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# Factors that influence the behavioral intention of customers toward online food delivery service

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## **ABSTRACT**

Many studies focus on components that influence consumers' behavioral intent to acquire an online food delivery service rather than those responsible for determining consumers' online behavioral intent to purchase service providers. Therefore, this study aims to identify such factors and assess the impact on the behavioral intention toward OFDs according to the consumer's point of view. Findings are supported by the explanatory approach and the quantitative research technique and were collected via a questionnaire accessible through a Google Form. Costumers lived in Tallinn, Estonia were polled using a non-probability sample approach, and 137 responses were received. Trust demonstrates the highest impact of 30.8% on the intention of using OFD service by customers, followed by time-saving benefits (21.0%), perceived ease of use (15.2%), and perceived usefulness (14.5%). Price saving benefits and food safety risk perception are insignificant statistically, and the study assumptions are rejected. The study suggested that customers' intentions to use Online food delivery services must be tailored to their preferences and perceptions of the product's intrinsic and extrinsic worth and its quality. Service providers must become more alert and efficient to keep everything safe and confidential. A secure system for sharing information should be implemented if at all practicable.

Keywords: Online food delivery services, consumer behavioral intent, brand trust, time-saving benefits, food safety risk perception.

**Article originality and practical implications**: This article presents original findings into consumer behavioral intentions towards online food delivery services. Its practical implications guide service providers in enhancing trust and efficiency, ultimately improving customer satisfaction and loyalty.

#### INTRODUCTION

As internet business has developed, its unique idea has become old. Retailers in the food business have been offering different Internet-based services to remain serious in a crowded market. Food delivery intermediates empower more modest food traders to provide these administrations too, but on the other hand, they're turning out to be more commonplace (Yeo et al., 2017). This shows that clients are bound to settle on food-value choices depending on their current requirements rather than their earlier buys since food is low-contribution ware (Vazquez, 2009). With the assistance of a food delivery service, clients may now associate with a broad scope of neighboring cafés and cooks through a cell phone application. Clients may rapidly observe the food sources they wish to buy and add them to their shopping baskets utilizing straightforward pursuit highlights. Clients may either demand an expected conveyance time dependent on their area or deal with a particular conveyance time ahead of time (Chen et al., 2020). From that point onward, a delivery individual might take the request, travel to the café, get the thing, and afterward carry it to the client. Meal delivery systems and real-time tracking of orders wipe out the requirement for clients to talk with restaurant workers reducing energy use and relational correspondence (Kapoor, 2018). When food is conveyed, the feeling of holding up time is diminished (Alalwan, 2020). Without growing the number of seats or representatives, they may get another income stream. Individuals requesting food have more choices, and they can discover critical data about the spots they're thinking about by perusing reading online comments and reviews (He et al., 2019).

Estonia's Internet-based food delivery service is estimated to reach €19m in 2021. Pay is depended upon showing a yearly improvement speed of 7.97%, achieving a projected market volume of €26m by 2021, wherein the OFD area, the number of customers is depended upon to amount to 0.5m customers by 2025, so the business will proceed to augment

(Statista, 2021). The amounts of competitors will foster like mushrooms later storm. Nonetheless, Food delivery services are becoming more advanced since different delivery service organizations develop through web and versatile applications (Prabowo, 2019).

Many indispensable critical members in Estonia's web-based food delivery business, like Bolt and Wolt, governed the dining market in Tallinn just as set up the unprecedented possibilities, controlling the economies through the ordinary pay per customer in the Online Food delivery (OFD) fragment, working opportunities, comprise to serious rivalry among the organizations and eateries, etc. (ERR, 2020; Statista, 2021). Even though the structure of food mobility is changing, its commercial progress goes steadily. Information quality, timing precision, price regard, social influence, and changing customer affinities, will sort out which accomplices win or lose as the business makes, or they are probably managerial restrictions, including expected changes to how such factors are tended to, will consider alongside the reshuffling either client will continue with the service or not (Ahuja et al., 2021). Despite such difficulties, the client buys aim in OFD has been examined from time to time. Yet, there is no consistency in the exploration regarding the variables that influence the social goal to involve a specific innovation where numerous snags on the internet-based food delivery have been emerging (Amir & Rizvi, 2017; Kandasivam, 2017; Novato, 2017). Currently, researchers are focusing their efforts on components that influence consumers' behavioral intent to acquire an OFD service rather than those that are responsible for determining consumers' online behavioral intent to purchase service providers. Therefore, the study aims to determine the impact of factors (perceived usefulness, received ease of use, trust, price saving benefits, time-saving benefits and food safety risk perception) on the behavioral intention toward online food delivery services according to a consumer point of view. To accomplish the aim, the study measures the response of the following inquiries:

- i. What factors determine the customer's behavioral intention to use an online food delivery service?
- ii. What impacts such factors on online food delivery services?
- iii. What are the various motivations of clients to use online food delivery services?

Questionnaires are used to obtain information from customers who lived in Tallinn, Estonia and used online food delivery service, using quantitative research methods. The study is organized into four parts. The introduction outlines the issues emerging from the developing significance of today's internet-based delivery service, the foundation to the examination, research issue, and aims. Section two gives a hypothetical outline of various subchapters examining factors affecting customers purchasing food online. Section three portrays and legitimizes the fundamental technique and materials used for the study. Also, the study conclusion, limitations, and possibilities for further research are suggested in this part.

# LITERATURE REVIEW

Discussion of the underlying ideas and prior literature that are relevant to the research is presented in this chapter. The chapter is divided into parts on Consumer Foodservice Industry, Estonian Takeaway Industry, Consumer Behaviors, and Post-Purchase Behaviors. To begin the chapter, the food service sector was discussed in detail. Discussion of the concept's growth and implementation during the last decade would include a critical examination of its consequences.

# Implementation of online food delivery service

Online meal ordering has become a significant trend throughout the world, and it's expected to continue for years to come. Significant alterations have been made to the eatery. As a result, the restaurant no longer must develop its website or app. Adding their eatery to the food delivery apps is all that is needed to begin receiving orders. When a consumer places an order, the app assigns it to the restaurant and takes care of everything from there on out, including delivery. Expanding one's social media footprint is also a priority now (Partridge et al, 2020).

Online food services will be considered to fall under the takeaway sector of the customer food service industry, which refers to the aspect where food is purchased at a restaurant via online services such as apps, websites, or phone calls, delivered and consumed outside of the restaurant (Ogunsemi, 2020). A restaurant's ability to connect with and interact with its target audience is closely correlated to its use of social media. It's no secret that restaurants are using social media to grow their clientele (Yaris & Aykol, 2021) Customers may compare menus, pricing, and cuisines, as well as read reviews from other customers, on popular on-demand meal delivery services. Analyzing customer feedback is an important part of making company decisions (Sjahroeddin, 2018).

Food delivery services providers use online services not only to make the meal delivery industry effective but also to expand their clientele quickly. Based on previous research in online meal ordering, there is a strong signal that many modifications are needed in this situation, particularly since technology advances at a breakneck pace (Kasmani & Shafie,

2021). E-commerce growth has made online meal ordering services more convenient for customers who like to have their food delivered to their doorstep. Online meal ordering is an excellent illustration of how flexible things can be, and everyone appreciates it. You may order whenever and from wherever you want; this is what the customer wants in terms of things being done to suit their preferences and demands. To meet the needs of today's users, every program and web browser is being built with customization in mind. It is feasible to arrange food online and have it conveyed to your door by a restaurant or a café (Ray et al., 2019; Wang et al., 2019). Internet meal delivery services benefit clients by making it quick and straightforward to purchase food. It provides the most remarkable customer service by revealing every aspect of the client's purchase (Hoffmann & Prause, 2018, .33).

# **Consumer food service Industry**

Due to technology improvements, the popularity and relevance of online ordering have increased in Estonia's consumer foodservice industry. In reaction to the growing popularity of third-party delivery apps, restaurants have changed their ways. Companies like Wolt and Bolt have used delivery apps to expand their delivery coverage in Estonia, where food delivery services are becoming more popular (ERR 2020). However, there has been a noticeable increase in restaurants that use these services. Despite the industry's general stagnation, small food enterprises that use these applications can extend their client base and see constant development (Tsap et al., 2020). Estonians make purchasing selections depending on their income (they frequently seek discounts), the selection supplied by suppliers, and their values. Values are based on other people's suggestions, particularly those from specialists, acquaintances, and salespeople. As a result, one of the decisionmaking triggering mechanisms is the food options offered to consumers (TNS, 2008, as cited in Esko et al., 2012). Consumers in Estonia are aware of the growing popularity of fast food and lower-cost, lower-quality food products (Reiman et al. 2011). Restaurants with food services have been seen as entertainment because consumers varied experiences; therefore, the customers are split between those who want expediency and those who wish to have various experiences. Cashless payments, click & collect, and third-party delivery alternatives are becoming more common as the on-demand foodservice culture grows (Old, 2021). Many "front of house" interactions between customers and operators might be automated when the latest technological solutions join the market It was noted in the report that consumers are getting younger and older, making it difficult for businesses to be "all items to all customers." This is especially true for restaurants, which must find ways to appeal to younger and older customers through technologically enabled solutions (Mc Carthy, 2018, 3, as cited in Ogunsemi, 2020). From the perspective of Estonian customers, this research attempts to understand better how the online meal delivery service market is expanding (Tsap et al., 2020; Gunden et al., 2020). Integrated OFD platforms like uber eat helped fuel the growth of OFD services (Novita et al., 2020; Kabir et al., 2021).

#### Online food delivery service and Consumer behavior

Ordering meals has evolved into a simple and practical habit with the click of the mouse. Without consciously thinking about pronouncing long names, menus, and ingredients can be accessed online (Moondra et al., 2020). A food business normally pursues the direction for their administration framework, which is carried out through technology. Now, just a handful out of every odd café's web-based ordering system is comparable. While some cafés rely on third-party applications for both takeaway and delivery (due to high volume and costs), others opt for an in-house or direct internet ordering system (conceivably lower volume however low or no charges) (Warlina & Noersidik, 2018). The study also reveals that, customers can place orders and make reservations from the comfort of their own homes using the online delivery service. The efficacy of the restaurant's online system provides a solution to the problem of long lines in restaurants. In the catering sector, OFDs has become a developing drift, giving an integrated online commercial center for eateries, deliverers, and clients who want their meals delivered to their homes (Kedah, 2015). With the increasing popularity of the OFD industry, the rivalry between the various stages and concerns of online food delivery services initiatives are becoming prevalent because similar items on several online platforms are remarkably similar. To back this argument, the number of clients using the OFD service has reduced by 44% in 2021 compared to 2019(62%) (Wang et al., 2021). Compared to Estonia, in 2016, while the entire takeout business is expected to increase by 17% in 2020, it is predicted that the internet delivery sector will grow by 40% to 60% and that smartphone technology will play a significant part in this expansion. Even though this study proved the economic relevance of the takeout industry and its expansion, it was unable to explain why customers are drawn to it and what can be done to maintain its long-term viability. Third-party apps and websites are primarily responsible for the rise in quick-service food delivery services, allowing customers to compare meals from various restaurants and introduce them to new cuisines (Strielkowski et al., 2017). The study conducted by Soosalu (2022) reveled that an estimated 249 million euros was spent online by Estonians in the fourth quarter of 2021, averaging around 6 million euros each month. Due to a combination of restrictions and dents in consumer preferences, as well as an increase in online buying options. Online transactions increased by 31% in the latest quarter, while turnover increased by 59% compared to a comparable quarter of the previous year. Even though many stores in Estonia have reopened their doors, many people continue to purchase food and other essentials from online stores since it is cost-effective and extremely reliable, especially in larger towns. It didn't take long for professional communities to adapt to the new conditions, and many of them began setting up their electronic channels shortly after the epidemic broke out (Soosalu, 2022).

Even though OFDs platforms can deliver a wide range of services, service providers cannot always meet consumer expectations such as trust, quality, consistency, and satisfaction. (Wang et al., 2021). Other than this maintaining operating expenses, adoption of new technology, maintaining food safety, maintaining the supply chain are the provokes addressing to online food delivery in the future (Islam & Sultan 2020). Consumer behavior has been theorized in various ways due to its versatility as a research topic. There was a widespread belief that people made logical decisions when making choices in the early industrial age. Assuming the market is ideal and in tune with human reason, this theory assumes individuals make their decisions based on perceptions of which products or services would provide the most outstanding level of enjoyment when they use it as a tenet (Suhartanto et al., 2019). Nonetheless, rational choice is no longer helpful in understanding the illogical aspects of consumer behavior, such as impulsive purchasing (Suhartanto et al., 2019). Rational choice would be ineffectual in describing the behavior of somebody who doesn't have all the alternatives available to pick from, and in certain situations, they lack the time, skills, or desire necessary to make logical choices. Many alternative explanations of consumer behavior may be used in conjunction with rational choice theory, such as those based on other ideas and models.

Suhartanto et al., (2019) define consumer behavior as a process rather than a reaction. "Activities and decision processes of persons who acquire products and services for personal use" are another description of consumer behavior (Yeo et al., 2017). Using definitions, consumer behavior may be a series of behaviors that begin with recognizing a need for the product or service, progress via research and information gathering, and end with either the product or service being used or discarded. For most people, buying a product or service isn't an illogical decision; instead, it is sensible based on their objectives, resources, and the obstacles they face in pursuing those goals. Customers' objectives are often impacted by personal qualities that are in turn shaped by their cultural and psychosocial surroundings. Even though these objectives may shift throughout time and vary depending on the scenario, they are always there in some shape or another. The aims of a customer reflect the consumer's character (Kassim, 2010). This personality type dictates where and how they spend all their time, what they purchase, where and when they buy it, and who (the brand) they trust with their money and the marketing manager may better grasp customers' needs and desires by uncovering the motives behind their purchases (Yeo et al., 2017). Varied types of customers have different motivations, and marketers may use this information to make better judgments about what to sell, what to brand, and how to promote. Acceptance/adoption and continuation-intention are the two main types of online purchasing behavior (Mehrolia et al., 2020). In addition, it was discovered that among US internet buyers, motivation to purchase is based on demographics, belief, risk, security, and other variables gleaned from the submitted reviews, product attributes (such as search, experience, and credibility), purchasing preferences, website characteristics, and internet inclination, among other things, were also considered. Trust and advantages from prior experiences were shown to influence customer attitudes regarding online buying. Greater confidence levels in an online purchasing website were linked to a higher degree of the perceived web (Mehrolia et al., 2020).

## **Post-purchase Behavior and Customer Purchases Journey**

Post-purchase behavior is crucial since it is a significant factor of repeat purchases, recommendations, customer happiness, loyalty-building, consumer trust, or trying an entirely new brand. Consumers need to know that purchasing items or services can solve their issues or meet their demands before buying them. Even after a customer has made a purchase choice, they continue to demonstrate post-buy behavior that researchers should watch. The quality of product is the most critical factor in post-purchase behavior; therefore, ensuring customer satisfaction is the first step toward long- term business success (Mehrolia et al., 2020). The necessity for healthy food options and menu variety affects consumer behavior towards online meal delivery services but organization want to bridge this knowledge gap by determining whether this new phenomenon influences customer attitudes about meal delivery services offered over the internet or not. Online meal delivery platforms are helpful for enterprises in the consumer foodservice sector. It also considers how social media and technology have fueled this market. Therefore, the growth's consumer component is ignored. Understanding the pre-and post-purchase behavior of customers responsible for this sector's development would help marketing managers better address the demands of consumers and hence increase sales for the organizations (He et al., (2019). It was shown that the quality of customer service and customer satisfaction directly impacted consumer behavior in the setting of online buying (Tata, 2020). The study by Tran & Nguyen, (2021, 174-182) revealed that revealed good post-purchase behavior is strongly associated with product quality. It is possible for clients to be entirely delighted with the service they have received, yet they will not return because of various other issues; positive post-purchase behavior such as customer contentment is highly sought for. Besides this, it is common for consumers to be pleased if the value they get matches the value they anticipated (Customers may express their happiness or discontent with a purchase (Gunden et al., 2020). Bhattacherjee (2008) revealed that a product's ability to satisfy customers depends on its ability to meet their needs. Again, if the product information and performance are inconsistent, customers will be dissatisfied. On the other hand, there could only be three potential evaluations: neutral, satisfied, or dissatisfied. Performance that meets expectations creates an unsatisfied emotion, but the version that surpasses expectations produces a happy one. Consumer loyalty and repurchase are common post-purchase behaviors that result from customer pleasure, but scholars disagree on this matter because high repurchase rates do not always indicate loyalty, but low rates do not usually show disloyalty, and customers may say they're happy but then walk off and buy something different (Curtis et al., 2011). It was acknowledged that customer happiness influences post-purchase behavior and future consumer decisions, leading to greater customer loyalty and retention. This proves the adage that happy customers tell three people, whereas dissatisfied customers tell three thousand people (Yeo et al., 2017), whereas an opposite view was expressed and argued that although customer pleasure may enhance customer loyalty and retention, it is insufficient to secure it. According to the idea that loyal customers are often pleased customers, customer happiness does not always lead to loyalty.

Pre-, during, and post-purchase, customers are exposed to customer interactions that shape the client experience which includes interactions that occur before, during, and after the actual purchase (Kietzmann et al., 2018; Martin et al., 2015; Sands et al., 2016). In the pre-buy stage, purchasers are affected by both inside and outside redesigns and whether they decide to shop face to face or on the web (Garaus, 2018). It is claimed that "the pre-purchase stage, as well," where "the wide variety of product offerings which are given to the customer through numerous advertising tools and promotion strategy instill confusion in him concerning what product to purchase, and what product not to purchase," is also where "the cognitive dissonance is present" (Kasmani & Shafie, 2021). At the buying stage, the buyer settles on a decision and chooses to buy (Inman et al., 2009). It is vital to comprehend the idea of purchaser decision since, when customers are surer about an item and its specific highlights, they feel engaged, and their degree of decision certainty builds (Garaus & Wagner, 2016).

# **Underlying Theories and Conceptual Framework**

The following underpinning theories are employed in this study to arrive at the conceptual framework and development of the hypothesis. In the Unified Theory of the Use and Acceptance of Technology, the primary model (performance expectation, efforts, social influence) (Venkatesh et al., 2003), where technology acceptance speculations have been considered to examine the singular's ways of behaving and their acknowledgement capacity to embrace new advances as per the few builds that zeroed in on the mental and social perspectives of the clients of technology (Momani, 2020).

# **Unified Theory of Use and Acceptance of Technology (UTAUT)**

This theory is used with other variables to uncover the factors that impact online food delivery service users' behaviors and acceptance of their goods. In contrast, UTAUT is used to forecast whether a user would new technology (Momani et al., 2017). Consequently, the idea is used to gauge customer acceptance intentions for food delivery apps. Increased accepting intents are a consequence of this. Many clients utilize food delivery apps or services for several reasons, including food on doorsteps at any time and the improved price transparency (Venkatesh et al., 2003). Alternatively, this depends on the conflict of when a client experiences more prominent value, the motivation to recognize and use a particular technology will moreover grow (Alalwan et al., 2017). UTAUT theory is the expectation of effort, interfaces with how much clients are linked to the use of a particular technical breakthrough. It is possible to determine whether a technology will be utilized eternally based on how simple it is to learn and use (Venkatesh et al., 2003). On other hand, it reflects the client's impression of execution upgrade by utilizing on the web administrations like the comfort of payment, quick reaction, and service adequacy. FDAs are easy to use, with a couple of basic advances and several payment methods. FDA will be utilized soon because of the helpful effect of exertion assumptions on the reception of innovation that is easy to utilize and doesn't include a lot of work, bringing about a high probability of taking on it (Zhou et al., 2010). Another element that impacts behavior and intentions to embrace new technology is the effect of social networks. Friends, family members, and colleagues may all impact a person's willingness to experiment with new technology. Users' intentions to adopt new technology are positively influenced by social influence, and the other way around is true as well. To determine whether a user plans to continue using FDA, you may utilize this factor. The social impact on the reception of new portable breakthroughs like FDA has grown as the number of adaptable informal groups (like Facebook, Twitter, and Instagram) has grown. Client happiness has been linked to social effects, which has a good impact on client satisfaction. (Venkatesh et al., 2003). Similarly, a person's attitude about technology is a factor in determining how they intend to act. Whether or whether a person plans to use a new piece of technology is determined by its capacity to be advantageous. Clients will consider a development worthwhile if they acknowledge that it requires no effort on their part. As a result, FDA has an impact on clients' behavior desires, which are influenced by their perception of their own value. Users' behavioral intentions are positively impacted by FDAs since the apps provide seamless services that are customized to their preferences (Venkatesh et al., 2003).

Purposeful Utility (PU) is used in this research to describe people's belief that utilizing an OFD service would be a helpful method of ordering meals. OFD study has shown that PU has a considerable influence on OFD use intention. OFD services were more likely to be retained when PU was present. The largest influence on OFD use intention comes from PU (Chen et al., 2020). Perceived ease of use (PEOU) is a term used to describe how well people are prepared morally and practically to use new pieces of technology (Correa et al., 2019). PEOU has a considerable impact on consumers' use intentions for a range of technologies, according to several studies. Ramayah (2005) proposed that people are more likely to

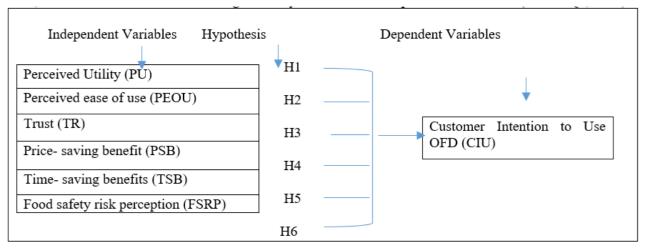
buy online if their smart apps and web interfaces are simple to use. According to these researchers, online buying intention is influenced by factors such as PEOU. When it comes to OFD services, the higher the customer's PEOU, the more likely they will be to employ OFD services and therefore increase the likelihood of success. The ordering process, order tracking, and interface filtering choices play significant roles in deciding CIU (Ray et al., 2019).

Trust (TR) has been evidenced in the system as a strong driver of new technology adoption to measure trustworthiness, dependability, and assurance, a person or item, or technique is referred to as a "TR" (Mendoza- Tello et al., 2018). Customers with a high TR regarding the technology-based service are more likely to accept it, while those with a low TR are more likely to be dubious and hesitant. However, multiple studies have shown that TR is one of the essential elements favorably impacting CIU, even when used in the OFD scenario (Cho et al., 2019; Ray & Bala, 2021). OFD services may charge a delivery fee or service fee in addition to the product's regular price (Lichtenstein, 2020). Due to fierce competition in the OFD industry, organizations regularly provide discounts that cover or lower costs to entice new clients and expedite existing ones. Likely, customers may get a \$10 discount on their first order at Grubhub, and students can get a discount of 10% (Groupon, 2021). Free transport, lessened movement expenses, or unique inspiration boost CIU in OFD service (Kaur et al., 2021; Ray & Bala, 2021). In addition, Kasmani and Shafie (2021) found that OFD clients want a pricing advantage. Consequently, this research focuses on PSB as a critical predictor of CIU. Saving money (e.g. a 10% discount, a cheaper delivery/service price) and not charging extra fees for buying products/services (e.g., free delivery) are two examples of PSBs (Yeo et al., 2017). It is predicted that PSB will raise CIU based on the evidence that it substantially affects customer OFD use.

Moreover, in the present time-compelled society, online delivery lessens travel time by wiping out the need to go to and from a retail store/restaurant. Going to a retail store/restaurant and standing in line may be held by ordering food via OFD. Consumers may keep their payment and prior purchase information in several web browsers and OFD applications to make the checkout process faster (Statista, 2020; Bansal, 2019). The study revealed no correlation between time-saving benefits (TSB) of OFD services and customer use intentions; however other studies have demonstrated that TSB of OFD services impacted CIU (Correa et al., 2018; He et al, 2019). Food safety may be difficult to assess while eating out since consumers lack the necessary instruments and abilities. Customers evaluate an eatery's tidiness and sanitation depending on several criteria such as the cleanliness of the establishment itself and the safety standards followed by its personnel, such as the wearing of clean clothing and sanitary gloves when handling food. The term "food safety risk perception" refers to the way people see the dangers of eating certain foods (FSRP) (Kim & Hwang, 2020).

An important factor in consumers' food-purchasing decisions is the food safety risk profile (FSRP). There is an increased readiness to pay for safe goods and services by consumers with higher FSRQ scores. Customers may have a varying FSRP based on where they purchase the product. Because have been added to the regular restaurant's plan of action, OFD services are finding it challenging to stay aware of food taking care of and cleaning, resulting in food contamination. For OFD delivery, temperature control, freshness, and the right use of food compartments during transportation are generally factors to consider (Mehrolia et al., 2020).

Due to this, consumers may have an increased FSR while using OFD, which may impact CIU since they cannot evaluate restaurants and personnel's cleanliness in person. Along these lines, utilizing the current literature review and theoretical legitimizations, the complete six hypotheses were figured out for testing the connections of factors in this study; H1, H2, H3, H4, H5 have appositive and H6 has a negative impact on CIU (Figure 1)



**Figure 1.** The conceptual framework

Note. Author's development

#### **MATERIALS AND METHODS**

This section begins with a succinct comment on the contextual structure that was used for this investigation. It contains information about the population of the study, research design, the size of the sample, sampling method, and sample design. This chapter discusses variables to be measured, instrumentation, data collecting procedures, and data analysis methods. Additionally, the study's findings are analyzed and summarized in this section, with the study's limitations discuss, and recommendations for further studies are preferred.

## Research Design

When conducting research, there are various factors to consider, including the study's goal, where it will take place, what style of inquiry will be conducted, how much interaction the researcher will have with the subject matter, and how long the study will endure. Researchers believe that logic-based methods will produce more accurate and reliable results (Akhtar, 2016). It is possible to collect data more quickly using quantitative processes and statistical analytic approaches when many respondents are accessible and using quantitative. These findings are supported by the explanatory approach and the quantitative research technique, both of which are based on primary data collecting. It was collected via questionnaire that was made accessible using a Google Form. People who completed questionnaires were informed about the study's aim, the use of the data obtained, the importance of anonymity, and the academic significance of the results, all of which were described to them before they began. Individuals were under no obligation to participate in the survey; rather, their participation was entirely voluntary on their side.

# **Population and Sampling**

This is a noteworthy achievement since, as previously said, two-thirds of the population of Estonia is linked to online food delivery services, making this a big advancement. Thus, the place we have chosen has a relationship to Estonia, and it makes more sense to use this medium and to utilize this location because of this connection. The surveys that are carried out in areas where they make the greatest sense are of particular importance to us; there is no doubt about that. Estonia is an excellent location for conducting this survey, which is one of the reasons to picked it over other options: most people who reside in this country are interested in online meal delivery services, which we found to be true. The polls that were performed here in Estonia. In this study, the data or information was gathered by placing a practice known as non-probability sampling. This inspecting can be used to depict phenomena, discover new ones, and develop hypotheses, still it is not always possible to generalize the revelations to the entire population genuine degree of assurance method. This approach is referred to as purposeful or subjective sampling, and it includes expert sampling as one of its components. The researcher utilized this technique to collect data. The researcher's judgment determines which units or populations are the most appropriate to study when choosing the people to be examined under this sampling method when selecting the teams' steams to be investigated under this sampling approach. The examiner will be able to connect the research question and aims and the study's conclusion and results if the reasoning for the selecting respondents for the quantitative research is supplied to the examiner in advance.

# **Determination of sample size**

Obtaining an accurate and sufficient sample size is critical to ensure statistical validity and applicability for future studies (Hair et al., 2007). As a result, the study received totals 1403 response from customers, and based on Yamen (1967) sampling criteria, 311 people are needed for 1403 participants. Therefore a 311-participant sample was sufficient for evaluating the hypotheses given at a 95 percent confidence level.

Table 1. Calculation of sample size

n	N	E	1	n= N/ 1+N (e) 2
Sample size	Total population	Margin of Error	Const. Number	
	1403	0.05	1	311

Note. Author's assessment

## **Data collection instruments and procedure**

The data was collected via the use of a survey approach to determine the factors that impact consumers' behavioral intentions toward online meal delivery services. When using a survey instrument designed to find scales that had been changed in previous research and with high overall quality and authenticity, this survey would be the most successful. The data collection procedure took place from the 25th of March to 19th of April 2022. It is appropriate to use a structured questionnaire to collect data if the researcher is clear on what information they require. It's also simple to administer, popular with most of the populace, and may reduce bias since researchers are unable to influence the responses of individuals who fill

out questionnaires. A questionnaire is created in a five-phase process. The following are a few examples: developing initial notions, refining concepts, selecting question kinds, organizing the questionnaire, and putting the questionnaire into action. Additionally, it is responsible for the questionnaire's design and testing. An online questionnaire was used that had two key sections: First, details on sex, age, also, some broad inquiry that poses regarding the OFD service experience and its advantages. For the second part, a sample of the public sampled their thoughts with a Likert scale of 1 to 5 allowing participants to express their views (strongly disagree to strongly agree).

#### Measurement scale

The authors used the pre-testing and internal consistency of scales of the questionnaires used in the study by different scholars who used questionnaires in a specific context and for a specific purpose. As a result, this study relied on their questionnaire to gather data. Also, to ensure accuracy and validity, the supervisor was given a draft version of the questionnaires to review for structure, sequencing, and any necessary adjustments based on the study's present environment. Before using the questionnaires to collect data, the author made these alterations.

Number of Measurement scale Sources items Perceived usefulness 3 Jun et al. (2021) Perceived ease of use 2 Jun et al. (2021) Price saving benefit 3 Yeo et al. (2017) Yeo et al. (2017); Chai & Yat (2019) Time saving Benefits 3 Mendoza-Tello et al. (2018); Jun et al. (2021) Trust Mehrolia et al. (2020) Food safety risk perception Customer intention to use OFD Al Amin et al. (2021)

Table 2. Questionnaires scale

Note. Author's development based on indexed literature

## **RESULTS AND DISCUSSION**

The findings in this section are based on the data collection and describe the research outcomes conducted for this study. A discussion will be held in which the results of the existing scholarly will be used to back up the claims stated. Finally, a summary of the complete research work will be presented

# **Demographic Analysis**

There are 40 female (30.5%) and 89 males (67.9%) in this sample, with 2 (1.6%) refusing to revel their gender. There is no one in the age groupings of 51 and up, while 3(2.3%) are between 41 and 50, 31 and 40 are 40 (30.3%), 21-30 (86 respondents, 65.1%) are the largest percentages age group among 137 respondents, and below 20 are the lowest percentage age group (3 respondents, 2.3%). Out of 137, 5 students don't disclose their age group (question left blank). A total of 133 understudies have become aware of the advantages of web-based food delivery services and believe that such services are beneficial in a variety of ways; nonetheless, four understudies are unsure whether such services are valuable.

# **Reliability Assessment**

The consistency of procedure's outcomes across numerous trials, as measured by Cronbach's alpha values, is what reliability refers to as measuring principle. Cronbach's alpha value of 0.920 was obtained from 19 items, which is an excellent standard for internal consistency. Individual variables, on other hand, showed a score of 0.871 for perceived use (PU), 0.894 for perceived ease of use (PEOU), 0.886 for rust (TR), 0.897 for price saving benefits (PSB), 0.804 for time -saving benefits (TSB), 0.838 for food safety risk perception (FSRP), and 0.874 for customer intention to use OFDs, proposing that the assessment scale is reliable and compared to measure (.0.7).

Cronbach's Alpha **Measurement Items** 19 Items .920 Perceived Usefulness .871 .894 Perceived ease of use .897 Price saving benefit Time saving Benefits .897 .886 .838 Food safety risk perception 0.874 Customer intention to use OFD

Table 3. Reliability Test

**Note.** Author's assessment

#### **Measurement Model**

In a convergent way, the constructs used in the study were trustworthy and valid. Table 4 shows the dependability and consolidated legitimacy of the assessing model was utilized to measure its sufficiency and fits discovered by the CFA ( $\chi$ 2 /df= 2.127, GFI=0.976, AGFI= 0.934, RMR= 0.431, NFI=0.983, NNFI= 0.918, CFI= 0.972, and RMSEA= 0.038).

**Table 4.** Output of indices

Fit Indices	Measurement Model	Cut-Off
χ2 /df	2.127	3
Goodness- of Fit Index (GFI)	0.976	≥0.95
Adjusted Goodness- of Fit Index (AGFI)	0.934	≥0.90
Root Mean Square Residual (RMR)	0.431	<0.05
Normed Fit Index (NFI)	0.983	≥0.95
Non- Normed Fit Index (NNFI)	0.918	≥0.95
Comparative Fit Index (CFI)	0.972	≥0.95
Root Mean Square Error of Approximation (RMSEA)	0.038	≤0.07
Source: Hooper, G. et al., (2008)		

Note. Author's assessment

## **Validity Assessment**

In addition, Latent Variable Correlations and Cross stacking (Discriminant Validity) were considered for the study of discriminant validity. Table 5 shows how the diagonals and off-diagonals address AVE's square foundation and connection, respectively.

**Table 5**. Discriminant Validity – Latent Variable Correlation

Research Construct	CIU	PU	PEOU	TR	PSB	TSB	FSRP
Customer intention to use OFD	0.713						
Perceived Usefulness	0.516	0.721					
Perceived ease of use	0.521	0.663	0.768				
Trust	0.691	0.471.	0.775	0.709			
Price saving benefit	0.365	0.536.	0.661.	0.629	0.854		
Time saving Benefits	0.489	0.421.	0.611	0.637	0.548.	0.649	
Food safety risk perception	0.614	0.637.	0.645.	0.699.	0.529	0.481	0.713

**Note.** Author's assessment

The Fornell Larcker standard shows that discriminant validity exists since diagonal values are higher than off-diagonal (Standard loading > 0.5), which implies that the upgrades have discriminant validity on the off chance that the loadings of a thing on its attributes are more critical than each of its cross-loadings with different viewpoints (Alarcón et al., 2015).

**Table 6.** Convergent and divergent validity assessment

Construct and Measurement Items	Standard Loading Range	CR	AVE
Perceived Usefulness	0.814-0.853	0.874	0.698
Perceived ease of use	0.844-0.906	0.886	0.743
Price saving benefit	0.829-0.892	0.947	0.821
Time saving Benefits	0.663-0.821	0.874	0.643
Trust	0.811-0.832	0.892	0.757
Food safety risk perception	0.775-0.798	0.850	0.654
Customer intention to use OFD	0.733-0.860	0.850	0.655

Note. Author's assessment

## **Structural Equation Modeling**

Structural Equation Modeling (SEM) is usually used to explore the relationship between one developed variable and another. It was found that borders or coefficients that showed a correlation or impact between two static variables were significant in this investigation (Table 5). The result uncovers that the connection between the factors is seen as emphatically related to one another and found to have a critical effect on one another.

Table 7 illustrates the relationship between the immediate effects of free components and significant levels using normalized assessments. It might be argued that this is the case fours elements to be explicit seen perceived usefulness,

perceived ease of use, trust, and time-saving benefits on customer intention to use online food delivery services are immense ( (p<0.05), yet two variables, for instance, Price saving benefits and Food safety risk perception are not adequate with the reliant variable (p>0.05).

Table 7. Standard estimates and significance level

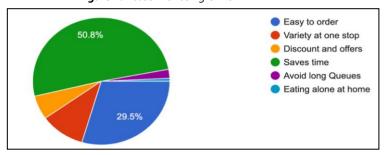
Dependent Variables	Path	Independent Variables	SE	P-value
	<	Perceived Usefulness	.145	0.031
	<	- Perceived ease of use		0.000
Customer intention to use	<	Trust	.308	0.010
OFD	<	Price saving benefit	.045	0.116
	<	Time saving benefits	.210	0.001
	<	Food safety risk perception	.086	0.061

Note. Author's assessment

#### Reasons behind the use of OFDs

In this part, the study delineated the various motivations behind why clients like to utilize OFDs, considering the assessment given by the respondents. To observe the explanation for the decision, the most extreme reactions given factors are viewed as the significant reasons.

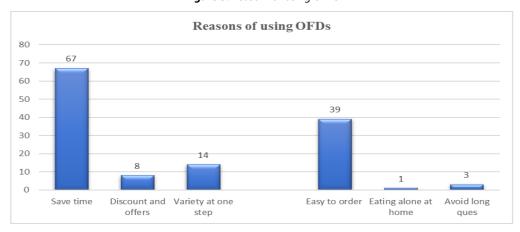
Figure 2. Reason for using OFDs



Note. Author's development

Customers can appreciate is to browse an entire assortment of food sources, and they can look at their internet-based menus to figure out the sort of food varieties they offer and convey on the web. The expected thing will be sent to the client in almost no time. 29.5% of the absolute respondents likewise acknowledge their desired truth to utilize the internet-based food delivery services because of straightforward entry. The review led by Jun et al. (2021) again uncovered that through OFD services, it is clear and agreeable to observe the food varieties that the client plan. A food business focus is a concentrated place where various diners and food outlets show their food contributions for clients to browse. When a client comes to the stage, they investigate the recorded restaurant, and cooking draws near. They can then arrange food straightforwardly from the restaurant according to their necessities. Clients benefit since they might explore food sorts from a few diners in a single spot instead of introducing numerous applications for every restaurant, which saves them a great deal of time. 50.8% of the total respondents to this study also reveal that it's convenient to order and drop up at their homes within time. Previous reviews led by Chai et al., 2019 also claim that a food delivery service can help cut down on the amount of time it takes to get food and open the opportunity to have it at any time and from any location.

Figure 3. Reason for using OFDs



Note. Author's development

The client saves time by shopping on the web since they don't need to stress over things like lining up when now is the right time to look at. According to a client's perspective, usability is the most supportive part of requesting food online. Online food asking permits clients to put orders at almost any time and from any area, saving them the time and assets they would have in any case spent venturing out to get dinner, making it more helpful for all interested parties. Clients can likewise profit from the accommodation of reordering their favored request with a couple of snaps. By requesting on the web, the client can again exploit bargains that are simply proposed to online clients and frequently observe items that wouldn't be accessible at a stroll coming up/coffee. Unique offers are given to online clients. 6.1% of respondents likewise guarantee that various limits and recommendations urge them to utilize online food services.

Additionally, Yeo et al., 2017 observed that Online rebate coupons and unique motivators assist clients with saving a great deal, contrasted with shops/cafés. The research investigates the various aspects that influence customers' decision to use online meal delivery services. The findings of this study demonstrate that perceived usefulness, ease of use, trust, and time-saving benefits have a substantial impact on customer intention to use OFDs.

The data analysis method and its outcomes demonstrated the study's various findings. The survey has more males than females participating. All 133 respondents (100%) had heard about online food delivery services, with 132 respondents (99.2%) claiming that it is beneficial and one respondent (0.8%) claiming that it is not. In comparison, 50.8 % use online services due to time savings, while 29.5 % are motivated by the convenience of ordering food online. 10.6 % use online services because they can acquire more products in one place, and 6.1 % use online meal delivery services because they can get more discounts and offers compared to typical purchases. Customers utilize online food delivery services for a variety of reasons, including avoiding long lines (2.3 %) and eating alone at home (0.8 %). Considering the above examination and the insight given by the respondent, coming up next are the motivations behind why clients need to utilize online food delivery services: Save time, easy to order, variety at one stop (choosing, comparing, and finalizing), avoiding long queues and discounts and offers (Comparatively cheap).

The impact of various characteristics such as perceived utility, perceived simplicity of use, trust, cost-cutting benefits, time-saving benefits, and food safety risk perception on behavioral intention to use an online food delivery service is investigated. To process the structural modelling approach, according to table 4, the measurement model is found to be valid with all values approved using the confirmatory Factor Analysis. Under the validity evaluation with discriminatory and latent variable correction part, the correlation between the variables is 71.3% (r=0.713). Perceived usefulness ( $\beta$  = 0.468, p ≤ 0.001), Perceived ease of use ( $\beta$  = 0.373, p ≤ 0.001), Trust ( $\beta$  = 0.225, p ≤ 0.01), Time saving benefits ( $\beta$  = 0.074, p ≤ 0.05) evidenced to have a substantial impact on customer propensity to utilize OFD, which means H1, H2, H3, H4 were supported by the model. Food safety risk perception and price saving benefits showed an insignificant relationship with CIU, failing to support H4 and H6. Among the four variables, Trust demonstrates the highest impact of 30.8% on the intention of using OFD service by customer followed by time-saving benefits (21.0%), perceived ease of use (15.2%), and perceived usefulness (14.5%).

Different researchers focus their efforts on components that influence consumers' behavioral intent to acquire an OFD service rather than those responsible for determining consumers' online behavioral intent to purchase service providers. Therefore, according to a consumer point of view, the study aims to identify such factors and assess the impact on the behavioral intention toward OFDs. The aim is thus achieved, and the study concluded that perceived usefulness, ease of use, time-saving benefits, and trust affect positively and significantly. Trust demonstrates the highest impact of 30.8% on the intention of using OFD service by customers, followed by time-saving benefits (21.0%), perceived ease of use (15.2%), and perceived usefulness (14.5%). Price saving benefits and food safety risk perception are insignificant statistically, and the study assumptions are rejected. As per the finding of the concentrate first, the most powerful influencing factor influencing clients' expectations for utilizing online food delivery services is Trust. This finding is like past investigations by Jun et al., 2021; Mendoza-Tello et al., 2018 appearance client innovation reception goal in CFDs.

Additionally, the clients profoundly trust that contactless instalments and individual data used to buy online food are protected and private. Moreover, time-saving advantages are one more ruling component to choose either shopper needs to utilize OFDs or not, because most the clients hate to go to the café, battle with traffic, manage the groups, holding up in quite a while to request, check and outs they're all irritating and make them need to keep away from the restaurant through and through. Yet, online food delivery services make clients liberated from such an annoying climate and partake in their food with an inward feeling of harmony. The past review led by Yeo et al. (2017), and Chai, L. T., and Yat, D. N. C. (2019) likewise acknowledge the reality of the benefits of utilizing OFDs.

Contrasted and the examinations, utilizing an OFDs assists clients with getting things done more rapidly in the dinner buying process, diminishing travel work to purchase food from any place and whenever. Perceived ease of use and service are two key influencing factors. Many changes have arisen due to technological advancements, making human life easier and more comfortable. Every person may order their goods effectively and painlessly using the various platforms and apps. Such

amenities not only make a living more accessible but also help to improve society. A comparable study by Jun, K., Yoon, B., Lee, S., and Lee, D. S. (2021) agrees that learning to run an online meal delivery platform is simple for any client and provides an opportunity to become skilled without exerting any effort. The convenience of using the service always draws customers to buy meals online. However, price savings and food risk perception on customers' decisions to use OFDs were not statistically significant. These two factors did not affect their decision to use OFDs. According to the findings, customers do not sacrifice intermediate money whiles. The individual is unconcerned about the additional costs. On the other hand, the additional cost may not be significant in and of itself. Still, when added together, customers may believe that there is no significant difference in increasing their purchase total. It's also due to the high-quality food, which is unconcerned with promotions, discounts, or other options, which are confirmed when ordering food. The findings of this study disagree with those of Yeo et al. (2017). They asserted that utilizing OFDs permits clients to set aside cash by analyzing the expenses prior to making a buy.

The study also quantified why customers like to use OFDs, where time flexibility, easy accessibility, discount and offers, and the multiple options to choose the product are the most considered. A more powerful item message and sufficient excitement toward beginning a client's purchasing cycle could affect their buying conduct. This assimilation of direction should assist advertisers in withdrawing additional clients in business sectors with a ton of contending things. Subsequently, firms or associations that give OFDs ought to focus on their service quality and correspondence strategies. The app of the service provider and its efficacy should be updated to include a fresh and healthy menu as well as a price range. Customers' intentions to use OFDs must be tailored to their preferences and perceptions of the product's intrinsic and extrinsic worth and its quality. The food must be kept and delivered at the proper temperature, and adequate safety protocols must be followed to decrease the danger of food contamination. Although using an internet delivery service eliminates the need to leave the house, it makes it much easier for crooks to carry out their deception. Scammers and fraudsters abound in the digital world, waiting to entice people and obtain personal and sensitive information. As a result, service providers must become more alert and efficient to keep everything safe and confidential. A secure system for sharing information should be implemented if at all practicable.

## **CONCLUSIONS**

The given discussion strives at presenting a deeper, qualitative understanding of many aspects of consumers' interest in OFD services in Estonia. Regarding the factors of loyalty, trust was said to be the most influential factor by all respondents, time-saving benefits, and easy to use. Such results indicate that the customer intentions are influenced by platform security and operational efficiency. Similarly, perceived ease of use, perceived usefulness while not trending high showed a moderate positive coefficient, perceived price saving benefits as well as food safety risk perception were insignificant considering the dependent variable indicating that users of food delivery services are more concerned with convenience and trust than cost considerations. The study was conducted in Estonia only, and despite obtaining a considerable number of patients for analysis, the authors must state that they did not examine all possible demographic and regional subgroups. In addition, the study also limited the influence factors which could have some effects on the customer behaviors such as loyalty factor and the experience factor.

The study is very helpful to businesses in the online food delivery markets as they give an insight of what is of most importance to the consumer when making an option to use the services. It also provides knowledge on how the organization can enhance consumer loyalty and satisfaction over internet-based channels by addressing two critical requirements; this is trust and convenience. I think that these results can be useful in improving the OFD service providers' platforms. If the airline assures its users or clients the highest levels of security, satisfaction then the service delivery will be on time and a customer loyalty will have been realized. In addition, this study would assist firms to enhance their ways of developing their communication messages, especially on the simplicity that is associated with companies' services.

On this account, based on the outcomes, the OFD providers need to invest on enhancing data protection to enhance customer trust. Second, extending the time span since its users visit the microblog and receive their orders will also boost demand. Two issues are still significant: price promotions and food safety Even though these topics are urgently acknowledgeable in the sphere, it is possible to state that they can be referred to the second rank according to the objectives of the leading platforms and the actual need of users. It can be continued to other geographical regions; Other than student population other big population group could be analyzed. The other factors such as customer care services, affiliations to certain brands could also be used.

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