



Vaasan yliopisto
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**Consumer Engagement and Value Capture in Digital Food
Waste Platforms Across Different Cultural Contexts**

School of Marketing and Communication

Master's thesis in International Business

Vaasa 2024

UNIVERSITY OF VAASA

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Title of the Thesis: Consumer Engagement and Value Capture in Digital Food Waste Platforms

Across Different Cultural Contexts

Degree: Master of Science in Economics and Business Administration

Programme: International Business

Supervisor: Arto Ojala

Year: 2024 **Pages:** 93

ABSTRACT: This research provides several essential contributions to the fields of circular economy, sustainability, and digital platforms. First, it enhances our understanding of value creation in contexts such as food waste platforms, where network externalities and the buildup of stakeholder trust are crucial. By integrating previous theories on platform economics, this work enriches the literature on multi-sided platforms and offers practical advice for platform managers seeking to expand their services both locally and internationally. Secondly, the study reveals that culture can serve as both an advantage and a constraint for user adoption, highlighting the imperative need to develop specific strategies that account for local peculiarities in different countries. Therefore, it can be concluded that when expanding into foreign markets, strategies addressing cultural differences present opportunities for the sustainable growth of digital platforms and for maintaining reliable stakeholder interactions in the future. The study also provides valuable insights for other platform operators on how to increase user interactions based on behaviours analysed herein, as well as on the importance of heterogeneous local marketing strategies and approaches to enhance trust. The findings suggest that any platform targeting global markets must differentiate economic benefits, such as the lowest prices of offered foods, from culturally appropriate sustainability communications. Furthermore, many organizations have established or considered forming strategic partnerships with local entities as effective means of overcoming entry barriers and sustaining growth in new markets. For policymakers, this research underscores the importance of implementing circular economy measures to ensure that digital platforms contribute positively to achieving broader public goals, such as combating hunger and reducing waste. In conclusion, this study offers rich insights into strategies that create value within the circular economy context of food waste platforms, explores how digital solutions can facilitate two-sided markets, and discusses the management of the internationalization of digital platforms.

KEYWORDS: Food waste platforms, consumer engagement, value creation, internationalization, two-sided markets, sustainability, cultural differences, digital platforms

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1. Introduction

This first chapter is the background of the study and presents an introduction to the research topic. It includes the background which elucidates the relevance of the research topic and highlights the research gap. Based on this gap, the following research questions, and objectives of the study are developed. This is followed by a brief discussion of previous research work that has been conducted review of literature. The following section presents definitions of all the key terms used throughout the thesis. Last of all, the structure of the thesis is briefly summarized in the last chapter.

1.1 Background of the study

In today's world globally, food waste has become an issue of critical proportions and presents us with a major challenge to our environmental sustainability and resource efficiency. About one third of all food produced is wasted and the consequences for food insecurity and for the adverse environmental effects caused by the unnecessary consumption of water, land and energy resources from this unnecessary food consumption brought to stasis (Amaral et al., 2022). With a growing recognition of the environmental and economic cost of food waste, there has been a greater need for new, sustainable approaches to the problem. In response, food waste reduction digital platforms have been developed, which connect food waste providers and consumers, allowing for efficient resource use and value creation throughout the supply chain (Ciulli & Kolk, 2020). These platforms allow surplus food to be redistributed at reduced prices, in line with the goal of a circular economy in keeping with the sustainable development goals. Consumer engagement and value capture in the context of reducing food waste in digital ecosystems is the critical success factor and the key to sustainability of food waste reduction platforms. Consumer engagement, specifically, is key to sustain an active user base, and create network effects, i.e., an increase in user engagement on one side of the platform (consumers) facilitates the value and attractiveness for the other side (food providers). To address food waste, digital platforms are exploring these same channels, making it crucial to understand the mechanisms of consumer engagement and how value is captured in these platforms, given that these marketplaces are dual sided, needing engagement by both consumers and food providers to thrive (Ciulli et al., 2019). This study attempts to study how these engagement mechanism's function and what factors determine consumer behavioral responses, where there is limited work, especially when implemented in a digital food waste reduction platform and across different cultural contexts. In the literature on digital ecosystems and circular economies, the topic of consumer engagement in food waste reduction platforms represents an emerging field, which

existing research has posited that such platforms can shape sustainable consumer behavior. The food waste reduction platforms that are studied in this research give the consumers the opportunity to buy surplus food cheaper and provide the food providers with an alternative distribution channel for otherwise wasted resources (Amaral et al., 2022). In the social and environmental dimension, the dual process of value creation that depends on resource wastage, customer trust and sustainable business models aligns with objectives of the sustainability research in general (Ciulli & Kolk, 2020). Even so, there is lack of clarity around how consumer engagement and value capture work in these platforms, particularly in different cultural contexts where attitudes towards food waste and technological adoption are quite dissimilar. For digital ecosystems, value creation and capture are associated with several other factors that span the spectrum from trust and perceived risk. The literature shows that the acceptance of digital platforms by consumers is negatively affected by perceived risks associated with service quality and trustworthiness (Lăzăroiu et al., 2020; Shao & Yin, 2019). For example, when it comes to food waste reduction platforms, trust is especially important, because consumers may worry about the quality, freshness and safety of the surplus food products. Reducing food waste platforms can reduce risk to consumers, which will further increase the leverage of these platforms, allowing them to gain more customers and to increase the trust from consumers. Such trust is often built by being transparent about your food sourcing, food handling, pricing, etc, and clearly communicate how you as a platform play into sustainability and quality assurance (Närvänen et al., 2022; Boustani et al., 2022). The focus of this study will be on investigating the effect of trust and perceived risk on different levels of consumer engagement on food waste platforms, as well as how these factors might vary between Finnish and Estonian consumers, whose cultural and regulatory environments are very different. Similarly, cultural context has a major impact on digital consumer behaviors including user adoption and user engagement rates. International business and digital platform scholars have argued that consumer behavior is influenced by local cultural values, regulatory frameworks and market dynamics that could reinforce or constrain the adoption of the digital solution (Ojala & Tyrväinen, 2011). For example, attitudes towards food waste and sustainability differ greatly among regions, some may put great emphasis on sustainability practices and others less (Ojala et al, 2023). Finland and Estonia serve as an intriguing comparative setting in this study because they share a geographic proximity, but culturally (and for the function of this study, regulatory) they differ. This paper aims to address this gap by investigating how this understanding is applied on a food waste resources platform functioning in multiple countries (US and UK) to creating consumer adoption and engagement across diverse

domestic and cultural markets. In addition, digital food waste platforms are characterized by two sidedness and network effects, because value is co-created by the interactions between consumers and food providers. Thus, in platform-based ecosystems, network effects are key as the value perceived by one user group can be based on how the other user group participates (Ciulli et al., 2020). An increase in the number of participating food providers on food waste reduction platforms will lead to the increase in variety and availability of surplus food, which meets the needs of consumers. On the flip side, the more consumer demand there is, the more incentivized food providers are to participate in the platform, creating a positive feedback loop that creates the virtuous circle to keep growing the platform to be healthy (Amaral et al, 2022). In the case of a food waste reduction platform, this study characterizes the dynamics of these network effects and how they contribute to value capture. For developing the architecture of a successful digital platform, it is critical to understand these dynamics to help design platforms that not only attract users but also make them stay by building mutually beneficial interactions that increase the platform value.

In addition to the network effects, the internationalization of digital platforms faces several other difficulties relating to adapting to the conditions of the local markets. Entering international markets becomes an arduous task for digital platforms to scale and it's important to consider how their users' service engagement and overall platform growth will be affected by cultural, regulatory and competitive factors in those markets. Digital platforms have great difficulty in entering foreign markets mainly due to variations in consumer preferences, regulatory requirements and competitive landscape (Närvänen et al., 2022). This paper set out to explore how food waste reduction platforms can overcome these challenges by adapting their business models and value propositions to local conditions. The findings will discuss how digital platforms can strategize to scale sustainably and efficiently enter the market in various cultural contexts. By exploring consumer engagement and value creation in the context of a digital food waste reduction platform, this study offers insight into the more general literature for digital business models and sustainability. It fills in the research gap with respect to the adaptation of digital platforms to satisfy local market requirements and in line with global sustainability goals. Furthermore, this research provides practical insights for platform managers and policy makers how to develop effective engagement strategies to promote consumer trust, reduce perceived risks, and encourage sustainable consumption behaviors for a broad variety of cultural contexts. In this work, we explore the phenomenon of digital engagement and value capture in food waste reduction platforms, specifically examining what drives adoption, trust and

engagement amongst consumers. This research aims to enhance understanding about how digital platforms can attract and retain user engagement in different cultural and regulatory settings by conducting a comparative analysis of the consumer behaviour in Finland and Estonia. This study will explore these dynamics to gain insight into how value can be captured and deliver useful information regarding the design of sustainable business models that enable circular economy principles, promote consumer trust and accommodate value creation within two sided markets. Overall, this work is the latest addition to digital platform, sustainability, and international business studies, and presents a comprehensive framework for future research and managerial guidance for platform managers in food waste reduction.

1.2 Purpose of the Study and research questions

This research aim is to examine how the value creation impacts on consumption in online food waste recycling platforms with an emphasis on RESQ Club in Finland and Estonia. RESQ Club being an online platform is under a two-sided market model where they create value for the content owners such as restaurants and food vendors as well as the final users (Ciulli et al., 2020). In this regard, there are issues that affect these platforms as they go international which include the ability to attract and sustain user attention from a diverse geographical and cultural background (Ojala and Baber, 2020). Knowledge of how consumers respond to value creation in such different settings is crucial to the companies' success particularly in markets where trust and perceived risk are not constant (Shao & Yin, 2019; Lăzăroiu et al., 2020).

Further, it seeks to understand the larger picture of how processes of internationalization influence user interactions and sustainability of the platforms. As dynamics of digital ecosystems differ significantly from traditional markets, the role of culture in influencing users' behaviour and whether it mediates the impact of the platform on markets will be explored in this study. Therefore, as the work addresses how FWRPs business model and marketing strategies are adjusted to target consumers in different cultural backgrounds, the research shall be informative in the internationalization of digital platforms together with the approaches used in engaging the customers.

1.1.1 Main Research Question

This research investigates some key factors that determine the factors that lead to success of digital food waste platform, including the value creation and user engagement in different markets, to help

understand the dynamics of digital food waste platform. The study aims to answer the following questions:

1. What is the effect of value creation on the use of digital food waste reduce platforms by consumers?
2. How internationalization and cultural differences affect user adoption and engagement at FWRPs in Finland and Estonia?
3. To what extent does the creation of value distinguish the consumer interactivity on the FWRPs.

1.1.2 The objective of the study

Primary objective: The objective of the present research is to understand the role of the value creation concerning consumers' engagement in the context of FWRPs, with the key focus on RESQ Club from Finland and Estonia. Unlike other studies that primarily focus on the interactions between the content providers and the end consumers, this research will seek to leverage understanding of the platform's model to make an analysis of its internationalization and the usage patterns among users in different geographical and cultural environments.

To achieve the primary objective, the study is guided by the following sub-objectives:

Sub-objective 1: To study value creation on FWRPs, see what effects it has on consumer engagement and decision making in the two markets; Finland and Estonia.

Sub-objective 2: To analyse the impact of the two-sided marketing model of the platform where content providers and consumers are equally engaged in FWRPs, which builds a sustainable digital economy.

1.4 Definitions of Key Terms

In the section below, important concepts and their operationalisation are described, which offers the reader of this study an understanding of vital terms and notions used in it.

1.4.1 Food Waste Reducing Platforms (FWRPs)

FWRPs are online marketplaces which have been created for the purpose of repackaging and donating excess food items to the consumers whereby content providers are the food vendors like the restaurants and grocery stores among others. This plan seeks to increase efficiency in the reduction of food waste using technology through market-based solutions (Ciulli et al., 2020). The

challenge of surplus food distribution is addressed by FWRPs in the form of a two-sided transaction between content providers namely restaurants and grocery stores and other consumers (Ojala & Baber, 2020). These platforms have the environmental impact that they do not generate waste, in addition to the economic and social value of creating value for all the involved stakeholders as elaborated by Ojala and Lyytinen (2024). Services like FWRPs perfectly illustrate the possibilities of constructing the digital ecosystem based on food waste management by improving consumers' experience with friendly interfaces and providing them with valuable services (Ciulli et al., 2020).

1.4.2 Consumer Engagement

The degree of interaction, participation, activity and interest from a user to a specific online platform can be termed as consumer engagement. Finally, it can be defined as the level and the extent to which a user engages and engages with a platform to make his or her contribution to the system and to the longevity of the system. For digital platforms, such as FWRPs, it is crucial for consumers to be engaged since engagement increases user traffic, platform usage and satisfaction with the services obtained from the platform (Ojala et al., 2020). Some of the engagement factors involve trust, perceived value and site usability which motivates consumers and brings out commitment and increased investment (Ciulli et al., 2020).

1.4.3 Digital Ecosystem

A digital ecosystem refers to a set of several parties such as content producers and consumers, technology enablers/developers and other related players who experience value co creation through reciprocal transactions and/or interactions on a digital platform (Ciulli et al., 2020). In the case of platforms such as FWRPs, the digital ecosystem comprises of the excess food providers such as restaurants and the consumers who purchase these products through the support of a technological infrastructure (Ojala et al., 2020). The ecosystem success is based on the network externalities with the value that rises with the number of participants and their activity within the platform (Ojala & Lyytinen, 2024). Supply chain participants are interconnected through established information, resources and services that are flexible and modify as per the prevailing culture and market of participants' locations (Ojala & Baber, 2020).

1.4.4 Two-Sided Markets

Two-sided market is an online marketing system whereby two different groups, usually the sellers of content and the buyers, enjoy the benefit of the market that will create a linkage that will efficiently bring them closer. Such platforms work in this framework; connecting restaurants/food service

providers with unsold food to consumers who are, in turn, looking to purchase meals at a discount, which achieves the twin objectives of mitigating food waste and saving on cost (Ojala et al., 2020). The main value of two-sided markets connects with the concept of positive network externalities, which imply positive feedback between sides of a market (for instance, more restaurants with food), thus, creating a virtuous cycle (Ojala & Lyytinen, 2024). However, it shows that two-sided markets have more challenges in balancing the platform needs with the two sides at the same time as their constant change in different markets and across different cultures especially in international operations such as the ones carried out by RESQ Club in Finland and Estonia (Ciculli et al., 2020).

1.4.5 User Adoption

The term user adoption may be defined as the process through which an individual starts engaging a certain digital platform in his/her activities and becomes habitual to the platform. While technology is still in the developmental stage there are other end-user variables such as perceived usefulness, ease of use and trust and cultural variables with reference to end user of application such as FWRPs. This is because the decision to adopt a platform in the first place depends on the extent to which the needs of the user are met and the extent to which perceived risks associated with its services are minimized, for instance food quality of foods to be wasted in waste reduction platforms described (Pavlou, 2003; Kim et al., 2008).

Still, the degree of user adoption is also influenced by the network effects, which occur when users' engagement with the platform becomes more valuable as more users participate in it (Ojala & Lyytinen, 2024). The firm that operates in a two-sided market model like FWRPs must entice both the content providers and consumers, thus fashioning a kind of positive reinforcement whereby the adoption of one side will result in an increase in value to the other side (Ojala et al., 2020). Finally, there are cultural and geographical factors that have a role in determine user adoption because people from different cultural background and residing in different geographical locations have different preference and behaviours (Ciculli et al., 2020). Therefore, within a Finnish or Estonian market as an international market, there is a need to adapt to the consumers' daily use and their cultural practices that enhance the use of the application to be inclusive by many users (Ojala & Baber, 2020).

1.5 Structure of the Study

This master's thesis is structured into six chapters: **The first chapter** comprises of the background to the study, the literature review, the research method, the findings and the conclusion. Chapter one

provides the background to the study, research questions and objectives. It also offers the definitions of the terms associated to the research topic including value creation, consumers, engagement, and two-sided markets. This chapter aids in the process of creating a basis to evaluate the relevance of food waste reduce platforms such as FWRPs in international markets.

The second chapter to make a thorough literature review as a basis for the construction of the theoretical part of the work. This section summarises the previous studies on issues like digital platforms, user adoption, cultural adoption, and the interactions of the digital ecosystem. It offers a clear guideline of the conceptual framework that inform the research by following international business literature and studies platform-based economies.

The third chapter establishes the method that was used in conducting the study. It defines the research technique employed in the study along with an account of the rationale of choosing the qualitative research method to understand the functioning of RESQ Club in Finland and Estonia. This chapter provides an understanding of how data was collected through interviews with both the content providers and the consumers together with sampling methodology and data analysis methods that were used. Aspects of research ethics, and credibility, and dependability of the data collected are equally considered to make the study credible.

The fourth chapter provides the implication and conclusion of the research done. It assesses the data collected in interviews, targeting the effect of value creation on consumer engagement; and how cultural differences affect the users' adoption. The findings are grouped according to the research questions to reflect the major themes; the use of tables and figures to support key findings.

The fifth chapter offers a recap of the results derived from the research and carries a theorization of the findings made and their usefulness in analysing the contemporary business environment. It outlines how the research furthers knowledge in the domain of digital platforms and International Business. Besides, the chapter offers some directions that the existing digital food waste platforms, intending to enter the foreign market, can follow, as well as implications for future research and the study's limitations.

2. Literature Review

In this chapter, the theories and literature in digital platform, value co-creation, and consumers' engagement in Food waste reduce platforms are discussed. It then goes through the history of digital technologies and the emergence of two-sided markets and the creation of value proposition between content supply and demand. The present chapter then examines the antecedents of user adoption like trust, perceived value, and culture with reference to the international settings like Finland and Estonia. Besides, this review also evaluates the empirical research critically through assessing how cultural adaptation influences platform internationalization and consumer engagement. Finally, the conceptual framework is developed to justify the study where theoretical and practical research findings are combined to examine how value creation influences the consumer engagement on digital interfaces.

2.1 The Evolution of Digital Platforms and Food Waste Reduce Platforms (FWRPs)

There is the increasing adoption of technologies in the food waste sector over the past years due to advancing technology. Based on the case, social networks have become the factors that have a significant influence on the solution of the global problem of food waste with the help of means of digital communication, data exchange and transactions. Digital platforms are defined as technology-based business models whereby various user categories, mainly the consumer and providers, can exchange resources over the Internet (Amaral et al., 2022). These platforms act as a middleman and offer a framework within which participants can carry out business transactions, exchange information and can work together towards a cause. Looking deeper into the cases of FWRPs, they act as a tool that enables tackling the problem of food waste throughout different levels of supply chain (Sarti et al., 2017).

Digital platforms designed to combat this issue are gaining significant traction as they solve broad issues such as food waste and increasing sustainability. These are two-sided market platforms which connect the food providers with the consumers as intermediaries to close the gap of resource distribution at optimal efficiency. According to Amaral and Orsato (2023), apart from lessening food waste, digital food waste platforms create economic value for businesses through cost saving and increased consumer participation in sustainable practices. The circularity broker model as discussed by Ciulli et al. (2020) and further realized in this value further realized through digital platforms that allow for the recovery of waste across the supply chain and deploying a circular economy. These platforms help connect surplus food from producer to consumer to combat food waste directly at

its source and create a model of environmental stewardship and sustainable businesses (Bruno, 2019). Furthermore, digital technology is also used in the context of food waste management, which facilitates the practice of circular economy in different regional context. System dynamic simulation models, according to Ranjbari et al. (2024), can be used to analyse the influence of digitally enabled food sharing platforms in promoting a circular economy through their effects on waste management. These models are essential to explain the behaviour of the complex systems and the intrinsic scalability of these platforms. Yet, despite this, regulatory and logistical barriers remain in the adoption of platforms for platform adoption, as shown in Freitas et al (2024) study for Brazilian food waste reduction platforms. This work contends that although these platforms are powerful, they must be deployed with a view of the cultural, infrastructural, and policy constraints that shape such a deployment.

FWRPs come into limelight due to their efficacy in promoting circular economy in food waste. These platforms operationalize the sharing economy mechanisms for restaurants, cafes, retailers to sell food that would otherwise be wasted to end consumers at cheaper rates. The advantages that these marketplaces offer generate value for the suppliers who reduce food waste and loss as well as the benefits offered by the food delivery services to the consumers in terms of accessibility and affordability (Ciculli et al., 2020). Another important component that was identified as a key determinant of success of FWRPs is the involvement of actors in the system food producers, retailers, distributors, and consumers. Due to the ability of FWRPs to link the above actors, they help address the problem of wastage of food in a way that helps reduce its implications on the wellbeing of the environment and the economy (Principato et al., 2023; Ciulli et al., 2020).

It is also important to note that through the globalization of the digital platforms, has also contributed to the development of FWRPs. When FWRPs broaden operation regions, they face new cultural, legal, and market contexts. Such internationalization process can include the adaptation of these features to the legal, cultural and market contexts of the target countries (Da Costa et al., 2022; Trevisan & Formentini, 2023; Visconti et al., 2020). For example, while launching affiliates, it is expected that their target consumers' susceptibilities towards food waste and usage of the digital platform will differ. The contribution of FWRPs in the improvement of sustainable food practices is also positively related to the effectiveness of the intervention in reaching users in various settings thus supporting global Food Waste prevention initiatives (Amaral et al., 2022).

Besides, FWRPs are based on the larger and more well-known concepts of sustainable business models that consider ecological, social and economic sustainability. The appearance of FWRPs is also relevant to various global objectives, for instance the United Nations Sustainable Development Goals (SDGs), namely SDG 12, which provides to reduce food waste at least in half by the year 2030 (Principato et al., 2023; Ciulli et al., 2020). These platforms are helpful when it comes to sustainability since they help in minimizing food wastage and making sure that food that has been excess is gotten to the intended consumer. Thus, sovereignty and innovation also promote digital platforms in the food industry due to transparency and accountability since people can observe the availability and quality of foods in real – time and thus make the right decision (Sarti et al., 2017).

Furthermore, the contextual enablers embracing technological advancement in FWRPs are central to increasing their utility and flexibility. Fun items like mobile applications, geolocation services, and real time updates have gone a long way in changing how consumers engage with food waste reduction initiatives. For instance, mobile applications enable users to locate meals that have been in excess in restaurants, order for them and pick up the meals without so much struggle. Since these platforms are easy to use and available for different classes of users, their usage rates and hence their effectiveness are boosted (Da Costa et al., 2022; Trevisan & Formentini, 2023; Visconti et al., 2020). In addition, when reaching their maturity, they can leverage on big data for enhanced insights on user’s consumption patterns, logistics chain, and demand prediction with the aim of efficient and effective, food wastage prevention (Ciculli et al., 2020).

There are, however, issues which are associated with FWRPs’ success or effectiveness. The first challenge that these platforms experience is the dispersion of users across different platforms which affects the platforms’ growth. As correctly mentioned by Sarti et al (2017), the lack of a single monopoly player in the food sharing application market again disperses the user base which lacks the necessary critical mass to make serious impacts on the reduction of food waste. This fragmentation is also a problem for platform operators because the users are always looking for something new and there is always stiff competition to get the new people. Besides, obstacles related to institutions and management, including issues on food safety along with those on transportation, affect FWRPs as they expand (Principato et al., 2023; Ciulli et al., 2020).

2.2 Two-Sided Markets and Digital Ecosystems

Two-sided platforms have become a major trend shared by many Internet-based businesses. These markets are characterized by ‘two-sided networks’ where two different types of users benefit from

each other, in most cases the buyer and seller or the customer and producer. From two-sided markets, cross-network effects are defined as whereby the existence and activity of one user base can add value and appeal to the other user base (Rochet & Tirole, 2003). In this ecosystem, the platform plays a role of a mediator of the two sides, for instance consumers and the business entities. This model is especially relevant in industries involving the sale of surplus food products through FWRP which operates as go-between on behalf of food suppliers including restaurants and supermarkets, and customers purchasing the discounted products (Amaral et al., 2022).

As mentioned earlier, Two-Sided markets are characterized by positive cross-side externalities where an increase in demand for a particular side result in an increase in demand in the other side as well. For instance, where FWRPs are concerned, the more consumers that are onboard, the more food suppliers want to participate as this will be beneficial for all the parties involved (Chu & Manchanda, 2016). Oppositely, as progressively various quantities of food suppliers distribute the surplus food at cheaper prices, greater number of consumers visit the platform. This dynamic interaction between supplier and consumer enhances the continuity and growth of digital platforms such as FWRPs that targets to reduce food waste through marketing relevant food from local businesses to consumers. Nonetheless, representatives of two sides must be maintained and developed to keep them actively using the platform, as their lack of interest can negatively influence the ecosystem participants (Evans & Schmalensee, 2010; Hagiwara & Wright, 2015).

The significance of digital ecosystems as part of the perspectives on two-sided-market cannot be overemphasized. Digital ecosystem is a wider context which consists of interacting stakeholders, technologies and platforms that strengthen their interdependent and co-evolve to share the value creation in the context of a given platform (Autio et al., 2018). These ecosystems go further than the platform and its key players, such as logistics, payment systems, and advertising agencies, that improve the platform and its users' experience. Network effects and synergy of services determine an ecosystem's health and success, as the services enable users to engage with other users efficiently and effectively (Ojala et al., 2020). Digital platforms such as FWRPs escalate internationally; they must consider local demands which are unique to each ecosystem these include regulations, culture, and customer relations concerning the platform and devices they use.

Another classic problem that becomes evident in many platforms of a two-sided market is the 'chicken and egg' problem in which the platform cannot exist in a meaningful way until it obtains users from both sides of the market. There are also related problems such as the "chicken-and-egg"

dilemma That is, if there are not enough suppliers, consumers are not interested in the platform, and if there are not enough consumers, suppliers are not interested in the platform either (Evans & Schmalensee, 2010). Issues like these need to be solved in the case of platforms like FWRPs, which should employ strategies allowing approach enough utility providers and users from both sides at an early stage of the platform for free, using transactional cost incentives like discounts, promotions, or special offers. In this way, the platform can generate a positive feedback mechanism of network effects that, on one side, increases network size within a particular business and, on the other, generates a proportional growth of the other side's network size (Song et al., 2018). Further, it may use pricing mechanisms to tip markets, meaning that one side of the platform gets to operate at a loss, in a bid to entice participants. For example, FWRPs charge relatively less from the food suppliers to join the platform and take a cut from consumers through freemium model; another strategy used in two-sided market where one side pays while other side is charged for the premium services (Amaral et al., 2022).

Digital ecosystems also have specific importance in maintaining two-sided markets because apart from the interactions they can supply the execution environment for users. These ecosystems are known for their open closed-door policy, which allows other third-party services to be integrated into the platform, which in turn helps platforms to offer users almost all necessary tools and services (Rong et al., 2018). For instance, the extended electronic environment of FWRPs comprises of mobile Apps, real-time stock position, payment gateway solutions as well as delivery systems that enhance the value proposition of the platform. Platforms also go further to support the diffusion and coordination of different actors within the ecosystems and this in different ways help in the enhancing of experience, efficiency or even innovation (Kapoor et al., 2021).

Understanding digital ecosystems requires a deep understanding of two-sided markets wherein platforms act as an intermediary between different user groups and gain network effect to drive engagement. As Crane (2024) states, it is important to define relevant markets in digital ecosystems, because this is necessary to evaluate platform dynamics, to understand how the platform can manage cross side network effects and to achieve sustainable growth. In Digital ecosystems the increase of one consumer group, e.g. content provider, increases value for another consumer group, e.g. end user, (Parikh, 2019). For Food Waste Reduce Platforms (FWRPs), this dynamism has the benefit of enabling platforms to add value by adding surplus food to their availability to attract more consumers who desire sustainable consumption and via the same platform incentivize food

providers to waste less. Additionally, as Hein et al. (2020) state, they gain value within the ecosystem of digital platform ecosystems if the structure of the interdependent roles of stakeholders in these ecosystems is well structured, trust is created, and the value proposition of the basic platform is increased. Through the complexity of complex relationships amongst consumers, content providers and other participants, FWRPs must work together in creating a cohesive digital ecosystem that promotes sustainable practices for FWRPs to succeed.

Song (2019) delineates the approach of the 'Digital Entrepreneurial Ecosystem' as an evolving framework for platforms, including FWRPs who repeatedly redefine their business models to accommodate changing user preferences, regulatory environments, and their influence. As FWRPs evolve across cultural and geographical boundaries, these ecosystems must overcome the platform governance and regulation problems as highlighted by Vimarlund and Mettler (2017). In two-sided markets, however, this adaptive capacity is crucial: platforms not only act as an intermediary but are knit into the definition of market standards and what users expect (Hein et al., 2020). Lastly, with an impending growth of sustainability awareness and initiatives emerging in digital ecosystems, and specifically in FWRPs, designing and modelling such platforms based on the principles of balancing consumer engagement and ecological impact is of paramount importance to understanding value creation in two sided digital ecosystems.

The increase of digital platforms in two-sided markets increases the level of complexity in its internationalization. When platforms went global, they must consider the local characteristics of the environment they are entering; the consumers themselves, the regulations as well as competitors. This has been found to be important so that the platform can succeed in the competitively evolving two-sided markets (Autio et al., 2018).

2.3 User Adoption and Consumer Engagement

The information concerning the concept of user adoption as well as the consumer engagement is vital when thinking of the sustainability of such platforms as FWRPs. The first concept is user activation, which pertains to the first moments of utilization of the digital platform, while the second is consumer participation that measures how actively the users engage with the platform, in this case leading to repeat use. Both concepts are pivotal in platforms such as the FWRPs, where users are divided into two categories: buyers and sellers of content as well as the ultimate users of the content who are the audience (Venkatesh et al., 2012; Hein et al., 2020).

A review shows that the extent to which the new technology platforms are used is a function of perceived value, trust and culture, ease of use and culture. In platform such as FWRPs, which is available in different geographic regions including Finland, Estonia among others, there is a lot of variation in the kind of reception and acceptance the platform receives depending on the cultural differences in those regions. Hollebeek et al. (2019) have revealed that the rate of users acquiring a given platform is determined by its cultural matching and utility to the platform users. For example, when it comes to delivery of information about a platform, the ability to present its value proposition in a manner that is in harmony with the consumer behaviour in a specific geographic location is likely to enhance the performance of the platform in new markets (Helmold & Helmold, 2020).

Consumer engagement, however, differentiates from just adoption since it refers to the existence of a continuous relationship between the user and the platform. Whereas consumer engagement is more than simple adoption, it includes the continued interactions of the user and with the platform. We often quantify engagement through the number of times users interact with the platform the 'touches' of the platform as well as the depth in which they engage, and their emotional attachment to the brand (Roy et al., 2023). For FWRPs it is essential to involve consumers for the development of the ecosystem in which both providers of content and consumers themselves can gain tangible benefits from the platform. The key engagement techniques include use of incentives, provision of convenient means through which clients can access services, and nurturing; all which has been proven to enhance the overall retention rate, and, therefore, customer loyalty (Kim & Drumwright, 2016).

However, research notes that FWRPs calls for the reduction of perceived risk that may affect the likelihood of the users to engage with and use the App and it is particularly important where the App has been developed for the food-related services. It is found that when a user's discomforts of food safety, quality, and trust are allayed, they are more inclined to use a platform (Amaral et al., 2022). Thus, the stronger external linkages and the more transparent the organization's activities are, the greater the likelihood of users being loyal to the platform and inviting their friends to use the platform.

2.3.1 Cultural Differences in User Adoption

This is an essential factor that impacts the uptake of products mainly for social media firms that are extending their services to other countries. Cultural preferences thus emerge as a relevant factor for dynamics of digital platforms as they go international. For instance, a mobile applications of FWRPs

needs to acknowledge how such factors affect the perceptions and behaviour of customers. There are cultural differences in the acceptability of availing digital services and products, and this depends on, Technology usage, Culture and online shopping. As highlighted by Shaheer and Li (2020) cultural, administrative and geographical distance is a functional barrier that firms experience in the process of introducing digital platforms in foreign markets affecting the process of user adoption.

People's culture in relation to consumption patterns and their engagement with technology might influence the usability of the platform regarding the number of users that will adopt it (Amaral et al., 2022). It is highlighted that while analysing the overall impact of digital platforms it has been evidenced that even when the platforms are technologically capable of operating on a global level, cultural factors can either encourage or discourage the use of these platforms (Sarti et al., 2017). For instance, the Japanese consumers are more likely to embrace the new technologies than the European people since they have embraced the technological growth (Da Costa et al., 2022; Trevisan & Formentini, 2023; Visconti et al., 2020).

Again, cross cultural issues play a role in the level of trust which is a key variable in the ability of persons to adopt various digital services. Therefore, it is understood that to build trust with the help of digital tools and platforms, localized marketing activities, including translation of the text or reference to cultural codes would be required. Shaheer and Li (2020) assert that for the same platform, a simple act of translating the language used to the local language can go a long way in making sure that users adopt the platform; or not, depending on other factors namely: local price sensitivity and the process of establishing credibility. This is true especially with the kind of platform they are using such as the Indian based RESQ Club that depends on its users' content and interaction. Users may have different levels of trust in the digital platforms they are using. The level of trust depends on the culture of online transaction and perceived risks.

2.4 Theoretical Perspectives on Platform Internationalization

Platform internationalization entails the process of taking an existing digital platform and expanding it and its functioning into various other countries different cultural contexts. It is therefore important to understand the theoretical fundamentals of this process if indeed platforms such as FWRPs aims at posing its operations in foreign locations such as Finland and Estonia. In this section, it will be necessary to present the most relevant theories and frameworks known in the field of international business, platform economics, and network science, which could explain the internationalization of digital platforms. Such theories were chosen since these theories can be used to explain how firms

achieve growth, operate in different cultures, and how they overcome challenges associated with multi-homing environments (Vahlne & Johanson, 1977; Rochet & Tirole, 2003; Sarasvathy, 2001).

2.4.1 Uppsala Internationalization Model

The Uppsala Internationalization Model is widely regarded as one of the best-known models in the international business theory. It elucidates how firms begin a gradual internationalization process of expanding their operations in a stepwise manner in geographically or culturally proximal global market (Vahlne & Johanson, 1977). This model underlines practice acquisition, and organisational learning as a firms internationalise. In the context of the internationalization of FWRPs the Uppsala model can give an understanding on how the platform can enter new countries by initially targeting Estonia that is geographically and culturally closer to Finland. To this end, this model possesses the platform an ability to manage and insulate itself from risks because it acquires market knowledge in small doses and continuously refines its operations based on the knowledge gleaned from one market at a time (Johanson & Vahlne, 2015).

Thus, while the Uppsala model is a useful framework for understanding many companies' internationalizations process, one of the major concerns is that the model might not adequately explain the processes of digital platforms, which can expand very quickly, without the direct physical establishment in multiple markets. In contrast, FWRPs do not require significant tangible assets since they are built on digital environments that enable them to internationalize at a very fast pace with lesser tangible assets. However, the overall concept of learning and gradual adjustment can be considered even more applicable in the case of cross-cultural interactions and overcoming user adoption issues in new markets (Ojala, 2020). It is for this reason that this study uses the Uppsala model to examine how digital platforms may internationalize step by step and at the same time, continue to utilize their digital status to internationalize much faster.

2.4.2 Network Theory

Network theory is highly applicable in new age digital platforms which draw heavily on the concept of network externalities – whereby the value of the network increases with each added user. This theory proposes that firms internationalise to become affiliated with networks that offer resource, information about markets and selling channels (Hosseini & Dadfar, 2012). When applying the context of platform internationalization, theory of networks makes it easier for one to understand how it is possible for an organization such as FWRPs

to leverage on partnerships to expand to different markets. Through partnering with local businesses and stakeholders, the platform can avoid some of entry barriers for example reference to cultural differences and/or regulation (Ojala & Tyrväinen, 2011).

The network theory has more focus on the relations which are more closely related with the theory of two-sided markets, in which the FWRPs must form the relations with contents providers such as restaurants and grocery stores as well as consumer. Hence, with the help of cooperation with businesses and organizations in Estonia, FWRPs can establish the beneficial network that will broaden the appeal of smart solutions for both the buyers and the sellers. The network theory is especially relevant in understanding how digital entrepreneurs manage the process of internationalization through the development of new networks linking existing structures to expand their operations while managing the risk that is inherent in the process of entering new markets (Autio et al., 2018).

2.4.3 Platform Economics and Multi-Sided Markets

Knowledge of platform economics is crucial to analyse the process of internationalization of digital platforms. This theory mainly highlights how such platforms play the role of a broker between two and more consumption communities and generate value for every participant (Evans & Schmalensee, 2010). For multiple sided platforms such as FWRPs, internationalization comes with the task of balancing between the supply side which comprises of content providers namely businesses with surplus foods and the demand side which is the consumers. The existence of externality and the problem of coordination is a main theme in the theory of multi-sided markets, which explains that, an increase in the quantity on one side of the market (for instance, consumers) is valuable for the other side (for instance, content providers) (Rochet and Tirole, 2003).

Where platform internationalization is concerned – that is expanding into a new geography bringing changes in regulatory conditions, cultures or other operational factors this is where platform economics helps in fathoming on how to sustain the new issues. For instance, depending upon its efficiency in creating network externalities that can pull in Estonian food suppliers and consumers, FWRPs success in breaking into Estonia has been phenomenal. Knowledge of the multi-sided platform is useful in how FWRPs can change the price models, promotion, and services that are favourable by users in several countries (Amaral et al., 2022). This theoretical framework is very

valuable to understand how platform manages the balance between different users while going global.

2.4.4 Effectuation Theory

Another theory that can support the argument is the effectuation theory because it mainly deals with decision making of entrepreneurs in situations of great uncertainty. What this theory is postulating is that instead of trying to foresee the future, the entrepreneur should instead adapt the strategy of steering the future by influencing what he or she has control over today, which is the resources that are available and partnerships that minimize the act of uncertainty (Sarasvathy, 2001). In the case of digital platforms such as FWRPs, the concept of effectuation theory advocates for the internationalization strategies by undertaking small tests in the new market rather than attempting to model the market and its consumers perfectly. This approach is especially relevant for the platforms that face high levels of uncertainty in the markets they are targeting and/or operate in environments that are changing rather constantly and rapidly, so that the results of more traditional market research may not be enough to help navigate the business through this uncertainty (Oviatt & McDougall, 2005). This theory stresses on the point that it is must to being willing to take opportunities and adapt based on the feedback received from the market which is highly beneficial for the success in this highly competitive world of digital media marketing (Fisher, 2012).

2.5 Relevance of These Theories for the Study

The theoretical frameworks described above are pertinent to the analysis of the internationalisation of FWRPs as well as of other digital platforms operating in multi-sided markets. For the initial approach to internationalization, there is the more popular Uppsala model where the idea of gradual expansion is depicted while for the strategic value of relationship building and leveraging on local networks to enter foreign markets depicted by the network theory (Hosseini & Dadfar, 2012; Johanson & Vahlne, 2009). Platform economics provides information about multi-sided markets and growth of platforms to manage customers' demands in different countries (Evans & Schmalensee, 2010). Last but not the least, the technique of effectuation is more effective than causation in the uncertain environment because it requires the ability and willingness to work in a flexible manner which is vital for the digital platforms existing in the dynamic and constantly evolving marketplaces (Sarasvathy, 2001; Fisher, 2012).

2.6 Conceptual Framework of the Study

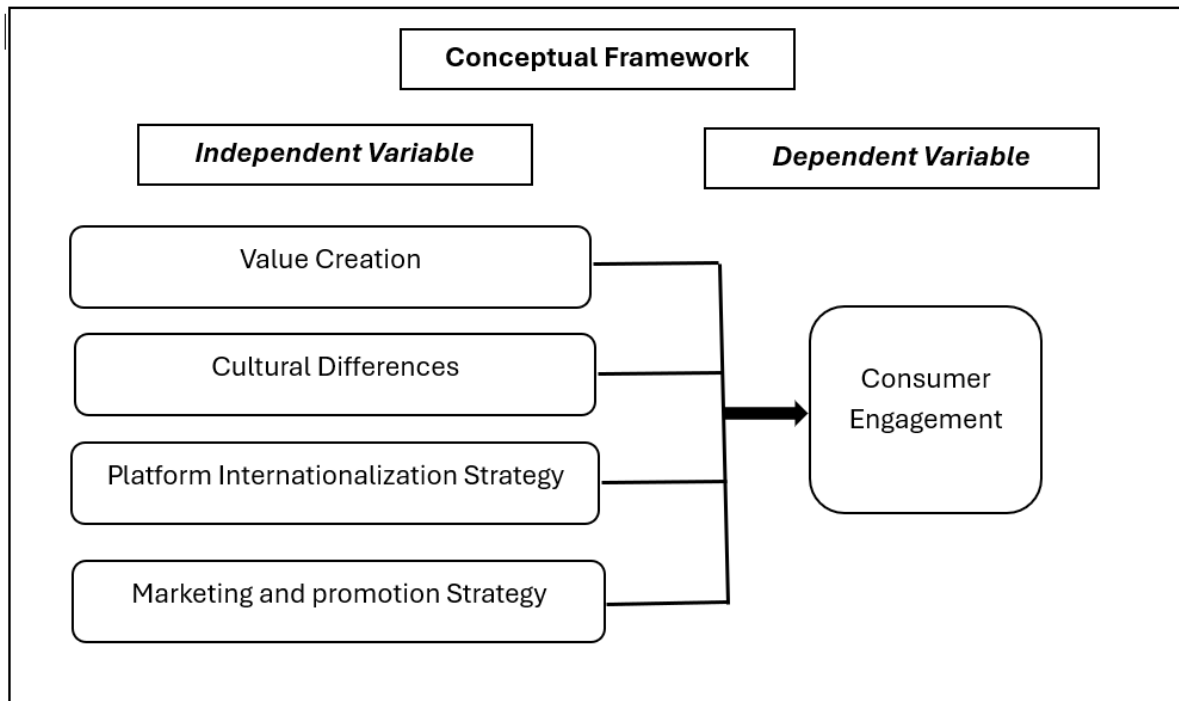


Figure 1. Conceptual Framework for the study

The literature analysis demonstrates how the digital platforms, especially FWRPs, internationalize and create value and engage consumers. The operation of these platforms is in a multi-sided market where one side is the owners of content (for instance restaurants, grocery stores) while the other side is the consumers. These include: The internationalization of these platforms, and how successfully they can enter various markets, for instance, Finland and Estonia is dependent on how they relate with the external and internal factors present.

Indeed, and from various literature reviews that have been made in this paper, it is evident that value is a major determinant in the consumer engagement. This perception of value of the surplus food offerings, compounded with the cost structures of the online platform, make up the core appeal of this business model for both the consumers and business partners (Rochet & Tirole, 2003). Cultural differences remain another factor to consider, given that the consumers' perception of wastage of food and use of technology varies from one country to another. It is crucial to appreciate these cultural dynamics to achieve user uptake and platforms viability in emergent markets (Shaheer & Li, 2020).

From the present theoretical models, for instance the Uppsala Internationalization Model, network theory, and platform economics, it is evidently understood that whilst developing international strategies, competition and cooperation are equally vital for success learning processes as the exploitation of existing networks and partnerships. That is, where developing platforms such as FWRPs, it is necessary to cooperate with food suppliers, as well as to investigate the general legal conditions of the regions (Johanson & Vahlne, 1977; Hosseini & Dadfar, 2012). Other variables that also have a bearing on consumer engagement include trust and perceived risk. Innovative platforms that can create a trustful marketplace through admitting information, reviews from other customers, and food safety measures will have a higher relative engagement from the clients (Amaral et al., 2022).

3. Methodology

This chapter gives information about the methodological approach used in the context of the study on the internationalization of digital platforms that primarily is associated with the FWRPs food waste reduce platform. It starts with the description of the chosen qualitative research method to study how value creation influences the customers' engagement. The research method is mainly built upon the semi-structured interviews with both content providers and consumers in Finland and Estonia as the main countries of focus. Building on this, the chapter then proceeds to discuss the research design strategy with a special focus on the use of case studies to gain rich understanding of the user adoption and platform internationalization. Interview design and sampling are discussed in the following sections wherein information on how the participants were chosen to represent each side of the platform are provided. Subsequently, the chapter describes the ways in which the qualitative data were analysed, with reference to coding and thematic analysis. Finally, the chapter is concluded by the consideration of the quality of the research where reliability, validity, and the impact of the potential use of the AI tools in the given study are concerned.

3.1 Research Philosophy

Following this introduction, the paper adopts a research philosophy that is called "Qualitative Positivism;" a fusion of both qualitative and positivist research philosophy. Qualitative positivism has been described as suitable to research situation that necessitates a technical appreciation of the reality social, and which does not involve quantitative research techniques like surveys or tests but involve interviews and observations. This is the kind of mixed method approach that scholar such as Piekkari and Welch (2018) postulate and Prasad (2002) saying that only the research or the research framework can be positivist while the contexts under study are naturally sociological. The approach involves the conduct of qualitative research to capture the essences of structures of the society while at the same time aligning with the positivist view towards the validity of results, objective findings among research (Chandra & Shang, 2019). This has proven to be a perfect philosophy fit for the current study that seeks to understand the dynamics of digital platforms across borders. Qualitative positivism is considered by Su (2018) as a moderate form of research that is embedded into actual settings while at the same time utilizing theoretical concepts for the interpretation of collected data. Traditional positivism on the other hand concentrates mobile positive variables that can easily be measured and evidenced. This makes it an especially appropriate approach to use to study digital

ecosystems and platform internationalization in dynamic environments characteristic of the increased digitization and globalization of the modern world.

3.2 Research Methods

This research study uses a qualitative research approach in the framework of qualitative positivism. To get rich insight information about the actual situation of the case and the dynamics of the platform internationalization and consumer activities in the digital platforms, the qualitative research approach is more appropriate. The choice of the qualitative method found a good synergy with the intended aim of identifying with key stakeholders in the FWRPs comprising of the content providers and consumers in Finland and Estonia. Semi-structured interviews were selected as the main data collection method with the focus on keeping the main directions of the conversation oriented while also enabling a free choice of topics by the participants. This approach helps in gathering abundant data which is connected to the context and can be analysed qualitatively. Moreover, the application of qualitative studies enables understanding of cultural aspects and details of users' engagement across geographic regions, which does occupy a special interest for the given research on platform internationalization and users' adoption (Lobe et al., 2020; Ridder, 2014).

3.3 Research Strategy

Given the uniqueness of operational approach of RESQ Club in the food waste reduction sector, this study selects the context of RESQ Club as an exemplary case to explore the dynamics of consumer engagement and value capture on digital platforms. Unlike traditional business models, food waste reduction platforms such use the sharing economy concept efficiently to connect consumers to surplus food from local providers. Further, this approach is consistent with recent trends towards sustainability, making it an important case for considering how two-sided platform can help society to achieve environmental goals. Food sharing platforms may exhibit complex cross-side network effects: the more participants there are on one side, the more valuable the platform becomes for the other, and as Mullick et al. (2021) find, this provides helpful clues to what is driving engagement and how within the multi-sided market structure. Therefore, this selection provides in depth exploration of a platform that innovates beyond only refrigeration of unsold food but is a manifestation of the sustainability goals that are at the heart of current digital ecosystem studies (Maia, 2020; Michelini et al., 2023).

In addition, FWRPs digital platform nature operating as a food-sharing marketplace across Finland and Estonia, enable the analysis of digital platform market entry and adaptation in an international setting, and development of appropriate platform-based growth strategies in different regulatory and cultural environments. The existing literature on digital platforms in the sharing economy recognizes the importance of localized adaptation leading to user trust and platform effectiveness in socio-cultural contexts that have different cultural orientations towards sustainability and digital transactions (Orsato & Amaral, 2023; Meshulam et al., 2023). This research focuses on a platform that is negotiating aspects of these international complexities, and the strategies generated are applicable for global platform scalability, but also provide a unique vantage from which to examine how platforms can utilize collaborations and partnerships in culturally situated ways (Principato et al., 2023; Bruno, 2019). But, more than an isolated operationally distinct case, RESQ Club is a relevant and timely example of the broader trends in a digital economy and sustainable business practices.

A case study is most preferable when describing complicated real-world occurrences in their specific environments, particularly if the division between the phenomenon under analysis and the context it is studied in is unclear (Yin, 1994). As platform business models are relatively new in international markets, this approach provides an understanding of the processes, decisions, and strategies used by RESQ Club in its process of internationalization (Doz, 2011). The case study approach will allow for developing a deep, qualitative insight into the issues of scaling in the context of the RESQ Club's experience, both in terms of adaptation to different markets and network management on multiple sides. This approach allows for an understanding of operational practices of a particular organization and the generation of ideas that are tailored to the organization's given context.

3.4 Research Process

3.4.1 Sampling

In this research, purposive sampling was used so that only the respondents who could readily inform the research on RESQ Club's internationalization and consumer engagement were sampled. This method was used because the target participants had first-hand experience of using the platform as either consumers or content creators and could provide important data on the research questions. Convenience sampling is mostly suitable for those case studies that call for investigation of aspects within depth which makes certain that, only the respondents who meet a specified need are only chosen (Eisenhardt & Graebner, 2007).

The subjects of this study comprised of 5 consumers drawn from Finland and 3 from Estonia. These individuals were selected because they have recently been using RESQ Club platform to purchase food in their countries which means they would best understand how the influence of culture may impact the usage of the platform. Moreover, five restaurants of Estonia and ten restaurants of Finland were selected as content providers. These businesses were chosen based on their past activities of supplying surplus food by way of the RESQ Club platform, which provides them valuable insight into how such a platform functions in various markets (Doz, 2011). Recruiting participants from both consumers and content providers, the study provided insights into the context within which RESQ Club operates in. The participants were recruited using email and social media where RESQ Club is active. Recruitment was done based on simple criteria: all targets were drawn from real users who were engaged with the platform for more than six months.

The duration of the engagement allowed participants to offer rich data in terms of their experiences and overall impressions toward the usefulness of the platform and challenges to using it. Thus, it corresponds to the purposive sampling technique, which aims at obtaining unique, dense, and detailed information from qualified respondents (Lobe et al., 2020). When choosing the restaurants, more attention was paid to establishments which actively used the platform posting over 50 items over the course of 12 months. This criterion made sure that the produced sample consisted of content providers with great understanding of how the platform operated. In Estonia, focus was made on local, less centralized venues to observe how RESQ Club adapts to different business climates while, in Finland, restraint and larger chains were used to get a general view of the versatile applicability of the platform in the home market. The geographical distribution of the sample was important in analysing how RESQ Club adjusted its platform to the completely different cultural and market contexts of Finland and Estonia. Through having participants from both countries, the study was able to look at local factors which include regulatory environment, consumers and competition which influence usage and platform success (Romanello & Chiarvesio, 2019).

Table 1. Overview of Interview Participants

Participant Type	Category	Country	Time Using RESQ Club	Average Monthly Usage/ Listings	Primary Reason for Using/ Joining	Other Demographics

Consumers	Frequent User 1	Finland	6 months	5+ orders/month	Price and convenience	Age: 25-34
	Casual User 1	Estonia	1 year	10+ orders/month	Environmental concerns	Age: 35-44
	Frequent User 2	Finland	8 months	5+ orders/month	fair price, saving food that is going to the waste	Age: 25-34
	Frequent User 3	Finland	1 year	7+ orders/month	Price and convenience	Age: 25-34
	Frequent User 4	Finland	1 year	5+ orders/month	Convenience	Age: 25-34
	Frequent User 5	Estonia	10 months	10+ orders/month	Environmental concerns	Age: 35-44
	Frequent User 6	Finland	1 year	7+ orders/month	Price and convenience	Age: 25-34
	Frequent User 7	Estonia	10 months	10+ orders/month	Environmental concerns	Age: 35-44
RESQ Club Platform Providers	Small Business 1	Finland	1 year	50 listings/month	Reducing food waste	Restaurant Size: Small
	Chain 1	Finland	2 years	100 listings/month	Increasing revenue	Restaurant Size: Large
	Small Business 2	Finland	1 year	50 listings/month	Reducing food waste	Restaurant Size: Small
	Chain 2	Finland	2 years	100 listings/month	Increasing revenue	Restaurant Size: Large
	Chain 3	Finland	2 years	100 listings/month	Increasing revenue	Restaurant Size: Large

3.5 Data Collection

Semi-structured interviews were used to gather primary data in this study; the technique is recognized for its ability to offer in-depth qualitative data which can aid understanding of real-life issues or events (Su, 2018). Semi-structured interviews are suited for this study because they offer the interviewer the flexibility of a conversation while still maintaining structure; that is, the participants can give a narration of their experiences with reference to the study objectives (Yin, 1984). The data collection process took about 3 months from June 2023-August, and participants consisted of 8 respondents. Consequently, 5 Restaurant managers and 5 consumers from Finland and 3 consumers from Estonia were interviewed. All the Finnish restaurant managers were e-mailed prior asking them whether they were willing to participate in the study and if they agreed, a mutually convenient appointment for the interview was arranged and conducted face to face at their restaurants. Such interactions were conducive for the development of better rapport, the researcher was able to capture both verbal and nonverbal feedback and currents as well as develop rapport which enhanced the data collected. All interviews took between 45 minutes to an hour, and with the interviewees' permission, each interview was tape-recorded to minimize omissions and one hundred percent data capture. In the case of the Finnish consumers, face-to-face interviews were conducted in relaxed environments that the participants seemed comfortable with, away from workspace interference. These interviews were conducted with permission from the participants and like the restaurant managers' interviews employed a semi-structured interview technique allowing the participants to express their views and experiences regarding their consumption of ResQ Club. Since the current research is limited by the geography of Estonia, the interviews with the consumers were conducted in an online format using the Zoom application. With the advent of social media and other online media platforms, the use of online media in qualitative research is very valid and convenient due to the flexibility offered by time and place and live interaction (Lobe et al., 2020). The Estonian consumers were interviewed one to one and the interviews took approximately 30 to 45 minutes per consumer. Scheduling and conducting online interviews are convenient but there were certain disadvantages in it; there was a problem with gesture observations, but video conferencing enabled me to observe body language. All the online interviews were also audio graphed by the participants and later, the audio-visual recordings were transcribed.

To compare the opinions of consumers, on one hand, and restaurant managers, on the other, two sets of interview questions were developed which would make the data collected more relevant to

each of the two categories of users of ResQ Club. Consumers' related variables of interest were platform use, reasons for using ResQ Club, and perceived satisfaction with the service. While the operational issues, interaction with the platform, and opinions on the purpose of the platform for combating food waste were asked by restaurant managers. The interview questions for all the sessions were framed from the research questions themselves, with three major areas discussed: platform use, consumer engagement and cultural context of platform use. The questions posed during the survey were mainly exploration in nature, or the respondents gave rather elaborate case studies of operations with ResQ Club. While there were disparities in the questions on the two questionnaires, both sets were structured to capture insight on how the platform interfaces with the other conservation stakeholders and the perception that other players in food waste had towards the initiative. After the interviews, the audio tapes were transcribed to produce copies of the actual interview conducted. These transcriptions were made as early as possible to reflect the intact responses as much as possible. Transcripts were returned to the respondents for their review and validation as a measure to maintain the quality of the data. Any edit made or additional information sought by any participant was incorporated into the final transcriptions. Not only did this process improve the quality of the data but also recruited people into the study and developed a sense of credibility. Conducting interview travel surveys through both interviews and online, this study painted in-depth qualitative data of the ResQ Club and gave information on its operational discipline, managerial approach, and usage experiences. The choice of face-to-face interviews with the restaurant managers and Zoom interviews with the consumers offered convenience and accommodation. This method helped to identify the features of the platform use and, thus, revealed its adoption and engagement patterns in both the Finnish and Estonian national contexts.

Some limitations could be identified for the study; firstly, the authors could not interview any Estonian restaurant managers because of time constraints and practical difficulties. This limited the extent to which independent content provider's points of view could be gathered in Estonia.

3.6 Data Analysis

This study has a very important data analysis phase, in which it systematically extracts and interprets insights from the semi structured interviews. This is to address the core research questions and objectives of this thesis by identifying recurring themes, identifying differences of responses, and relating these findings with the theoretical framework that grounds this study. Thematic analysis is approached as a method for the analysis of this qualitative data in this research because of its

suitability for the evaluation and interpretation of complex qualitative data sets. The flexibility and structured methodological approach of thematic analysis is valued for its ability for researchers to explore patterns across diverse approaches to qualitative data synthesis (Clarke & Braun, 2017; Terry et al., 2017). The six step thematic analysis framework (Clarke & Braun, 2017) is utilized to properly analyse the data. The process is iterative, familiarizing with the data, generation of initial codes, searching for themes, review of themes, definition and naming of themes, and final production of detailed data report. The research questions and objectives drive each stage of this process, so after applying the findings one will know whether they are relevant and meaningful.

3.6.1 Familiarization and Initial Coding

The analysis was started by familiarizing the researcher with all the interview notes and transcripts. We needed to go through this process to understand more about the data and identify first impressions and potential themes. Not all interviews were recorded because some participants raised confidentiality concerns. Rather than that, detailed notes were recorded, and immediate summaries were generated after interviews. As per Saunders et al. (2009), this practice follows these scholars' point that qualitative data should be summarized and organized to facilitate meaningful analysis. After familiarization with data, the initial coding was done. In this stage, key pieces of data were labelled and identified with descriptive codes corresponding to crucial points with regards to the research question. As suggests by Saldaña (2016), initial coding captures the most prominent pieces of data. Analysis by descriptive and process coding showed actions, perceptions and attitudes of interviewees on all major themes of the study.

3.6.2 Theme Development and Second-Cycle Coding

After the initial coding phase was done, the data was reviewed to determine which patterns and connections were shared by the codes. Second cycle coding, or this phase, included the grouping of codes into preliminary themes. Maguire and Delahunt (2017) define a theme as a recurring pattern of information that encapsulates a single point worthy of attention in the data and or integrates specific research questions. This study proposes themes related to the core areas of consumer engagement, value creation and sustainability practices impact. These themes were refined by the second-cycle coding via pattern coding. Pattern coding links larger data segments and helps create explanatory constructs in qualitative research (Miles et al., 2018). Consequently, a similar group of themes e.g. 'perceived economic value' and 'sustainability driven engagement' were identified and used for this study which shed light on participant's motivations and barriers.

3.6.3 Reviewing and Defining Themes

Once we identified the initial themes, we reviewed and refined those themes to assure that they represented the data accurately. By cross referencing themes with some of the discussed theoretical frameworks and literature in the study it was able to assess how the empirical findings relate or differ from what is known. Review process is important to make sure that themes must not only be able to represent the data in the way possible but also contribute in the depth to the theorization of the study (Terry et al., 2017). Then I defined the themes clearly and came up with their names to capture their meaning. Labels for each theme were provided that reflected the focus of each theme and its relation to the research questions. This theme is the social value that consumers perceived in their use of the platform and could be transformed into theme like community driven sustainability for instance. These themes were also validated against the objectives of this research to ensure they assist with a smooth narrative that tackles the fundamental research inquiries.

3.6.4 Reporting and Interpretation

The third phase of thematic analysis engaged with synthesising the themes into a structured narrative that is compatible with the study's conceptual framework. In addition to being a descriptive narrative of themes, this report can be considered an interpretative synthesis of findings in relation to study objectives. In this phase, the researcher applied thematic context within the broader theoretical context to explore how the interplay of sustainability and consumer engagement works inside in the platform's ecosystem. Using this systematic approach to thematic analysis allowed to shed light on a more nuanced understanding on the dynamics of value creation, consumer trust and engagement strategy in a two-sided digital platform. The importance of thorough thematic analysis as a means for comprehensively understanding complex qualitative data is illustrated in studies which examine experiential and behavioural aspects of a participant (Kiger & Varpio, 2020).

3.7 Limitations in Data Collection and Analysis

There are certain limitations with regards to the data collection and analysis processes that should be recognized. Data from Estonian platform providers was impossible to obtain due to logistical constraints, which caused the comparative analysis between Finland and Estonia to be incomplete. Furthermore, some interviews were not recorded when requested by participants which could have potentially diminished the depth of data collected. Despite that, the shortness of immediate note taking, and summary process released this limitation by keeping those important insights. In

addition, subtle interpretative biases are likely to have been manifested in the data translation process, though due attention was paid to the process of translation. The data analysis process overall used a rigorous thematic approach to extracting meaningful insights that are already directly pointed to the direction of the research question of the study. Using these theoretical frameworks as the foundation and applying the coding and theme development methods in a consistent way, this study provides noteworthy contributions to the exploration of consumer engagement, value creation, and sustainability in the digital platform ecosystem. All these limitations have potential for improvement in future research through collecting more in-depth data from different user groups and geographical location.

3.8 Validity and Reliability

Using a qualitative methodology based on semi-structured interviews, this research aims to gain an understanding of dynamics of value creation, consumer engagement and cultural adaptation related to food waste reduction platforms, specifically RESQ Club in Finland and Estonia. As a qualitative study, it is necessary to identify potential limitations regarding its reliability, validity, and generalizability so that findings are both credible and robust. In qualitative research reliability refers to the consistency and dependent of the data collection and analysis processes; validity refers to the extent of correctness and the extent to which the findings are applicable (Saunders et al., 2007). Saunders (2007) indicates that in qualitative research reliability is given when data collection and data analysis are conducted in a consistent manner, allowing the results to be repeated with similar conditions. This study followed a transparent and systematic data collection process to comply with this level of reliability.

The same semi structured interview guide and uniform protocol employing introduction to the purpose of studying, a promise of confidentiality and neutral approach to questioning to avoid bias (Saunders et al., 2009) was used in all interviews. The interviews were all conducted online, recorded and transcribed to accurately capture all that was said. To mitigate external impacts on response, participants were asked to attend the interviews from a location that felt private and where inappropriate interruptions would be unlikely, and thus provide a consistent environment. Particular attention was also paid to reducing observer error and observer bias to increase reliability. Questions posed by the interviewer were leading questions that did not colour the participants' responses and maintained a neutral tone. Furthermore, the participants were notified of their right to anonymity,

that their responses would be treated confidentially and that their details would be separated from their data during analysis (Saunders et al., 2007).

The type of measures that were put in place to guarantee that the responses were authentic, and free from influence by the fear of disclosure, all the while reiterating the dependability of the data that was gathered. It documents the research process in a clear audit trail format that offers even the imposition of the future research to achieve the same with similar conditions (Yin, 1984). According to the definition, to be valid, the study findings must be right and to reflect what is being studied (Saunders et al., 2007). In this research, validity was considered in two dimensions: Furthermore, I presented problems of internal validity, which relate to questions about the credibility of the study findings within the study context, and external validity, which concerns questions about the potential for generalizing the results beyond the specific cases that have been studied.

In this study, internal validity was achieved using thematic analysis grounded in Braun and Clarke's (2006) six-phase model, designed with a systematic approach to examining patterns and themes among the data. An inductive and a deductive coding approach were used to identify themes, as well as to verify themes with the existing literature on digital platform and consumer engagement and cultural adaptation to validate their relevance and coherence. This fits the process of the 'enfolding literature' in Eisenhardt (1989), is continuously comparing emergent themes with established theories to strengthen internal validity. On the other hand, data triangulation was used by comparing the responses among various stakeholders, consumers and platform representatives, in identifying similar and differing views. With this triangulation, the findings had credibility enhanced as it offered a more complete picture of what factors are driving consumer engagement and platform adaptation (Yin, 1994).

In line with qualitative research, and as inherent to a purposive sampling approach, the external validity of the study is limited to the specificity of the context, and the single digital food waste platform observed in two Northern European markets. Qualitative studies have faced restrictions to generalise findings to general population, as they are context specific and based on a small sample size (Saunders et al., 2007). Though this study is not intended to generalize statistically, the findings may demonstrate analytical generalizability (Yin, 1984), presenting to similar platforms and platforms industries that experience similar consumer engagement and cultural adaptation challenges insights. While the study examines a particular context, the insights into means to engage

the users as well as concepts of how to cope with the cultural difference could also be useful in the other digital ecosystems pursuing sustainability. Given the existing limitations in reliability and validity of such methodologies, this study sought to improve methodological rigor. Reliance on self-reported data, including a potential social desirability bias due to the ethical and sustainability focus of the topic used as the basis for this study, represents one limitation. On the contrary, the interview questions were designed to be open to a variety of answers such as no, a little, a lot, or very much, and neutral, so that participants could freely put forth their views without constraining responses in any specific direction (Saunders, 2009). Furthermore, considering that purposive sampling and limited sample size constrained the generalizability of the present study, this approach facilitated an in-depth investigation of complex, context bound phenomena. Future studies of this sort could increase external validity by increasing sample size as well as including a wider variety of cultural contexts, and further support for cross cultural comparisons in digital platform engagement.

4. Empirical Findings

In this chapter, the primary research study that involved semi-structured interviews with the content providers (restaurant managers) and end users of the RESQ Club application in Finland and Estonia is described and analysed. The interviews aimed at discussing the participants' experience interacting with the identified platforms with an emphasis on RESQ Club, the ways value is created for the consumers and the factors that affect the use of the service across regions of the world and potential differences between them. The following sections will present the results of the study including a detailed analysis of the collected data which examines the role and workings of the platform from the provider and the consumer perspective, with a view to understanding how they define the overall ecology of the digital environment.

4.1 Waste Reduction and Sustainability: Insights from Content Providers in Finland

The restaurant managers in Finland, which are the content providers of the RESQ Club platform, were asked about their sustainability goals and how the platform assist them in decreasing food waste. This has been a major reason that restaurants are willing to join such platforms as RESQ Club. The platform provides an opportunity for businesses to sell food that would otherwise be wasted and in this way generate income and promote sustainability.

"We understood how much of the food was being wasted and RESQ Club offered a solution that also reduced this wastage and at the same time brought in extra income." (Small Business 1)

Sustainability and profitability were found to be in harmony in all the interviews conducted. The owner of a Finnish Chinese takeout restaurant shared the same views as the first interviewee.

"For us, it is a question of contributing to the environment in some way and, of course, we see the financial advantages because we sell what would otherwise be waste." (Chain 1)

This highlights the dual incentive for businesses: minimizing the negative effects on the environment and increasing their profitability. These findings show how the platform's business model promotes sustainability since it helps the restaurants reduce the amount of food waste. Some of the content providers also mentioned that customers understand and value the notion that the company has a positive impact on the environment and thus strengthens the company's brand. A manager of a

lunch buffet restaurant said that ‘more and more our customers are asking us what we do with the leftover food.

“Getting involved with RESQ Club allows us to demonstrate that we are concerned with waste, and they appreciate it.” (Small Business 2)

This feedback suggests that the platform not only supports waste minimization but enhances customer experience, as customers seek to transact with sustainable enterprises. In practice, restaurants made some changes regarding their internal practices to manage the food better, based on the potential to sell leftovers through RESQ Club.

“We are now more conscious of the way we prepare and divide the meals because what is left over cannot be sold in the course of the day can be sold through the platform”. (Chain 2)

This change in behaviour demonstrates how the platform is helping to foster greater adoption of more sustainable strategies right from the start. However, there are some drawbacks, especially on part of stock control and on the quality of food that is left unsold and may be resold.

“The challenge is to make enough to cater for the normal customers while at the same having some for RESQ Club without compromising on quality.” (Chain 3)

This sentiment reflects a key operational tension faced by restaurants: waste reduction with compliance with food quality and customer satisfaction standards. The content providers in Finland have used the RESQ Club as a means of fighting food wastage with the aim of supporting sustainability. The platform provides restaurant operations an avenue to transform surplus into revenue, thus improving the brand image and promoting sustainability. But there is still an issue of how to manage the food preparation during the short notice of surplus food provided. Thus, restaurants not only help to solve the problem of food waste but also improve their financial results.

4.2 Consumer Engagement in Finland

When investigating the relationship between user engagement for RESQ Club in Finland based on key dimensions as initialized in the conceptual framework such as: value creation, cultural differences, platform internationalization strategy and marketing and promotion strategies. In this

analysis, interviews with five consumers in Finland are conducted, which results in the following analysis on the factors that have affected consumers' engagement to the platform.

4.2.1 Value Creation

The evolving interviews proved to be a central theme, as consumers repeatedly revealed creation of value in economic and environmental terms by utilizing RESQ Club. Frequent User 1 felt that items on offer through the platform are affordable:

'It's cheaper than eating out or ordering from other delivery platforms and I feel like I'm getting a good deal.' (Frequent User 1)

This sentiment was echoed by Frequent User 2, who mentioned that the price savings were a significant motivator:

"So, I think it's all about saving money without having bad quality food."
(Frequent User 2)

In terms of reducing food waste, another facet of the personal values of consumers, the platform contributed toward this within the context of food consumption, something that was also recognized by consumers as a means by which cost savings were generated. Frequent User 3 showed the environmental impact of using the RESQ Club,

'It feels more meaningful to buy it knowing the food would have gone to waste.' (Frequent User 3)

Similarly, Frequent User 4 indicated that the platform's sustainability focus was a key factor in their decision to continue using the service:

"Knowing I can help decrease wasted food is more than a meal, it's part of something bigger." (Frequent User 4)

Though the platform delivers value by ensuring affordability and sustainability, however there were a few instances when food quality was once in question.

'Sometimes the food isn't as fresh as I'd thought it would be, but the low price tends to balance it out.' (Frequent User 4)

Therefore, the platform is suggested to create value from the viewpoint of cost and sustainability though consumer satisfaction still relies on ensuring food quality.

4.2.2 Cultural Differences

It seemed that cultural differences had a relatively small effect on consumer engagement in Finland, as most interviewees did not see culture as an important factor in their use of RESQ Club.

*“I don’t think culture plays a role at all – it’s convenience and price,”
(Frequent User 2)*

Slightly agreeing, Frequent User 6 also added that

“I think most people here just like the idea of saving money and reducing waste.” (Frequent User 6)

However, the consumers had subtle differences in how they perceived the platform was aligned with Finnish cultural values.

“We are known in Finland to value practicality and sustainability a little bit more, so RESQ fills that space pretty well.” (Frequent User 4)

They do not show any overt cultural influence, but it is likely that in Finland, RESQ Club’s profile of being focused on sustainability meets with the wider public's conceptions of sustainability. However,

*“it’s a big thing to be environmentally conscious here, and RESQ Club does that, which is probably why it’s been successful.”
(Frequent User 1)*

The interviews generally indicate that although cultural differences are not themselves a motive to engage on the other hand, the platform matches the Finnish subculture for sustainability and practicality.

4.2.3 Platform Internationalization Strategy

Overall, consumers were positive about the platform’s ability to adapt and work in different regions.

“No, I haven’t noticed the biggest differences where it is used, I mean Helsinki or Turku, it works the same way everywhere,” (Frequent User 1)

If so RESQ Club has managed to roll out a standard platform that works conveniently at different locations. This is an indication that there is consistency in the experience users get. Some consumers, however, wanted more localized offers.

“It would be awesome to have more options for restaurants or food, more than just some cities,” (Frequent User 2)

In addition, this proves that though the platform is available across regions, local market needs can increase the option of available food and increase its effectiveness in engaging the consumers.

“The importance of maintaining a simple and user-friendly interface, regardless of location: One of the reasons I continue to use the app is that it’s easy to use. But I think that’s important no matter where you are.” (Frequent User 3)

This shows the importance of technological simplicity to the strategy of internationalization, to guarantee similar experiential aspects of products and services throughout all brand’s users.

4.2.4 Marketing and Promotion Strategy

Additionally, RESQ Club’s consumer engagement approach is dependent on its marketing and promotion strategy and its manner of communication of value to potential users. There are several features which affect whether interviewees decide to use the app, they include promotional deals and notifications.

“It’s nice to get notifications about when my favourite restaurants have sales—it’s simple to pick what I want, now.” (Frequent User 4)

Further, the importance of clear communication and transparency in marketing:

“Anything that says, ‘This is what you’re saving,’ ‘This is how much we spend,’ or ‘I’m saving this much money’ is great. I think it’s great when the shows show pictures of the food. “I mean that helps create trust and makes me more likely to use the app.” (Frequent User 6)

This fits within the consumer expectation around transparency, particularly with respect to defining the value of what they bought. After all, not all the consumers were satisfied equally with the promotional strategy.

“Sometimes I find there aren’t enough specials or it’s just not everywhere because only some restaurants are doing it,” (Frequent User 1)

Thus, although the current approach works well with some consumers, room exists for greater promotional efforts directed to additional types of food providers in other regions.

“More personalized promotions could enhance engagement: “I think if they could offer more deals based on what I had previously purchased or they knew I liked, I would use it even more.” (Frequent User 2)

‘Using reshare, I analyse consumer engagement regarding RESQ Club in Finland and see how RESQ Club delivers value through its affordability, sustainability focus, and user-friendly platform. (Frequent User 3)

Cultural differences seem not to be a big deal, but the platform is in line with Finnish values of practicality and environmental awareness. However, there is a possibility of internationalization strategy becoming localized. Lastly, the marketing and promotional strategy generates appropriate engagement; yet continual promotion focus along with personalized offers could potentially increase customer satisfaction and usage.

4.3 Consumer Engagement in Estonia

The analysis carried out in this section focuses on identified variables related to the conceptual framework and presents an analysis of consumer engagement with RESQ Club in Estonia, specifically analysing value creation, cultural differences, RESQ Club marketing and promotion strategy for internationalization, and platform internationalization strategy. From interviews with three Estonian consumers, the factors leading to the consumers to adopt the service are derived.

4.3.1 Value Creation

Finally, the Estonian consumers not only consistently identified RESQ Club as a critical driver of engagement, but also pointed out that value creation was a critical element of an engaging brand. A key theme to emerge from the interviews was the ability of the platform to deliver economic and environmental benefits.

“The main reason I use RESQ is the price, you can get good meals for half the price, sometimes less than that.” (Casual User 1)

“The platform is affordable; it is an affordable way to get a decent meal given the fact that you were eating it compared to regular restaurants.” (Frequent User 5)

There was also a lot of environmental appeal in reducing food waste.

“It feels good to know that the food I’m buying wouldn’t have gone anywhere.” (Frequent User 7)

“It’s not just about getting cheaper food; it’s about supporting sustainability and not wasting food.” (Casual User 1)

However, many interviewees were concerned about food quality, while value proposition was viewed positively.

“Sometimes the food isn’t as fresh as I’d hoped and things like salads are the last to go bad.” (Frequent User 5)

“If it’s not perfect the food then I’m still okay with it considering the price.” (Frequent User 7)

Therefore, RESQ Club does indeed create value by realizing cost savings and environmental benefits, but for further increase of customer satisfaction value and consumer loyalty in terms of long run, ensuring food quality consistency is essential.

4.3.2 Cultural Differences

In Estonia, cultural differences were not identified as having a major influence in the formation of consumer engagement with RESQ Club. Most of the interviewees used the platform due to practical reasons like price and convenience.

“As far as I can tell, the culture doesn’t seem to make much difference to how people use RESQ; it’s more about the practical benefits.” (Casual User 1)

“It’s the same thing; it’s about saving money and reducing waste, and these are universal concerns, not specifically cultural.” (Frequent User 5)

But there were some connections to Estonian cultural values. In addition, Frequent User 7 indicated that there may be a match here with the wider environmental goals of society.

“In Estonia, people appreciate practicality and efficiency. It’s straightforward, and environmentally friendly, and RESQ is a good fit for that.” (Frequent User 7)

This ties in with other research that mentions Estonian consumers are spending more mindfully on more sustainable items, and this might in turn influence their mind on engaging with RESQ Club. So, even though there aren't many obvious cultural differences, they have noticed that, when it comes to RESQ Club, it aligns with Estonians values such as sustainability and practicality that gives it attractiveness for Estonian consumers.

4.3.3 Platform Internationalization Strategy

With such an internationalization strategy, RESQ club managed to give a consistent user experience in different parts of the world such as Estonia. Each of the three interviewees never faced any trouble working with the platform, wherever their location may be.

'The app's the same whether I'm in Tallinn or somewhere else, It's simple and straight forward to use.' (Casual User 1)

It is a sign that RESQ Club's standardized platform has been working and consumers don't have to go through the hassle of learning a different platform in each region. But interviews concluded that the platform can be further localized, for example by enlarging the access to offers in smaller cities.

"In Tallinn there are a lot of things you can do but in smaller cities, there aren't so many choices, which was the question," (Frequent User 5)

They further emphasized that as the platform has been internationally successful at delivering a uniformly great experience, it could perhaps be wise to adapt to local markets by allowing for a larger number of food providers to participate in less urbanized areas. Users also praised the technological simplicity of the platform.

"The map feature is very helpful finding offers nearby, it's very easy to use, it is easy to navigate the interface, and that makes for easy quick purchases." (Frequent User 7)

They continuously praised the user interface. One key element that leads to consumer engagement here is the ease of use, meaning the less cognitive load and the amount of decision making needed to use the platform. Finally, RESQ Club's internationalization strategy is working in achieving the coherence of the consumer experience across regions, and further localization, especially the introduction of more food options to less populated cities can boost engagement.

4.3.4 Marketing and Promoting Strategy

RESQ Club's notifications and targeted deals strategies for marketing and promotion were effective in keeping the consumer engaged.

"I like the notifications—especially for a place I like when it has a new deal. I don't have to constantly check the app for alerts or notifications, and it saves me." (Frequent User 5)

It follows that push notifications have an important role in getting users to register to the platform and go ahead to make a purchase. Consumer engagement was also another factor where food offers were also transparent.

"I like when restaurants give a full description, pictures, and don't mind asking what something is about. Beyond that, it helps me trust what I'm buying." (Frequent User 7)

Nevertheless, Casual User 1 noted that not all providers provide information in detail which they can at times be unsure about food quality. And suggestions for personalization in promotions were also made.

"More personalized recommendations based on past purchases would make it better." (Casual User 1)

It is part of a larger shift in consumer behaviour, where increasingly users of digital platforms expect not only personalized offers and targeted marketing from these technologies. RESQ Club's existing marketing and promotion techniques are successful in generating engagement; however, they need to be enhanced to offer better transparency and the potential to tailor the offerings to fit the customer profile. The analysis of the consumer engagement with RESQ Club in Estonia shows how the platform succeeded in providing value by being affordable and sustainable, whereas cultural differences only influence the consumer behaviour to a slight extent. The internationalization strategy of the RESQ Club ensures that the end user experience with the application is not different from one region to another, though more localities can still be provided (for example by providing more food options) in smaller towns. The marketing and promotion strategies, namely relying on notifications and offers involve high consumer retention, which could be even better by enhancing transparency and personalisation.

4.4 Summary of Findings

Both the results from Finland and Estonia reveal that value creation is an important driver in consumer engagement and the involvement of content providers in RESQ Club. Both countries consumers attach the benefit of buying meals at discounted price as the primary driver for using the platform. Interviewees in Finland emphasized the advantage of lower food cost for higher quality food and Estonian consumers mentioned that RESQ Club is affordable and good for sustainability as it prevents food waste. Finland's content providers underline that RESQ Club helps them cut food waste and make the world a little more sustainable. Several restaurant managers said the platform acts as an ideal way to handle excess food while making additional money. In addition, challenges involving balancing inventory and maintaining food quality were also identified, by content providers in both regions. Therefore, there is room for value creation through sustainability and financial savings on the platform; however, as a trade-off, operational issues (i.e., food freshness) need to be taken care of to ensure continued engagement.

As cultural differences were not seen to be central to determining how users engaged, slight differences between the two regions were observed. Within Finland, reduction of food waste due to its environmental impact resonated with consumers more than any other reason to reduce food waste, which fits with long term trends towards sustainability in society. One interviewee in Finland has highlighted how using the RESQ Club is financially smart, while also feeling morally good about helping save the environment. Compared to Estonian consumers, however, cost savings outweighed environmental consciousness. Eventually, although Finnish consumers expressed excitement over the features of the clothing, they were also confused on how to utilize the platform, whereas Estonian consumers praised the simplicity of the platform, meaning that RESQ Club was addressing a set of universal consumer needs including affordability and convenience.

The platform internationalization strategy was successful to present consistent user experience both in Finland and Estonia. The standardized interface and features of the platform led to easy consumer adoption that extended both to the content providers in these regions. Interviews did however reveal that RESQ Club has been successful in big urban cities but there is scope for further localization to serve smaller cities and rural areas. It was explained by Estonian users of the fact that the availability of surplus food offers is more restricted outside Tallinn. In less urbanized areas, therefore, extending the number of food providers participating in the platform could increase consumer engagement and fuel growth of the platform.

Both in Finland and in Estonia, consumers reacted very well to RESQ Club's marketing and promotional ways such as notifications and targeted deals. It was observed that having push notifications for new offers from users' favourite restaurants plays a vital role in holding the attention of users to the platform. Overall, the feedback about these food descriptions is positive but there is room for content providers to improve how transparently they describe food that is available in the feeds. Finnish and Estonian consumers preferred more information concerning the quality and freshness of surplus food products. There was also a mention of more tailors made offers, based on previous purchase, to enhance the customer experience.

5. Conclusion and Implication

In this study, we were interested in the influence of value creation and consumer engagement on digital food waste reduction platforms and drew on case studies of operations of RESQ Club in Finland and Estonia. Understanding how sustainability practices, cultural differences and platform internationalization strategies affect consumer behaviour and engagement was the aim. The research studies these dynamics in different geographical and cultural contexts, to obtain insights into the dynamics of operating multi-sided digital platforms in the food waste management industry. Amongst other things, this research allowed us to identify themes like the role of the digital (food) platform in the redistribution of surplus food, the significance of consumer engagement to create a sustainable ecosystem, and the effect of cultural nuances in adopting the platform and the behaviour of the users. These results are consistent with findings from existing literature on digital platform internationalization that underscores how platforms must change their business models and marketing strategies by considering local market preferences and behaviour (Da Rocha et al., 2023). Furthermore, the work emphasizes the significance of trust, perceived risk, and local partnerships for the creation of consumer engagement, especially in a context of cultures, such as the Finnish and Estonian one (Oroski & da Silva, 2023).

5.1 Value Creation and Consumer Engagement

This idea of value creation becomes important to understand the dynamics of a business model of RESQ Club in the context of digital platforms and two-sided markets. Value creation on a digital platform, such as RESQ Club, depends on fostering beneficial interactions between two distinct user groups: consumers and content providers (e.g. restaurants, cafes, grocery stores, etc). The platform's technological infrastructure makes these interactions seamless through the communication, transactions and engagement. For example, in the case of RESQ Club, we create value by redistributing the surplus food and both content creators and consumers gain actual value to them.

5.1.1 Consumer Perception of Value

After interviewing selected RESQ Club users, the thematic analysis of the interviews shows that consumers are getting huge value of getting surplus food at better prices. Affordability was a big reason why many interviewees would use the platform, as highlighted by many interviewees. Interviewees emphasized how RESQ club enables them to afford high quality food at slashed prices, something that is quite necessary in this inflationary economy. Literature on two-sided markets also rings true to this perception of value, as consumers are often willing to engage because they perceive

value, for example, to lower price or for convenience (Ojala et al., 2023). They also pointed to their own sustainability efforts that the platform aided in. They purchase surplus food, feeling they are actively contributing to reducing food waste, giving them moral or ethical value to their purchase. Also, this symbiosis corresponds to what has been stated in the literature for sustainable business models, which consist of creating value not only in economic terms but also through advocacy of environmentally friendly behaviour (Ciulli et al., 2020). RESQ Club, in this regard, creates a dual value proposition: The opportunity to make environmentally responsible choices, and financial savings for consumers.

5.1.2 Facilitation of Interaction Between Content Providers and Consumers

Interviews with content providers, i.e. restaurant and grocery store managers, showed that RESQ Club enables an essential operational benefit: it helps reduce food waste and bring in additional revenue streams. Managers said it allows them to monetize surplus food that would otherwise have gone to waste. ‘RESQ Club is a simple solution for us to manage food surpluses,’ said one of the managers. However, rather than dump it we can sell it at a lower price, which helps us and the customers.” This strengthens the circular economy platform’s position in stimulating a circular economy centred around minimising food waste and by creating economic and environmental value. Real time updates and easy technology on the platform enhance efficiency of matching the food providers with consumers and encourages both to engage with each other. The RESQ Club app allows a restaurant to easily post surplus items, and consumers can easily find and buy discounted meals. The possibility of digital ecosystems and the idea that platforms help to facilitate transactions between different actors without generating new intermediaries is supported by this idea of seamless facilitation of transactions (Amaral et al., 2022; Ciulli et al., 2020). By making these interactions simpler, RESQ Club also enhances its overall value to the providers of content and consumers accustomed to utilizing this resource over longer periods as their primary platform for SEO.

5.1.3 The Role of Indirect Network Effects

The value creation of the platform in RESQ Club’s platform is based on a two-sided market structure and the indirect network effects reinforce this value creation. The more consumers join the platform, the greater the restaurant and other food provider incentive to be on the platform because the odds of selling a surplus go up. On the other hand, as more content providers join the platform and have surplus food, the discounted food items get increasingly varied and become available more often

which consequently attracts more consumers (Rochet & Tirole, 2003). A critical driver of value creation in multi-sided markets is their feedback loop of network effects — the growth of one user group boosts the value for another. Content providers in the interviews express that having a growing user base is central to the value proposition of RESQ Club. “The more people who use RESQ Club, the better it is for us because it increases our chances of selling all our surplus food,” one interviewee said. Importance of this stems from the fact that they need to build and maintain a critical mass of users on both sides of the platform which improves their business model. This observation is supported by the literature on digital platforms; where the success of two-sided markets depends on the ability to generate positive cross side network effects (Evans & Schmalensee, 2010). These effects are core to the ability for RESQ Club to scale and create value for all participants.

5.1.4 Alignment with Value Creation in Two-Sided Markets and Digital Ecosystems

The findings from the interviews align with RESQ Club’s business model with existing value creation theories of two-sided markets and digital ecosystems. Value in two-sided markets is co-created via the interaction of distinct user groups, whilst acting as facilitator, as stated by platform economics (Amaral et al., 2022). For the RESQ Club, the platform works well as a middleman between food providers and consumers such that both parties are better off being part of it. Consumers get affordable meals and providers get to make revenue while at the same time reducing food waste. Furthermore, this ability of RESQ Club to create a self-sustainable digital ecosystem resonates with literature on digital ecosystems where value is created by platforms that integrate multiple stakeholders optimizing interactions between them (Autio et al., 2018). The incorporation of the integration of mobile application, real time inventory update and payment services on the platform has played an essential role in enabling the best user experience leading to increased levels of engagement and satisfaction. According to the literature, the strength of digital ecosystem is seen through the extent to which it achieves value co creation and intensifies network effect (Ojala & Baber, 2020). This is accomplished by the digital infrastructure of the RESQ Club’s platform where it connects food providers and producers in a seamless way that more enticingly presents the platform as the user base for it grows. Interview insights with consumers and content providers alike reveal that RESQ Club’s value creation mechanisms match with theoretical frameworks of two-sided markets and digital ecosystems. RESQ club offers consumers a solution to have affordable, sustainable food options, and content providers a way to reduce waste and generate revenue, in

return creating a balanced, and mutually beneficial, value proposition. As a result, the platform can realize indirect network effects and increase in value via this ability which allows engagement to continue to increase on both sides of the system. The proven alignment between practical outcomes and theoretical principles indicates that the business model of RESQ Club produces sustainable value in a multi sided digital marketplace.

5.2 Cultural Difference in User Adoption

The adoption and engagement patterns of RESQ Club (digital platform) are deeply influenced by cultural differences. By analysing the interviews, we conducted with Finnish and Estonian users, we found that cultural differences greatly impacted how users interpret food waste, engage with technology, and trust of the platform. It is very important for platforms that are expanding internationally to understand these differences as the cultural nuances can directly change the user adoption as well as the long-term engagement (Shaheer & Li, 2020). In this section we analyse the cultural factors which influence consumer behaviour in Finland and Estonia and are related with the theories of internationalization and platform adoption.

5.2.1 Perception of Food Waste and Sustainability

There is also one of a more pronounced Finnish versus Estonian cultural difference related to food waste and sustainability. From the interviews in Finland, there is an increased awareness of the environmental issue, and Finnish consumers seem much more dedicated to a public interest in sustainability and waste reduction. This fits with larger Nordic cultural values in which environmental responsibility is sometimes deeply embedded in everyday life and consuming practices (Ojala & Lyytinen, 2024). According to one Finnish interviewee: 'I rate using RESQ Club as it helps me avoid food waste which is important to me.' They say such sentiments indicate that Finnish consumers consider the platform as a gateway to cheap food as well as being able to make some quota toward a bigger environmental endeavour. However, Estonian consumers seemed to focus on the economic benefits to the use of RESQ Club, overlooking the issue of sustainability. While several Estonian users' garbage the environmental benefits of decreasing food waste, the biggest cause of engagement was financial. One Estonian interviewee noted that he uses RESQ Club because 'I can get cheap meals'. Examining cultural discrepancies over the perception of food waste and sustainability in the two countries made me make such an observation. Finally, given that Estonia has undergone rapid economic transformation in recent decades, it may also be the case that the country is still in the process of integrating sustainability into broader consumer behaviour (Ciulli et al., 2020; Amaral et

al., 2022). This corresponds with research suggesting that the cultural values of sustainability and consumption differ substantially between regions, in Europe even (Shaheer & Li, 2020).

5.2.2 Trust in Technology and the Platform

Finnish and Estonian users also differ in trust in digital platforms, with Finnish more trusting users to RESQ Club and similar platforms. One of the possible reasons is that Finland has the long-lasting digital infrastructure and technologically friendly environment for consumers to interact digitally (Laatikainen & Ojala, 2019). Finland's reliance on technology translates to significantly higher confidence in platforms such as RESQ Club, where problems such as food quality and safety are largely addressed with features of transparency and reliability. "Because – as one Finnish respondent observed – the restaurants are vetted and there are reviews from other users giving me confidence in the quality of the food," they say. But in Estonia, trust in digital platforms seems less durable. Since Estonia is known for its digital advancements, such as e-governance, the level of trust for food waste and surplus food in the online platforms is not very great. This might be due to history or maybe there are just different attitudes on food quality and safety. However, the issue of whether the surplus food was fresh and safe was raised by the Estonian users less often than by the Finnish consumers. One Estonian user expressed concern: 'I'm not always sure how fresh the food will be.' This resonates with research from the standpoint of digital platform trust that the point is, to build trustworthiness on a digital platform one relies on the use of trust building mechanisms, such as user reviews and ratings, and transparent food quality control (Ojala & Baber, 2020).

5.2.3 Barriers to Adoption and the Uppsala Internationalization Model

They also document several barriers to adoption that can be understood in the light of Uppsala Internationalization Model. According to the Uppsala model, which argues that firms are reluctant to expand internationally into culturally or spatially nearby markets to minimize the risks involved in foreign market entry (Johanson & Vahlne, 2009), the firm's propensity to internationalize is positively affected by its experience in the domestic market and by the experience of the capability providers in the domestic market. With some cultural similarity, a small step was taken and expanded into a neighbouring country Estonia. Yet the fact that there are nuanced cultural differences in terms of how food waste and trust in technology are treated has hampered achieving the same level of user adoption in Estonia as it has in Finland. For example, Estonian consumers might need a more localized approach to marketing, overcoming trust barriers and focusing on the value proposition of the platform over and above saving money. According to Johanson and Vahlne (2009), experiential

knowledge on the foreign market is prerequisite for a successful internationalization, and RESQ Club's experience in Estonia reflects that an adaptation to particularities of the culture through the platform adaptation is necessary. This concurs with literature from network theory which emphasize the need of establishing local partnerships and networks for overcoming the barriers of market entry (Hosseini & Dadfar, 2012). To tackle the cultural concerns that are holding back adoption in Estonia, building relationships with local food providers and promoting the platform via trusted community channels could help.

5.2.4 Localized Marketing and Trust-Building

It really can't be reiterated how important it is to implement localized marketing strategies to build trust and engagement with digital platforms. The findings show that Finnish and Estonia consumers are culturally different, therefore, marketing and communication programs need to be tailored to suit these groups. Sustainability and the environmental impact of the platform strikes a chord more with Finnish consumers than it does for the Estonians, where (affordable) food quality may be a better pitch. From the perspective of internationalization and digital platforms, research literature has indicated that localized marketing aids in closing the gap of culture and increases consumer trust by performing specific local needs and preferences (Da Costa et al., 2022; Trevisan & Formentini, 2023; Visconti et al., 2020). In addition to that, RESQ Club's platform features like user reviews, real time updates on food being available and bringing transparency about who are the actual food providers helps builds trust across different cultural context. This research is consistent with that which underscores the importance of conducive elements of transparency and user generated content that help to build trust in digital platforms (Ciulli et al., 2020). RESQ Club can further strengthen its position in both markets by continuing to do more to enhance these trust building mechanisms and adjust them to better suit local cultural needs. The results stress how cultural differences influence adoption and engagement of users within RESQ Club in Finland and Estonia. Estonian users are more focused on economic benefits yet trust technology slightly less than Finnish consumers and worry more about the safety of the food they eat. Based on these insights, RESQ Club must internationalize by following a culturally sensitive approach as stated by Uppsala model and using localized marketing strategies to gain trust and engagement in diverse markets. Therefore, if it is successful in linking platform features with the compensation of cultural preferences and removes barriers to adoption, the user base of the RESQ Club can continue to grow and the value it creates in Finland and Estonia will be sustainable.

5.3 Drivers and Barriers of Platform Engagement

This knowledge of the drivers and barriers of consumer engagement on RESQ Club helps understand what digital food waste platforms can do to improve their user experience and their impact. As a multi-sided platform, RESQ Club acts as an intermediate between food content providers and consumers exploiting principles of sustainability and circular economy. While some factors propel user adoption and engagement, other factors are serious barriers toward success in the long run.

5.3.1 Drivers of Consumer Engagement

Convenience, affordability, and sustainability emerged several crucial driving factors from the residing interviews of the RESQ Club users. The convenience of RESQ Club to obtain discounted surplus food via a user-friendly mobile platform is one of the primary drivers. Ease of use paired with features like real-time update on food availability, existence of geolocation services and flawless payment processing facilitates a positive user experience, compounding the desire for ever more use. Prior related studies suggest that platforms that make the most of convenience and accessibility tend to enjoy a more active user base, since consumers prefer services that fit naturally into their routine (Ciulli et al., 2020). Additionally, another important driver of consumer engagement with RESQ Club is affordability, most significantly in Estonia where the budget savers showed that using it helped them save cost on discounted meals. Users in both Finland and Estonia valued the economic value that the platform provided to them and during uncertain economic times. One Estonian respondent pointed out, "At RESQ Club I get to eat from great restaurants and save money on meals." In this way, value perception is reflected by digital platform research, which identifies that users of multi-sided platforms in food and retail sectors are often driven by economic benefits (Ojala & Lyytinen, 2024). Finnish consumers moreover proved to be powerful sustainability drivers. When I ask many users what makes them participate in RESQ Club, most of them simply see it as an environmentally responsible choice that suits them. 'It feels good knowing that I'm helping to decrease food waste and receive a meal' was the sentiment of one of my Finnish interviewees. User engagement is highly dependent of the ever-growing awareness to environmental issues, especially in Finland. The findings are in line with literature on circular economy platforms that claim sustainability as a strong motivator for users in places where there is a strong environmental culture (Ojala & Baber, 2020). Considering such platforms as RESQ Club, the focus on sustainability in their marketing and communications can contribute to greater consumer engagement for example in countries such as Finland, where ecological concerns have the highest priority (Da Costa et al., 2022:

Trevisan & Formentini, 2023; Visconti et al., 2020). Another concept that also drives user engagement on RESQ Club is the concept of indirect network effect. However, as the number of food providers grow on the platform, the variety and availability of surplus meals rise, and thus the platform becomes more attractive to consumers. On the other hand, the more consumers the platform is used by, the more valuable it becomes for food providers that want to grow their customer base and decrease food waste. Moreover, this reciprocal relationship between content providers and consumers serves as a must to keep engagement and grow in multi sided platforms (Song et al., 2018). The research of indirect network effects shows that if the number on both sides of the platform grows the value of the platform grows thus creating a virtuous circle which magnifies the platform's entire engagement.

5.3.2 Barriers to Consumer Engagement

Out of all the perceived risks highlighted during the interviews, the one that has been deemed to have a great impact on the implementation of surplus food collection is the quality and freshness of sentiments regarding surplus food. While many orders are delivered as cheaper than dining in physical restaurants, some subscribers in Estonia wonder if their foods are freshly prepared. A respondent from Estonia said, 'sometimes I do fear that the food offered may be a bit stale and hence I am reluctant to order food online.' This issue of food quality is a common problem with food waste reduction platforms because users may be hesitant to buy food surplus and are not confident about the quality. To address such issues, players such as RESQ Club must develop ways that would help them build trust for their operation, therefore embracing endorsement, credibility, and honest information regarding the food sources and quality assurance processes. Studies point out that, when perceived risks are communicated through white labelling and social content generation and dissemination, consumer engagement is greatly improved in digital media (Ciulli et al., 2020). Further, there are certain barrier related to food quality that are valid, including lack of quality assurance features that show that the surplus food is fresh and has not been handled or stored poorly in the past. The final impediment is the incidence of digital technology across the client base, including those who are older or unsure about engaging with a mobile application. The youngest customer segments are the easiest to transition using digital interfaces, but some customers complained that they could not navigate the app or were reluctant to use mobile payment services. This is in line with the research done by Shaheer & Li (2020) who opined that digital adoption could face challenges with technological literacy as potential user's barriers when using technological

equipment. In turn, the given findings suggest that RESQ Club could introduce easy-to-follow guides or, the change of initialization process easier for as many generations as possible. There are cultural differences inherent in engagement between two countries namely Finland and Estonia. Finnish consumers in general have higher trust in digital platforms than Estonian consumers and are more willing to participate in sustainable actions, though Estonian consumers are driven by economic reasons they are more sceptical towards the differentiation of surplus food. These cultural differences, and many others that can be mentioned, have made the marketing strategies localized due to some issues that prevail in those markets. For instance, RESQ Club can focus on food quality and product orientation to its consumers in Estonia whereas it can maintain its sustainable message in the Finnish market (Ojala & Baber, 2020). Cultural adaptation of platform features and marketing messages is deemed imperative to eliminate expressions of cultural resistance to change and stimulate people's use of the platform in distinct cultural environments. Finally, transportation issues and inaccessibility of food providers/ delivery of food within the agreed time was pointed out as some of the challenges experienced by some of the mobile applications users. Some of the negative impacts attributed to low density of participating food providers include; where there are few participating food providers, a consumer may be presented with few choices of meals which is not good for the platform. This issue is the 'chicken and egg' dilemma seen in two sided markets; the platform must have supply, the food providers, and demand the consumers to maintain value on both sides of the market (Evans and Schmalensee, 2010). This issue can be resolved by enhancing incentives for food providers to join the platform, so supply is sustained, and the consumer experience is improved at RESQ Club. Despite, RESQ Club has many positive drivers that would leads to consumer engagement like convenience, affordable and sustainable food delivery, there are several barriers such as perceived risk associated with the quality of food, digital illiteracy and cultural differences. By addressing such barriers –either through enhancing trust-building mechanisms, localizing marketing strategies, or platform design in the described country RESQ Club may continue accruing and expanding consumer base in both Finland and Estonia.

5.3.3 Internationalization and Platform Growth

The case of expansion of the digital platform RESQ Club between Finland and Estonia points to the challenges of organizing ventures into new geography and culture. As a platform facilitating transactions between sellers of food content and consumers, RESQ Club has had to base its growth strategy on several theoretical models to overcome the numerous problems that accompany market

entry, local regulations, and competition. The following section examines the internationalization of RESQ Club through three theoretical frameworks: platform economics, effectuation theory, and network theory that offer interesting perspectives into how the strategies used to build platform traffic across borders were developed.

5.3.4 Platform Economics and Growth Strategies

From the platform economics point of view, RESQ Club belongs to the group of firms with two-sided markets since the consumer utility is a function of the providers of food (Evans and Schmalensee, 2010). However, as part of its internationalization plan, RESQ Club must learn how to navigate through these two aspects of the market successfully while responding to each country's requirements. For instance, in Finland, the platform operates under the backdrop of sustainability as a culture, where consumer and food suppliers embraced the aspects of sustainable food procurement and supply. Yet, Estonia was characterized by an entirely different environment – consumers are much occupied with the Use value and can be more sceptical concerning the quality of the surplus food, as it has been mentioned before. To tackle these challenges RESQ Club has incorporated culture-specific tactics that can match the consumers and providers' inclinations across the countries. For example, in Estonia, the key focus is still low price and in Tangor, the importance is given to the quality of the food products being offered while in Finland the concept is sold based on the impact it creates on environmental conservation through minimal food waste. This localization is essential to sustain mechanisms that generate cross-side network effects which are important in the growth of the platform. Thus, as the platform grows in terms of the number of food providers within each market location, more types and quantities of surplus food are brought to the platform and hence attracting more consumer demand. The research on platform economics also posits that internalization helps RESQ Club enjoy economies of scale since the platforms that support operate the digital platform would cost a relatively small amount to expand globally. This scalability enables the platform to reach more consumers to expand the underserved market without incurring substantial increases in operating costs, an important dimension in achieving broader cross-border growth (Evans & Schmalensee, 2010). However, such strategy timely factors in the success of this strategy by the platform to feature and marketing a timely and suitable planned strategy that will meet the user needs of each country, where the effectuation theory enhances the process.

5.4 Effectuation Theory and Adaptive Strategies

The theories linked with internationalization of RESQ Club include the effectuation theory, which is critical because it strengthens the dynamics of the venture. To enter Estonia, RESQ Club already maintains relationships with businesses and consumers in Finland which allows the company to gradually form partnerships that will enable it to begin testing the market in Estonia and gradually develop a sustainable business model. In view of the global uncertainty for the business, aspects of the effectuation theory where flexibility is respected can be used to understand how RESQ Club has been implementing its internationalisation plans (Sarasvathy, 2001). Instead of trying to forecast and dominate its market incursion into Estonia, the platform is more flexible and fluid in the present investigation by starting new activities and assessing their effects before amplifying the efficacious actions. Such an approach is especially valuable in unpredictable and constantly evolving environment that many digital platforms face at present. The main policy that has been implemented at RESQ Club in Estonia is the establishment of links with food suppliers and companies. This way, engaging with the local partners the platform has managed to obtain important insiders' insights and assets that would help the platform enter Estonian market. This approach is consistent with the theory of effectuation where partnering can mitigate uncertainty and leads to access to resources, which the platform on its own may not be able to access (Fisher, 2012). Also, these partnerships create contacts that help RESQ Club with aspects of the local legislation and regulations as well as food hygiene status and other legalities that may exist between the country of Finland and Estonia. Similarly, to the prediction focus, effectuation theory also underlines the importance of people's attempts to use the available resources to don their influence on the future. In the case of RESQ Club the business has found that it can lever on its user base/Users and technology/partner platform already in place in Finland to venture into Estonia. This has made it easier for the platform to grow, leveraging on experience gathered on its operations in Finland to those in Estonia. However, as is stated in the theory, flexibility is the most important strategy, and the platform has shown the desire to adjust features and marketing slogans of the application for the liking of Estonian users.

5.4.1 Network Theory and Partnership Development

Another theory that can explain the processes that occurred in RESQ Club, and its expansion and platform development is the network theory. In this theory, the concept of the business network implies that firms pursue growth through the development of relationships and networks in the

operating environment that grants them access to new markets, resources, and outlets for distribution (Hosseini & Dadfar, 2012). The success of RESQ Club both in Finland and Estonia highly depends on the foundation of local sub supplier's network. They are restaurants, grocery stores and other types of food providers that create platform value proposition through providing consumers with surplus food. Having ventured into partnerships with local food suppliers, RESQ Club has been able to address some of the barriers to market entry including the challenge of gaining consumer confidence. For instance, establishing other partnerships with famous local companies has been a major boost to the credibility of the platform besides dealing with issues to do with quality of food offered. As network theory goes, these relationships give RESQ Club a valuable window into the local resources needed for the platform to adapt its services to the local market conditions (Ojala & Tyrväinen, 2011). In addition, the application of the network theory shows that both dot and inward connections are crucial for platform development. More food providers increase the visibility of their food and the opportunity to work on minimizing food waste; more consumers have a broader choice of meals. This forms a vicious cycle that consolidates the platform dominance and the market and attracts more demand and suppliers on either end of the platform (Ojala et al., 2023). Through these network effects, RESQ Club has successfully scale its business across international borders and make sure that supply side (food providers) and demand side (consumers) are well balanced which is essential for the growth of every platform. The elements of platform economics, effectuation theory and the theory of networks have guided the internationalization plan of RESQ Club. Thanks to its experienced staff, found local partners and adjusting its marketing techniques in accordance with the culture and the level of economy of every country, it is possible to note that the platform can transfer the service from Finland to Estonia. However, its endurance over the next few years will still depend on a platform's ability to deal with local regulation; to gain user trust; and to sustain the positive network effects that underpin engagement and value capture on both sides of the platform.

5.5 Types of Value Created

Five types of value are created for both consumer and food providers by the RESQ Club platform, which makes the platform more sustainable in the markets it operates in. As an online platform that works to minimize food waste by matching quantity suppliers with consumers, RESQ Club forms value that exceeds strictly economic. This section explores the key dimensions of value creation: there is the economic, functional, social and relational value.

5.5.1 Economic Value

Other forms are direct and indirect, the first of which can be approached as one that is most tight to RESQ Club. In the case of the consumer, they benefit from the availability of food that may have otherwise been wasted through a much cheaper price than actual price of the food stuffs. This is in line with other food sharing and discount platforms where the consumer benefits to get food items at cheaper prices than those offered by other food vendors giving consumers a clear monetary reason to use the platform (Ciculli et al., 2020). This economic impact is always valued most during moments of economic volatility where customers want value for their money but within an economic constraint. While the economic value for food providers can lie in the efficiency of avoiding losses through selling meals that otherwise would not be served. This sustainability of the business through another source of revenue also helps solve problems of food waste at the same time (Amaral et al., 2022). Being a two-sided platform, RESQ Club adds economic value to consumers and providers of foods as it helps bring down the costs of food for the consumers while helping the providers deal with the surplus stock. This is in line with platform economics whereby two-sided platforms make their profits through providing a link that would otherwise be costly (Evans & Schmalensee, 2010). Further, such economic benefits are possible because the platform is scalable and can operate across the markets, catering for purchasing power and the economic inclinations of the populace in both Finland and Estonia.

5.5.2 Functional Value

The functional value offered by RESQ Club is in the manner with which it performs the role of a link between food suppliers and clients. The platform helps to organize the procurement of excess food, presenting consumers with a clear list of goods, allowing them to order them and pick up at a convenient time. This feature engages the consumers because it makes what otherwise may be a process of hunting for surplus food easy. As a result, RESQ Club becomes a convenient platform for food suppliers as it helps them to prevent food waste, distribute the products while still fresh. The functional value of RESQ Club is also lifted by innovation technology tools of real-time updates, mobile applications and geolocation in which consumers can easily search for nearest deals and get their purchases ready for collections. These features derived from the platform technology intensify the participation of both the consumers and providers side and reduces the entry. Also, the company that owns the platform can support the scaling process of the platform in many geographic locations, keeping its functionality intact, which is essential to grow internationally (Ojala & Lytinen, 2024).

5.5.3 Social Value

Besides, possessing economically and functionally high importance, RESQ Club generates substantial social benefit due to the problem of food waste. The principle of the platform, which is the minimization of food waste, is consonant with such global concerns as saving the environment and promoting sustainability. Essential customers are not only willing to save some money, but they also understand that they help to prevent food waste, which is critical for many people who care about the planet's sustainability (Sarti et al., 2017). Sustainability enthusiasts and those concerned with the reduction of energy wastage, RESQ Club helps to feed the needy while playing its part of helping assure sustainable consumption and reduction in the energy utilized to produce food that ends up being wasted. From the aspect of brand image improvement, food providers also benefit from such a social value achieved by the platform – the reduction in food waste. Such alignment with sustainability can result to higher consumers' customer loyalty, enhanced corporate image since consumers judge organizations by their sustainable impacts (Amaral et al., 2022; Ciulli et al., 2020). This form of value creation is crucial for digital platforms such as the case of RESQ Club because it aims at developing economic value together with social value, and therefore adopting the values of both consumers and providers.

5.5.4 Relationship Value

The third important type of value which is achieved through utilization of RESQ Club is relationship value as this is a method through which the social platform builds a relationship between consumers and the provider of the foods. They, therefore, postulate that trust is an important element in any digital marketplace particularly for combating the difficult crusade against food waste where food safety concerns may act as a critical throttler (Ojala et al., 2023). The positive attributes outlined above that include the implementation of transparent processes, user reviews, and safety guarantees go a long way to eliminate the above concerns and therefore increase the level of trust that consumers have in the platform. Even the community engagement component of RESQ Club makes its individual relationship value contribution to the platform. Yes, consumers and providers are both engaging in transactions, but they are also engaged in the social cause of minimizing food waste. These purposes in still better user engagement and help them relate with each other hence more users are retained by the platform hence encouraging others to patronage the site (How Marketing is Used for Food Waste, 2024). Furthermore, these network externalities make this kind of community useful for the platform's value proposition since as more users actively engage, the

more often and in a more diversified manner they will interact on the platform (Ojala & Tyrväinen, 2011). This paper shows that consumers of RESQ Club services stand to benefit from economic, functional, social and relationship related values. These different types of value are mutually supporting and build up a platform model which thus ensures economic sustainability as well as societal relevance on the long term. Through providing coupons that makes products cost less, providing surplus meals through shops, and giving a chance to participate in sustainability efforts, RESQ Club has created a value proposition for consumers. In addition, through encouraging trust it maintains long-term collaboration with users and clients which builds the foundation of its sustainability in the context of the Finnish and Estonian markets.

5.6 Conclusion

Digital food waste platforms constitute part of a wider spectrum of two-sided markets that go beyond enabling efficient transactions to promote sustainable consumption (Amaral et al., 2022). Digital platforms aimed at food waste reduction, including various global initiatives, share common objectives: they help surplus food providers to link with consumers directly, therefore minimising food waste, whilst creating an economical value to these two parties (Evans & Schmalensee, 2010). This study supports the claim that two-sided platforms can obtain cross network effects whereby more providers (restaurants, grocery stores) make the platform more attractive to the other set of participants (consumers because of wider choice at lower cost). Food waste platforms are key to this dynamic, in that maximizing engagement on both sides of the platform can directly support sustainable business models. This research contributes to a broader understanding of how two-sided digital markets can act as a catalyst for both environmental and economic benefits with a model that can be replicated in other digital marketplaces with similar aims (Principato et al., 2023).

Beyond cross network effects, the mechanisms by which trust is built, and perceived risk factors are central to the inclusion in the phenomenon of consumer engagement in digital platforms, especially for perishable goods. In the case of food sharing platforms, for example, transparent risk mitigation strategies, like quality controls and detailed provider information, are crucial to building trust in a platform and influencing user's willingness to engage and repeat usage of a platform (Shao & Yin, 2019; Lăzăroiu et al., 2020). We find that consumers on food sharing platforms are more likely to interact when risks, like concerns over food quality, are actively managed, and this finding generalizes to other platforms in this space. This is consistent with broader platform literature that extols the role of trust and perceived risk reduction in engendering adoption and ongoing usage.

The research situates RESQ Club within this framework and shows how digital platforms that address food waste can also capitalize on a good level of consumer trust and loyalty sustained by their consistency in quality and transparent operations. The discussion adds to the theoretical discourse by showing us that for platforms in the same ecosystem trust mechanisms are necessary not only for initial user engagement but also for retention.

By applying these generalized lessons to the particular case of RESQ Club, we show how the platform adheres to and is powered by these more abstract rules. Cross network effects are exploited with expansion of the RESQ Club 's food providers roster, increasing its appeal to consumers who seek both economic value and convenience. The platform has managed to develop a mutually beneficial ecosystem wherein surplus food meets ready buyers helping in reduction of waste and simultaneously supporting local businesses. As such, the findings from this study put forward that RESQ Club's value creation model is more than just effective, it also supports the industry wide effective strategies on resource efficiency and user satisfaction. To achieve the sustainability goals on one end, and to keep a stable user base on the other end, RESQ Club has eked it out by continuously induction of engagement through incentives on both sides of the market (Amaral et al., 2022; Ojala & Baber, 2020).

In addition, the RESQ Club case offers specific observations regarding the impact of localized trust building mechanisms on user adoption in culturally very different markets, in particular Finland and Estonia. Overall, our findings show that the transparency and risk mitigation capacity of the platform has been a core capacity for gaining user confidence, especially in the light of the oversupply of food and the perceived potential food quality concerns inherent in selling it. The usefulness of these practices is that their success reflects that by using generalized trust building techniques into meeting specific regional needs, RESQ Club was able to successfully attract a reliable consumer base. In doing so, the platform provides a blueprint for other digital ecosystems looking to build confidence in products or services that are perceived as inherently risky for consumers. What follows is an exposition of how this understanding of consumer dynamics in digital waste food platforms can inform RESQ Club's localized approach through a connection of the broad platform theory to its efforts.

This paper aimed at describing and understanding how RESQ Club works in the digital environment to prevent food waste in Finland and Estonia as a platform that brings together food sellers and buyers. By considering value creation, consumer interaction, cultural differences, and

internationalization initiatives, RESQ Club is steadily moving on the right direction of sustainable consumption and fighting food waste. But several issues persist due to the issues with free software adoption by users and cultural differences, and economic demands necessary for global expansion. In return, the RESQ Club generates value by giving consumers affordable prices on food products while also enabling the food providers to come up with a way of effectively reducing food waste and at the same time generating more revenue. This is in concord with the literature on two sided platforms where cross externalities are seen as critical ingredients to the generation of value for all the stakeholders (Evans & Schmalensee, 2010).

However, there are challenges that have been identified as affecting the efforts of the platform to make interactions possible; such include issues of perceived quality and food safety, which are perceived to negatively affect food quality hence playing a role in limiting the adoption of the platform in both Finland and Estonia. These results emphasize the need for constant work on trust using clear and non-misleading marketing messages and sufficient safety protocols (Amaral et al., 2022). Cultural factors are also a major factor that determine user interactions and therefore their use of the platform. Also, in Finland, people are more aware of the environment and therefore are willing to participate in sustainable campaign such as the one of RESQ Club. Cultural beliefs towards food waste and attitudes towards digital platforms vary in Estonia and as such marketing strategies and platforms need to be customized for the country (Ojala & Tyrväinen, 2011). These culture differences' evidence the relevance of importing Uppsala model, a globalization theory which incorporates incremental market entry approaches stemming from learners' experience and adaptation.

However, drivers including convenience, affordability, and sustainability are key to the platform utility while factors like the use of technology and perceived risks about food quality act as barriers to engagement (Ciculli et al., 2020). Similar recommendations, associated with network theory, were also revealed to probe the details of partnerships with local companies to enter the new market more easily as well as to develop trust between different. Further, Effectuation theory reinforces the strategic concept of flexibility and adaptability as the key approaches to the management of digital platform business growth in volatile and uncertain markets. From a theoretical angle, this research joins the list of material involving digital platforms, especially concerning managing food waste and sustainable business models. Drawing academic concepts from platform economics, network theory and inventions on internationalization this paper better understands how platform such as RESQ

Club can scale up and prepare for internationalization across different cultures and locations. Therefore, although RESQ Club is an example of how technology can address pressing global problems such as food waste, it is only possible to achieve it provided that digital businesses understand cultural differences, consumer trust, and the enormous positive network effect. In this regard, the platform should maintain the strategies on localized marketing which were also assessed in this paper and work on improving its relationships with the local businesses to mitigate the challenges stated in this research. The research shows that digital platforms targeting multi-sided markets must be organic and dynamic in their use of lessons gained from market expansion as they seek to achieve sustainable growth.

5.7 Theoretical contributions and practical implications

This research thus provides significant theoretical developments in literature through exploring how digital platforms such as RESQ Club help businesses co-create value and engage consumers, especially in the setting of combating food waste in Finland and Estonia. The research further develops the knowledge on functioning of digital ecosystems especially in the context of two-sided markets, and their possibilities to create cross-network effects and overcome the differences in users' culture in terms of adoption. Therefore, this thesis was derived from the platform economics theory, network theory, and internationalization, which could offer a more systematic way of unpacking the platform's growth in various regional environments. Another theoretical advance of this research is the use of platform economics to analyze the FWRPS, specifically how companies like RESQ Club generate value through offering consumers content from content providers. This is in line with earlier literature on two-sided operating markets where it is posited that efficiency gains must be created by cross flow between the two networks to increase value for the parties on both sides of the market (Evans & Schmalensee, 2010). Furthermore, the analysis emphasizes the importance of cultural factors for user behavior and adoption while enhancing the understanding of cultural factors that influence the success of localized marketing strategies that encourage trust and continued use in various cultures that have emerged as a research gap after synthesizing findings from prior research (Shaheer & Li, 2020). This paper contributes to filling this gap in literature by examining the interaction of platform growth strategies with the cultural environments of Finland and Estonia. From the internationalization perspective they extend the scholarship on how digital platforms manage the challenges of growth across borders. The use of the Uppsala model and network theory shows that RESQ Club – together with similar platforms – cannot avoid entering

business relationships with local firms and authorities to mitigate other constraints, such as regulatory and cultural challenges, which are especially crucial for initial committed investments (Johanson & Vahlne, 2009; Hosseini & Dadfar, 2012). Furthermore, the study adds insight to effectuation theory explaining how platforms adapt to its theoretical context by employing innovative methods for expansion within unsteady and volatile markets; this enhances the knowledge on platform internationalization (Sarasvathy, 2001). The practical relevance of this research is equally rich, especially for managers and decision-makers in digital platform businesses. First, derived from the literature review and validated in the study, the following drivers and barriers concerning related consumer involvement were detected: utility value and cost value, known to enhance consumer engagement; perceived food quality risks and technology-related perceived barriers, affecting the decrease in consumer involvement. By doing so, one is able to understand seemingly incomprehensible factors with an aim of working extra hard to frame strategies that may solve user concerns hence building trust with the various platforms. This accords with the work of Ranta et al. (2020) where they state that stakeholder perspective tools should be used strategically to fully optimize potential value in circular economies. Second, by realising that the Finnish and Estonian markets differ in certain aspects, platform managers are better equipped to adapt their strategies to meet that market's needs. For instance, campaigns based on sustainability can be more successful in Finland because people from this country pay more attention to the state of environment, whereas in Estonia introduction of trust messages could be a more effective approach because people tend to worry about food quality and reliability of the platform (Ojala & Tyrväinen, 2011). This cultural sensitivity may add value to the platform offerings and improve the user engagement where the trust in the new digital platform entrants is in the growth phase. Also, in the present study several relevant and useful recommendations are provided which will be useful for enhancing business sustainability and operational performance in particular form of international business. Through compliance with regional laws and regulations and by tying up with the right players in the marketplace, platforms can enter a market with less resistance and expand with even less problems. The local network concept of network theory allays the complexity in managing the local network of the food providers and the consumers by making the operations to flow smoothly and in the process delivering value to all stakeholders (Hosseini & Dadfar, 2012). However, this study suggests that there be new and evolving changes within the market and the timely responded to them. The platforms needed to make positive changes in the technologies that support user engagement areas like food tracking systems and real time changes. Managers have also a central

role in employees/stakeholders' awareness about the subject, and implementation of sustainable food waste practices. This is according to suggestions in the literature that highlights that internal and external stakeholders are needed to be educated in the aim to improve the consumption and internal practices (Ciculli et al., 2020). When these practical considerations are met, not only does the overall sustainability performance of the business improve but the business is able to attract higher consumer willingness to pay and therefore is more competitive in the market.

5.8 Limitations and suggestions for future research

there are few limitations that have emerged while conducting this research on value creation and consumer engagement on digital food waste reduction companies like RESQ Club. Most of these limitations are realised in the research process and they also point to the areas that can be developed in subsequent research studies. It is important to overcome such limitations to improve the theoretical knowledge about digital platforms within the sustainability context and optimize their use in practice. Another drawback of this research was the losing data collection opportunity of providers of platforms in Estonia. The smoother part that requires mentioning is that this approach excluded info from some service providers outside the range of interviews and thus narrowed the research view on the Finnish market considerably, leaving the competitor comparison of Finland and Estonia with less complete perspectives. The absence of data from platform providers in Estonia can be regarded as a weakness primarily because the study is mainly focused on the consumer side, We have thus no clear understanding of platform providers' views regarding their roles and responsibilities in forming value, their strategies for interacting with users, and their problems of operational expansion across diverse cultural and market backgrounds. Future research should extend this study by conducting interviews with both content providers and consumers, although future cross-border analysis should also include consumers and providers from Estonia as well as additional geographical locations. This would extend knowledge of how value is co-produced between providers and consumers, and how platform providers manage market peculiarities, including legal standards and user acquisition. That is, a major research limitation of this study is that the data collection was done on a cross-sectional basis, thus providing only a snapshot of consumer action and participation. The thing is this snapshot-like mechanism hampers a continuous tracking of engagement change that is crucial when analysing the dynamics of digital platforms as effect networks emerge and grow. Such systems as RESQ Club are complex which means that consumers' interaction with the service, its value, and the platform performance as a whole change

as the number of users increases and when new functions and services are launched. Also pointed in the literature, the steady change detection and the long-term consumers' activity maintainability on the multi-sided platforms require longitudinal research (Evans & Schmalensee, 2010). Future work should therefore follow cross-sectional individual user and cross-sectional overall platform utilisation and success over time to measure how indirect network effects impact continuous platform growth and value creation in various markets. About this it would offer deeper understanding on the beneficial related and inherent ways in which the platforms could continue to be engaged while growing and expanding to other areas. Another bias requires mention, and it is the collection of self-administered interviews which may result in a social desirability or recall bias. These problems can be particularly acute in sustainability and food waste research, as respondents may have incentives to inflate their levels of eco consciousness and actual positive behaviors in this reporting context (Ciulli et al., 2020). To minimise these biases, subsequent work should use triangulation, which integrates qualitative interviews together with quantitative data including the usage analytics generated by the platform. For instance, the transaction information that how people buy and use products, logs of activity that users provide, and other quantitative measures of platform interactivity can be compared with the actual self-reports affording a more reliable and comprehensive understanding of consumer behaviour and their levels of engagement. This approach would also enable researchers and practitioners to quantify the effects that specific marketing campaigns, platform configurations and localisation have on adoption and user retention. There are, therefore, geographical and cultural limitations to this study as well. Although the research focuses on two rather similar markets, Finland and Estonia, the impact of potential cultural differences is not investigated beyond what is applicable to rather similar or occasionally contrasting markets. The Uppsala model of internationalization enhances the fact that the process of firms' internationalization is incremental and based on gains from experience (Johanson & Vahlne, 2009). Thus, generalization of these results for different platforms, functioning in markets with dissimilar cultural perceptions of food waste, sustainability, or technological implementation, could be somewhat limited. Future research could look at increasing its geographic generalizability by examining the same subjects in relation to different RESQ Club like apps or food delivery platforms within other relatively unexplored cultures like Southern Europe, Asia or Latin America where culture, digital use, and sustainability behaviours may differ sharply from those within the Nordic region. It would not only refine the understanding of how culture affects the take-up and usage of

platforms, but also the approaches utilised for adapting platforms appropriately to the requirements/consumers of different markets.

However, this research is also restricted to the consumer side of the platform only. Consumer participation can indeed be viewed as an essential component of the platform-based business model, therefore other platform participants - content creators (restaurants, shops, etc.) are just as essential in maintaining, let alone developing, the platform-based ecosystem (Ojala & Tyrväinen, 2011). Subsequent studies should focus on factors related to content providers, learning how they evaluate the value that the platform creates for them, and how their perceptions may lead to profit or loss, or lead them to continue using the platform or not. Exploring the provider side may demonstrate further how the supply chain function and other decisions such as pricing mechanism, and promotional strategies affect provider activity rate in enhancing the performance of the platform. Further, by concentrating on both sides of the platform, future research can present a more extensive representation of co-produced value in multitude digital environments. This research also brings theoretical limitation from the theories used in the study. As much as the study relies on platform economics, theory of networks, and the theory of internationalization, the psychological and behavioral perspective of consumption is not adequately developed. For example, trust, perceived risk and usability are essential constructs for explaining user acceptance and usage of technology especially in markets with food safety and sustainability implicating issues (Amaral et al., 2022; Ciulli et al., 2020). It may also be valuable to adopt and integrate further TAM or consumer trust frameworks in subsequent studies to enhance an understanding of P2C food waste app users' attitudes and behaviour regarding food quality, reliability, and the functionality of the P2C platform. These perspectives would extend current knowledge derived from economic and strategic models by providing cognitive and affective theories regarding consumer behaviours in digital environments. Finally, the contribution of this study to practice is constrained to the study of food waste reduction platforms only. The findings provide an additional contribution to the comprehension of digital platforms in the context of sustainability-related activities; Nonetheless, the results cannot be taken for granted for other platform types or sectors. Subsequent research could also extend the propositions made by this study to other types of sustainability-centric applications, for instance – energy-saving, circular economy, or environmentally-friendly mobility (Ranta et al., 2018). Such comparative studies would help to establish if the drivers and barriers to engagement with the platforms are contingent on the industry or the same for the various sustainability initiatives. In sum,

the present book contributes to knowledge of consumer involvement, value co-creation, and platform development in the context of the food waste minimisation setting, yet several limitations need to be considered in future research. In the future studies, the inclusion of different cultural settings; the use of longitudinal studies; involvement of both the supply side; and application of the behavioral theories will go a long way to enhance the scholarship on how digital platforms can scaling up and sustain itself in the global arena. These efforts will not only provide valuable contribution to the academic literature but also a practical guidance to the platform operators interested in broadening their influence in the fast-growing digital landscape.

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Appendices

Appendix 1. Interview Questionnaire for RESQ Club Consumers (End Users)

Background Information:
Q1: How did you first hear about RESQ Club?
Q2: How long have you been using RESQ Club to purchase surplus food?
Q3: Can you tell us about your typical purchasing habits when using the platform (e.g., how often you use it, how much you spend)?
Q4: What factors influence your decision to purchase surplus food from RESQ Club over other options?
Motivation and Value Perception:
Q3: What motivated you to start using RESQ Club?
Q4: How would you describe the value you receive from using RESQ Club compared to other food purchasing options?
Q5: Can you describe a situation where RESQ Club exceeded or fell short of your expectations?
User Adoption and Cultural Influences:
Q6: How frequently do you use RESQ Club to purchase food?
Q7: Do you think cultural factors influence how you and others in your community use RESQ Club? If so, how?
Q8: Have you noticed any differences in how RESQ Club is used in different regions (e.g., between different cities or between Finland and Estonia)?
Platform Experience and Engagement:
Q9: How would you describe your overall experience with the RESQ Club app/website?
Q10: What features of RESQ Club do you find most useful or appealing? Why?
Q11: Are there any features or aspects of the platform that you find frustrating or challenging to use?
Q12: How do you usually find and select the food offers available on RESQ Club? What influences your decision-making process?
Perceived Risk and Trust:
Q13: When you first started using RESQ Club, did you have any concerns or doubts about the platform? If so, what were they?
Q14: How has your trust in the platform and the food providers evolved over time?
Q15: What steps do you think RESQ Club could take to improve trust and reduce any perceived risks for users?
Digital Ecosystem and Interaction with Content Providers:

Q16: How do you perceive the relationship between the food providers on RESQ Club and yourself as a consumer?
Q17: Have you ever interacted directly with the food providers through the platform? If so, how was that experience?
Q18: How do you think the platform could better facilitate communication or interaction between consumers and food providers?
Suggestions for the RESQ Club
Q19: What improvements or features would you like to see added to the RESQ Club platform to enhance your experience as a consumer?
Q20: If you were to recommend RESQ Club to a friend, what would you highlight as the main benefits of using the platform?
Q21: Is there anything else you would like to add about your experience with RESQ Club that we haven't covered?
Q23: Can you provide more specific examples of positive or negative experiences you've had with RESQ Club?
Q24: Why do you continue to use RESQ Club, and what factors would encourage you to use it more frequently?

Appendix 2. Interview Questionnaire for RESQ Club Content Providers

Background Information:
Q1: Can you please describe your business and the type of food services you offer?
Q2: How long have you been using RESQ Club to offer your products/services?
Q3: How did you first hear about RESQ Club, and what made you decide to join the platform?
Q4: What specific goals do you have for your business by using RESQ Club (e.g., reducing waste, increasing sales)?
Value Creation:
Q3: What motivated you to start using RESQ Club to offer your surplus food?
Q4: How does RESQ Club help you create value from surplus food that would otherwise go to waste?
Q5: Can you describe how the platform has impacted your business operations, particularly in terms of reducing food waste and reaching new customers?
Platform Engagement:
Q6: How would you describe your overall experience with the RESQ Club platform?
Q7: What features of the RESQ Club platform do you find most beneficial? Why?
Q8: Are there any challenges you've faced while using the platform? How have you overcome them?
Q9: How frequently do you interact with the platform to update your offerings or engage with customers?
Internationalization and Cultural Adaptation:
Q10: In your opinion, does the platform meet the needs of your customers in Finland/Estonia? Why or why not?
Q11: Have you noticed any differences in how customers in different regions (e.g., Finland vs. Estonia) engage with the platform?
Q12: How do you think cultural differences influence the adoption and use of RESQ Club in different markets?
Business Model and Two-Sided Market Dynamics:
Q13: How do you perceive the relationship between content providers like yourself and the consumers on the RESQ Club platform?
Q14: How does RESQ Club support you in marketing your surplus food to consumers? What could be improved?
Q15: How do you balance the needs of your business with the pricing and promotion features offered by the RESQ Club platform?

Digital Ecosystem and Consumer Engagement:
Q16: How do you view your role within the broader digital ecosystem created by RESQ Club?
Q17: What strategies do you use to engage customers on the platform and encourage them to purchase your surplus food?
Q18: How has the platform influenced your understanding of consumer behavior and preferences?
Improvements and suggestions for RESQ Club
Q19: What improvements or changes would you suggest for the RESQ Club platform to better support content providers like you?
Q20: Is there anything else you would like to add about your experience with RESQ Club?
Q23: Could you explain in more detail how your business operations have changed after joining RESQ Club?
Q24: Are there any specific incidents or examples that highlight how the platform has benefited your business or posed challenges?