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Fighting Food Waste with Food Sharing Platforms?

A quantitative analysis of consumers' repurchase intention on profit food sharing platforms

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Abstract

Food waste could cause problems in society, the economy, and the environment, which is regarded as a global problem. In advanced countries, the majority of food waste happens in the retailer-consumer interface. Commercial digital food sharing platforms (CDFSPs) as a part of sharing economy could help save food from ending up in the bins in the business-to-consumer (B2C) context. This thesis focused on consumer repurchase intention, which is vital to the success of CDFSPs and transfer consumer food consumption to a more sustainable pattern. There is a lack of research on consumer repurchase intention in CDFSPs context. Against this background, this thesis conducted a quantitative approach to investigate the factors that could influence consumers' repurchase intention in profit food sharing apps. The study extended the technology acceptance model (TAM) and analyzed seven factors that could potentially influence repurchase intention. The non-probability sampling methods were adopted to distribute an online survey to collect data from March 20 to April 8, 2022. Finally, 218 valid respondents were collected. The data analysis findings expanded previous research on sharing economy platforms in the field of CDFSPs. An independent-samples t-test method was used to investigate the different performances of consumers in terms of demographical characteristics, and the results showed that the CDFSPs consumers were not a homogeneous group. Then, the author utilized the stepwise regression analysis to test the hypothesis, suggesting that perceived risk can significantly negatively influence consumer repurchase intention. Significant positive relationships have been observed between environmental consideration, social influence, perceived ease of use, economic value, and perceived usefulness and repurchase intention. Furthermore, the factor trust did not significantly influence repurchase intention on CDFSPs. The author further provided recommendations to the CDFSPs practitioners to help them better develop the platforms.

Keywords: Food waste, Food sharing, Sharing economy platform, Repurchase intention, Technology acceptance model.

Executive Summary

Problem definition

Globally, the amount of food waste shows an alarm increase rate, influencing the environment, society, and economy, leading to climate change, natural resource depletion, and social inequality issues (Cicatiello et al., 2017; Falcone & Imbert, 2017). According to the Food and Agriculture Organization (FAO), a third of all food produced for human consumption, approximately 1.3 billion tonnes and worth approximately US$1 trillion, is lost or wasted worldwide every year (FAO, 2022b; Gustavsson, 2011). Food waste reduction accounts for an important position of the 2030 Agenda involving eradicating hunger and food insecurity, improving water management, mitigating climate change, and boosting sustainable ocean and terrestrial ecosystem development (FAO, 2022a). The commercial digital food sharing platforms (CDFSPs), supported by the development of information and communications technologies (ICTs) and sharing economy, are emerging and providing a new mindset to solve food waste in the B2C context.

As a new business model, customers' repurchasing or loyalty is critical to the success and profitability of the sharing economy platforms (Chiu, Chang, et al., 2009). The sharing platforms need to maintain a long-term relationship with their customers to survive in the competitive business environment and gain profits (Trivedi & Yadav, 2018). The users' repeated and continued usage of the platforms contribute more to the success of the sharing platforms rather than their first adoption (Wen et al., 2011). The cost of retaining a customer is far less than acquiring a new one from a marketing perspective (Wen et al., 2011). So the higher customer repurchase intention could represent the provision of services that lead to repurchase intentions has been considered a fundamental element and a source of competitive advantage for several service industries, including food sharing platforms (N. Zhang et al., 2021). However, the extant food sharing literature mainly focused on the type of sharing for the community and non-profit platforms, the motivations to engage in food sharing initiatives, and the social, environmental, and economic impacts of food sharing initiatives. The research on the profit food sharing platforms is still in its infancy and there is a research gap in the repurchase intention of CDFSPs.

According to the food waste reduction in SDG 12.3, the Swedish government has adopted a milestone target within Sweden's environmental objectives to reduce food waste by 20 weight per cent per person from 2020 to 2025 (European Commission, 2022). Too Good To Go (TGTG) and Karma are the two leading profit food sharing platforms in Sweden that aim to solve food waste problems by shifting the current model to a more sustainable food consumption pattern. It is meaningful to analyze the CDFSPs to help them scale up the market and win success since it is a possible solution to food waste and can contribute to carbon reduction in Sweden. Thus, there is a critical need to find context-specific factors or drivers of the consumer repurchase intention concerning CDFSPs in Sweden to facilitate effective strategies development and induce repurchase behaviour. Accordingly, to fill these research gaps, this study seeks to figure out the factors that could influence CDFSPs consumers' repurchase intention and examine the relationships between factors that drive customer repurchase intention in the profit food sharing context.

Aim and research questions

The thesis aims to conduct exploratory research on repurchase intention in the context of CDFSPs and provides recommendations for scaling up the CDFSPs to accelerate sustainable consumption and reduce food waste. Firstly, the thesis looks forward to figuring out the vital factors and building a research model that could be utilized as a framework to analyze the repurchase intention in CDFSPs. Secondly, the thesis aims to compare the consumers'

perception of different factors based on demographical characteristics to investigate if any differences exist among different types of consumers. The thesis further seeks to analyze the importance of each factor to repurchase intention under the food sharing platform context. These objectives are achieved by extending a TAM model and distributing an online cross-sectional survey to conduct empirical research with regard to the repurchase intention of CDFSPs.

Based on these objectives, research questions are listed below:

RQ 1: What factors influence the repurchase intention of CDFSPs consumers?

- RQ1a: What are the main differences in the consumers' perception of these factors based on demographical characteristics?

RQ 2: How important are these factors to repurchase intention?

Research design and methodology

Quantitative research was applied in this thesis which can help the author test the hypotheses and explore the relationship between different variables and consumer repurchase intention (Creswell & Creswell, 2018). Considering the two research questions, the study extended the well-established TAM model with two existing factors and corporated five other constructs that could influence consumer repurchase intention in food sharing platforms. The research contains 4 phases, and the research design is shown in Figure 1.

Firstly, a literature review was conducted to depict a theoretical foundation for the research questions. The seven factors that could influence the consumer repurchase intention in CDFSPs and corresponding hypotheses were identified from existing literature. The research model was built up by incorporating these seven factors. This process contributed to answering the RQ1. Furthermore, the literature review provided a framework for the questionnaire questions, and an online questionnaire was designed on the platform "Qualtrics" for data collection.

Secondly, an online survey was distributed to collect empirical data. Before the formal questionnaire distribution, a pilot test was conducted to test the language usage, question design, and validity. The revised survey was then distributed using a non-probability sampling method to approach the target group.

Thirdly, data analysis provided the answers to the two research questions. In detail, the descriptive analysis, including demographic data and descriptive results of the measurement scale, was presented to show the essential characteristics of the collected sample. Then, an independent-samples t-test analyzing the difference in consumers' intentions of factors and repurchase intention regarding demographical characteristics was performed to answer RQ1a. Additionally, the stepwise multiple regression analysis tested whether the seven potential factors in the research model are statistically significant to repurchase intention and how important these factors contribute to repurchase intention to answer RQ1 &RQ2.

Finally, the author discussed the findings and implications and provided suggestions on related stakeholders to help improve consumers' repurchase intention. The thesis then concluded the main findings and limitations and provided suggestions for future research.

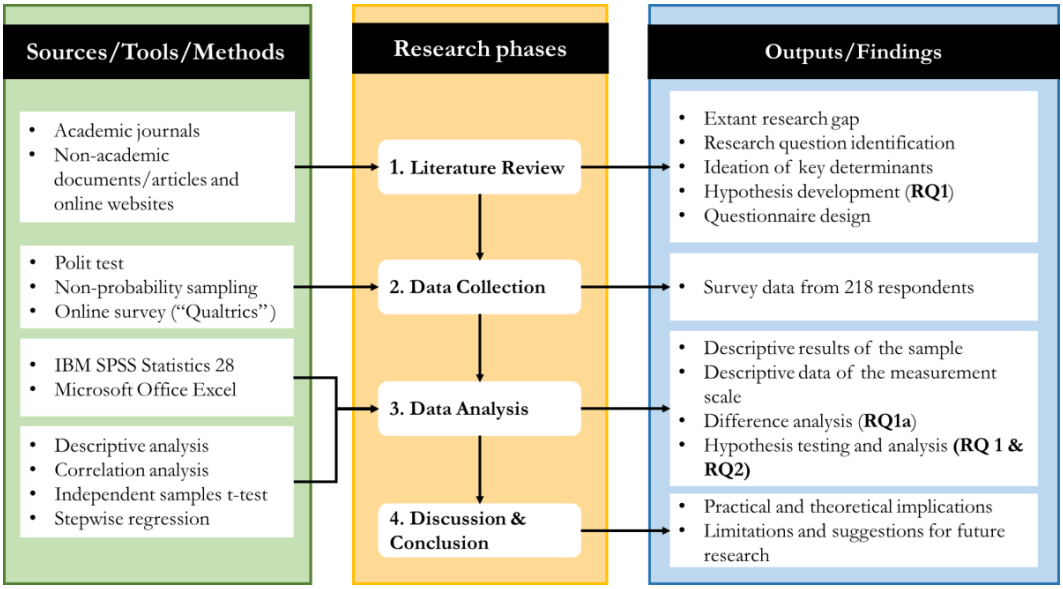

Figure 1 Research design

Key findings

This study collected 218 respondents who have had shopping experiences on two food sharing platforms (i.e., TGTG and Karma). The sample mainly focused on CDFSPs consumers residing in Sweden. Overall, the participants are relatively young, between 18 – 34 years old. Students and full-time working participants are the main respondents, accounting for 44.04% and 46.44% of the sample. 86.6% of participants' educational backgrounds are bachelor's degree level or above. The shopping intensity and frequency on CDFSPs apps of respondents are distributed evenly, concluding in three high-intensity, medium-intensity, and low-intensity groups. All the findings and answers mentioned below are based on this sample.

RQ 1: What factors influence the repurchase intention of CDFSPs consumers?

The author tested the hypothesis through stepwise multiple regression analysis, which could figure out the factors that significantly influence repurchase intention and rank the importance of each factor based on the coefficient. Based on the stepwise multiple regression analysis, the author figured out that perceived risk significantly negatively influenced the repurchase intention of CDFSPs consumers. The perceived ease of use, usefulness, economic value, social influence, and environmental considerations statistically significantly influenced repurchase intention with a positive relationship. The R-square value of this research model was 0.395, meaning that the six factors in the present model could explain 39.5% of the variance in repurchase intention. Trust did not present a significant relationship with the repurchase intention and was excluded from the research model.

RQ1a: What are the main differences in the consumers' perception of these factors based on demographical characteristics?

The author conducted an independent-samples t-test to compare the differences of different factors between the two groups. Four types of demographical characteristics were analyzed, including gender group: male(111) and female (103), age group: 18-24 years old (106) and 25-34 years old (97), employment status group: working full-time (101) and student (96), and educational level group: bachelor's degree (113) and master's degree (72).

There was no significant difference in perceived ease of use, environmental considerations, economic value, and repurchase intention in any demographical groups listed above. The results prove that these factors may not be influenced by gender, age, employment status, and educational level. On the other hand, the factor of social influence showed a significant difference in all demographic categories, which deserves further research. Table 1 lists the summary of significant differences based on the independent-samples t-test.

Table 1. Summary of significant differences based on independent-samples t-test

	Male and Female	18 -24 years old and 25-34 years old	Working full-time and Student	Bachelor's degree and Master's degree
PEU				
PU	×			×
T				×
PR	×		×	×
EV				
SI	×	×	×	×
EC				
RI				

Through the independent-samples t-test analysis, the author finds that the users of CDFSPs are not homogeneous. Thus, their attitude, intention, motivation and perception of utilizing the CDFSPs applications have several differences and deserve further research.

RQ 2: How important are these factors to repurchase intention?

The regression equation was formulated and shown as:

RI =0.768+0.183*EV+0.243*EC+0.207*PEU+0.225*SI-0.263*PR+0.149*PU.

The stepwise coefficient could represent the importance of each variable to repurchase intention. The perceived risk (-0.263) is the most significant factor that negatively influences repurchase intention. It is followed by environmental consideration (0.243), social influence (0.225), perceived ease of use (0.207), economic value (0.183), and perceived usefulness (0.149), which all statistically positively influenced the repurchase intention. Additionally, trust is found to have no significant influence on continuous use intention in this study.

Conclusions and recommendations

The author conducted an exploratory quantitative study to examine the factors that could potentially influence consumer repurchase intention of CDFSPs in Sweden. The findings have unique implications for the food sharing platform, whose business models and profits are based on the long-term relationship with the consumer and their continual buying behaviour.

For theoretical implications:

This study drew on the TAM model to examine consumer shopping behaviour in the continuous use of CDFSPs. The author classified significant factors from a theoretical perspective and empirically tested the research model that could potentially influence consumers' repurchase intention toward CDFSPs. Based on the results of stepwise regression analysis, the author verified six factors that could significantly influence repurchase intention in

the research model. Thus, in particular, this study is significant because it employed the TAM model that has never been applied in the field of profit food sharing platforms to measure consumer repurchase intention. Furthermore, by introducing some other constructs in the TAM model and analyzing how these factors would influence behaviour intention, this study made substantial academic contributions as it integrated the research trends in the areas of food sharing economy platforms and ICTs. Thus, the theoretical framework presented in this model could be employed as a basis for future studies on consumers' shopping behaviour on the food sharing platform.

Besides the theoretical implications, the author also provides suggestions on practitioners of CDFSPs like TGTG and Karma. These recommendations aim to help them scale up the business, improve their service, maintain a long-term relationship with their consumers, and improve consumer repurchase intention.

For the CDFSPs practitioners:

- Improve the transparency of food information on apps;
- Optimise service in the pick-up phase;
- Conduct marketing based on CSR-related motives;
- Advertise environmental impacts on social media;
- Build up the brand's user communities (both online and offline);
- Optimize the digital interaction system of the applications;
- Provide more food choices for consumers and optimize the post-purchase services.

This empirical study is the first attempt to explore the factors that influence consumer repurchase intention of CDFSPs through a quantitative analysis. The findings contribute to future research in the field of food sharing platforms, and there are some suggestions for the researchers to consider:

For future research

- **Research topic**: Future research could pay attention to the other stakeholders in the food sharing platform like retailers and practitioners of platforms, which would add diverse insights into the food sharing platform research. Based on the analysis, there may exist differences among different demographical characteristics. Thus, the scholar could focus on comparing the differences among different types of consumers in future research.
- **Geographical scope:** Future research could focus more on cross-cultural factors and collect data outside of Sweden to investigate consumers residing in other countries and cultural backgrounds, which could help compare and generalize the current results.
- **Theoretical foundation:** In future research, scholars could consider utilising the other theory like TPB theory, Value-based theory and etc., as the underlying theoretical foundations to expand the knowledge from more perspectives and theories.
- **Potential factors to repurchase intention:** Researchers could consider and incorporate more variables from different perspectives and levels into the current model. Future research could adopt a mixed-method combination of interviews and literature review.
- **Questionnaire design:** Researchers could consider developing a measurement scale devoted to the food sharing platform context for future study.

- **Data collection methods:** Researchers could consider working with CDFSPs companies to conduct probability sampling and get a more representative sample for the future study.
- **Analytical methods:** Scholars could utilize more advanced analytical methods like the SEM technique to analyze the relationship between the factors and repurchase intention.

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Abbreviations

B2B - Business-to-Business

B2C - Business-to-Consumer

CDFSPs - Commercial Digital Food Sharing Platforms

CSR - Corporate Social Responsibility

ECM - Expectation-confirmation theory

EU - European Union

GHG - Greenhouse Gas

PEU - Perceived Ease of Use

PT - Prospect Theory

P2P – Peer-to-Peer

SDGs - Sustainable Development Goals

SEM - Structural Equation Modeling

SEP - Sharing Economy Platform

TAM - Technology Acceptance Model

TGTG – Too Good To Go

TPB - Theory of Planned Behavior

TRA - Theory of Reasoned Action

TTP - Technology Task Fit

UN - United Nation

UK - United Kingdom of Great Britain and Northern Ireland

WFP - World Food Programme

WOM – Word of Mouth

e.g. - Exempli gratia

i.e. - id est ("that is")

1 Introduction

This chapter firstly presents the background of the research topic, which depicts the food waste problem. Then, it introduces the importance and necessity of investigating commercial digital food sharing platforms (CDFSPs), which is a part of the sharing economy to alleviate food waste in the business-to-consumer (B2C) context. Further, it emphasizes the importance of consumers' repurchase intention to the CDFSPs' success and investigates the research gap in the repurchase intention analysis in this field based on the extant literature, thus figuring out the problem definition and research importance. Next, the aim and research questions are identified, the delimitation and scope, the ethical considerations, and the audience of this study are discussed. The chapter ends with an overview of the structure of the whole thesis.

1.1 Background and importance

Globally, the amount of food waste shows an alarm increase rate, influencing the environment, society, and economy, leading to climate change, natural resource depletion, and social inequality issues (Cicatiello et al., 2017; Falcone & Imbert, 2017). Food waste reduction accounts for an important position of the 2030 Agenda involving eradicating hunger and food insecurity, improving water management, mitigating climate change, and boosting sustainable ocean and terrestrial ecosystem development (FAO, 2022a). As one possible solution to fight food waste, food sharing platforms, supported by the development of information and communications technologies (ICTs) and sharing economy, are emerging and trying to transform food consumption into a more sustainable pattern. Too Good To Go (TGTG) and Karma are the two leading profit food sharing platforms in Sweden that aim to solve food waste problems by shifting the current model to a more sustainable food consumption pattern.

1.1.1 Food loss and food waste

While some areas face hunger and poverty problems, around one-third of the food produced is lost or wasted worldwide every year (FAO, 2013). According to the Food and Agriculture Organization (FAO), a third of all food produced for human consumption, approximately 1.3 billion tonnes and worth approximately US$1 trillion, is lost or wasted worldwide every year (FAO, 2022b; Gustavsson, 2011). On one side, despite the high amount of food produced being lost or wasted, 36.2 million people still suffer from food poverty and cannot afford a quality meal every two days (Eurostat, 2020). On the other side, as well as an ethical and economic issue, food waste also affects the ecosystem and climate change, depleting the limited natural resources and generating considerable greenhouse emissions (GHGs) (Falcone & Imbert, 2017; FAO, 2013; Gustavsson, 2011). As estimated, greenhouse gases generated from food waste and loss are responsible for 8% to 10% of the whole GHGs emissions, which impact the environment four times more than all air flights combined (IPCC, 2019; Mimi Billing, 2020). In other words, if food waste were regarded as a country in the world, it would rank third in terms of the number of greenhouse gases produced globally, behind China and the United States (Environment, 2017). In recent decades, many international and national initiatives have been making efforts to reduce food losses and waste to improve the food security situation for vulnerable groups and decrease the environmental footprint of food production activities (FAO, 2022b).

The Europe Union (EU) and the EU countries have been committed to meeting the 2030 Agenda for Sustainable Development Goals (SDGs). The food waste and loss problems are primarily expressed in Target 12.3: "by 2030, to halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses." (FAO, 2022b; United Nations, n.d.). This target contains two worded components, which implies that there are two distinctly distinct aspects of a sustainable food

system, i.e., demand-oriented food waste that happens at retail and consumer levels and supply-oriented food loss that occurs among the food production and suppliers before retailers (Fabi & English, 2018). Although food is lost or wasted along the entire food supply chain from production, storage, and distribution to the market and consumption, it is widely agreed that food waste and loss in developing countries typically occur at the early stages of the supply chain due to challenges in harvesting and storing (Gustavsson, 2011). However, in developed nations, food waste at the retail and consumer stage has become a massive problem, in which food is wasted mainly at the retail and consumer interface related to unsustainable retail activities and consumer behaviour (Gustavsson et al., 2011; Stenmarck et al., 2016). A massive amount of food waste was produced in Europe in 2016, with the recorded amount of waste around 88 million tonnes, and associated costs were estimated at 143 billion euros (Cicatiello et al., 2017; Schanes & Stagl, 2019; Stenmarck et al., 2016). Extant studies indicate that food wastage at the retail level is highly underestimated and that more than 30% of the store's food waste is unrecorded (Cicatiello et al., 2017).

Given the high amount of surplus food occurring in retail and consumption phases, the high food waste levels in advanced countries cannot maintain sustainable development over the long term unless structural changes are made (Falcone & Imbert, 2017). In high-income countries, in order to eliminate food waste and shift the whole food sector toward a more sustainable pattern, changes are needed at all stages of the food supply chain, especially at the retail and consumption level.

1.1.2 Food sharing

Food sharing could be an effective solution to prevent food from being wasted. Food sharing is a fundamental and longstanding form of human cooperation and practice that play an essential role in protecting access to food, building social bonds and reinforcing mutual support network in human life history (Falcone & Imbert, 2017). Before going further, it is crucial to define the conception of food sharing. Currently, there is no consensus on the definition of food sharing. In the Oxford English Dictionary, the definition of food sharing is described as: "having a portion [of food] with another or others; giving a portion [of food] to others; using, occupying or enjoying [food and food-related spaces to include the growing, cooking and/or eating of food] jointly; possessing an interest [in food] in common; or telling someone about [food]"(Press & Pearsall, 2002). It is a broad definition and reflects that sharing food involves diverse activities, actors, and formats along the food supply chain. Davies et al. (2017) concluded that the typology of food sharing that based on what is shared and how it is shared. They propose that the meaning of food sharing not only refers to the foodstuff sharing (seeds, plants, proposed food staff, food waste etc.), but also includes food spaces sharing (sites for shared growing) and food skills sharing (sharing knowledge and experience in food planting and cooking). The four main modes of food sharing are collecting, gifting, bartering, and monetary exchange. Combined with the research topic, the thesis sheds light on surplus foodstuff sharing based on the monetary exchange in the retailer-consumer interface.

Historically, food sharing is recognized as a common practice that occurs within family and among friends and has been well-studied in the anthropological studies on primates in the context of small-scale, hunter-gatherer or forager-horticulturalists societies (Feistner & McGrew, 1989; Jaeggi & Gurven, 2013; Jaeggi & Van Schaik, 2011). Specifically, food sharing within and between families enabled division of labour, which in turn led to specialization, and shaped relationships and connections in communities (A. Davies et al., 2020). In recent times, due to ICTs innovation and urbanization development, food sharing initiatives have occurred beyond the family and friends setting. Food sharing activities include exchanging, collecting, and sharing food to transfer unused food from hotels and restaurants, canteens, and other public catering establishments with the help of digital platforms driven by ICTs for free or at a

significant discount (Saginova et al., 2021). Under the context of industrialized countries, the sharing economy plays an essential role in achieving more sustainable patterns, also within the food sector (Falcone & Imbert, 2017). It is recognized that food sharing initiatives have strategic importance for implementing sustainable consumption through reducing food waste generation, fostering social connections, and creating, consolidating, and strengthening community engagement (Falcone & Imbert, 2017; Schanes & Stagl, 2019). It is worth noting that although sharing activities (e.g., food sharing) are fundamental consumer behaviour and the most common economic distribution form that has existed for hundreds of thousands of years in hominid societies (Belk, 2009), sharing behaviour enabled by digital sharing economy platforms driven by information and communications technologies (ICTs) is a recent phenomenon (The Sharing Economy, 2021).

1.2 Problem definition

1.2.1 The emergence of commercial digital food sharing platforms (CDFSPs)

In the food sector context, the longstanding food distribution practices to recover and reuse food at the retail level, which are well-known by the public, are food donations through the food bank, charitable organizations, or secondary markets (Saginova et al., 2021). However, food sharing is not limited to charity. The commercial digital food sharing platforms (referred to as "CDFSPs") can provide a new mindset to solve food waste which could generate a "win-win" situation for consumers, retailers and platforms (Falcone & Imbert, 2017; Saginova et al., 2021). CDFSPs are new food redistribution channels in the B2C context that could improve resource efficiency by saving discarded food from the waste stream and using it for human consumption (Cicatiello et al., 2017; Mazzucchelli et al., 2021). These CDFSPs can offer restaurants and retailers the opportunity to offer their leftovers at a discounted price through last-minute discounting of perishables initiatives and facilitating the sharing and exchange of edible food; in turn, people who need them can get food through these platforms at the lowest price (Mullick et al., 2021; Saginova et al., 2021). It theoretically results in more efficient resources while minimizing waste production simultaneously regarding environmental effectiveness and economic efficiency.

More and more grocery retail stores in advanced countries choose to provide the initiatives of the last-minute discounting of perishables on CDFSPs applications (Mullick et al., 2021). Several start-ups of CDFSPs have been spreading quickly throughout western countries these years. Too Good To Go (TGTG) and Karma are the two prevalent profit digital food sharing applications in Sweden. Too Good To Go is a food sharing application and web-based platform established in Denmark in 2015 and has covered major European cities since then. However, it did not enter the Swedish market until 2020 (Yang, 2021). TGTG is currently the leading platform for fighting against food wastage, connecting restaurants and food retailers, who provide their unsold surplus food in a box (i.e., so-called "Magic bags[1]"), with consumers. The cafes, bakers, restaurants and groceries could sell their surplus food after the lunch or dinner period for the users to pick up onsite. On the other hand, Kamar is also a CDFSP company, a Swedish-based food sharing start-up that originated in Stockholm, Sweden, in 2016 (European Commission, 2019). By 2020, the number of TGTG users was 20.8 million (DMR, 2020), and Karma has over 1.4 million application users and 9,200 sellers associated with restaurants, cafés and grocery stores in 225 cities (@YourKarmaApp, n.d.). There is no doubt that these two

[1] The "Magic bags" usually contains a random selection of items and vary between three and five euros, priced at one-third of their original price. Until they get the "Magic bags", consumers will not know the "Magic bags" factual content (TGTG, 2022) .

CDFSPs companies, as a part of a business model in the sharing economy, have the potential to generate a huge business market and considerable profit (Mazzucchelli et al., 2021).

On the other hand, sustainability is integrated at all stages of food production due to robust environmental policies and high standards for the food production process in Sweden. However, it is estimated that 10 - 50% of Swedish food is wasted, depending on the product type and mainly happens in the consumer chain (The Swedish Research Council Formas, 2020). Food waste reduction plays a vital role in achieving the target of net-zero emissions by 2045, which is based on the implementation of Agenda 2030 in Sweden (The Swedish Research Council Formas, 2020). Based on the statistic, the TGTG has saved 29 million meals since the first meal they saved in Copenhagen in 2015, avoiding over 72,000 tonnes of greenhouse gas emissions, the equivalent of 15,000 cars driven for an entire year (Zero Waste Europe, 2020). Karma also has already saved more than 4 million meals from ending up in rubbish bins, estimating that more than half a million kilograms of food have been saved (roughly 2,200 tonnes of CO_2 equivalent) (European Commission, 2019; Shah, 2020). Both the two CDFSPs have helped reduce a significant amount of food wastage in a short time, showing a potential solution for food wastage reduction and carbon reduction and converting the food consumption model to a more sustainable way in Sweden (Partha Ray, 2020). However, compared with sharing economy platforms like Airbnb, which show revolutionary power in the lodging industry and shift the consumers' consumption habits (Branding, 2020; Hati et al., 2021), CDFSPs seem not to have such influence on the consumers, and there are rare research focus on this field. Under these contexts, what factors could influence consumers' intention toward CDFSPs, and how could CDFSPs companies develop better arouse the author's interest.

1.2.2 The necessity to research on repurchase intention of CDFSPs

As a new business model, customers' repurchasing or loyalty is critical to the success and profitability of the sharing economy platforms (Chiu, Chang, et al., 2009). The sharing economy platforms need to maintain a long-term relationship with their customers to survive in the competitive business environment and gain profits (Trivedi & Yadav, 2018). Repurchase intention is "the individual's judgement about buying again a designated service from the same company, taking into account his or her current situation and likely circumstances."(Hellier et al., 2003, p. 4). The challenge for sharing platforms is to persuade existing customers to reorder from the same platform once they have consumed on that platform (Mao & Lyu, 2017). The users' repeated and continued usage of the platforms contribute more to the success of the sharing platforms rather than their first adoption (Wen et al., 2011). A study showed that an online retailer makes money from a customer only after shopping four times (Bain & Company, 2000). The current literature reveals that repeat customers are more likely to purchase products/services, resulting in substantial revenue and decreasing transaction costs(Anderson et al., 1994; Otim & Grover, 2006; Petrick, 2004). The cost of retaining a customer is far less than acquiring a new one from a marketing perspective (Wen et al., 2011). So the higher customer repurchase intention could represent a fundamental source of competitive advantage for several industries, including food sharing platforms (N. Zhang et al., 2021). In other words, the higher consumers' repurchase intention of CDFSPs reflects the platform's success in some aspects.

There has been some research conducted to investigate the repurchase intention of Airbnb and Uber, which are typical and successful P2P sharing platforms (Chiu, Chang, et al., 2009; Jeon et al., 2021; Lăzăroiu et al., 2020; Mao & Lyu, 2017; Wang et al., 2021; Wen et al., 2011; N. Zhang et al., 2021; T. C. Zhang et al., 2019). These researches are likely to help Airbnb and Uber develop and grow in a more sustainable way and win the market (Mao & Lyu, 2017). However, CDFSPs, as a critical player in the sharing platform which has considerable market potential, the firms and related stakeholders rarely know how to design the platform system to eliminate

the discrepancy between consumers' attitudes and their behavioural responses due to the lack of empirical research, let alone repurchase intention (Mazzucchelli et al., 2021). The extant food sharing literature mainly focuses on the type of sharing for the community and non-profit platforms, the motivations to engage in food sharing initiatives, and the social, environmental, and economic impacts of food sharing initiatives. The research on the profit food sharing platforms is still in its infancy. The majority of the academic research into CDFSPs to date focuses on distinguishing the taxonomy and characteristics of food sharing business models (Michelini et al., 2018a; Mullick et al., 2021; Saginova et al., 2021), the impact on society, the economy and the environment caused by food sharing platform business models (Michelini et al., 2020; Reynolds et al., 2019). In recent two years, some research started to investigate motivations for consumers to participate in CDFSPs and the factors for CDFSPs to succeed (Mariani, 2021; Matelytė, 2021; Sadrijaj & Rösing, 2021). Nevertheless, the critical problem – what drives and influences consumers' repurchase intention in CDSFPs – remains unexplored.

Thus, to analyze how and to what extent the CDFSPs are successful, there is a critical need to find context-specific factors or drivers of the consumer repurchase intention concerning CDFSPs, to facilitate effective strategies development and induce repurchase behaviour. Accordingly, to fill these research gaps, this study seeks to figure out the factors that influence CDFSPs consumers' repurchase intention and examine the importance of these factors in driving customer repurchase intention in the profit food sharing context.

1.3 Aim and research questions

The thesis aims to conduct exploratory research on repurchase intention in the context of CDFSPs and provide recommendations for scaling up the CDFSPs to accelerate sustainable consumption and reduce food waste. Since there is no existing literature investigating the factors that could influence repurchase intention in CDFSPs, the thesis looks forward to building up a research model that could be utilized as a framework to analyze the repurchase intention in this field. Since the users of CDFSPs applications are diverse, the thesis aims to compare the performance of different factors based on demographical characteristics to investigate if there exist any differences among different types of consumers. The thesis further seeks to analyze the importance of each factor to repurchase intention under the food sharing platform context. These objectives are achieved by extending a TAM model and distributing an online cross-sectional survey to conduct empirical research with regard to the repurchase intention of CDFSPs.

Based on these objectives, research questions are listed below:

RQ 1: What factors influence the repurchase intention of CDFSPs consumers?

- RQ1a: What are the main differences in the consumers' perception of these factors based on demographical characteristics?

RQ 2: How important are these factors to repurchase intention?

1.4 Scope and delimitation

Food sharing platforms are the new business model that aims to alleviate food waste in the B2C context. There are different kinds of food sharing platforms regarding food sharing platforms, including monetary and non-monetary organizations, firms, the charitable and commercial businesses. This study only focuses on the commercial and profit digital food sharing platforms in a B2C context. The research scope of the thesis focuses on the interface between retailers and consumers, shedding light on the consumers' intention of CDFSP, more specifically,

consumers' repurchase intention. Consumers' repurchase intention is of great importance for the success of sharing economy platform. Although it is also meaningful to investigate the insights and attitudes of retailers and practitioners toward CDFSPs, or analyze the initial motivations of consumers to adopt CDFSP applications, they are out of the scope of this study.

The research's geographical scope mainly focuses on Europe, especially in Sweden. As discussed before, the food waste problem in Sweden attracted the public and government's attention. According to the food waste reduction in SDG 12.3, the Swedish government has adopted a milestone target within Sweden's environmental objectives to reduce food waste by 20 weight per cent per person from 2020 to 2025 (European Commission, 2022). As a developed country where the people have relatively high environmental awareness, food sharing practices and CDFSPs are popular in Sweden, thus, providing a good sample population for this study. In turn, it is meaningful to analyze the CDFSPs since it can help the practitioners know better about their consumers and develop the platforms to attract more users, which could contribute to food waste reduction and carbon reduction in Sweden.

This study selects two popular CDFSPs applications in Sweden, i.e., Too Good To Go and Karma, as target companies. While TGTG is the biggest food sharing company globally, Karma is a Swedish-based company. Selecting both two platforms as research objects could help capture consumers' general and common intention toward CDFSPs in the Swedish market. The author distributed an online survey to collect data. Combined with the convenience sampling method and the purpose of this study, the research sample only concluded consumers who have had shopping experiences with CDFSP apps during the past 12 months. The empirical data collection time frame is from March 20 to April 8, 2022. In the end, 218 valid responses are collected and utilized to conduct the regression analysis. All of the findings and implications are based on the quantitative analysis and literature review.

1.5 Ethical considerations

Researcher honesty and personal integrity

This thesis has no known funds or interests provided by an external organization that could have influenced the nature of the conclusion in this study. The supervisor, Matthias Lehner, provides guidance and support to the author during the analysis process, thus influencing the results. Besides the thesis supervisor, the author ensures that no external organizations or parties were recognized to influence the research conclusions.

Ethical responsibilities to the subjects of research

The participation of respondents in this project is entirely voluntary. The thesis does not leak any personal information and answers from the participants. No disadvantages or harms are identified for respondents to participate in the thesis.

The outcomes of research regarding the findings are used for

The author confirms that the thesis results would not cause harm or damage to the reputation of any brands/companies involved in this study. The author respects the respondents' dignity and privacy and assures them that none of the conclusions intends to harm the respondents and their relationships with others.

The way of handling, storing and making available data records

The author ensures the thesis does not contain sensitive information or data which may damage the participants or other people. Empirical data includes the questionnaire and its answers,

stored in the survey software "Qualtrics" and will be maintained at least five years after the research.

1.6 Audience

The findings can benefit three folds: the academic literature (related to food sharing, sharing economy platforms and CDFSPs), commercial food sharing platforms, and society. Firstly, the results can add empirical knowledge to the sharing economy platform literature related to consumers' repurchase intention in CDFSPs. Secondly, commercial food sharing platforms could understand factors to improve and motivate people to repurchase on their platforms, adjusting their marketing strategies or business model to expand their business and help them achieve success. Lastly, the findings of this thesis are also open to non-academic people, which can help increase consumers' awareness and understanding of food sharing. The findings could help related stakeholders to understand and work together to reduce food waste and help society move toward a more sustainable food consumption direction.

1.7 Disposition

As presented in **Chapter 1**, the research background and problem addressed by this study are presented. After that, this chapter identifies the research scope and ethical considerations and describes the intended audience for the study.

Chapter 2 presents the literature review, concluding with research context and current knowledge on the repurchase intention. It also builds up the theoretical background based on the literature and figures out seven potential determinants influencing consumers' repurchase intention in CDFSPs.

Chapter 3 describes the research design and methodology used for this study, including the research philosophy description, methodological choices, questionnaire design, data collection procedure, data analysis process, and data reliability analysis.

Chapter 4 details the findings of the analysis results, which concludes with the answers to the two RQs. It shows the demographical characteristic of the sample and the statistical results of the stepwise regression analysis and an independent-sample t-test.

Chapter 5 discusses the research findings, theoretical implications, and managerial implications.

The thesis ends with **Chapter 6,** which offers the main conclusion of the work, research limitations, and directions for future research.

2 Literature review

This chapter clarifies the core terms and concepts mentioned in the thesis, and the theoretical background and hypothesis of the determinants of repurchase intention are also discussed. Firstly, the research presents an overview of the delineation of the topic, including sharing economy platforms and the current situation of CDFSPs. Then, the literature review provides the theoretical background, which contributed to formulating hypotheses and the research model and guided the questionnaire questions. Lastly, it identifies seven critical determinants that could influence the repurchase intention based on current literature and discusses their relationship with repurchase intention in CDFSPs.

2.1 Sharing economy platform (SEP)

In recent years, the socio-economic and environmental impacts of mass-consumption economies have become important issues in the international debate due to the challenges related to global climate change and its consequences on ecosystems and resource depletion (Falcone & Imbert, 2017). In this context, the term "sharing economy", which is also called the "collaborative economy" named by the European Commission in 2016 (Codagnone & Martens, 2016), has emerged as a business trend and an economic and technological phenomenon fueled by the development of ICTs, the proliferation of collaborative consumption, and the rise of collaborative web communities as well as social commerce/sharing technologies (Hamari et al., 2016). Sharing economy as disruptive business model innovations driven by digital technologies are emerging in many sectors, including accommodation (e.g., Airbnb and HomeExchange), transportation (e.g., Uber) and clothing (e.g., Vinted) etc. (Li & Fang, 2022; Mazzucchelli et al., 2021). By 2025, the sharing economy is expected to generate $335 billion (USD), 22 times its total revenue in 2014 (PwC, 2015). However, there is no consensus on definitions of sharing economy in extant literature. Codagnone & Martens (2016) states that sharing economy is "(...) peer-to-peer sharing of access to underutilized goods and services, which prioritizes utilization and accessibility over ownership." Hamari et al. (2016) define sharing economy as "(...) the peer-to-peer-based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community-based online services." Besides the different descriptions of sharing economy, the researchers have a further disagreement on whether it is based on monetary or non-monetary exchanges or both and whether it only includes P2P models or also Business-to-consumer (B2C) and Business-to-Business (B2B) models (Stanoevska-Slabeva et al., 2020). In this thesis, the research background of sharing economy is based on the monetary exchange of food sharing in the B2C model.

The European Commission has summarized that the sharing economy involves three types of actors: providers, consumers, and sharing economy platform (SEP) (Stanoevska-Slabeva et al., 2020). The SEPs utilize digital technologies like mobile apps or websites as valuable tools to connect suppliers/providers and consumers and redistribute underutilized resources in previously impossible ways, broaden consumers' economic activities, and change the way they live (Fernandez & Raine, 2021; Saginova et al., 2021). Stanoevska-Slabeva et al. (2020) summarized the features of SEPs and defined them as "…various digital platforms organized as intermediaries, i.e., marketplaces or communities that enable shared use of peers' goods and services in for-profit or non-profit manner through intermediation and matchmaking as well as additional value-adding services…". Airbnb and Uber are the two famous companies which are representative of the sharing economy platforms and the successful business model since they have changed the traditional hotel industry and travel model and generated huge profits (JUNG, 2019). Thus, the majority of extant studies focusing on the sharing economy use them as the research object.

2.2 Current research on food sharing platform

As discussed in section 1.2.1, TGTG and Karma are the food sharing platforms that belong to sharing economy platform that aims to alleviate food waste. Unlike famous sharing economy platforms like Airbnb and Uber, the current studies on food sharing platforms are rare. They mainly focus on figuring out the characteristics and taxonomy of food sharing platforms, analyzing motivation to participate in food sharing platforms, the impacts on the environment, society and economy of food sharing platforms, and the barriers related to the sharing of food by consumers (Hsieh et al., 2021; Lazell, 2016; Michelini et al., 2018b, 2020; Saginova et al., 2021; Sarti et al., 2017; Schanes & Stagl, 2019; Wastutiningsih & Aulia, 2021). Saginova et al.(2021) mentioned that the food providers could be digital commercials, non-profit platforms or private people. The interaction modalities include consumers (P2P), commercial and non-profit organizations (B2C), business to business, charitable foundations, and public organizations. Michelini et al. (2018) investigated and proposed three main categories of current food sharing models: 1) the "sharing for money" model, it is referred to as the B2C for-profits businesses; 2) the "sharing for charity" model, which is a non-profit model that food is collected and given to the charitable organizations ; 3) the "sharing for the community" model which is the new trend of food sharing and exchange among consumers (P2P) in the digital era. All of these sharing platforms have a profound impact on food waste prevention. Sarti et al. (2017) utilized content analysis to investigate 49 existing food sharing platforms in the market and grouped them into four categories (see Figure 2-1) based on the typologies of social initiatives and business models. They are social sharing platforms (NP: Non-profit and P2P), corporate social sharing platforms (NB: Non-profit and B2P), social eating platforms (PP: Profit and P2P) and food alerting platforms (PB: Profit and B2P). The CDFSPs defined in this study are similar to food alerting platforms that operate for profit and in a business-to-consumer context.

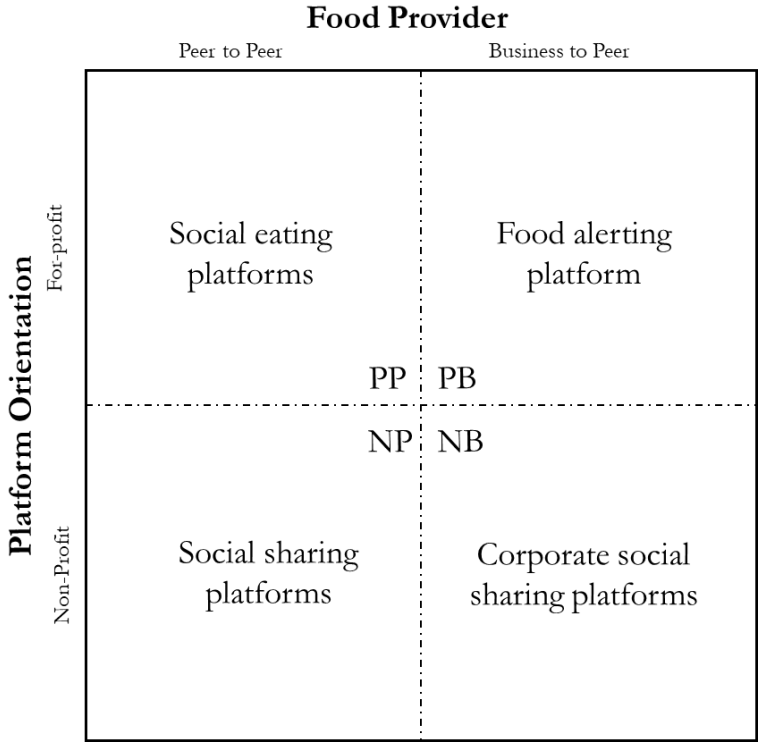

Figure 2-1. Classification of food sharing platforms

Source: adapted from Sarti et al. (2017)

Based on the results, Sarti et al. (2017) concluded that there is no dominant player in food sharing platforms among the four categories compared with the sharing economy in the other fields. It is a critical problem and barrier to eliminating food waste through this method from the sharing economy perspective. Mullick et al. (2021) described the sharing platforms that contribute to food waste reduction as essential in collecting the food retailers and consumers in the two-sided markets. A food sharing platform is a system that enables interplay between its users by matching offers with those who want them, providing efficient and effective ways for providers and users to connect. Based on the research on the interaction between retailer activities and consumer activities in the context of sharing platforms based on cross-side network effects, Mullick et al. (2021) found that consumer activities have more power to influence food retailers than their impacts on consumers. Thus, it requires the leader and developer of digital platforms to intervene on the consumer side of the market to improve consumers' response to the applications. Currently, only a fraction of the research has focused on the motivation of engaging in food sharing initiatives. Falcone & Imbert (2017) emphasized that people's primary objective in engaging in food sharing initiatives is to save money. Rombach & Bitsch (2015) utilized the social movement theories to explain the motivations for people to participate in social movements. Three main motivations are instrumental motivation, identificational motivation, and ideological motivation. To maintain the competitive advantage of food sharing platforms, the companies need to actively engage and empower consumers, rely on the support of local communities, and create social, economic, and environmental value (Mazzucchelli et al., 2021).

As discussed in section 1.2.2, consumer repurchase intention plays a critical role in the success of sharing economy platform. However, there is a research gap in analyzing the repurchase intention of food sharing platforms based on the literature review. Thus, this thesis aims to fill out this gap. The theoretical background, present literature on repurchase intention and hypothesis development will be discussed further in the next section.

2.3 Theoretical background and hypothesis development

With the growing popularity of online shopping, e-commerce and digital sharing platforms, consumers' perception has changed constantly given the complex functions, different features they provide, the uncertainties of products, and the internet security. Researchers need to put more effort into analysing how to improve consumers' repurchase intention and continue shopping from the same company. In order to understand the factors that could influence the repurchase intention in the context of profit food sharing platforms, a solid and valid theoretical foundation is required. Although many empirical studies have been conducted to analyse the factors that can influence consumers' repurchase intentions, their research backgrounds and fields mainly settle in online shopping (website), e-commerce, and the sharing economy platforms like Airbnb. Currently, rare studies choose profit food sharing platforms as their repurchase topic, let alone focus on repurchase intention on CDFSP apps. Thus, the author concluded ten pieces of literature that analysed online repurchase intention determinants in Table 2-1 to choose suitable theories and factors to investigate repurchase intention in CDFSPs. Then the author selected the TAM model and other CDFSPs-relevant constructs as the primary determinants of the CDFSPs repurchase intention for this thesis.

2.3.1 Present literature on repurchase intention

In consumer buying behaviour, there are two stages: the first concerns primarily encouraging individuals to purchase, while the second involves encouraging them to repurchase products (Yen et al., 2013). It is important to note that whereas purchase intentions are formed based on the assumption of an upcoming initial transaction, repurchase intentions are formed upon the assumption that the consumer has already completed the first transaction with the retailer

(Sullivan & Kim, 2018). Thus, online purchase intention can be defined as the probability that a consumer will engage in a specific purchase behaviour over the internet for the first time. In comparison, the repurchase intention could be defined as the likelihood of a consumer revisiting a company or platform again. Besides that, there has been some evidence that customer loyalty is closely linked to repurchase intentions, while customer loyalty has been viewed as the frequency or quantity of purchases from a specific manufacturer or brand (Bain & Company, 2000; Chiu, Lin, et al., 2009; Chiu, Chang, et al., 2009; B. Kim, 2019). Thus, the author also included the literature focusing on consumer loyalty in this study.

Table 2-1 concludes the research field, sample, theory, and main findings of ten current literature that analyse the key factors influencing shopping intention. Chiu, Chang, et al. (2009), Wen et al. (2011), Trivedi & Yadav (2018), and NGUYEN et al. (2021) focused on the background of online shopping. The research object of Mao & Lyu (2017), B. Kim (2019) and Wang et al. (2021) is the typical sharing economy platform Airbnb. The table also concludes one research on the repurchase intention of the online furniture (IKEA products) conducted by Geraldine & Laurent (2019) and two empirical studies researching the repurchase intention of food delivery apps conducted by S. W. Lee et al. (2019) and Yeo et al. (2021). Although these researches focus on different fields, some common methods, theories, and findings utilised in the studies could be seen.

Table 2-1. Current literature on repurchase intention

No.	Source	Topic	Data	Theory	Findings

1	Chiu, Chang, et al. (2009)	To understand the customers' repurchase intention in online shopping.	Web survey; 360 PCHome online shopping customers in Taiwan	• TAM	**Significant constructs:**
					• Trust
					  o Fulfilment
					  o Privacy
					  o Responsiveness
					  o Contact
					• Perceived ease of use
					• Perceived usefulness
					• Enjoyment

2	Wen et al. (2011)	Explore the key determinants that could influence consumers' online repurchase intention	Paper-based questionnaire; 218 college students who have online shopping experience in the US	• TAM
				• ECM
					Significant constructs:
					• Perceived usefulness
					  o Perceived ease of use
					  o Confirmation
					• Satisfaction
					  o Perceived ease of use
					  o Confirmation
					• Perceived enjoyment
					
					Insignificant constructs:
					• Trust

3	Trivedi & Yadav (2018)	Predict online repurchase	Online survey; 309 students aged 20-35	• [2]TTF	[3]**Significant constructs:** • Security • Privacy concerns • Trust

[2] TTF present a good combination of TAM and ECM)

[3] Online satisfaction plays a mediation role among variables.

		intention on Gen Y	years old in northern India		• Ease of use
4	NGUYEN et al. (2021)	Investigate the factors that could influence consumers' satisfaction and repurchase intention of online shopping	Online survey; 597 individuals who have online shopping experiences. Interviews with five randomly chosen participants.	None	[4]**Significant constructs:** • Information quality • Delivery • Convenience • Perceived website usability • Control variables: gender and marital status **Insignificant constructs:** • Responsiveness
5	Mao & Lyu (2017)	Examine the psychological factors that motivate consumers to reuse Airbnb	Online surveys; 624 US consumers who have Airbnb shopping experience	• TPB • PT • other constructs	**Significant constructs:** • Attitude o Perceived value and risk o Unique experience expectation • Subjective norms o Electronic word of mouth • Familiarity **Insignificant constructs:** • Perceived behavioural control
6	B. Kim (2019)	Examine the key antecedents of consumer loyalty toward Airbnb	Online survey; 317 Airbnb consumers in South Korea	• TAM • TPB • Value-based adoption model • Etc.	[5]**Significant constructs:** • Consumer satisfaction o Entertainment o Recognition • Trust o Entertainment o Recognition o Social benefits
7	Wang et al. (2021)	Research tourists' repurchase intention on Airbnb	Survey; 442 valid samples in China	• Adjusted TPB	[6]**Significant constructs:** • Perceived value • Behavioural attitude
8	Geraldine & Laurent (2019)	Investigate consumers' online repurchase of household equipment	Online survey; 218 consumers who have shopping experience on the IKEA	• TAM • ECM	**Significant constructs:** • Enjoyment o Perceived ease of use • Perceived usefulness o Perceived ease of use • Satisfaction

[4] Trust moderately affects satisfaction and repurchase intention

[5] The variables money savings and exploration have no significant influence on consumers' decision-making processes; The variable social benefits positively influence trust in Airbnb while having no significant effect on consumer satisfaction.

[6] The relationship and mediation effect of the variables is omitted here since it is not relevant to the research topic of this study

		(IKEA products).	website in France		○ Past shopping experience ○ Confirmation **Insignificant constructs:** • Trust
9	S. W. Lee et al. (2019)	Explore the determinants of continuous intention on food delivery apps	Online survey; 340 respondents who had ordered or purchased food through delivery apps in Korea	• TAM	**Significant constructs:** • Habit • [7]Performance expectancy • Social influence **Insignificant constructs:** • Information quality • Effort expectancy • Facilitating conditions • Hedonic motivation • Price value
10	Yeo et al. (2021)	Investigate the factors that could influence the consumers' repurchase intention on the FoodPanda in Malaysia	Online survey; 250 respondents who have shopping experience on FoodPanda in Malaysia	None	[8]**Significant constructs:** • Perceived usefulness • Social influence • Trust **Insignificant constructs:** • Expectancy, • Information quality • Perceived risk

Note: Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Prospect Theory (PT), *Expectation-confirmation theory (ECM), Technology Task Fit (TTF)*

The technology acceptance model (TAM) is one of the most popular theories applied in researching repurchase intention, thus, being selected as the leading underpin theory in this study. Besides that, from the other theories like TPB, ECM, PT, etc., we could see that the factors like perceived risk, trust, and social influence are also significant factors in to repurchase intention of CDFSPs from different perspectives. Combined with the research questions and topic, the author extended the TAM theory in conjunction with several constructs from other perspectives to build up the research model. In the next section, the author will introduce the theoretical background and explore the potential determinants of consumers' repurchase intentions of CDFSPs based on the extended TAM model.

2.3.2 Theoretical background

Technology Acceptance Model (TAM)

Davis initially developed the Technology Acceptance Model (TAM) as a theory to predict users' adoption and use of technology or a system based on consumers' attitudes (Davis, 1989). As shown in Figure 2-2, the foundation of TAM is rooted in the Theory of Reasoned Action (TRA), which was developed by Ajzen and Fishbein (1980). According to TRA, people's behaviour is

[7] Information quality has an indirect effect on continuous use intention via performance expectancy.

[8] Both importance and performance of perceived usefulness highly contributed to customer repurchase intention for food apps.

motivated by their behavioural intentions, while attitudes and subjective norms are two vital determinants (Ajzen & Fishbein, 1977). The initial TRA argues that the people's intention to engage in a particular behaviour is the best predictor of whether or not that person actually participates in it (LaCaille, 2013). Behavioural intention, in turn, is assessed by attitude and subjective norms. In social psychology research on behavioural research, attitudes are significant predictors of behaviour, which refer to how much a person values something positively or negatively (Farias et al., 2019). On the other hand, subjective norms refer to the social pressure perceived by an individual which will influence him or her to perform or not to perform the behaviour. However, the TRA's predictive power is limited to easy to perform and voluntary behaviours in situations in which individuals perceive that they have high levels of control and there have been few constraints on the action. This means the TRA model could not capture and apply to the lower level of control behaviour. For this reason, Ajzen (1985) extended the TRA to the Theory of Planned Behavior (TPB) by introducing a third construct, perceived behavioural control, which refers to a person's perception of how easy or difficult it is to carry out a specific behaviour. Thus TPB includes three fundamental components, i.e., attitude, subjective norms, and perceived behavioural control, that can be applied in many fields, including communication, health behaviour and consumer behaviour (Mao & Lyu 2017). Three studies focus on the repurchase intention of Airbnb that are listed in Table 2-1, all utilising the TPB as the underlying theory.

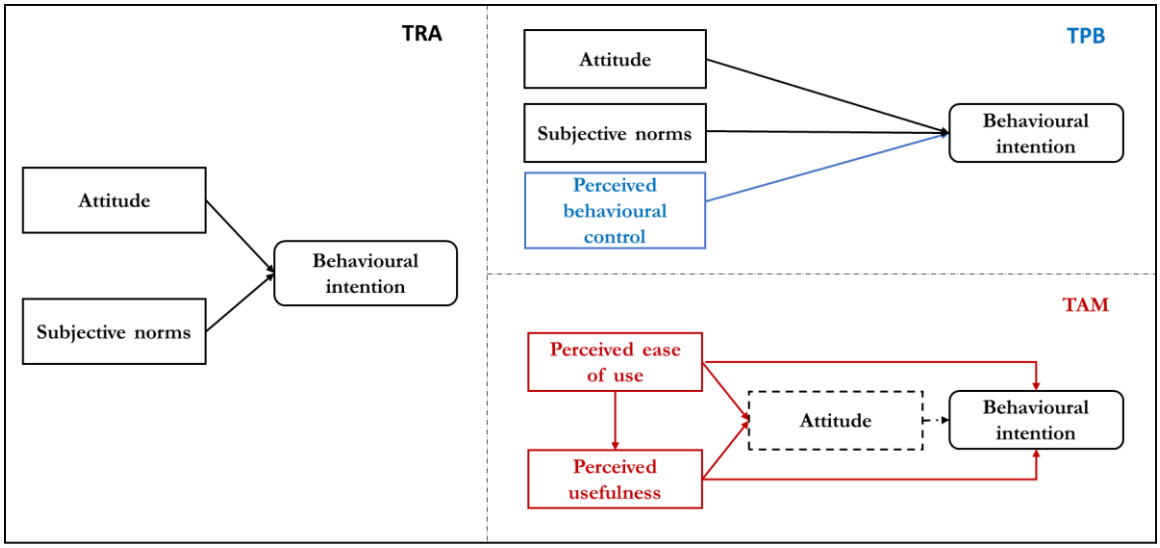

Figure 2-2. The TRA, TPB and TAM theory models

Source: author's own figure (Ajzen, 1991; Gefen et al., 2003; LaCaille, 2013; Rouibah et al., 2009)

Compared with TRA and TPB, TAM was initially applied in technology adoption in the workplace (Chiu, Lin, et al., 2009). Since the primary interface for consumers to order and purchase food in the CDFSPs is in the form of applications or websites, a form of information technology. The TAM can partially explain the acceptance and usage of websites and applications. Thus, this thesis chooses the TAM as the theoretical foundation to understand the consumers' repurchase intention on profit food sharing platforms while incorporating several factors from the other perspectives in the CDFSPs context. It should be noted that attitudes have previously been examined before the intention in some studies (Wen et al., 2011). This construct, attitude, was excluded from the subsequent studies of TAM due to it was proved to be a weak mediator of user intentions (Venkatesh & Davis, 2000). From the TAM perspective, the success of new technology adaption is based on two salient beliefs: perceived ease of use and perceived usefulness (Chiu, Chang, et al., 2009). Then, the researchers widely used TAM to

study online shopping behaviour. Chiu et al. (2009) concluded that perceived ease of use (effort expectancy) and perceived usefulness (performance expectancy) could significantly and directly affect customers' online shopping behaviour intentions. Perceived usefulness was defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis et al., 1992, p. 320). Perceived usefulness denotes that consumers prefer to purchase on the website, platform or applications when these channels can satisfy their performance expectancy or are more effective than the other ways (C. H. Lee et al., 2011). Davis et al. (1992) defined perceived ease of use as "the degree to which a person believes that using a particular system would be free of effort". An individual's perception of ease of use or effort expectancy is based on the belief that shopping online via a website or platform will be effortless (Bhattacherjee, 2001). Ease of use will improve his or her shopping experience and enhance the platform performance in the context of online shopping (Wen et al., 2011). What is worth noticing is that the perceived ease of use could strongly impact perceived usefulness since the ability of online clients to find valuable information on products affect their perception of the platform's functionality, thus, usefulness (Davis, 1989).

Other constructs

In this study, behavioural intention is the consumers' willingness to repurchase food and products from the profit food sharing platforms, including TGTG and Karma (Pang et al., 2020). Previous researches show that TAM needed to be extended by including additional variables to enhance its specificity and explanatory power. P. A. Pavlou (2003) integrated trust and perceived risk into the TAM model considering the high uncertainty of the e-commerce environment, and the empirical results validated and proved the research model. Besides these factors, considering the characteristics and background of the sharing economy platform and food consumption, the determinants of society, economy, and environment were also included in the research model. Based on TPB, the subjective norm is also an important determinant that could influence behaviour intention, reflecting social influence on an individual(Ajzen, 1991); thus, the social influence also is included in the research model. On the other hand, there is no doubt that one of the primary reasons for adopting a sharing platform is the promise of better economic solutions (Liang et al., 2021a), and financial benefits have a vital influence on consumers' purchase intention. In addition to the monetary benefits, food sharing platforms also offer other benefits like environmental and ecological benefits, which will also influence consumers' decisions in purchasing.

Thus, it is plausible to integrate two existing significant variables of TAM with perceived risk, trust and three important determinants, including social influence, economic value and environmental considerations, to investigate the repurchase intention of CDFSPs in this study. The relationship of these seven factors with repurchase intention and hypothesis will be further discussed in the following section.

2.3.3 Hypothesis development

Perceived usefulness

Prior research shows that perceived usefulness significantly affects customer repurchase intention. In other words, the shoppers who have efficiently performed the shopping task of acquiring a product from one platform will more likely exhibit stronger repurchase intentions on the same channel (Chiu, Chang, et al., 2009). Compared with the conventional transaction model, the online shopping environment could better meet consumers' demands, improve consumers' shopping experience, and complete their shopping tasks more efficiently through cutting-edge technology and technological innovation (Yeo et al., 2021). The excellent design of the website, search engine, menu, interaction system, etc., could benefit the consumers save

time on researching, shopping with fun, comparing prices/items easier to make better shopping decisions (S. W. Lee et al., 2019; Venkatesh & Davis, 2000).

When it comes to ordering food online, perceived usefulness has been a substantial factor that motivates consumers to order food online consistently. Sadrijaj & Rösing (2021) formulated a research model based on TPB theory to analyse the motivations for the consumer to engage in food sharing platforms, and the results show that perceived usefulness strongly influences consumers' behavioural intentions. According to the study of a food delivery platform – FoodPanda, Yeo et al. (2021) emphasized that the performance and importance of PU have a significant influence on consumers' repurchase intention on food apps in Malaysia which is based on the importance-performance matrix analysis (IPMA). S. W. Lee et al. (2019) demonstrated that performance expectancy is the most decisive determinant that positively influences the continuous use intention of delivery apps, while information quality plays an essential role in increasing performance expectations. Since food delivery platforms and food sharing platforms share all operate in an online-offline model.

Adapting Davis' definition of perceived usefulness to the context of CDFSPs, perceived usefulness in this study is defined as the degree to which a consumer perceives that shopping at a digital food sharing platform will improve his or her shopping experience. In this study, the author could assume that, with the help of CDFSPs, consumers could purchase the food they need more efficiently and improve consumer repurchase intention. Thus, the hypothesis is:

H1: There is a significantly positive effect of perceived usefulness on consumer repurchase intention in CDFSPs.

Perceived ease of use

Through empirical studies based on the TAM model, Chiu, Chang, et al. (2009) and C. H. Lee et al. (2011) confirmed that perceived ease of use is a significant construct of online customer repurchase intention. As Van der Heijden et al. (2003) described, consumer needs to interact with digital technology to purchase goods and services in the IT-based environment. If consumers find it challenging to take command of a B2C website and find it hard to find the desired product on that website, they will abandon use and leave that site (Pearson et al., 2007). Thus, developers of online platforms need to lower the technical issues and guarantee that consumers can make good use of platforms' functions without much effort through good human-computer/phone interaction design. Namely, an online website, platform or application could be regarded as user-friendly and attract consumers to revisit it when it can be navigated effortlessly (C. H. Lee et al., 2011). Similar findings could also be found in online furniture shopping, where Geraldine & Laurent (2019) emphasised that perceived ease of use could improve consumers' repurchase intention of IKEA products on the online website through good website design, which improves shopping enjoyment and perceived usefulness.

In the context of food sharing platform, consumers are more likely to stay on a platform if there is ease of use in operation, which could help them find desired food or improve shopping performance. Thus, perceived ease of use in this study refers to the degree to which a consumer perceives the ease of interaction with CDFSPs applications and efforts needed to find helpful information about the food or vendors they require. The hypothesis is:

H2: There is a significantly positive effect of perceived ease of use on consumer repurchase intention in CDFSPs.

Trust

Trust beliefs are associated with customers' positive feelings towards online vendors, increasing their likelihood of repurchasing products (Ajzen, 1991; Chiu, Chang, et al., 2009). Customer retention relies heavily on trust, which has been incorporated into the TAM model to understand customers' behaviour intentions (Gefen et al., 2003). Online consumer trust is defined by Kim et al. (2008) as "a consumer's subjective belief that the selling party or entity will fulfil its transactional obligations as the consumer understands them." For shoppers, trust is highly dependent on the salesman's initial image/impression and the results of the previous shopping experience gained by the consumer (Swan & Nolan, 1985, p. 42). In the online transaction environment, asymmetric information and opportunism are closely related to uncertainty and fraud risk, which leads to difficulty identifying and distinguishing the quality of sellers and products from the perspective of users and consumers (Gefen et al., 2003; P. Pavlou et al., 2007). Van der Heijden et al. (2003) emphasised that greater trust is required for the consumer in an online transaction environment than in a physical shop. Under the B2C sharing platform context, Wen et al. (2011) and Tan & Sutherland (2004) ensured that consumer trust could be looked at as a multi-dimensional concept that refers to the consumer, the vendor/company, the product and the internet.

Thus, trust is essential when scholars research consumers' repurchase intention of digital sharing platforms. In prior research, many researchers have argued that trust is vital in facilitating consumers' purchasing intention. Chiu et al. (2009) analysed the determinants of online customer repurchase intention by extending the TAM model. They find that trust, enjoyment, perceived usefulness and perceived ease of use are essential determinants, while repurchase intention is influenced much more by trust than the other three factors. Besides that, the analysis results of their study show that trust is controlled by order fulfilment, privacy, responsiveness and contact in the context of online shopping. Trivedi & Yadav (2018) also agree with the hypothesis when they find that security, privacy concerns, trust and ease of use have a significant positive relationship with repurchase intention by conducting a structural equation modelling analysis. Similarly, Yeo et al. (2021) reported that trust displayed a significant and positive influence on customer repurchase intention based on a study of the food app (i.e., FoodPanda).

When it comes to food consumption, one of the influential factors that could influence shopping choices is food quality (Liu et al., 2021). Saginova et al. (2021) claimed that the lack of trust between buyers and sellers mainly results from the recipients' worries about receiving low-quality surplus food or spoiled products caused by the product information missing on these platforms. Thus, for CDFSPs like TGTG and Karma, they cannot maintain a long-term relationship with their customers without building up trust with consumers. By corporating trust into the model, the study hypothesis:

H3: There is a significantly positive effect of social influence on customer repurchase intention in CDFSPs.

Perceived risk

It is well known that perceived risk affects a buyer's purchase intentions (during the pre-purchase stage), but it also plays a vital role in the post-purchase phase (Sullivan & Kim, 2018). Perceived risk in online shopping refers to "a belief about possible negative uncertainty from an online commerce transaction" (J. Kim & Forsythe, 2010). This perception of uncertainty in an online environment makes consumers hesitant or decide not to conduct the transactions (Dinev & Hart, 2006). The perceived risk could be divided into three essential dimensions in online shopping or on the applications: 1) tangible assets, i.e., consumer perception of product risk since consumers could not touch or contact with products directly and may receive lower quality or performance products, 2) intangible assets, i.e., perceived risk related to service that

consumer may not be able to enjoy the same level post-service as buying onsite, and 3) transaction process risks, it refers to the possible privacy information leakage and payment security problem in the online shopping environment (X. Zhang & Yu, 2020). These uncertainties caused by the online environment could exert a higher perceived risk than onsite shopping. Since repurchase intention is defined as the desire to revisit/repurchase on a platform after the initial shopping, the perceived risk of continual shopping is highly based on their first and cumulative shopping experience. A customer's buying expectations are formed based on their past experiences, word of mouth, and advertisements for the products (Shiau & Chau, 2016). Any difference identified between the customer's actual shopping experience and their purchasing goals and expectations will lead to a perception that they are taking a higher risk. The higher perceived risk would lower consumers' willingness to stay on the same platform (Kesharwani & Singh Bisht, 2012).

Many studies have analysed the influence of perceived risk on the consumers' repurchase intention. The results from the empirical study showed that perceived risk has a negative impact on consumers' continual usage intention (Gefen et al., 2003; Lai, 2015). For example, Tho et al. (2017) found that perceived risk (including financial risk, massage risk and psychosocial risk) negatively correlates with repurchase intention in the mobile telecommunication market. A study examining the factors that affect online customer experience and their influence on satisfaction and repurchase intention was presented by Martin et al. (2015). The results showed that there would be a stronger negative correlation between perceived risk and repurchase intentions among infrequent shoppers than among frequent shoppers.

Similarly, ordering food from CDFSPs platforms like TGTG and Karma, in which perceived risk also plays a significant role in consumers' shopping intention and decision making. These factors affect consumers to switch to other websites or platforms to avoid these risks. Therefore, CDFSPs platforms will lose customers due to the perceived risk. Thus, CDFSPs platforms should reduce perceived risk for consumers to improve their trust and satisfaction. By adding perceived risk to the research model, the research hypothesis:

H4: There is a significantly negative effect of perceived risk on customer repurchase intention in CDFSPs.

Social influence

Social influence refers to "the processes whereby people directly or indirectly influence the thoughts, feelings, and actions of others" (Turner, 1991, p. 1), meaning that an individual changes behaviour to meet the requirements of the social environment. In this thesis, social influence refers to the effect or beliefs from the close circle of peers, family, friends, and netizens from social media on consumers. Consumption behaviour seems to be influenced mainly by the consumer's perception of others' beliefs and behaviour, such as sustainable consumption, environmental awareness, and corporate social responsibility(Mazzucchelli et al., 2021).

Generally, social influence involves normative and informative aspects. On the one hand, more positive information about the products available by consumers will lead to more supportive and favourable behaviour (Yeo et al., 2021). An effective way for companies to attract consumers and influence their behaviour is through positive word of mouth (WOM), an essential marketing strategy through sharing information from one person to another (Tho et al., 2017). WOM has diverse formats in the online shopping environment, including online comments, reviews, and online community discussions. When facing the need to buy a product, people's behaviour is highly affected by the impact their peers, families and friends have on them. For instance, the number of previous buyers of a given product may serve as social validation in which the opinions or references from others influence their opinion towards such

products, especially when they have no previous exposure to the product category (Lobo & Greenland, 2017). Yeo et al. (2021) verified that social influence could be an influential factor to repurchase intention, especially when customers are sure their family and friends agree with their choice to use food delivery apps. On the other hand, in a social group's behavioural and psychological context, the social influence is the norms that apply to a particular behaviour that will drive and instruct individuals' intentions and actions. For example, religious norms, traditional culture, social customs and movements could shape and change consumers' shopping habits.

Nowadays, food sharing is one of the green topics related to food wastage and carbon reduction on social media, which may affect consumers' shopping choices in food consumption (Liu et al., 2021). Besides that, many online and offline food sharing communities provide channels for consumers to exchange information and build up strong relationships among consumers to spread and improve the social influence of CDFSPs. In this study, CDFSPs companies brand themselves as the role of food waste fighters and are sustainable business models by default. The green brand position of CDFSPs and all of the positive information acquired by people from outside would positively impact repurchase intention since they would consider the social influence when purchasing on these platforms. Thus, the hypothesis is:

H5: There is a significantly positive effect of social influence on customer repurchase intention in CDFSPs.

Economic value

A product's perceived economic value relates to its price or how consumers perceive the price and cost of the product relative to alternatives (Dodds et al., 1991). It is stated that people would only purchase products or services when perceiving that they get more value than they give. Diverse benefits are expected from the sharing economy, where consumers can take advantage of low prices, a variety of products and services, improved quality, and convenience by creating new transactions on sharing platforms(JUNG, 2019). Among these benefits, financial benefits and perceived economic value brought by shopping on sharing economy platforms are one of the main drivers for consumers to shop on them. From the value-based theory, consumer intention to purchase on a sharing platform is driven by assessing perceived benefits (Liang et al., 2021a). As Liang et al. (2021) described, the most crucial incentive for consumers to engage in a sharing platform is to get better economic solutions. When it comes to food sharing platforms, Sadrijaj & Rösing (2021) claimed that economic benefits are one of the most substantial incentives for consumers to engage in TGTG.

Combining the attributes of food sharing platforms can save money and create economic benefits for both suppliers and consumers by selling discounted edible food. The consumer is likely to perceive economic value compared with shopping in a normal food distribution channel, encouraging them to continue purchasing. The perceived economic value is the key to customer loyalty, influencing the customer's desire to purchase. Thus, the hypothesis would be:

H5: There is a significantly positive effect of economic value on customer repurchase intention in CDFSPs.

[9]Environmental considerations

Dunlap & Jones (2002) defined environmental consideration as "the degree to which people are aware of problems regarding the environment and support efforts to solve them and or indicate the willingness to contribute personally to their solution". In recent years, with the food waste and climate change problem attracting more and more attention globally, the governments (e.g., the Swedish government) have published several policies to boost sustainable food consumption through labelling, nudging, subsidies and etc. (Röös et al., 2021). In turn, the younger generation has been educated with strong environmental awareness in their daily lives, primarily affecting consumers' intention to participate in eco-friendly consumption activities. Their ecological consciousness propels them to seek out and purchase eco-friendly products and services and prefer to support organisations and companies that promote sustainable development in order not to compromise the needs of future generations (Dubihlela & Ngxukumeshe, 2016). These environmental considerations would push consumers to choose pro-environmental food and sustainable consumption style in the food consumption field. Besides the quality and nutrition of the food required to meet consumers' basic needs when shopping, green products that could minimise the carbon footprint and waste emissions are also additional attracts (Farias et al., 2019).

Many studies have verified the significant role of environmental consideration in the repurchase intention of green products like organic food (Ariffin et al., 2016; De Toni et al., 2018; Liu et al., 2021; Lobo & Greenland, 2017). For example, De Toni et al. (2018) confirmed the positive relationship between environmental awareness and the perceived value of organic food (including perceived quality, healthy consumption, and perceived price fairness), which will improve their repurchase intention. When it comes to the food sharing platform, Saginova et al. (2021) concluded that food sharing could be a behavioural response to the values of sustainability, environmental awareness, and social justice. Sadrijaj & Rösing (2021) claimed that sustainable considerations and perceived trust powerfully drive consumers' attitudes toward digital food sharing platforms.

In the present study, the food sharing platforms are B2C platforms and do not produce green food by themselves. Still, as discussed before, the most significant aim and the task of food sharing platforms is to help reduce food waste, thus, carbon reduction. In other words, CDFSPs platforms have an excellent environmentally-friendly business model by default, while shopping on them could bring extra environmental benefits. Therefore, the author could consider environmental considerations a potential predictor for improving CDFSPs consumers' purchasing intention when shopping in this study. The hypothesis would be:

H7: There is a significantly positive effect of environmental considerations on customer repurchase intention in CDFSPs.

2.3.4 Summary

It is worth noting that this research is an exploratory study that seeks to find the significant factors that could influence the repurchase intention on the food sharing platform like TGTG and Karma. The author extends the TAM model and synthesizes seven factors, which have been verified to significantly influence repurchase intention based on the extant literature on sharing economy platforms, online shopping, organic food consumption, etc. The figured potential determinants are perceived usefulness, perceived ease of use, trust, perceived risk,

[9] In this study, the environmental considerations could be understood as environmental consciousness or environmental awareness.

social influence, economic value, and environmental considerations, which are summarised in Figure 2-3.

Since the research questions aim to explore the factors that could influence repurchase intention, the research model only builds the direct relationship between the seven determinants and repurchase intention. In other words, this study does not aim to test the relationship among the variables, like the influence that perceived ease of use would put on perceived usefulness based on the TAM model. The results of this study could contribute to future research in this field. The researchers could then utilize different theories and pay more attention to analysing further relationships among these factors based on the findings of this study.

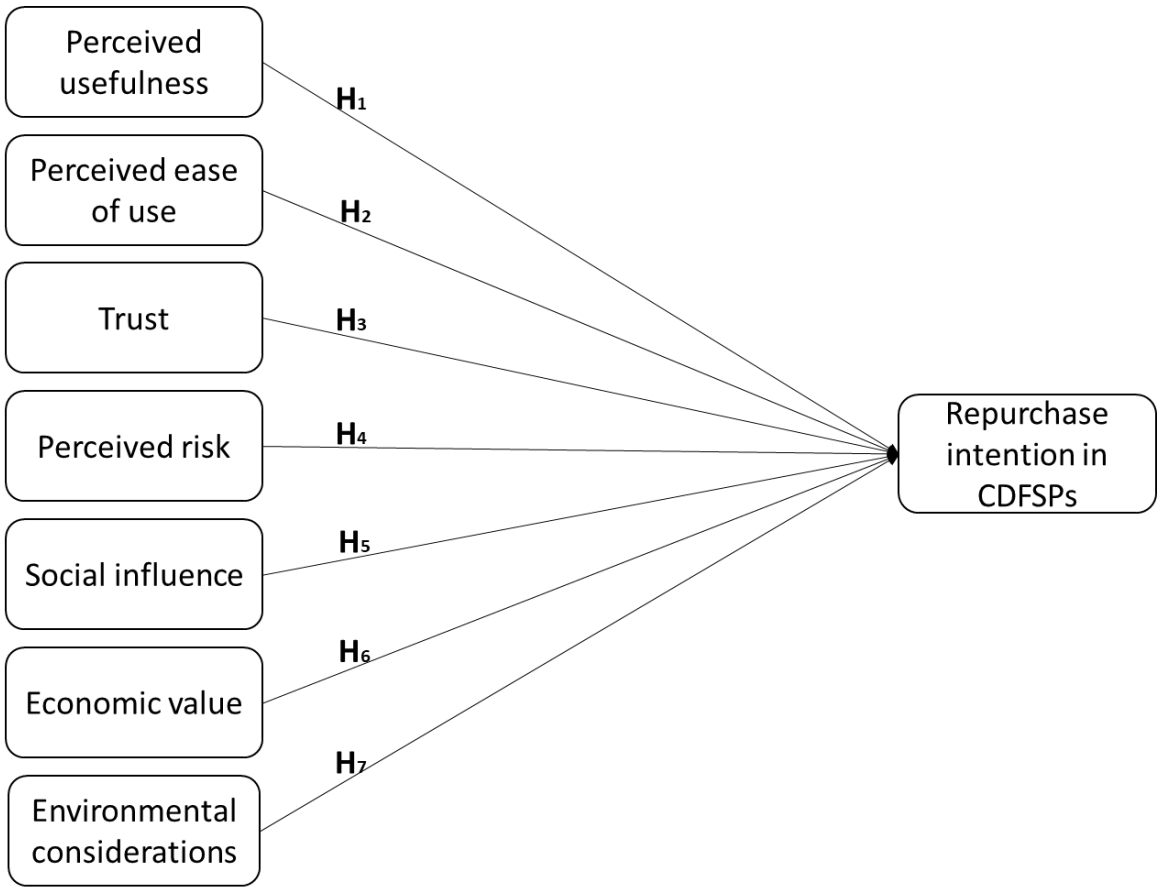

Figure 2-3. Research model

Source: designed by the author

3 Research design and methodology

Chapter 3 presents the overall research design of the thesis and the underlying methodology applied in the study. Firstly, the author figures out the research philosophy and research design, drawing the flowchart of the research plan. Secondly, the author introduces the data collection and process, including data source, sampling and survey design. It then introduces the data analysis techniques by introducing data analysis tools, concrete analysis techniques and the reliability and validity of the data.

3.1 Research philosophy and research design

Research philosophy needs to be figured out because it is concerned with the nature, origins, and development of knowledge underpinning the whole study, associated with data collection, analysis, and use (Bajpai, 2011). There are three types of research assumptions to distinguish the research philosophies: Ontology (What is the nature of reality?), Epistemology(What can be accepted as knowledge?) and Axiology (What are the role of values and ethics within the research process?) (Saunders et al., 2009). Many practical implications could impact the choice of research philosophy, and researchers may make different assumptions for their studies. Thus, addressing research philosophy could help people understand the researchers' beliefs and assumptions.

This study aims to investigate consumer repurchase intention towards CDFSPs and sheds light on positivism when it comes to research philosophy. Further, there are three main research approach categories, inductive, deductive and abductive(Kovács & Spens, 2005). This research applies an abductive approach that combines the advantages of both deduction and induction. Abductive reasoning usually begins with observing some "surprising facts" and then exploring their explanation during the research process (Trivedi & Yadav, 2018). This approach could help the author develop context-embedded knowledge about the consumers' repurchase intention on CDFSPs (Liu et al., 2021). According to positivism, a quantitative methodology can be developed, which involves collecting "scientific" data that is highly accurate and based exclusively on measurement and can use these statistics to generalise the findings of this research to a bigger population (Saunders et al., 2009). The quantitative research design can help the author test the hypotheses and explore the relationship between different variables and consumer repurchase intention (Creswell & Creswell, 2018).

A research design serves as the framework for collecting and analyzing data (Bryman, 2012). The research contains 4 phases, and the research design is shown in Figure 3-1.

Firstly, a literature review was conducted to depict a theoretical foundation for the research questions. The literature sourced from both academic and non-academic documents could help the author gain basic knowledge of the research topics, figure out the research gap, define the variables of interest, give preliminary insight into how variables interact and provide a basis for the hypothesis (Saunders et al., 2009). The main factors that could influence the consumer repurchase intention in CDFSPs and related hypotheses were identified from existing literature related to repurchase intention in sharing economy platforms or online shopping. The research model was built up by incorporating seven factors. This process contributed to answering the RQ1. Besides that, it provided a framework for the questionnaire questions, and an online questionnaire was designed on the platform "Qualtrics" for data collection.

Secondly, for data collection, the thesis utilized the online survey to investigate, examine, empirically illustrate, and conceptualize how these factors influence the consumers' repurchase intention in the CDFSPs. The cross-sectional survey is a typical quantitative research method that allows researchers to get a comprehensive picture of a wide range of phenomena spread

out over time or space (Verschuren et al., 2010, p. 162). Before the formal questionnaire distribution, a pilot test was conducted to test the language usage, question design, and validity. Then the revised survey was distributed to collect primary data from consumers, which used a non-probability sampling method to approach the target group and finally got 218 valid responses (Bryman, 2012).

Thirdly, data analysis provided the answers to the two research questions. First, the descriptive analysis, including demographic data and descriptive results of the measurement scale, was presented to show the essential characteristics of the collected sample. Then, an independent-samples t-test that analyzed the difference in consumers' intentions of factors and repurchase intention regarding demographical characteristics was performed to help better understand the consumers' perception of using the CDFSPs, contributing to the RQ1a. A correlation analysis followed it to measure the association relationship between the two variables. Most importantly, the stepwise multiple regression analysis was then used to test whether the seven potential factors in the research model are statistically significant to repurchase intention and how important these factors contribute to repurchase intention. All of these analysis techniques are discussed in detail in section 3.3.2.

Finally, the author discussed the findings, incorporating the implications of what was already known about the research problem in the extant literature. Then, it provided suggestions on related stakeholders to help improve consumers' repurchase intention. The limitations of the study regarding the sampling method, the findings generalization and analytical method choice were also discussed. In the final chapter, the thesis concluded the main findings and provided suggestions for future research.

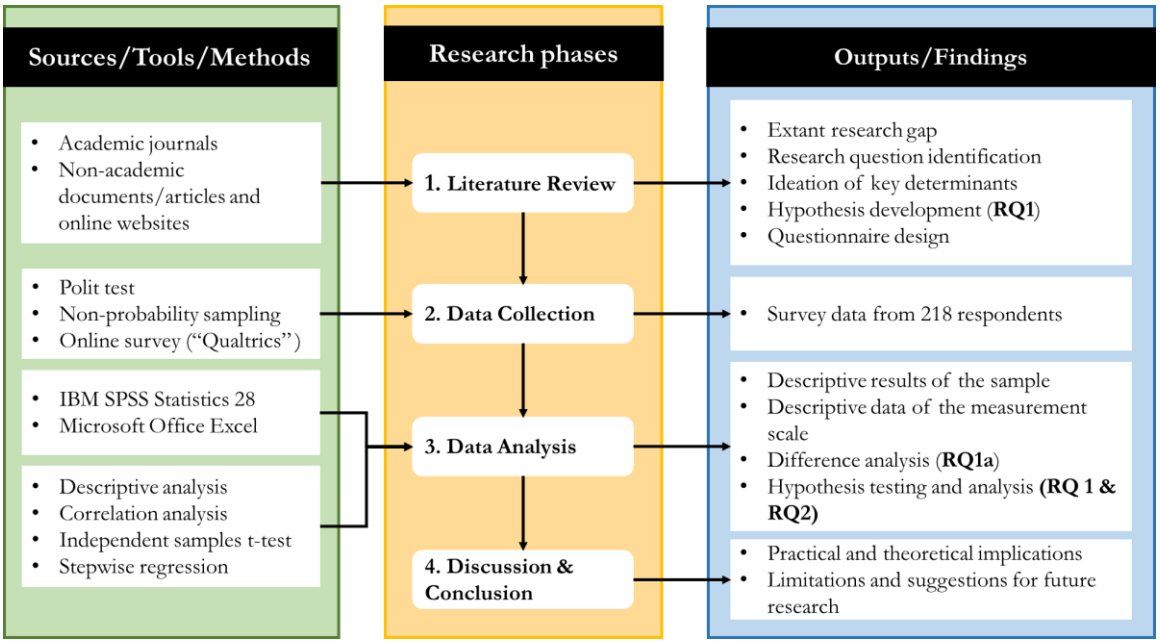

Figure 3-1. Research design

Source: designed by the author

3.2 Data collection

3.2.1 Data source

The data source in this thesis consists of both primary data and secondary data. The primary data mainly comes from the online survey containing consumers' answers to questionnaire questions, seen in section 3.2.3.

The secondary data in this study came from the literature review, which contained peer-reviewed journal articles, conference papers, book sections, government and NGOs reports, master dissertations, and grey literature, to build up a representative and solid dataset on CDFSPs. The research engines involved in this process conclude Google Scholar, LUBsearch, SCOPUS, ProQuest and Google Search. The data from the existed literature help the author understand the current state of knowledge about the studies related to food sharing, the current knowledge of CDFSPs, the investigation of consumers' repurchase intention in the sharing platforms, and the factors that could potentially influence the repurchase intention of consumers in CDFSPs. This process plays an essential role in identifying research questions by comparing and contrasting different authors' views on the research topic and critically evaluating the other researchers' opinions and ideas. On the other hand, it could also help determine the theoretical foundation to help establish the research hypothesis and survey questions.

3.2.2 Research population and sampling

As discussed previously, the population for this study refers to the individuals with at least one successful buying experience on CDFSPs (i.e., TGTG and Karma) during the past 12 months. As discussed in Section 1.2.1, the users of TGTG and Karma are around 20.8 million and l.4 million, respectively. It is impossible for the author to contact all qualified users of these two platforms, considering the large population and resource limitations. Thus, the author decided to draw a sample. When it comes to the sampling method, probability sampling is not possible for this study because the author has no access to the official list of all users of these two CDFSPs applications. Thus, non-probability sampling methods were applied due to this reason.

For the non-probability sampling techniques, the study utilized convenience sampling and snowball sampling methods, which have the virtue of accessibility, cost-effectiveness and quick administration (Bryman, 2012). Also, some biases exist in the sampling methods since they are not based on a random selection, leading to the sample could not be representative of the population being studied (Bryman, 2012). The author posted the survey link and invitation to potential respondents in the food sharing related forums and social media, including Facebook groups and Instagram, through the author's personal network (mainly based in Sweden). The author also asked friends to invite the potential participants within their network to join the study. Theoretically, users on these social media who see this survey all have opportunities to participate. However, not all of the participants were relevant to the study, and they may have not thoroughly read and understood the requirements of participants. For example, consumers who have never used TGTG and Karma may still choose to participate in this study. The author needed to check and distinguish these participants to avoid them becoming a part of the research sample. Thus, the author set up the first question at the beginning of the questionnaire, "Have you shopped on CDFSPs apps (e.g., "TGTG" or "Karma") before?" to exclude unqualified participants. Only people whose answers were "yes" could be allowed to participate in this study formally and become a part of the sample.

3.2.3 Survey

Questionnaire design

This study adopted a self-completed online questionnaire to conduct the survey and collect primary data. The questionnaire design platform was 'Qualtrics' which has already been applied in many professional and academic journals. The questionnaire was prepared in English and then translated into Swedish. The researcher provided sweepstake prizes (worth 30 SEK) with a 10% winning rate as incentives for participants to complete the survey and increase the response rate. After completing all of the questions, the participants have a chance to win the Amazon e-gift cards, and they could also select to donate the money to charity if they do not want to join the sweepstake.

The questionnaire for consumers includes three sections, and the complete questionnaire is attached in Appendix 1. Customer Repurchase Intention of CDFSPs Survey Questionnaire). The questionnaire is structured as follows: **The first section** states the purpose of this study and presents the background of the research questions. Then, there is an informed consent assuring that the respondents' personal information and answers would be anonymous and confidential. **The second section** begins with three questions that investigate the consumer usage profile of CDFSPs. It then covers five questions related to the socio-economic and demographic characteristics, including gender, age, employment, education and country. **The third section** contains eight variables consisting of 34 questions. There are seven independent variables (i.e., perceived usefulness, perceived ease of use, trust, perceived risk, social influence, economic value, and environmental considerations) and one dependent variable (repurchase intention). The measurement items in this study are mainly adapted from the existed literature and modified to fit this study (See Table 3-1).

Constructs

As mentioned above, the research model constructs were taken from the past study and adapted a bit to suit the study's context. A total of 34 items measuring eight constructs were used for this research purpose. The perceived ease of use was measured by five items adapted from Gefen et al. (2003) and Chiu, Chang, et al. (2009). Perceived usefulness was measured by five factors developed by Chiu, Chang, et al. (2009) & Wen et al. (2011). There was a five-item scale adapted from Gefen et al. (2003) and Hassanein and Head (2007) measuring trust. Based on the research of Yeo et al. (2021) and Shim et al. (2001), the author adjusted five statements to measure perceived risk. Economic value was measured by three items, adapted from Mohd-Any et al. (2014). The author then adopted the T. C. Zhang et al. (2019) questionnaire to measure social influence, which contains four items. The environmental value dimension was measured using a four-item scale utilized by Li & Tsai (2022) and Tussyadiah (2016). The consumer repurchase intention was measured by three items adapted from Wen et al. (2011).

The Likert scale, one of the most common techniques for investigating attitudes, was applied for all measures in this study. In detail, a five-point Likert scale is adopted, with 1 as "strongly disagree" and 5 as "strongly agree" (Bryman, 2012). The goal of this technique is to measure the intensity of consumers' intensity of feelings and agreement with the statements in question (Bryman, 2012). The respondents were asked to select the level of agreement based on these statements.

Table 3-1. Measurement items of the study

Construct	Indicators	Sources

Perceived usefulness (PU)	PU1. Using CDFSPs apps enables me to finish the task of searching and purchasing food more quickly. PU2. Using CDFSPs apps for buying food helps me make better purchase choices. PU3. Using CDFSPs apps makes it easier to search and purchase food. PU4. Using CDFSPs apps saves my time. PU5. Overall, I find it is useful to use the CDFSPs apps for buying food.	Chiu, Chang, et al. (2009) & Wen et al., (2011)
Perceived ease of use (PEU)	PEU1. Learning to use the CDFSPs apps is easy. PEU2. It is easy to get the CDFSPs apps to do what I want. PEU3. My interactions with the CDFSPs apps are clear and understandable. PEU4. My interactions with the CDFSPs apps do not require a lot of mental effort. PEU5. It is easy to become skillful at using the CDFSPs apps.	Gefen et al. (2003) & Chiu, Chang, et al. (2009)
Trust (T)	T1. I feel safe in my transactions with the CDFSPs apps. T2. I believe the CDFSPs apps can protect my privacy. T3. I believe the offered food on CDFSPs apps would have a good quality. T4. I feel that CDFSPs apps provide me with good service. T5. I feel that the CDFSPs apps are trustworthy.	Gefen et al. (2003) & Hassanein and Head (2007)
Perceived risk (PR)	PR1. I do not feel comfortable giving out credit card information to make a transaction over the CDFSPs apps. PR2. I feel apprehensive about purchasing in CDFSPs apps. PR3. Purchasing in CDFSPs apps is risky. PR4. There are many uncertainties associated with purchasing in CDFSPs apps. PR5. Compared with other methods of purchasing, buying food from CDFSPs apps is riskier.	Yeo et al. (2021) & Shim et al. (2001)
Social influence (SI)	SI1. My peers around me are willing to purchase food from CDFSPs apps. SI2. I think I should use the CDFSPs apps because everyone around me seems to use it. SI3. My family/friends or people who are influential to me recommend that I should use the CDFSPs apps. SI4. It has become a trend to use CDFSPs apps to purchase food.	T. C. Zhang et al. (2019)
Economic value (EV)	EV1. I can save money if I use CDFSPs services EV2. My usage of CDFSPs services benefits me financially EV3. My usage of CDFSPs services can improve my economic situation	Mohd-Any et al. (2014)
Environmental considerations (EC)	EC1. CDFSPs help reduce the negative impacts of food waste on the environment. EC2. CDFSPs help reduce the consumption of energy and resources while consuming food. EC3. CDFSPs provide a more sustainable way to consume food. EC4. Using CDFSPs apps makes me an environmentally friendly consumer.	Li & Tsai (2022) & Tussyadiah (2016)
Repurchase intention (RI)	RI1. If I could, I would like to continue using the CDFSPs apps to purchase food.	Wen et al. (2011)

	RI2. It is likely that I will continue to purchase food from the CDFSPs apps in the future. RI3. I intend to continue purchasing food from the CDFSPs apps in the future.	

Pilot test

A pilot test is necessary for this study to confirm that the research instrument as whole functions well and guarantees there is no confusion regarding the question formulation (Bryman, 2012, p. 263). So the pilot study was conducted to test the initial questionnaire after the draft was made on "Qualtrics". The respondents selected in the pilot are from the author's network, including friends and classmates with CDFSPs shopping experiences. This pilot test provided information on how much time respondents need to complete the questionnaire and how difficult the items are to be understood. Besides that, the pre-test could help the author discover and solve the potential problems in the survey, such as the logical consistency of questions, sequence of items, the contextual relevance. (Chiu, Chang, et al., 2009).

There are 15 respondents involved in the pilot test. Five respondents gave out their suggestions on question formulation. At the same time, the thesis supervisor, Matthias Lehner, examined all of the items and gave feedback to make sure there was no confusion and the content worked appropriately in this questionnaire. According to the feedback from the pilot test, some items adapted from the other studies utilized several terminologies, which may confuse the non-academic respondents. To avoid misunderstanding and vague descriptions, the author revised the statement of some items, including perceived usefulness, social influence and repurchase intention. The author also calculated that the average time usage of this survey is approximately 4 – 6 minutes. Then, the revised questionnaire was distributed to the target population.

3.2.4 Data cleaning

The questionnaire was distributed during the period from March 20 to April 8, 2022. Before the data entered the analysis phase, the author conducted screening and cleaning procedures among the received surveys to get valid and reliable data. In total, 290 responses were received on "Qualtrics". Firstly, the unqualified respondents were screened by the first question mentioned in section 3.2.2, and 34 invalid respondents selected "No" and were not allowed to proceed further in the survey. Besides that, there were 38 incomplete surveys recorded in the data set extracted from Qualtrics, which were also removed from the valid data set. Thus, 218 final usable responses[10] were retained after screening out the invalid or incomplete answers.

3.3 Data analysis

3.3.1 Data analysis tools

After the data were collected through the questionnaire and extracted from the "Qualtrics", the author conducted data processing with the help of IBM SPSS Statistics Version 28 (SPSS) and Microsoft Office Excel (Excel). Firstly, the author exported the data in numerical format from Qualtrics and imported them to the software SPSS. SPSS is a comprehensive statistical analysis software for data management and analysis in academic and non-academic usage. This study then used IBM SPSS software to test the hypothesis and analyze the research question through descriptive analysis, independent-samples t-test analysis, correlation analysis, and stepwise regression analysis, which are discussed in the next section. The results extracted from SPSS

[10] Thus, after the raffle, 22 people won the sweepstake prizes. Twenty participants won Amazon e-gift cards, whereas two respondents requested donations, and the author donated the corresponding money (60 SEK) to the UN World Food Programme (WFP).

were managed and drawn as figures through Excel to make the findings visible and more understandable.

3.3.2 Data analysis techniques

In order to answer the research questions, several analysis techniques (i.e., descriptive analysis, independent-samples t-test analysis, correlation analysis, and stepwise regression analysis) were conducted with the help of SPSS in the data analysis phase. The concrete analysis procedures and methods are discussed as follows:

Descriptive analysis and reliability test

Before going further to analyze the research questions, descriptive statistics are used to summarize the essential characteristics of the samples and measures through some simple graphic and table analysis (Trochim, 2006). The descriptive analysis procedure in this study maintains sections, namely 1) demographic characteristics, including gender, age, country of residence, employment status, educational level, and user profile; 2) usage profile and experience of CDFSPs, including user distribution based on the platforms and shopping intensity; 3) descriptive results of the multi-item scale, and 4) reliability test.

The descriptive data of the first and second sections are mainly measured through the frequency and distribution of the sample. For example, there are 111 male respondents out of the 218 (overall sample). Thus, the distribution of males in this study is 111/218 = 50.92%. For the third section, the descriptive results of the measurement scale are described by means and standard deviation (SD). There are seven independent variables and one dependent variable in the measurement scale, and each variable has at least three items. For each variable, the mean is calculated through the average value of all sub-items. For example, five sub-items (sub-questions) are used to calculate the value of the perceived usefulness (PU) in the measurement scale, assuming one respondent's answer to these five sub-items are "3, 4, 5, 4, 5" based on the five-point Likert scale. Then, the mean of PU for that respondent is (3+4+5+4+5)/5 = 4.2. After calculating the sum of all the consumer's average value of PU and then divided by 218, thus, the mean of PU is 3.49. The SD of PU is 0.69, which is used to quantify the degree of dispersion in a dataset.

The fourth section is the data quality test. Reliability and validity are the two primary criteria for evaluating the quality of the measurement instrument (Bryman, 2012, p. 46). On one side, validity is the extent to which a survey or instrument measures what they are intended to measure, namely accuracy (Bryman, 2012, p. 170). The scale and 34 items used for this study were adopted from the previous validated empirical research, which is deemed to reflect a good validity. Thus, this study does not need to test the validity again. On the other hand, reliability refers to the degree to which an instrument would get the same result again under the same conditions if the measurement were repeated. The reliability analysis is usually performed to assess the internal consistency of the variables used in the research and confirm that the data collected is representative of the actual situation (Huarng & Yu, 2019; Bryman, 2012, p. 169). This study utilized at least three items as the sub-questions for each construct to ensure the reliability of the questionnaire. The Cronbach's alpha score was applied to examine the reliability, reflecting the scale's overall internal consistency. According to Peterson (1994), the benchmark value of Cronbach's alpha is 0.7. When the value of Cronbach's Alpha is over 0.7, it represents acceptable reliability. Based on the results, the Cronbach's alpha values of all constructs exceed 0.73, showing the good reliability of the measurement scale.

Independent-samples t-test and correlation analysis

For the RQ1a, to analyze the difference based on demographic characteristics in consumers' intention of the determinants, an independent-samples t-test was applied in this study. The independent-samples t-test could investigate the differences between two groups by examining the difference in means between the two groups (Gerald, 2018). Since the research background is in Sweden, almost all participants (183) reside in Sweden, and 25 respondents come from Copenhagen near Sweden. There is no need to compare the differences based on the cultural background.

Besides that, all other four demographic characteristics, including gender, age, employment status, and educational level, deserve research. Usually, when three or more groups are required to test the means, ANOVA (Analysis of variance) should be applied. However, the sample distribution is highly uneven in this study. In all of the types in each demographic characteristic, each type only has two groups that share similar numbers of participants, while the rest groups are relatively small. For example, there are six employment status groups in the survey, and the sample distribution is: Working full-time (101), Working part-time (9), Unemployed and looking for work (7), A homemaker or stay-at-home parent (4), Student (96) and Other (1). To avoid a biased conclusion, the study needs to exclude the groups that only have a few samples. Thus, the four groups (i.e., Working part-time (9), Unemployed and looking for work (7), A homemaker or stay-at-home parent (4), and Other (1)) are excluded from the sample. This study only compares two groups: working full-time (101) and students (96) in the employment status group. Similarly, the other three types of demographical groups are gender group: male(111) and female (103), age group: 18-24 years old (106) and 25-34 years old (97), and educational level group: bachelor's degree (113) and master's degree (72). Thus, the independent-samples T-test is suitable for this study to compare the differences among these groups.

The correlation analysis is a common statistical evaluation method to test the linear association between two variables (Cohen et al., 2014). Considering the research question, the results of correlation analysis allow researchers to identify what aspects and variables are interdependent, which can produce actionable insights by themselves or lead to further research and deeper insights. The author utilized the Pearson correlation coefficient to represent the correlation degree in this study. It has a value between 1 and -1, 1 represents a perfect positive relationship between two variables, while -1 shows a perfect negative correlation, and 0 means no linear relationship exists between two variables (Cohen et al., 2014).

Multiple regression analysis

To answer RQ1 &RQ2, which attempt to verify the critical determinants of consumer repurchase intention in CDFSPs and analyze the importance of these factors to repurchase intention. Concerning the research questions and hypothesis, the stepwise multiple regression method (referred to as stepwise regression in this thesis) matched the research purpose and was selected as the analytical method in this study. The seven candidate factors extracted from the literature review, theory, and experience are the pool of possible variables, while the actual set of predictor variables in the final regression model needed to be selected by data analysis (Mse, n.d.).

Stepwise regression is functional when performing exploratory analyses or testing for associations. Stepwise regression analysis is a regression method that selects the significant variables in a step-by-step manner and removes the insignificant variables for the dependent using the variable's statistical significance. Thus, to find the "best" regression model through an automatic computational procedure (Rezaei & Amin, 2013). The stepwise regression model describes the relationship between a dependent variable (*Y, outcome*) and several independent variables (X_i, *predictor*). The model is expressed as $Y= B_0+B_1X_1+B_2X_2+B_3X_3+B_4X_4+\ldots+B_jX_j$. A variable (Xj) will be added or deleted based on the p-value or test statistics of the estimated

coefficients as the entry or exit model criteria at each step to find the most valuable variables to include in a regression model. The coefficient (B_j) is found for each X_j variable to minimise the sum of squared errors for the cases used in the model through using computer programs. The coefficient of each variable could represent its importance to the dependent variable.

The stepwise regression procedure could be simplified in explanation as follows: Firstly, there are no predictors in the "stepwise model". Then, a new predictor will enter or remove at each step based on the partial F-test (the t-test for the slope parameters). The model accounts for a substantial amount of variance in the outcome variable if the F-value is statistically significant (usually p <0 .05.). In other words, it is decided which variables should be included or removed based on the estimated coefficients' test statistic (i.e., T-value). Combined with the model written above, a T-test could be used to test the unique contribution of each independent variable X_j. (Frey, 2018, pp. 1621–1623). Until there are no more predictors that can be entered or removed from the stepwise model, it would be the "final model".

In this study, the author builds a regression model with one dependent variable to test the relationship between seven factors and repurchase retention as follows:

$$RI= \alpha1+ \beta1*PEU+ \beta2*PU+ \beta3*T + \beta4*PR+ \beta5*EV+ \beta6*SC+ \beta7*EC$$

In this formula, α1, β1, β2, β3, β4, β5, β6, β6, and β7 are coefficients, and the dependent variable is repurchase intention (RI). At the same time, there are seven independent variables, including perceived ease of use (PEU), perceived usefulness (PU), trust (T), perceived risk (PR), economic value (EV), social influence (SI), and environmental considerations (EC).

Since T-test/t-value and p-value are recurring concepts in this study, thus, it is worth describing a bit of them here. A T-test is also called a t-test, and the test result is based entirely on the T-values, which are test statistics(T. K. Kim, 2015). A test statistic is a standardized value calculated from sample data in a hypothesis test. When the test statistic is calculated, it compares the means of the data with the null hypothesis while taking into account both the sample size and the variability of the data. When the t-value is 0, the sample results exactly match the null hypothesis. In general, the higher the difference between the sample data and the null hypothesis, the higher the absolute t-value. Each t-value has a p-value go with it, and it is a measure of the probability that the results came about by accident. In statistical terms, Alpha (typically set to 0.05) is the p-value used to determine statistical significance, representing the probability that you will make the mistake of rejecting the null hypothesis when it is true (T. K. Kim, 2015). The null hypothesis is accepted if the p-value is higher than the alpha (0.05). A low p-value indicates that the data does not occur by chance (Zhu, 2016). For example, a p-value of 0.04 means that there is only a 4% probability that the results from the sample happen by chance.

4 Findings and analysis

In this chapter, the author discusses the results and findings exerted from the data analysis. It starts with describing the basic descriptive information of the sample and scale, including demographic characteristics of the sample, and the user profile of CFFSPs, to present the overview of the whole sample. Then, the scale's descriptive results and reliability test are presented to show the quality of the data collected, which is qualified for further analysis. Then, an independent-samples t-test analysis is applied to research the impact of demographic differences on empirical findings. The correlation analysis of the variables shows a fundamental relationship among the variables. Finally, a stepwise regression analysis is conducted to test the hypothesis and figure out the significant variables.

4.1 Descriptive results and reliability test

The author utilizes SPSS to generate descriptive statistics that provide an overview of the collected data. This section includes the sample's demographical characteristics, the consumers' profile and shopping intensity, the consumers' overall perception of different factors and a reliability test. These descriptive results allow the researcher to understand the basic information of the sample, which supports further analysis and explanation of the findings. All of the descriptive data can be seen in Appendix 2 (see Table A. I).

4.1.1 Demographic characteristics

As mentioned in section 3.2.4, 218 valid responses are retained after data cleaning. Four demographic characteristics of the sample: gender, age, country of residence, employment status and educational level, are discussed as follows:

Gender

Based on the collected 218 surveys, 50.92% (111) of respondents are male, and 47.25% (103) are female. In addition, four respondents choose "Non-binary/ Prefer not to say" regarding their gender. The ratio of males and females is almost the same in this study.

Age

In this survey, the age group are divided into seven groups, i.e., Under 18, 18-24, 25-34, 35-44, 45-54, 55-64 and 65+ years old. Most of the participants are relatively young; nearly half of the respondents fell in the 18-24 age group (106; 48.62%), followed by the 25-34 age group (97; 44.5%). It is crucial to mention that there is no respondent aged under 18. In contrast, the respondent above 45 years old only accounts for 0.46% (1) of the sample.

It does not lead to the conclusion that the majority of users of CDFSPs are the young generation. Two extra reasons that can lead to this situation need to be considered. First, the survey link was mainly posted through Facebook Groups in some food sharing related communities with more younger generations. Second, the author is a master's student and utilized the snowball sampling method to distribute the survey in this study. Thus, the population that the author has access to contact with are mainly students and young people.

Country of residence

Most respondents indicate their country of residence as Sweden. To be specific, 183 (83.94%) respondents are from Sweden. It is followed by Denmark, which consists of 11.47% (25) of the sample. What is worth noticing is that all of the Danish respondents all from the same city, Copenhagen, the capital of Denmark. Denmark and Sweden belong to the subregion of North Europe (Scandinavia), especially for the short geographical distance between Copenhagen and

Sweden. In this study, these respondents are regarded have similar economic and cultural backgrounds and ignore their demographic difference in the data analysis part.

Ten individuals select the option "other": three respondents come from Germany; six respondents are from other countries within Europe, including the UK, Switzerland, Norway, Netherlands, Belgium, and Austria; and only one respondent come from out of Europe, Kuwait. Since these ten respondents only account for 4.59% of the sample, the author ignores the cultural differences it may bring to the final results.

Employment status

When it comes to the employment status of the sample, the survey provides six options: working full-time, working part-time, unemployed and looking for work, a homemaker or stay-at-home parent, student and others. Based on the results shown in Figure 4-1, there are two main groups in the sample: i.e. full-time job respondents and students. More than half of the respondents work full-time (101; 46.33%), followed by 96 students. Besides these two options, 9 (4.13%) of them work part-time, 7 (3.21%) are unemployed and looking for work, 4 (1.83%) are homemakers or stay-at-home parents and 1 (0.46%) other.

Educational level

With regards to the educational level, the respondents who participated in the survey show a well-educated background. Around 87% of the sample have a bachelor's or above degree. Most respondents report their educational level as a bachelor's degree (113; 51.83%). Further, 72 (33.03%) individuals indicate they have master's degrees, and 24 (11.01%) respondents have completed high school education. It is crucial to mention that four respondents (1.83%) choose the "ph. D or higher" option, which shares the same proportion as the "middle school" option. Besides these, the "primary school" option only accounts for 0.46% (1) of the whole sample.

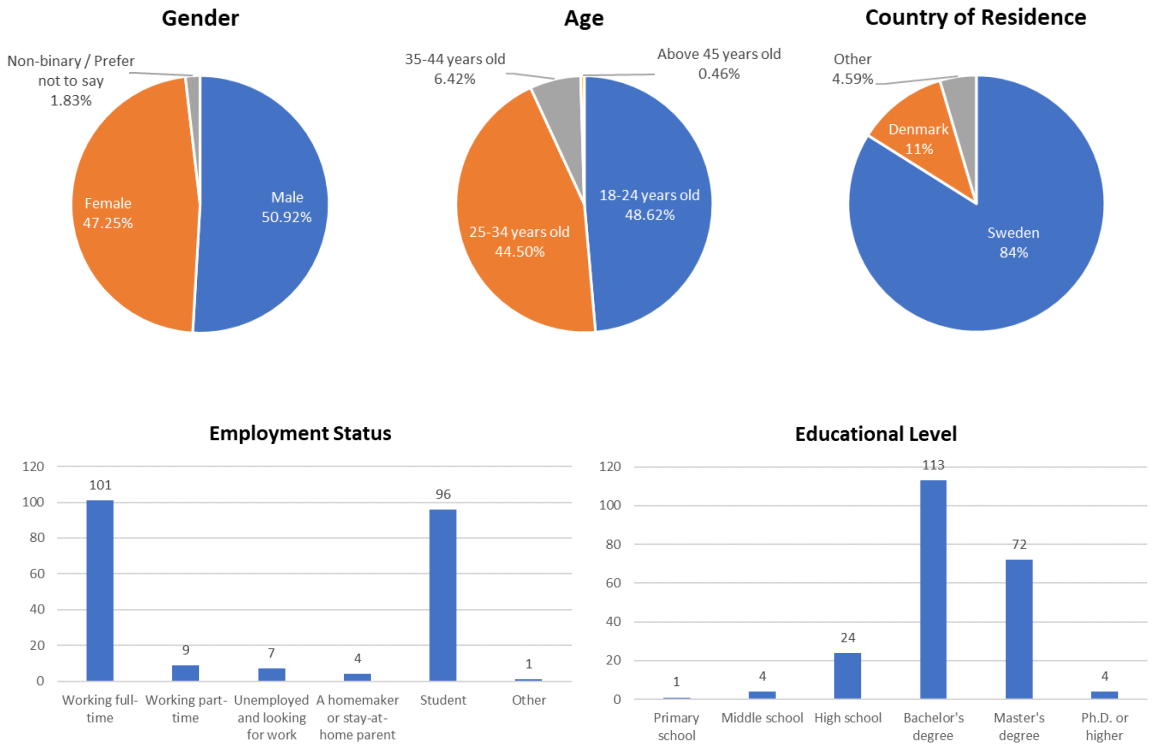

Figure 4-1. Demographics of the research population sample

Source: Author's own figure

4.1.2 Usage profile and shopping intensity of CDFSPs

Besides the demographic characteristics, the study also investigates the consumer distribution based on the two platforms and their usage intensity to better conclude the sample's characteristics.

Usage profile

Concerning the respondents' usage profile and experience with TGTG and Karma, the survey asked, "Which CDFSPs app are you using?". Based on the data extracted from Qualtrics, more than half of the respondents (114; 52.29%) indicated that they only use TGTG and 44 (20.18%) respondents only use Karma. There are 60 (27.52%) respondents who showed that they are using both TGTG and Karma. In other words, the proportion of TGTG users is more considerable than Karma users in this study. Since the TGTG is the largest CDFSPs application in the market, the results align with this.

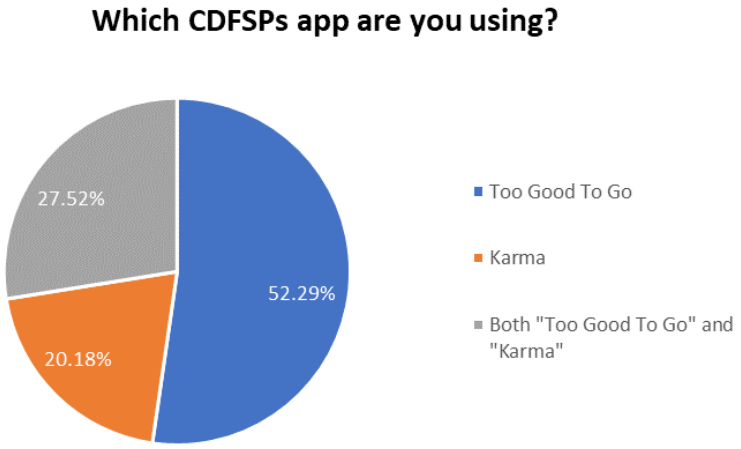

Figure 4-2. Usage profile

Source: Author's own figure

Shopping intensity of CDFSPs

To outline the shopping intensity and frequency on CDFSPs apps of the respondents who participated in this study, the question "How often do you purchase on CDFSPs app?" is stated. The options provided in the survey include nine choices from highest intensity to lowest intensity, i.e., daily, 2-3 times per week, once per week, 2-3 times per month, monthly, once every 2-3 months, once every six months, once a year, and less than once a year.

Through Figure 4-3, we can see that the distribution of each option is relatively even. The author divides the respondents into three shopping intensity groups: high-intensity, medium-intensity, and low-intensity groups, to conclude the characteristic of the sample better. The respondents who present that they shop on CDFSPs apps at least once per week are regarded as the high-intensity group (also called the weekly group). This group includes the first three options mentioned above, accounting for 35.78% of the sample. Specifically, forty respondents (18.35%) purchase 2-3 times per week, followed by purchasing once per week (31; 14.22%), and seven respondents regard shopping on CDFSPs as their daily routine. The medium-intensity group is the "monthly group", who purchase on CDFSPs at least once a month, consisting of

33.94% of the sample. There are two options in the survey involved in this group, including purchasing on CDFSPs "2-3 times per month" (52; 23.85%) and "monthly" (22; 10.09%). In contrast, around one-third of respondents who shop less than once a month are grouped into the low-intensity group. Specifically, 14.22% of respondents shop on CDFSPs once every 2-3 months, and 35 out of 218 respondents (16.06%) purchase food through TGTG and Karma less than once every six months.

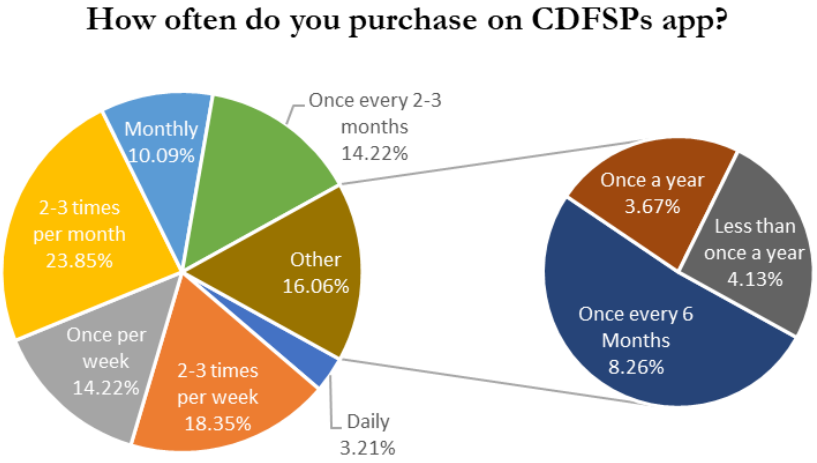

Figure 4-3. Shopping intensity on CDFSPs

Source: Author's own figure

The concrete data of the demographic characteristics, usage profile, and shopping intensity discussed above are concluded in Appendix 1 (Table A. *1*).

4.1.3 Descriptive results and reliability of the scale

This section describes the overview characteristics of overall consumer repurchase intention and consumers' intention on each factor, which could be reflected by the value of the mean and standard deviation (SD) of the variables. Besides that, it is necessary to test and check the reliability of the scale to guarantee the data quality that is qualified for further analysis before executing the further analysis. As stated in section 3.2.3, to measure the constructs, PU, PEU, T, and PR have 5 items, respectively; SI and EC have 4 items, respectively; EV and RI have 4 items, respectively. The mean of each construct is calculated based on their sub-items. The calculation method is stated in section 3.3.2. The results are concluded in Table 4-1, including item number of variables and mean and SD of variables. As Five-point Likert scale indicates that 1 represents "strongly disagree" and 5 represents "strongly agree". The means of variables analyzed all exceed the value of 3 (Neutral). The value of SD ranges from 0.57 to 0.90 (representing the dispersion of the dataset).

Specifically, for the independent variables, environmental considerations yield the highest mean (4.04), showing that consumers perceive CDFSPs could reduce the negative environmental impacts of food waste and agree that these platforms could help contribute to a more sustainable food consumption model. It is followed by the economic value (3.87), which suggests that consumers regard that CDFSPs could help them save money and benefit them financially. The mean of perceived ease of use is 3.83 reflects that CDFSPs platform users hold positive comments on the ease of use of TGTG and Karma applications regarding the perceived low efforts needed for them to interact with and learn to use these applications. Similarly, the mean

of trust also shows a positive consumer perception with a mean of 3.72, suggesting that consumers believe that CDFSPs could provide good protection in transactions, private information, service and food quality. In contrast, the factor perceived usefulness (3.49) generates a mean that tends to be more neutral (3). It suggests that consumers do not perform a high positive intention towards the usefulness of the CDFSPs in food buying regarding food searching, time-saving and etc. Similarly, compared with the other factors mentioned above, the mean of social influence (3.38) is a relatively low number. It suggests that users of CDFSPs do not perceive a high perception of social influence in the CDFSPs, indicating that consumers do not feel that their usage of CDFSPs is influenced significantly by their peers and society. Lastly, the mean of the independent variable perceived risk value is 3.03, indicating that consumers hold a neutral perception of this factor. However, the SD (0.9) of perceived risk is the largest SD value among the factors, which means a significant difference and dispersion among consumers' perceptions of this factor.

Remarkably, for the dependent variable, repurchase intention, the mean value is 4.00 (Agree), representing a positive consumers' repurchase intention of CDFSPs.

Table 4-1. Mean, standard deviation (SD) and reliability of the scale

Construct	**Mean(n=218)**	**SD**	**Number of items**	**Cronbach's Alpha**
Perceived usefulness (PU)	3.49	0.69	5	0.79
Perceived ease of use (PEU)	3.83	0.67	5	0.84
Trust (T)	3.72	0.60	5	0.80
Perceived risk (PR)	3.03	0.90	5	0.89
Social influence (SI)	3.38	0.71	4	0.74
Economic value (EV)	3.87	0.73	3	0.73
Environmental considerations (EC)	4.04	0.57	4	0.77
Repurchase intention (RI)	4.00	0.67	3	0.84

Source: Author's own table based on SPSS outputs

In this study, the reliability of the measurement scale is evaluated by Cronbach's Alpha. As shown in Table 4-1, the Cronbach's alpha of PU, PEU, T, PR, SI, EV, EC, RI is 0.79, 0.84, 0.80, 0.89, 0.74, 0.73, and 0.77, respectively, which ranges from 0.73 to 0.89. It means that reliability results are all well above the ideal level of 0.7, showing evidence of adequate internal consistency of the measurement scale.

4.2 Difference analysis and correlation analysis

As mentioned in section 3.3.2, an independent-samples t-test is applied in this study to compare the difference between the two groups in demographical characteristics regarding consumers' perception of the seven factors and repurchase intention. The results could help the researcher analyze the difference among the consumers and understand the characteristics and intentions of CDFSPs consumers. Then, a correlation analysis is conducted to test the linear association between two variables in the research model to identify any significant patterns, trends, or connections between the variables.

4.2.1 Independent-samples t-test based on demographical characteristics

An independent-samples t-test analysis is conducted to compare the difference in consumers' performance between two groups by examining the difference in means (Gerald, 2018). The analyzed demographical characteristics include gender group: male (111) and female (103), age group: 18-24 years old (106) and 25-34 years old (97), employment status group: working full-time (101) and student (96), and educational level group: bachelor's degree (113) and master's degree (72).

For the reporting format, use gender group as an example to compare different determinants' differences in females and males. Assume there are significant differences in scores of perceived risks between males and females. The reporting would be stated like "Comparing the perceived risks in females and males, there is a significant difference in the scores for males (M=___, SD=___) and females (M=___, SD=___); t =____, p = ____". Here, M=mean, SD = standard deviation, t= t-statistic, p=p-value. If p<0.001, it represents less than a 0.1% probability that there are no significant differences between the two groups.

Gender group

Based on the independent-samples t-test between males (111) and females (103) shown in Figure 4-4, see data in Appendix 3 (Table A II). Three factors, including perceived risks, social influence, and perceived usefulness, significantly differ between the two age groups.

It is found that the score of male participants to perceived risk (M=3.38, SD=0.85) is statistically significantly higher than female participants (M=2.64, SD=0.80), t=6.526, p<.001. The results show that male participants could perceive more risks when shopping on CDFSPs than female participants. Also, male participants statistically significantly are influenced by social influence (M=3.64, SD=0.70) more than female participants (M=3.14, SD=0.61), t=5.620, p<.001. Similar findings could be found in perceived usefulness, while the score for male participants is (M=3.63, SD=0.66) and for female participants are (M=3.35, SD=0.67), t=3.050, p=0.003. Besides these differences, there is no significant difference in other factors regarding gender.

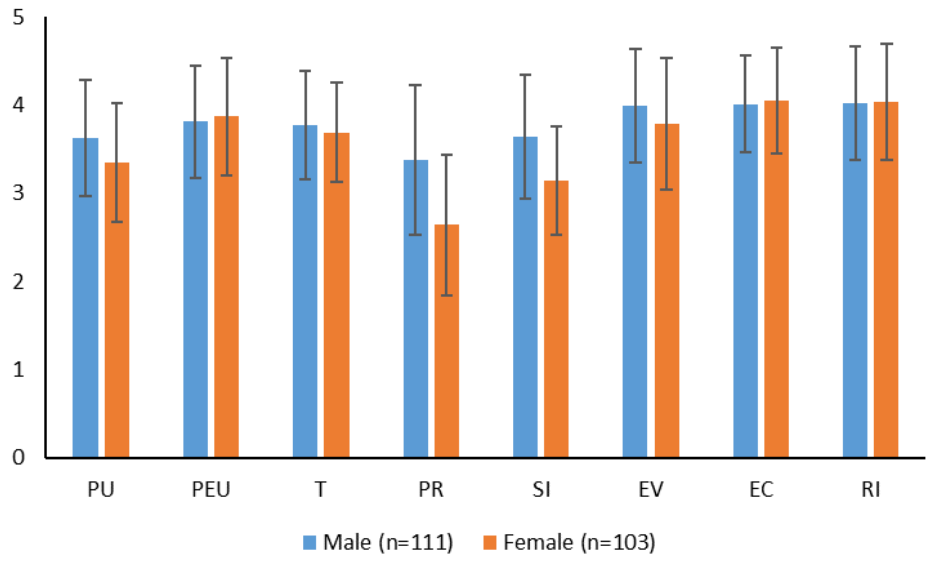

Figure 4-4. Independent-samples t-test regarding gender

Source: the author's own figure

Age group

For the age group, this study looks at 106 participants aged 18-24 years old and 97 participants aged 25-34. The independent-samples t-test results are shown in Figure 4-5. See concrete data in Appendix 3 (Table A III).

Based on the independent-samples test results, only one factor (social influence) is significantly different in these two age groups. Regarding social influence, 106 participants aged 18-24 years old (M = 3.57, SD = 0.72) compare to 97 participants aged 25-34 years old (M=3.20, SD=0.67), t=3.789, p<.001. No significantly different effects between the two age groups are found for the other factors since their p-values greater than 0.005. Because these two age groups are very close and are all young generations which should share similarities, thus this age group does not have many differences regarding these factors. The result aligns with the author's expectations.

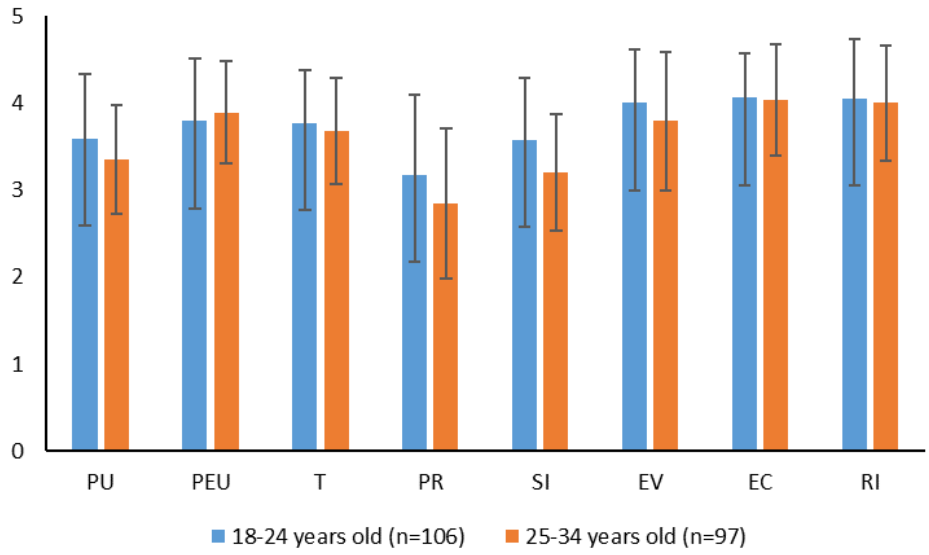

Figure 4-5. Independent-samples t-test regarding age

Source: the author's own figure

Employment status group

Due to the uneven sample distribution, the author only selected students (96) and full-time working participants (101) to compare the differences. The results of the independent-samples t-test are shown in Figure 4-6. See data in Appendix 3 (Table A IV). There are no significant differences in these factors between the two groups except perceived risk and social influence.

People who work full-time significantly have higher performance on perceived risk (M=3.43, SD=0.93) compared with students (M=2.61, SD=0.70), t=6.904, p<.001. It is worth noting that the mean value of perceived risk for students is 2.61, which is lower than 3 (neutral), meaning that students tend to say they do not perceive more risks of shopping through CDFSPs.

When it comes to social influence, students almost hold a neutral attitude (M=3.16, SD=0.66), while working full-time participants show a more positive attitude (M=3.66, SD=0.69), t=5.206, p<.001.

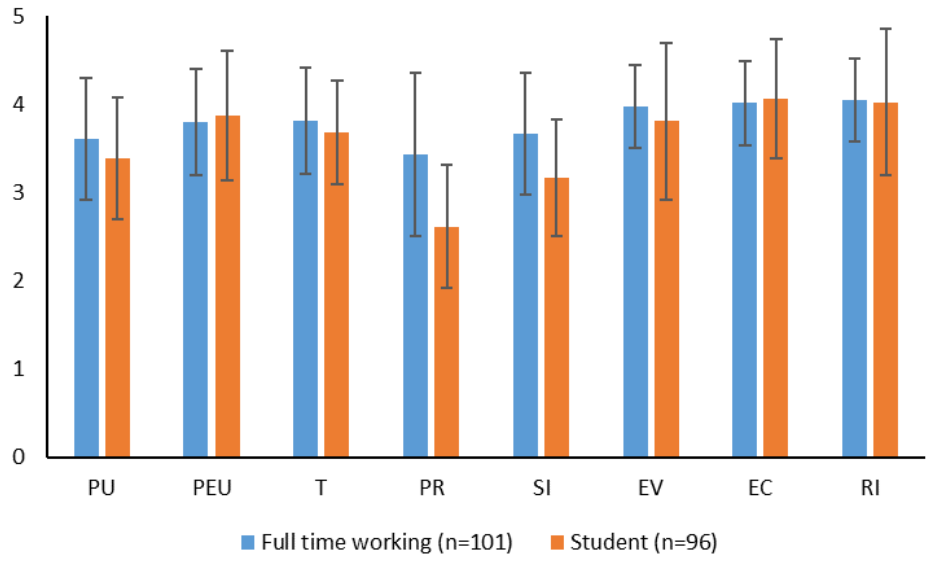

Figure 4-6. Independent-samples t-test regarding employment status

Source: the author's own figure

Educational level group

The study also analyzed the differences between 113 bachelor's degree participants and 72 master's degree participants. The independent-samples t-test results are listed in Figure 4-7. See factual data in Appendix 3 (Table A V). There are four factors (perceived usefulness, trust, perceived risk, and social influence) that show a significant difference between the two groups.

1) Perceived usefulness. The bachelor's degree participants who perceived the usefulness of CDFSPs (M=3.63, SD=0.72) compared with master's degree participants (M=3.25, SD=0.60) demonstrated significantly higher scores, t=3.720, p<.001.

2) Trust. There is a significant difference in the score of trust for bachelor's degree participants (M=3.86, SD=0.53) and master's degree participants (M=3.53, SD=0.61); t=3.841, p<.001.

3) Perceived risk. Bachelor's degree participants (M=3.14, SD=0.99) have a significantly higher score of perceived risk compared with master's degree participants (M=2.70, SD=0.68), t=3.605, p<.001.

4) Social influence. Bachelor's degree participants (M=3.56, SD=0.68) significantly perceive more social influence compared with master's degree participants (M=3.10, SD=0.63) t=4.640, p<.001.

It is worth noting that educational level could be an interesting research area for researchers to investigate the consumers' intention of CDFSPs platforms in future research since various differences exist between these two educational levels.

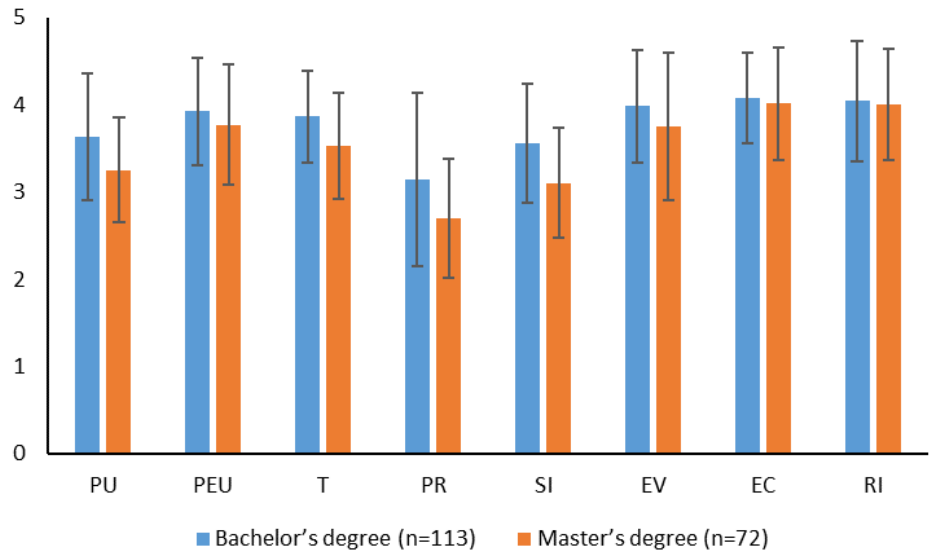

Figure 4-7. Independent-samples t-test regarding educational level

Source: the author's own figure

4.2.2 Correlation analysis

As mentioned in section Data analysis techniques3.3.2, the correlation analysis could be used to test the relationship between two variables based on the outputs from SPSS. The Pearson correlation coefficients could reflect the type (positive, negative and none) and strength (weak, moderate and strong) of the linear relationship between two variables. Since the RQ1 seeks to find the factors that could influence RI, the correlation between RI and the other factors could reflect and predict their relationship; thus, the analysis result of correlation analysis could help answer RQ1 in some aspects.

As shown in Table 4-2, most of the variables have a positive relationship with each other at the 0.05 level of significance. When it comes to the relationship between RI and seven independent variables, we can see a positive relationship between the dependent variable RI and PEU, PU, T, EV, SI and EC since Pearson Correlation values are 0.375, 0.363, 0.382, 0.450, 0.282, and 0.438, respectively. There are two values exceeding 0.4, EV (0.450) and EC (0.438), which show the most vital positive relationships with RI compared with the other variables. In other words, the higher the economic value and environmental considerations the consumers perceive from CDFSPs, the higher repurchase intention they may have. However, there is no significant correlation between PR and RI. The value of the Pearson correlation coefficient is -0.104, which means they have a negative relationship between PR and RI, but the correlation is not significant. Nevertheless, it does not mean that perceived risks do not influence consumers' repurchase intention because correlation analysis only considers the relationship between two variables and ignores the influence of the other factors.

Regarding correlation among independent variables, we could see the high-level correlation value of PEU with PU, T, and EV, with 0.394, 0.604 and 0.326, and a lower correction between PEU and EC with 0.171. PU with all the other six independent variables are closely related, and the values are all over 0.3; Similarly, T, EV and EC all show a high correlation with the other independent variables, excluding PR, while SI strongly correlates with the other five independent variables without PEU; Remarkably, PR only shows correlation with PU and SI in

this study. Among the significant correlation between variables mentioned above, they all show positive relationships with each other.

Table 4-2. Pearson correlation coefficient matrix

	PEU	**PU**	**T**	**PR**	**EV**	**SI**	**EC**	**RI**
PEU	1							
PU	0.394**	1						
T	0.604**	0.511**	1					
PR	0.010	0.393**	0.072	1				
EV	0.326**	0.317**	0.457**	0.061	1			
SI	0.047	0.460**	0.283**	0.420**	0.303**	1		
EC	0.171*	0.302**	0.371**	-0.033	0.413**	0.137*	1	
RI	**0.375****	**0.363****	**0.382****	**-0.104**	**0.450****	**0.282****	**0.438****	**1**

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*
Source: Author's own table based on SPSS outputs

4.3 Hypothesis testing based on multiple regression analysis

The stepwise multiple regression analysis was conducted to test the research model, which could determine the significant factors towards consumer repurchase intention in the CDFSPs context and show the importance of each factor through the coefficients. The results of hypothesis testing are the primary source of the answer to the RQ1 & RQ2.

To test the hypotheses H1 to H7, stepwise regression was carried out in SPSS. The predictor factor trust was removed from the final model based on the partial F-tests on the first step-stepwise predictor selection. Thus, trust does not significantly affect repurchase intention, meaning H3 was not supported in this study. The other six predictors passed the selection procedure and entered into the empirical model. The model summary of stepwise regression analysis from SPSS is shown in Table 4-3. The strength of the research model was evaluated using the R-square (R^2) value for the dependent variable. R^2 is a statistical measure that could be used to present the proportion of the variance of independent variables that contribute to the dependent variable in a regression model (Chicco et al., 2021). Adjusted R^2 =0.395, F (6, 211)=24.591, p< 0.001. The adjusted R^2 presents the value of 0.395, showing that 39.5% of the variance in repurchase intention in CDFSPs apps can be explained by six independent variables in the model.

Table 4-3. Model summary

Model	**Adjusted R^2**	**R^2 Change**	**F**	**Sig. F Change**	**Sig.**
EV	0.199	0.203	54.98	<.001	<.001
EV, EC	0.273	0.077	41.73	<.001	<.001
EV, EC, PEU	0.323	0.053	35.54	<.001	<.001
EV, EC, PEU, SI	0.347	0.026	29.81	.003	<.001
EV, EC, PEU, SI, PR	0.385	0.040	28.16	<.001	<.001
EV, EC, PEU, SI, PR, PU	**0.395**	**0.012**	**24.59**	**.036**	**<.001**

Source: Author's own table based on SPSS outputs

The importance of each construct in the CDFSPs repurchase intention can be demonstrated by calculating the effects of corresponding standardized regression coefficients (i.e., Std. Beta, β). From the results shown in Table 4-4, consistent with expectations, six factors could significantly influence repurchase intention, supporting H1, H2, H4, H5, H6, and H7. The coefficients (β constant) of repurchase intention with economic value, environmental considerations, perceived ease of use, social influence, perceived risk and perceived usefulness were 0.183 (t=2.902, p=0.04), 0.243 (t=4.042, p<.001), 0.207 (t=3.408, p<.001), 0.225 (t=3.470, p<.001), - 0.263(t=-4.262, p<.001), and 0.149 (t=2.111, p=0.036), respectively. The result shows a linear relationship between the dependent variable (repurchase intention) and six factors, with all of them significant at a 0.05 significance level.

It can be understood from the stepwise regression results that all of these six variables have been confirmed to have a significant influence on the repurchase intention. Firstly, among the six dependent variables, the coefficient of perceived risk is the greatest and is negatively correlated with the repurchase intention, indicating that perceived risk has the most critical impact on repurchase intention among the six independent factors. Then, the coefficients of environmental considerations, social influence, and perceived ease of use are positive, indicating that these factors have a positive relationship with repurchase intention. Besides that, economic value and perceived usefulness will also positively affect RI. The results are consistent with the hypothesis mentioned above. In conclusion, the importance rank as below:

1. Perceived Risk, - 0.263(t=-4.262, p<.001),
2. Environmental Considerations, 0.243 (t=4.042, p<.001)
3. Social Influence, 0.225 (t=3.470, p<.001)
4. Perceived Ease of Use, 0.207 (t=3.408, p<.001)
5. Economic Value, 0.183 (t=2.902, p=0.04)
6. Perceived Usefulness, 0.149 (t=2.111, p=0.036)

Thus, the regression equation is shown below:

RI =0.768+0.183*EV+0.243*EC+0.207*PEU+0.225*SI-0.263*PR+0.149*PU, where RI is the outcome variable, EV, EC, PEU, SI, PR, PU are the predictor variables, 0.183, 0.243, 0.207, 0.225, -0.263 and 0.149 are the beta coefficients, and 0.768 is a constant.

The stepwise regression analysis results are shown in Table 4-4.

Table 4-4. Regression coefficients

Model	B	Std. Error	Std. Beta	t	Sig
(Constant)	0.768	0.338		2.272	0.24
EV	0.169	0.058	0.183	2.902	.004
EC	0.285	0.070	0.243	4.042	<.001
PEU	0.207	0.061	0.207	3.408	<.001
SI	0.212	0.061	0.225	3.470	<.001
PR	-0.195	0.046	-0.263	-4.262	<.001
PU	0.147	0.069	0.149	2.111	.036

Dependent Variable: RI
Source: Author's own table based on SPSS outputs

4.4 Summary and interpretation of findings

This section concludes with the main findings of this chapter, which include three parts: the main characteristics of the sample, difference analysis and hypothesis testing.

The main characteristics of the sample

This study collected 218 respondents who have had shopping experiences on two food sharing platforms (i.e., TGTG and Karma) during the past 12 months. The sample mainly focuses on CDFSPs consumers residing in Sweden. Overall, the participants are the relatively young generation, between 18 – 34 years old. Students and full-time working participants are the main participants accounting for 44.04% and 46.44% of the sample. 86.6% of participants' educational backgrounds are bachelor's degree level or above. The shopping intensity and frequency on CDFSPs apps of respondents are distributed evenly, concluding in three high-intensity, medium-intensity, and low-intensity groups. All the implications and suggestions mentioned below are based on this sample.

Then, the overall consumer's perceptions of different influencing factors, repurchase intention and reliability of the measurement scale are analyzed in section 4.1.3. Cronbach's Alpha is used to evaluate the reliability of the measurement scale, and the values are all over the ideal level of 0.7, showing a good data quality. All the means of factors exceed the value of 3 (neutral). Especially the overall means of EC and RI exceed 4, which shows that consumers perceive that shopping on CDFSPs platforms could bring environmental benefits and alleviate food waste. The overall respondents indicate they prefer to continue to buy food from TGTG and Karma. The mean of PR is 3.03 (SD=0.90), which suggests that participants in this study present a neutral perception of PR, but a significant dispersion exists among the data.

Difference analysis

In section 4.2.1, the author conducts an independent-samples t-test to compare the differences of different factors between two groups. Four types of demographical characteristics are analyzed, including gender group: male(111) and female (103), age group: 18-24 years old (106) and 25-34 years old (97), employment status group: working full-time (101) and student (96), and educational level group: bachelor's degree (113) and master's degree (72). Table 4-5 summarizes the significant differences of the variables in these groups.

Based on Table 4-5, PEU, EC, EV, and RI do not show significant differences in any demographical groups. It means that consumers' intention of these factors may not be influenced by gender, age, employment status and educational level. However, since this study only concludes with two groups within a demographic category, this conclusion needs more research to generalise the situation in other age groups, employment statuses, and educational levels. In contrast, the factor SI shows a significant difference in all demographic categories, showing that all groups could perceive the different social influences of CDFSPs from their peers and society. Specifically, for the educational level group between bachelor's degree and master's degree participants, four factors show significant differences based on the two degrees. It shows that the consumers' motivation for platform usage and consumers' perception of shopping on CDFSPs between these two educational levels are significantly different.

Through the independent-samples t-test analysis, we find that the users of CDFSPs are not homogeneous. Their attitude, intention, motivation and perception of utilizing the CDFSPs applications have several differences and deserve further research.

Table 4-5. Summary of significant differences based on independent-samples t-test

	Male and Female	18 -24 years old and 25-34 years old	Working full time and Student	Bachelor's degree and Master's degree
PEU				
PU	×			×
T				×
PR	×		×	×
EV				
SI	×	×	×	×
EC				
RI				

* × **represents there exists a significant difference between the two groups**

Source: Author's own table based on SPSS outputs

A correlation analysis is then conducted to test the linear association between two factors. The results show that most of the variables have a high correlation with each other. It is needed to clarify here that it is meaningful to conduct a correlation analysis to investigate the association between two variables as an exploratory study. However, correlation analysis is not a suitable tool to answer the research questions since several factors influence the repurchase intention simultaneously (Lindley, 1990).

Hypothesis testing

The study tested the hypothesis through stepwise multiple regression analysis, which could test the hypotheses, figure out the factors that significantly influence repurchase intention, and rank the importance of each factor based on the regression coefficients. Table 4-6 summarizes the results and outcomes of hypothesis testing.

Table 4-6. Results of the hypotheses testing

	Hypotheses	Results
(+) H1	There is a significantly positive effect of perceived usefulness on consumer repurchase intention in CDFSPs.	Supported
(+) H2	There is a significantly positive effect of perceived ease of use on consumer repurchase intention in CDFSPs.	Supported
(+) H3	There is a significantly positive effect of trust on customer repurchase intention in CDFSPs.	Not Supported
(-) H4	There is a significantly negative effect of perceived risk on customer repurchase intention in CDFSPs.	Supported
(+) H5	There is a significantly positive effect of social influence on customer repurchase intention in CDFSPs.	Supported
(+) H6	There is a significantly positive effect of environmental considerations on customer repurchase intention in CDFSPs.	Supported
(+) H7	There is a significantly positive effect of economic value on customer repurchase intention in CDFSPs.	Supported

Source: author's own table

The results reveal that the effect of perceived risk is significantly more substantial than the other factors, and it negatively correlates with repurchase intention. Rank the rest factors in terms of their importance to repurchase intention from important to less important. The sequence is environmental consideration, social influence, perceived ease of use, economic value, and perceived usefulness, which all statistically positively influence the repurchase intention. Additionally, trust is found to have no significant influence on continuous use intention. The R-square value is 0.395, meaning that the six factors in the present model could explain 39.5% of the variance in repurchase intention. In other words, the framework created in this study could be regarded as a valuable tool to predict the consumers' repurchase intention on CDFSPs. The results of stepwise regression provide strong support for the proposed model of repurchase intention toward CDFSPs.

The meanings, implications and limitations of the findings will be further discussed in the next chapter.

5 Discussion

This chapter discusses the findings of this study, both theoretical and practical. It interprets the statistical findings in light of what has been already known about the research on repurchase intention, especially in food sharing platforms. Based on the findings, the author also provides suggestions on improving consumers' repurchase intention on CDFSPs. Moreover, the outline of limitations of this thesis regarding methodology, theoretical and analytical choices.

5.1 Research and practical implications

The final research model includes six factors that significantly influence the repurchase intention of food sharing platforms through the stepwise regression analysis. The most crucial factor influencing consumer repurchase intention of CDFSPs platforms is perceived risk, followed by environmental considerations, social influence, ease of use, economic value, and perceived usefulness. This section will discuss the importance of each factor towards the repurchase intention of CDFSPs and why trust is not significant in this study. Besides that, the author will provide suggestions on improving repurchase intention and the importance of factors regarding the analysis.

Perceived risk (H4)

The corroboration of hypothesis H4 emphasizes that the biggest concern that influences consumers' repurchase intention is the perceived risk of CDFSPs and the effect of perceived risk is strongly negative on repurchase intention. The results align with the findings of C. NGUYEN et al. (2021) and Kian et al. (2018). C. NGUYEN et al. (2021) concluded that product risk, security risk, time risk, and fraud risk of the seller negatively affect the intention to buy food via online shopping channels. Connected to the attribute of the food sharing platforms that aim to sell food that near expires or already exceeds "the best before date" but still be safe to eat, consumers will suffer higher risks of buying lower quality food. Falcone & Imbert (2017) stated that many consumers present that they do not know how the food is stored and the concrete food information when shopping on food sharing apps. Therefore, they cannot confirm whether the food is safe. Besides that, the considerations of payment security and personal information leakage while shopping on food sharing platforms could affect consumers' perceived risk. On the other hand, compared with the other online shopping channels that provide food delivery services, CDFSPs consumers could only get the food by picking it up on-site, which adds perceived time risks. Besides that, as Kian et al. (2018) proposed, the perception of gaining the security of payment while shopping online will significantly influence consumers' purchase intention. However, when it comes to the same research topic in other fields like Airbnb, Uber or IKEA websites in the past studies, the perceived risk shows relatively lower importance compared with the factors like perceived usefulness and social influence (Yeo et al., 2021; Geraldine & Laurent, 2019; S. W. Lee et al., 2019). That may be due to the different usage intentions of these platforms since food safety could be the most significant factor that consumers need to consider during food consumption.

The companies like TGTG and Karma need to take action to reduce perceived risk by consumers and to increase their intention to reuse these apps. Based on the previous analysis, the potential strategies could relate to improving the transparency of food information on apps, guaranteeing secure payment and personal information and optimising service in the pick-up phase, which could reduce the time usage and improve the convenience for consumers.

Environmental Consideration (H6) and Social Influence (H5)

Next, the support for hypotheses H6 and H5 suggests that environmental considerations and social influence could encourage consumers to reuse the CDFSPs apps. Environmental considerations and social influence perform the second and third highest level of importance in light of repurchase intention, respectively. The findings support the existing research on behavioural intention and usage behaviour in the context of the sharing economy, which concludes that the consumer behaviour response appears to be mainly affected by perceptions of others' beliefs and actions, including sustainability and environmental awareness (Liang et al., 2021b; PwC, 2015; Rong et al., 2021). Also, Schanes & Stagl (2019) found that people's participation in food sharing is facilitated by the factors such as social influence, community identity, and sense of belonging. When it comes to CDFSPs like TGTG and Karma, these platforms mainly operate in developed countries. The general public has a high level of awareness of sustainability affected by cultural and social factors that contribute to social interactions, information exchange, and community building. In turn, environmental considerations and social influence would facilitate people to shop at companies with good performance on Corporate Social Responsibility (CSR) (Yang, 2021).

Thus, the potential strategies for CDFSPs to improve consumers' repurchase intention may include improving good brand reputation through valid marketing based on CSR-related motives and advertising environmental impacts. Also, creating the brand's user communities that allow consumers to discuss and communicate with each other could improve their social influence and enhance consumers' repurchase intention.

Perceived Ease of Use (H2) and Perceived usefulness (H1)

As expected, the support for H2 & H1 suggests that easy use of and usefulness of the food sharing applications significantly encourages the individual to repurchase from that platform. Similar findings can be found in previous studies on food delivery apps conducted by S. W. Lee et al. (2019) and Yeo et al. (2021). They suggested that satisfaction with the performance of the application's effectiveness and easy use of the applications in searching and buying food could significantly positively affect consumers' repurchase intention. Consumers will increase the use of applications if they can help them improve their shopping performance and experience (Chiu, Lin, et al., 2009). However, this study displays that perceived usefulness has the lowest influence among the six significant factors. This signifies that consumers do not perceive TGTG and Karma However, their importance is relatively lower, especially for perceived usefulness, which ranks the least important among the factors. The reason may be that the author only concludes the "time saving" and "food searching" as the measurement scale of perceived usefulness, but perceptions about the cost-effective food regarding the price are not included. This measurement scale adapted from the other literature may not suit the food sharing platforms perfect and could not assess the perceived usefulness appropriately (Van der Heijden et al., 2003).

To improve the consumers' perceived ease of use and perceived usefulness of CDFSPs, the companies like TGTG and Karma could optimize the application digital interaction system, provide more food choices and optimize the post-purchase services.

Economic value (H7)

The other factor that influences the repurchase intention of the CDFSPs consumers is the economic value (H7). Based on the previous research on the motivation to engage in food sharing platforms, Falcone & Imbert (2017) and Sadrijaj & Rösing (2021) confirmed that

financial benefits through shopping on food sharing platforms are the main driving force for users to adopt these apps. This study confirmed that perceived economic benefits also contribute to the continuous repurchase in the context of CDFSPs. Similarly, Cechin et al. (2021) emphasized the role of perceived economic value in improving the intensity of organic food consumption. Since the food sharing platforms sell out surplus food at a discount price, economic value is a significant factor for consumers to reuse CDFSPs applications. Although the importance of this factor is not very high, scholars should still pay significant concerns to this factor since the empirical evidence shows that consumers are more likely to choose a sharing economy initiative motivated by economic factors instead of environmental considerations (Z. W. Y. Lee et al., 2018).

TGTG and Karma have already operated their platforms by providing discounted surplus food that could save money for consumers. Thus, there are no extra suggestions from the author regarding this factor.

Table 5-1 Suggestions on improving repurchase intention based on six significant factors

PR	EC&SI	PEU&PU	EV
• Improve the transparency of food information on apps • Guarantee secure payment and personal information • Optimise service in the pick-up phase • etc.	• Conduct marketing based on CSR-related motives • Advertise environmental impacts • Build up the brand's user communities (both online and offline); • etc.	• Optimize the digital interaction system of the applications • Provide more food choices and optimize the post-purchase services • etc.	None

Source: author's own table

Trust (H3)

A surprising result is that trust did not show a significant relationship with repurchase intention in CDFSPs, which differs from the findings of most past research based on online shopping and sharing economy platforms like Airbnb (B. Kim, 2019). Previous studies suggest a significant influence of trust on consumers' positive attitudes toward food sharing services (Sadrijaj & Rösing, 2021). Yeo et al. (2021) also confirmed that trust plays a vital role in achieving repurchase intention in FoodPanda. However, none of these existing studies that analyzed the relationship between repurchase intention and trust was conducted under the food sharing platforms context. It means that there exists a likelihood that consumers' repurchase intention may not be significantly predicted by the degree of trust in food sharing platforms. Similar findings could also be seen in the study conducted by Geraldine & Laurent (2019), which did not support the hypothesis of the relationship between trust and online repurchase intention in the household equipment market. The potential explanations for why there is no direct relationship between trust and repurchase intention in this study are as follows:

Trust is not a significant factor influencing consumers' repeated buying intention, although lack of trust could lead to negative attitudes towards these platforms and stop shopping on them (Wen et al., 2011). Because in the online shopping and e-commerce context, the consumer's

intention is broader than the scope of repurchase intention. Compared to the other sharing economy platforms in the accommodation and car-sharing industries like Airbnb and Uber, the trust contributes to consumers' continued usage intention of this platform. Because the safe environment and good protection of personal information mechanisms are the basic requirements for the demand of living and travelling, consumers could only contact and acquire information about the retailers through these applications. Thus, the trust in these applications could significantly influence their repurchase intention. Further, unlike the food delivery application like FoodPanda, where people order food online and get the food through a delivery service (Jeon et al., 2021), the consumers can not interact and contact the retailers directly. Consumers could only pick up food by visiting the retailer onsite if they order food on food sharing platforms. Under this situation, the trust in food sharing platforms seems to be less critical to the consumer in food purchasing. In addition to food quality, consumers' purchase intention could be highly influenced by the features of food like flavour, taste and size (Ma et al., 2021). In other words, if consumers cannot find the food satisfying their demand of flavour or taste, they will not purchase food from TGTG and Karma even if they perform high trust in these platforms.

5.2 Theoretical implications

Keeping consumers' continual shopping adoption behaviour could help companies create more profits and succeed. Thus, repurchase intention is currently an important research topic for online shopping and sharing economy platforms. This study drew on the TAM model to examine consumer shopping behaviour in the continuous use of CDFSPs. The author classified significant factors from a theoretical perspective and empirically tested the research model that could potentially influence consumers' repurchase intention toward CDFSPs. Based on the results of stepwise regression analysis, the author verified six factors that could significantly influence repurchase intention in the research model.

The TAM model is considered to have good explanatory power in measuring technology acceptance (P. A. Pavlou, 2003). This model has been verified to be valuable and valid in analyzing the consumers' repurchase intention in several fields like Airbnb and food delivery apps (Ariffin et al., 2016; J. Kim & Forsythe, 2010; S. W. Lee et al., 2019). Thus, in particular, this study is significant because it employed the TAM model that has never been applied in the field of profit food sharing platforms to measure consumer repurchase intention. Furthermore, by introducing some other constructs in the TAM model and analyzing how these factors would influence behaviour intention, this study made substantial academic contributions as it integrates the research trends in the areas of food sharing economy platforms and ICTs.

Thus, the theoretical framework presented in this model could be employed as a basis for future studies on the shopping behaviour of food consumers on the food sharing platform.

5.3 Methodology reflections

In this section, the author discusses the limitations of methodology regarding the data collection and data analysis methods.

Data collection: a literature review and a cross-sectional survey are utilized to collect data in this study. First, due to the novelty of the research topic, which focuses on the profit food sharing platform, there is a lack of research in this field, especially in repurchase intention. Thus, the author analyzed the literature on repurchase intention from similar fields like sharing platform platforms, online shopping, food delivery apps and food consumption to determine the potential factors and build up the research model. However, the characteristics and backgrounds of the literature could not fit the CDFSPs perfectly, which may lead to missing

some significant factors in the research. Ideally, the author should interview enough number of CDFSPs consumers to figure out the significant factors that could reduce this bias. Nevertheless, the author did not have enough time to conduct this procedure. Additionally, a cross-sectional survey, snowball and convenience sampling methods were applied to collect data, leading the research sample of this study may not be representative of the population. Especially, this study utilized the self-reported data from the survey, which may have many biases caused by social desirability, recall period and etc. (Althubaiti, 2016). Furthermore, some factors analyzed in the questionnaire are related to sustainable considerations, and people would tend to show a more positive attitude towards these choices than their actual behaviour. These limitations would cause some biases in the final findings.

Data analytical techniques: This study utilizes stepwise regression analysis as the primary analytical method. However, this is not a popular method to analyze the repurchase intention in the academic world. This is due to the limited time and sample size, and the study only focuses on the direct relationship between factors and repurchase intention. However, the stepwise regression analysis method has several disadvantages as the regression coefficients may bias and R-square is usually higher than its actual number (Smith, 2018). To generalize and generate more credible findings in future research, scholars could utilize advanced analytical methods like the Structural Equation Modeling (SEM) technique to analyze the relationship between the factors and repurchase intention. SEM is a widespread technique utilized in social science since it can perform factors analysis and regression analysis at the same time (Chiu, Chang, et al., 2009; Hair et al., 2009). It could be utilized to analyse the causal relationships among observed variables and latent constructs, including linear and nonlinear effects (Nordin, 2021). Combined with the SEM, researchers could observe more relationships (linear and nonlinear effects) and verify the research model.

This study's findings would be more generalizable and representative if the author could conduct the interviews with consumers, collect data from a probability sample and utilize a more advanced analytical technique. Nevertheless, this study still contributes to a better understanding of the repurchase intention of CDFSPs consumers in Sweden.

6 Conclusion and recommendations for future research

6.1 Conclusion

Given the severity of the food waste problem and requirements of sustainable consumption from society in developed countries like Sweden, a new business model, i.e., commercial digital food sharing platforms, is emerging. Undoubtedly, these platforms have a tremendous potential power that contributes to reducing food wastage in the retailer-consumer interface, boosting communication in the community, and alleviating several negative environmental impacts. However, unlike other successful sharing economy platforms like Airbnb and Uber, commercial food sharing platforms do not win the market with such a big success. Consumer repurchase intention is essential for companies to gain profits and business success, and there is a lack of research on this topic.

Under this context, the author conducted an exploratory to examine the factors that could potentially influence consumer repurchase intention of CDFSPs in Sweden. Based on the literature review, the author adopted the TAM theory with two factors: PEU and PU, and figured out five other factors, including T, PR, EV, SI, EC and RI, that could influence repurchase intention. The hypotheses and research model are developed during this process. The findings of this study have unique implications for the food sharing platform, which is a part of sharing economy platforms whose business models and profits are based on the long-term relationship with the consumer and their continual buying behaviour. The empirical data for this study were collected by distributing an online cross-sectional survey. In total, the study collected 218 valid respondents, which enabled the author to answer the following questions:

RQ 1: What factors influence the repurchase intention of CDFSPs consumers?

- RQ1a: What are the main differences in the consumers' perception of these factors based on demographical characteristics?

RQ 2: How important are these factors to repurchase intention?

For RQ1: Based on the stepwise multiple regression analysis, the author figured out that PEU, PU, EV, SI, and EC statistically significantly influence repurchase intention and show a positive relationship. While PR significantly negatively influences the repurchase intention of CDFSPs consumers. The R-square value of this research model is 0.395, meaning that the six factors in the present model could explain 39.5% of the variance in repurchase intention. Trust did not present a significant relationship with the repurchase intention and was excluded from the research model.

For RQ1a: It is answered through the independent-samples t-test. Because of the uneven distribution of the sample, the author only analyzed two groups within each demographical characteristic. The four categories include gender group: male and female, age group: 18-24 years old and 25-34 years old, employment status group: working full-time and student, and educational level group: bachelor's degree and master's degree. There was no significant difference in PEU, EC, EV, and RI in any demographical groups. These factors might not be influenced by gender, age, employment status, and educational level. On the other hand, SI shows a significant difference in all demographic categories, which deserves further research. These differences indicate that CDFSP consumers are not homogeneous, and their intentions to use the platform vary greatly.

The significant differences in the factors based on the demographic groups are listed below:

1. Gender group: PU, PR, SI;
2. Age group: SI;
3. Employment status group: PR; SI;
4. Educational level group: PU, T; PR; SI.

For RQ2: Still based on the results of stepwise regression. The regression equation is formulated and shown as:

RI =0.768+0.183*EV+0.243*EC+0.207*PEU+0.225*SI-0.263*PR+0.149*PU.

The stepwise coefficient could represent the importance of each variable to repurchase intention. The perceived risk (-0.263) is the most significant factor that negatively influences repurchase intention. It is followed by environmental consideration (0.243), social influence (0.225), perceived ease of use (0.207), economic value (0.183), and perceived usefulness (0.149), which all statistically positively influence the repurchase intention.

6.2 Implications and recommendations for practitioners

In this study, besides figuring out the significant factors that could influence repurchase intention in the food sharing platform, the author also provides suggestions on practitioners of CDFSPs like TGTG and Karma. These recommendations aim to help them scale up the business, improve their service, maintain a long-term relationship with their consumers, and improve their repurchase intention. The proposed suggestions are listed below:

- Improve the transparency of food information on apps;
- Optimise service in the pick-up phase;
- Conduct marketing based on CSR-related motives;
- Advertise environmental impacts on social media;
- Build up the brand's user communities (both online and offline);
- Optimize the digital interaction system of the applications;
- Provide more food choices for consumers and optimize the post-purchase services.

6.3 Recommendations for future research

CDFSPs platforms like TGTG and Karma are a part of sharing economy, which has the potential power to reduce food waste and shift the food consumption model in the B2C context in Sweden. It is vital to analyze the consumer repurchase intention to help these platforms understand the consumer's perception, maintain a long-term relationship with consumers, scale up the business development and win the profits and market. This empirical study is the first attempt to explore the factors that influence consumer repurchase intention of CDFSPs through a quantitative analysis. The findings study could contribute to future research in the field of food sharing platforms, and there are some suggestions for the researchers to consider:

- **Research topic**: This thesis only analyzed the consumer's repurchase intention of CDFSPs; future research could pay attention to the other stakeholders in the food sharing platform like retailers and practitioners of platforms, which would add diverse insights into the food sharing platform research. Based on the analysis of the sample, there may exist differences among different demographical characteristics. Thus, the scholar could pay attention to comparing the differences among different types of consumers in future research.
- **Geographical scope:** As mentioned above, this study mainly focuses on the Swedish background. Thus, future research could focus more on cross-cultural factors and

collect data outside of Sweden to investigate consumers residing in other countries and cultural backgrounds, which could help compare and generalize the current results.

- **Theoretical foundation:** In this study, the author built up the research model by extending a theory (TAM) popularly utilized in analyzing repurchase intention in the related literature. However, it does not mean this model is the best theory to analyze repurchase intention in the food sharing platform. In future research, scholars could consider utilising the other theory, like TPB theory, Value-based theory, etc., as the underlying theoretical foundations to expand the knowledge from more theories.
- **Potential factors to repurchase intention:** This study combined the TAM model with several factors based on the other considerations related to economic value, social influence and environmental considerations, which are based on a three-pillar conception. Researchers could consider and incorporate more variables from different perspectives and levels into the current model. For example, information quality, customer satisfaction, and service quality could be taken into account to broaden the understanding of the effects of the repurchase intention. On the other hand, this study figures out potential factors mainly based on the literature review. Future research could utilize a mixed-method combination of interviews and literature review.
- **Questionnaire design:** The author adopted and adapted the measurement scale (questionnaire questions) from the other studies due to the time limitation. Researchers could consider developing a measurement scale devoted to the food sharing platform context for future study.
- **Data collection methods:** The non-probability sampling was applied to collect data in this study. However, the collected sample may not be representative enough of the whole population. Researchers could consider working with CDFSPs companies to conduct probability sampling and get a more representative sample for the future study.
- **Analytical methods:** For future research, scholars could utilize more advanced analytical methods like the SEM technique to analyze the relationship between the factors and repurchase intention.

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Appendix

Appendix 1. Customer Repurchase Intention of CDFSPs Survey Questionnaire

Introduction

Hi! My name is Jiqing Chen and I am a Master's student at the International Institute for Industrial Environmental Economics (IIIEE), Lund University. Now, I am conducting a

survey as part of my Master's thesis to investigate the factors that could influence consumer repurchase intention of Commercial Digital Food Sharing Platforms (CDFSPs).

You will be presented with information relevant to this topic and asked to answer some questions about it.

If you have any questions or comments regarding the present research, please contact:

Student researcher:

Jiqing Chen

ji5167ch-s@lu.se

Informed consent

Before starting this survey, please read the information below carefully.

This survey is about the use of mobile apps such as "Too Good To Go" (https://www.toogoodtogo.se/) and "Karma" (https://www.karma.life/). In this survey, such services will be called **CDFSPs (Commercial Digital Food Sharing Platforms)**. The survey will take you around **4 - 6 minutes** to complete.

In the present survey, you will be asked about basic demographic information, and questions related to these topics. Please be assured that your personal information and responses will be kept **anonymous** and **confidential**! All of the data collected **will be only used for research purposes**.

By clicking the button below, you acknowledge your participation in the survey and allow the researchers to use the data generated from the present survey for academic research.

- I consent, begin the study
- I do not consent, I do not wish to participate

Section 1 Consumer profile

Q1 Have you shopped on CDFSPs apps (e.g., "Too Good To Go" or "Karma") before

- Yes
- No

Q2 Which CDFSPs app are you using?

- Too Good To Go
- Karma
- Both "Too Good To Go" and ""Karma"
- Other CDFSP applications, please specify: _____

Q3 How often do you purchase on CDFSPs app?

- Daily
- 2-3 times per week
- Once per week
- 2-3 times per month
- Monthly
- Once every 2-3 months
- Once every 6 Months
- Once a year
- Less than once a year

Section 2 Personal questions

Q1 How do you describe yourself?

- Male
- Female
- Non-binary / Prefer not to say

Q2 How old are you?

- Under 18
- 18-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65+ years old

Q3 What best describes your employment status over the last three months?

- Working full-time
- Working part-time
- Unemployed and looking for work
- A homemaker or stay-at-home parent
- Student
- Retired
- Other

Q4 What is the **highest** degree or level of education **you have completed**?

- Primary school
- Middle school
- High school
- Bachelor's degree
- Master's degree
- Ph.D. or higher
- Prefer not to say

Q5 Are you currently staying in Sweden or have lived in Sweden in the past one year?

- Yes
- No

Q6 In which country do you currently reside? （*If Q5 > "No"*）

Section 3 Detailed questions about consumers' intention of CDFSPs.

Below is the **main** and **last section** of the survey containing **8 dimensions** with **34 statements**. Please, select your level of agreement for each one of the following statements.

Q1	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Learning to use the CDFSPs apps is easy.	○	○	○	○	○
It is easy to get the CDFSPs apps to do what I want.	○	○	○	○	○
My interactions with the CDFSPs apps are clear and understandable.	○	○	○	○	○
My interactions with the CDFSPs apps does not require a lot of mental effort.	○	○	○	○	○
It is easy to become skillful at using the CDFSPs apps.	○	○	○	○	○
Q2	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Using CDFSPs apps enables me to finish the task of searching and purchasing food more quickly.	○	○	○	○	○
Using CDFSPs apps for buying food helps me make better purchase choices.	○	○	○	○	○
Using CDFSPs apps makes it easier to search and purchase food.	○	○	○	○	○
Using CDFSPs apps saves my time.	○	○	○	○	○
Overall, I find it is useful to use the CDFSPs apps for buying food.	○	○	○	○	○
Q3	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel safe in my transactions with the CDFSPs apps.	○	○	○	○	○
I believe the CDFSPs apps can protect my privacy.	○	○	○	○	○
I believe the offered food on CDFSPs apps would have a good quality.	○	○	○	○	○
I feel that CDFSPs apps provide me with good service.	○	○	○	○	○

I feel that the CDFSPs apps are trustworthy.	○	○	○	○	○
Q4	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I do not feel comfortable giving out credit card information to make a transaction over the CDFSPs apps.	○	○	○	○	○
I feel apprehensive about purchasing in CDFSPs apps.	○	○	○	○	○
Purchasing in CDFSPs apps is risky.	○	○	○	○	○
There are many uncertainties associated with purchasing in CDFSPs apps.	○	○	○	○	○
Compared with other methods of purchasing, buying food from CDFSPs apps is riskier.	○	○	○	○	○
Q5	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I can save money if I use CDFSPs services.	○	○	○	○	○
My usage of CDFSPs services benefits me financially.	○	○	○	○	○
My usage of CDFSPs services can improve my economic situation.	○	○	○	○	○
Q6	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My peers around me are willing to purchase food from CDFSPs apps.	○	○	○	○	○
I think I should use the CDFSPs apps because everyone around me seems to use it.	○	○	○	○	○
My family/friends or people who are influential to me recommend that I should use the CDFSPs apps.	○	○	○	○	○
It has become a trend to use CDFSPs apps to purchase food.	○	○	○	○	○
Q7	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

CDFSPs help reduce the negative impacts of food waste on the environment.	○	○	○	○	○
CDFSPs help reduce the consumption of energy and resources while consuming food.	○	○	○	○	○
CDFSPs provide a more sustainable way to consume food.	○	○	○	○	○
Using CDFSPs apps makes me an environmentally friendly consumer.	○	○	○	○	○
Q8	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
If I could, I would like to continue using the CDFSPs apps to purchase food.	○	○	○	○	○
It is likely that I will continue to purchase food from the CDFSPs apps in the future.	○	○	○	○	○
I intend to continue purchasing food from the CDFSPs apps in the future.	○	○	○	○	○

Sweepstake

Do you want to join in the sweepstake? (An Amazon e-gift card worthing 30 SEK).

- Yes, please write down your email address _____
- No, please donate to the charity

Appendix 2 Descriptive information of the data

Table A. I Profile of respondents (sample size: 218)

Variable	Frequency	Distribution (%)
Demographic Characteristics		
Gender		
Male	111	50.92
Female	103	47.25
Non-binary / Prefer not to say	4	1.83
Age		
18-24 years old	106	48.62
25-34 years old	97	44.50
35-44 years old	14	6.42
Above 45 years old	1	0.46
Country of Residence		
Sweden	183	83.94
Denmark	25	11.47
Other	10	4.59
Employment Status		
Working full-time	101	46.33
Working part-time	9	4.13
Unemployed and looking for work	7	3.21
A homemaker or stay-at-home parent	4	1.83
Student	96	44.04
Other	1	0.46
Educational Level		
Primary school	1	0.46
Middle school	4	1.83
High school	24	11.01
Bachelor's degree	113	51.83
Master's degree	72	33.03
Ph.D. or higher	4	1.83
Usage Profile and Experience of CDFSPs		
Which CDFSPs app are you using?		
Too Good To Go	114	52.29
Karma	44	20.18
Both "Too Good To Go" and "Karma"	60	27.52
How often do you purchase on CDFSPs app?		
Daily	7	3.21

2-3 times per week	40	18.35
Once per week	31	14.22
2-3 times per month	52	23.85
Monthly	22	10.09
Once every 2-3 months	31	14.22
Once every 6 Months	18	8.26
Once a year	8	3.67
Less than once a year	9	4.13

Source: Author's own table, data extracted from SPSS

Appendix 3 Results of independent-samples t-test

Table A II. Independent-samples t-test regarding gender

	Male (n=111)	Female (n=103)	t	p
PEU	3.81±0.64	3.87±0.67	-0.578	0.564
PU	**3.63±0.66**	**3.35±0.67**	**3.050**	**0.003**
T	3.77±0.61	3.69±0.56	1.061	0.290
PR	**3.38±0.85**	**2.64±0.80**	**6.526**	**<.001**
EV	3.99±0.64	3.79±0.75	2.070	0.040
SI	**3.64±0.70**	**3.14±0.61**	**5.620**	**<.001**
EC	4.01±0.55	4.05±0.60	-0.474	0.636
RI	4.02±0.64	4.03±0.66	-0.092	0.927

Source: the author's own table, data extracted from SPSS

Table A III Independent-samples t-test regarding age

	18-24 years old (n=106)	25-34 years old (n=97)	t	p
PEU	3.79±0.72	3.89±0.59	-0.993	0.322
PU	3.59±0.74	3.35±0.63	2.490	0.014
T	3.77±0.60	3.68±0.61	1.080	0.282
PR	3.17±0.93	2.84±0.86	2.641	0.009
EV	4.00±0.62	3.79±0.80	2.098	0.037
SI	**3.57±0.72**	**3.20±0.67**	**3.798**	**<.001**
EC	4.06±0.51	4.04±0.64	0.310	0.757
RI	4.05±0.68	4.00±0.66	0.497	0.620

Source: the author's own table, data extracted from SPSS

Table A IV. Independent-samples t-test regarding employment status

	Working full-time (n=101)	Student (n=96)	t	p
PEU	3.80±0.60	3.87±0.73	-0.763	0.446
PU	3.61±0.69	3.38±0.69	2.365	0.019
T	3.81±0.60	3.68±0.59	1.537	0.126
PR	**3.43±0.93**	**2.61±0.70**	**6.904**	**<.001**
EV	3.98±0.47	3.81±0.89	1.638	0.095
SI	**3.66±0.69**	**3.16±0.66**	**5.206**	**<.001**
EC	4.01±0.48	4.06±0.67	-0.507	0.661

RI	4.04±0.47	4.02±0.83	-0.195	0.843

Source: the author's own table, data extracted from SPSS

Table A V. Independent-samples t-test regarding educational level

	Bachelor's degree (n=113)	Master's degree (n=72)	t	p
PEU	3.92±0.62	3.77±0.69	1.459	0.146
PU	**3.63±0.72**	**3.25±0.60**	**3.720**	**<.001**
T	**3.86±0.53**	**3.53±0.61**	**3.841**	**<.001**
PR	**3.14±0.99**	**2.70±0.68**	**3.605**	**<.001**
EV	3.98±0.65	3.75±0.85	2.054	0.041
SI	**3.56±0.68**	**3.10±0.63**	**4.640**	**<.001**
EC	4.08±0.52	4.01±0.64	0.903	0.368
RI	4.04±0.69	4.00±0.64	0.363	0.171

Source: the author's own table, data extracted from SPSS