, Z., Ayidh Alsubaie, M., & Ur Rehman, S. (2022). Service Quality and Customer Satisfaction in the Post Pandemic World: A Study of Saudi Auto Care Industry. Frontiers in psychology, 13, 842141. https://doi.org/10.3389/fpsyg.2022.842141

Appendices

Appendix 1. Modified SERVQUAL 22-item questionnaire

Online Food Delivery Platform Service Quality During COVID-19

Pakolliset kysymykset merkitty tähdellä (*)

Hello!

I appreciate your interest in this survey for my Master's Thesis, feel free to share the link to your friends also. This study aims to research how service quality and customer satisfaction were achieved in the online food delivery platform Wolt during the COVID-19 pandemic.

PLEASE READ CAREFULLY BEFORE RESPONDING

In each question, first answer what were your expectations of the service and then what was the actual outcome of quality from the service you got. The questions are in five categories which are introduced before the questions. Answer from your experiences during the COVID-19 years of late 2019-early 2022. The survey will take 5-7 minutes to complete. Don't answer the survey if you didn't use Wolt during the COVID-19 pandemic.

The scaling is as follows:

1: Strongly disagree
2: Disagree
3: Neither agree nor disagree
4: Agree
5: Strongly agree

The survey is anonymous, but if you wish to participate in the raffle, you need to enter your email. The emails will be used in the raffle where I give away five gift cards to S-Group stores, and they are not connected to your answers.

Feel free to contact me via email if any questions occur or if you want to see the privacy notice.

Mika Eronen
The University of Vaasa - Industrial Management
a111392@student.uwasa.fi

1. (Optional): Provide your email, if you want to participate winning a gift card

Email

2. Demographics: Gender *

- ○ Male
- ○ Female
- ○ Other
- ○ Don't want to disclose

3. Demographics: Age in years *

- ○ 18-24
- ○ 25-31
- ○ 32-38
- ○ 39-50
- ○ 51 or older

4. Demographics: Employment status *

- ○ Full-time student
- ○ Student and employed
- ○ Employed
- ○ Neither student or employed

5. Demographics: How often did you use food delivery platforms during COVID-19? *

- ○ 0-1 times per month
- ○ 2-3 times per month
- ○ more than 3 times per month

6. Reliability: The food quality was consistent *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

7. Reliability: You could depend on the customer service to solve possible problems *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

8. Reliability: The correct food items were delivered to you at the first try *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

9. Reliability: Your orders were delivered in the promised time frame *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

10. Reliability: Your orders were correctly delivered consistently *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

11. Responsiveness: You were informed of possible delays to your order during the delivery process *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

12. Responsiveness: Wolt was prompt in possible special instructions you had *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

13. Responsiveness: Issues with wrong or missing items were efficiently resolved *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

14. Responsiveness: The customer service was fast to respond to possible complaints or other enquiries *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

15. Assurance: You could be confident in hygiene practices during food preparation and delivery *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

16. Assurance: The delivery precautions were adequate to ensure safety during COVID-19 *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

17. Assurance: The delivery personnel seemed trained in safety guidelines during delivery *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

	1	2	3	4	5
Outcome	○	○	○	○	○

24. Tangibles: Safety measures like masks were used by delivery personnel *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

25. Tangibles: Packaging for your food was clean and sanitized *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

26. Tangibles: The delivery personnel had a neat and professional appearance *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

27. Tangibles: Packaging for your order looked visually appealing *

	1	2	3	4	5
Expectations	○	○	○	○	○
Outcome	○	○	○	○	○

28. Which one of the five categories is the most important factor in service quality for you? *

- ○ Reliability
- ○ Responsiveness
- ○ Assurance
- ○ Empathy
- ○ Tangibles

29. Feedback about the survey is much preciated!