

Researching the possibility of expanding an app-based sharing economy business into the housing market in Finland

Case Lainappi

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Abstract

Environmental concerns among younger generations are being raised, leading to an increased demand for sustainable actions. The need for a mobile application based on the sharing economy, specifically item renting, among higher education students in Finland, was to be determined. Lainappi, a Finnish start-up, offers a user-friendly mobile application for short-term item rentals, promoting green economy. Student demand and needs are aimed to be understood, the market environment explored, and a market entry plan identified for Lainappi. The current market environment is aimed to be described, potential future scenarios explored, and a short-term plan determined. A systematic structure is followed, starting with an introduction, literature critically reviewed, data analyzed, and results presented. Ideas for future research are provided in the discussion chapter, which concludes by summarizing the findings and purpose of the study.

A mixed method approach is employed in the research design, with quantitative and qualitative data collected simultaneously. Primary data is gathered through a survey conducted among students, while secondary data is collected through personnel interviews. Numerical data is aimed to be gathered using the quantitative strategy with a survey for higher education students, while verbal dialogue is the focus of the qualitative strategy. Qualitative data was collected through semi-structured interviews with two personnel from student housing associations, who provided valuable insights into the practicalities of potential service commissioning.

A better understanding of the topic and demand for the service is aimed to be gained, offering valuable information for future research. The survey suggests that Lainappi services could enhance students' quality of life by saving money, providing quick access to temporary equipment, and reducing waste. The survey reveals that the Lainappi box service could be used by 36.7% of full-time students, while 46.7% might hesitate. The service is more likely to be used by working students who work fewer hours. On campuses, 71.4% of students working ten hours or less are more likely to use the service. The service is more likely to be used by full-time students on campuses. However, hesitation rates are higher in housing associations. Concerns about Lainappi's usage among university students are revealed through interviews. They prefer familiar platforms for renting, and having multiple apps can be negatively affected. Housing associations prefer to provide all services on their own platforms, with potential collaboration with Lainappi.

Lainappi has a potential market in Finland's student housing market due to the increasing global sharing economy trend. The service could be particularly popular on campuses, offering a broader user group. However, platform preferences and lack of usage are concerns. New market segments can be promoted by Lainappi through collaboration with universities and student associations, introducing boxes on campuses, and highlighting affordability and safety.

Keywords/tags (subjects)



Description

Sharing economy, green economy, Item renting, Mobile application, Housing market

Miscellaneous (Confidential information)

For example, the confidentiality marking of the thesis appendix. See Project Reporting Instructions, Section 4.1.2.

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1 Introduction

1.1 Background and context of the study

Environmental concerns among people, particularly younger generations, are increasing continuously, therefore the value towards sustainable and environmentally friendly actions, for example recycling, has increased and individuals have started to pay more attention to their decisions to ensure a sustainable future. The sharing economy market is highly competitive, making it challenging to convince individuals to use a certain platform or a service, especially if they are comfortable with a more familiar way. As noted, younger generations are more concerned about the environmental state of the world, making them more willing to welcome this type of services. The aim of this thesis is to ascertain if there is a need for a mobile application based on sharing economy, more closely item renting service, among university and college students in Finland.

Lainappi is a Finnish based start-up company that provides a mobile application for item renting. Lainappi operates by providing innovative household item rental service to both individual consumers and businesses. In the application users can rent various items, such as tools, sports equipment, and household items. They offer a user-friendly mobile application where they focus on short-term rentals. Their mission is to encourage people to rent items instead of purchasing them, therefore promoting green economy, and sharing economy. The company was founded in 2020 and now operates in Tampere and Helsinki (Lainappi, 2023). In addition, Lainappi has a box concept where rentals can be done without human connection, users renting items from a box through the mobile application. In this research we will discover the expanding possibilities for this box concept, furthermore the demand in the student housing market for this service.

In the application its user can be either a renter or an owner, depending on their needs. Renters can rent any items at hand. On the other hand, owners have the freedom to accept or cancel any lease request and can decide what items to lend. The owner has the authority to determine the price, location and length of the rental. A chat feature in the application allows renters and owners to discuss and agree on practical matters. At the end of a rental the application encourages both parties to leave a review and therefore increase their reliability (Lainappi, 2023).

SOA Ry provides student housing in Finland. SOA Ry has 24 companies and foundations that provide student housing all over Finland. They offer affordable accommodation with good access to the universities. These housings are made with student's need in mind. Typically, the rent includes electricity, water, and network. Many of them also offer free laundry, sauna and other facilities depending on the accommodation. Overall, they offer a comfortable living option with a reliable landlord and secure environment. This is particularly suitable for a student moving on their own for the first time (SOA Ry, 2023). Student housing is very popular in Finland, because it offers apartments in good conditions with low-cost, additionally with likeminded people, a community.

1.2 Motivation

Since environmental concerns has risen, especially among younger generations, meaning generation Z that include people born from 1996 to 2010 (McKinsey Explainers, 2023), the writers of this thesis have occurred an interest towards the consuming habits of young students, furthermore, their own evolving willingness for changing their own consuming patterns to more sustainable and eco-friendly choices, has significantly affected topic establishment. Moreover, the increasing awareness of climate change and the associated concerns within the Gen Z (McKinsey Explainers, 2023) influenced this topic. In addition, supporting a positive change with Lainappi box concept towards thoughtful and sustainable consuming habits, moreover a positive change towards sharing-focused community, has been a great factor when reasoning the topic. The writers are eager to see how Lainappi service could transform the youths' perceptions on item utilization. The Lainappi company hold the position of commissioners and assigned the authors with this topic to enhance their operational efficiency at the same time examining the potential of expanding to a new market as well as its efficiency.

The research topic for this thesis was established on the own interest of the writers towards sustainable consuming habits and environmentally friendly actions, therefore the motivation behind this topic is seeing significant potential of Lainappi's service, especially among young adults. It is genuinely believed by the writers that there is a demand for the service, because young adults, particularly higher education students, tend to have less money and are eager to options for saving money. Young adults, moving on their own for the first time to study, want to spend less money on infrequently used items, thereby creating an opportunity for Lainappi for a new market

to entry. The authors, who were both students and lived in a student housing apartment, identified the need for this service based on their own experience, therefore eager to do research on this topic and help Lainappi's with their new possible market entry.

Furthermore, the writers believe that digital innovations are required to meet the need of the younger generation. Younger people or Generation Z also referred as "digital natives" (McKinsey explainers, 2023, p.2) are more willing to test new platforms and apps rather than the older generations and they call for an effortless usage and transformation to a new application. Since Lainappi is providing a user-friendly platform, the usage potential rises among younger individuals notably. By entering this app and box concept to the student housing environment, the authors see the potential of building a sharing-focused community hence adapting long-term sustainable consuming habits within the younger generations.

In this context, the motivation behind this research is broader than the potential market entry. It seeks to contribute sustainable consumption, sharing economy and environmental consciousness of the younger generations. The prediction on this research is to present a comprehensive overview of the existing market demand for Lainappi within the student housing market and possibilities for entering the market by solving potential obstacles and opportunities, at the same time influencing student's habits regarding item utilization.

1.3 Research questions and objectives

This chapter covers the objectives and the research questions of this thesis, thus providing an understanding and purpose for this study. The aim for this research is to understand the demand and the needs of students, consequently, reach an overview of the market to identify a market entry plan for the service provider, Lainappi. Because the service is so new and unique, research on this topic is needed.

Firstly, it is required to discover the target groups, in this case university and/or college students, willingness and need for the service usage as well as to hear their opinions concerning this service. In other words, the objective is to explore the market environment and determine the demand. In addition, focusing on the student housing market, discovering if student housing foundations are

interested in investing and whether they feel the need for this service. Secondly, the aim is to explore opportunities for the provider (Lainappi) to enter a new market. Lastly, based on the research outcomes, the objective is to provide a short-term plan for Lainappi to adapt their service into the student housing market by putting our research finding into practical recommendations for the company to use.

Research questions

These research questions have been divided so, that the first question is describing, providing an assessment on how the situation is now. The second question is exploratory, examining potential future scenarios and lastly, the third question is normative, focusing on the future of Lainappi. These questions combined provides a solid base for the research.

RQ 1: How is the market environment currently for Lainappi, is there demand for this service withing the student housing market in Finland?

RQ 2: Which potential ways can be found that would promote new market segment entry?

RQ 3: Based on the outcomes of the research, what ought to be a short-term plan for Lainappi?

1.4 Structure

A systematic structure is key for solid research. At the beginning of this study, there is introduction. In the introduction background and author's motivation towards this topic are explained, additionally introduced the reader about Lainappi. Research questions, objectives and the structure of the thesis are part of the introduction. After the introduction, it is time to critically review the literature connected on the study's topic and widen the comprehension of the author's, thus laying a foundation for this study. The literature review section introduces the key concepts and theoretical basis for the authors to understand the existing situation in the market. After the literature review, the methodology chapter attains. That section focuses on the implementation and methodological choices of this research. It is important to show what kind of methodological choices have been selected and how data has been collected and analysed to obtain a realization of the research plan and implementation. When all data and literature have been analysed, the

next step of the thesis is presenting results followed by discussion. Those chapters reveal the answers to research questions and objectives, and the overall outcomes of this research as well as a short-term plan for Lainappi. In the discussion chapter, results of the study and the thesis process overall are being reflected, additionally providing ideas for potential future research. This thesis ends into a conclusion. The conclusion chapter summarises the finding and purpose of this study.

2 Literature review

In this chapter the literature of sharing economy and its market, sustainable development, sustainability withing student housing foundations, item renting, and phone applications are critically reviewed. By examining existing literature, a theoretical knowledge base on the subject is offered, therefore enabling the authors to understand the topic better.

2.1 Sharing economy

The literature of sharing economy provides several names and definitions, including peer-to-peer economy, gig economy, collaborative economy, digital economy, and circular economy to name a few. However, they are all defining this new concept of sharing and trading goods and services. This thesis is focusing more on shared goods. According to Curtis (2020) shared goods are items that last long as well as ephemeral, including apparel, décor, different items for home and electronics (Curtis, 2020). Despite of the various terms for the sharing economy, the idea behind them is the same: enabling individuals to share their un-used or underutilized items with others through a digital platform (Basselier, Langenus &Walravens, 2018).

Sharing economy can also be characterized as maximizing the utilization of resources. Sharing economy can include practices such as retailing, donating, exchanging, and temporary leasing in a digital platform. This can happen with or without financial transaction including individuals, businesses, and organizations. The sharing economy strives to enhance the lifecycle of shared goods with the help of technology and therefore saving money and resources (Demailly & Novel, 2014).

People are now more willing to share and rent items with other individuals due to the growth of digital technology and platforms. There is limited research on younger populations, meaning the Gen Z populations involvement on sharing economy, they however have favorable traits due to

their profiency in technology and digital platforms as well concerns about ecological issues. Additionally, University students are open to take actions associated with the sharing economy (Martínez-González, Parra-López & Barrientos-Báez, 2021). Since the sharing economy allows people to gain money from unused goods, the sharing economy market is evolving to a direction where owned assets are being shared and accessed as services (Yaraghi & Ravi, 2017), indicating that rather than owning assets, such as a drill, people will use them when needed. Previously sharing items was often between people familiar to each other, such as family members or the neighbours. However, due to the growth of digital environment, this practice has extended and transitioned into a more formalized process by including businesses (Basselier, Langenus & Walravens, 2018).

Sharing economy has several upsides regarding the climate change. Since the main idea of sharing economy is to reuse items and increase their lifecycle, it decelerates the usage of natural resources, decelerate the deficit of biodiversity, and minimize waste. Other advantage sharing economy has on climate change is the shrinkage of greenhouse gas emissions. Greenhouse gases means substances that retain the heat from the sun, which naturally lands on the Earth, forcing the heat to stay on the earth rather than flowing back to the space (European Parliament, 2023). According to the European Parliament, figure 1 shows the amount of greenhouse gases in a few European countries in 2019. The European Parliament states that industrial activities contribute to 9,10% of the greenhouse gases within the European Union and waste contributes to 3,32%. Making actions towards a sustainable future with sharing economy, these rates can decrease. The total amount of greenhouse gases from all European countries was 4,065,462. However, compared to other countries, Finland's amount (53, 021) remains relatively small (European Parliament, 2023).

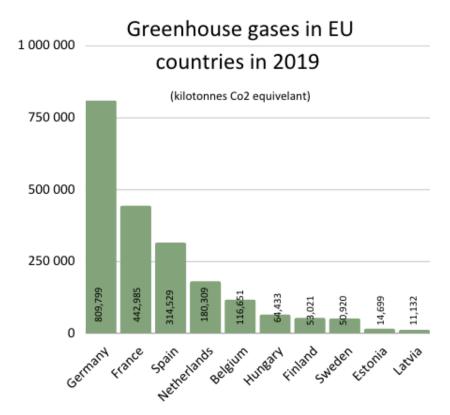


Figure 1. Greenhouse gases in EU countries in 2019 (modified from European Parliament, 2023)

2.1.1 Sharing economy business model

To comprehend the functioning of businesses such as Lainappi, it is important to study frameworks and models. The literature of sharing economy business models provides many models. Few most well-known models are "access-based business model", "marketplace/platform economy", and "on-demand service provider" (Barbu, Bratu and Sîrbu, 2018, p.159). The platform economy model is the most relevant to this subject and thesis. The main idea of this model is that there is a platform that enables actions between a provider and a user. Due to the platform, customer relationships are primarily automated (Barbu, Bratu and Sîrbu, 2018). Lainappi serves as an illustration of a company that practises this business model. This model satisfies the market supply and demand over the platform where both parties are being billed from leasing (Barbu, Bratu and Sîrbu, 2018).

Basselier, Langenus and Walravens (2018) have explained sharing economy's business model (see figure 2). The sharing economy business model includes peer-to-peer (P2P) model and peer-to-business model (P2B). The business model includes a provider that is either an individual or a busi-

ness and they offer their goods and/or services through a platform, for example a mobile application. The platform facilitates interaction between the user and provider enabling them to gain access to unused resources. In the receiving side there is the user, usually a consumer. They send their payment through the platform to the provider. Generally, there might be a payment fee that the platform keeps from providing the platform.

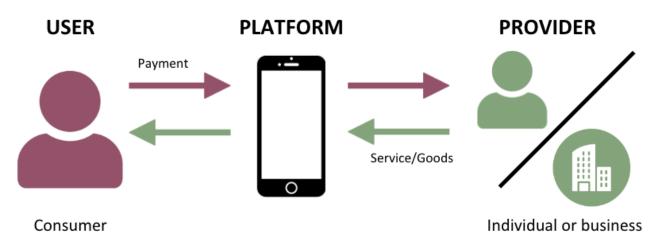


Figure 2. Sharing economy business model (modified from Basselier, Langenus & Walravens, 2018)

2.1.2 The future of sharing economy in Finland

Sharing economy currently plays a big role between individuals and organisations and it will grow even more in the future. As mentioned before people are now more willing to share and rent items therefore participate in the sharing economy. This also applies in Finland. Statista stated that 97% of people in Finland use mobile phones and users between the age of 16 and 24 the percentage is 99% (Statista, 2023). The high usage of mobile phones enables people, especially young people, to have easy access to sharing economy platforms and therefore increase their usage.

Based on the findings of Sitra's Resource-wise citizens poll conducted in 2019, renting items and donating them to others has increased in Finland since 2017 with 3% as well as the effort to reduce the number of owned items at home (Sitra, 2019). As proven consumer habits and patterns of consumption are shifting to a positive direction. In the future it is likely that a change in actions and perspectives will occur.

The European Commission (2020) conducted a "Circular economy action plan" that will shift the world towards a more sustainable word. The aim of the action plan is to promote sustainable consumption and minimize waste by extending the duration of resources within the EU to carry out "climate neutrality by 2050" (European Commission, 2020, p.1). By inspiring people to act on sharing economy, this plan promises to deliver superior, secure products enabling civilians to reutilize and upkeep their items. (European Commission, 2020). If these plans get into action, the world will shift towards sustainability and the actions of sharing economy increases, therefore slowing down climate change.

2.1.3 Market analysis

To explore the various ways for Lainappi to enter a new market, it is important to analyze the existing market for their services. This chapter covers the situation of Lainappi's current market regarding sharing economy mobile platforms as well as the future forecast on trends within the market.

When viewing the literature on this topic it is shown that the market for mobile app-based item rental services is practically nonexistent in Finland, making it challenging to study the competition and market. However, even if there are no studies related to the current stage or current use of sharing economy in Finland, the sharing economy has risen in Finland and there are several different platforms for different type of services available such as Commu App, Airbnb, Uber, Wolt, Tier, and Zadaa to name a few. Two companies dominate the sharing economy market globally, Airbnb operating in the home sharing market and Uber operating in transportation sharing market.

Airbnb permits people to rent their unutilized apartments and other housing options, whereas Uber permits people to share rides with each other. Nevertheless, despite the minor amount of literature of item renting services in Finland, the global market and other sharing economy platforms has a great influence in this market analysis. In accordance with PwC, the global market of sharing economy could lead up to 335\$ billion by 2025 (Watts, 2022). This mentioned it is wise, even if the focus is on Finland, to seek literature on the global sharing economy market in the market analysing phase.

PwC (2015) conducted comprehensive research about consumer perspectives regarding sharing economy. According to the study, following demographics were presented about consumers that

are "most excited" after they experienced using sharing economy platforms (PwC, 2015, p. 8): person between the age 18-24, parents with kids under the age of 18 and domestics with the income ranging from 50\$ to 75\$. The study included other captivating insights such as almost half of the US adults (participants of the research) senses a weight of responsibility in owning and majority of them agree that having access is more favourable than owning, however, predominant majority expresses worry about sharing economy usage being inconsistent as well as expressing distrust without recommendations and ratings (PwC, 2015). These insights provide perspectives that should be considered when planning a new market entry. As mentioned earlier, item renting platforms are community-driven focusing on peer-to-peer (P2P) renting and based on the research conducted by PwC there is a market niche for young adults and middle-class users favoring access rather than owning for P2P platforms.

In line with Grand View research (2023) the dimension of the global smartphone application industry was calculated at USD 206.85 billion in the year 2022, and it is projected to increase "at a Compound Annual Growth Rate (CAGR) of 13.8% from 2023 to 2030". The study's scope includes applications for gaming, wellness, audio and visual content, social media, trade and electronic commerce, alongside other purposes. However, the widespread adoption of smartphones, expanding use of the internet, and the integration of artificial intelligence and machine learning into mobile applications indicates a rising demand for such applications, or apps, will continue to rise in the future, therefore showing a positive light for Lainappi as well. The previously mentioned apps are generally acquired from application store locations such as the Androids Google Play Store and App Store for iOS-run devices (Grand View Research, 2023).

Furthermore, in the context of item renting and Lainappi company, there are a few competitors including Hygglo, Tori, Stuffio, Renda, Netti vuokraus, and Clas Ohlson. Lainappi has provided and listed their competitors in the figure 3 below. One factor that makes Lainappi unique is their box concept by allowing easy access for individuals to rent items from a box through their mobile application. As seen from figure 3, Lainappi is located in the upper right corner meaning that it it's reliable and the safest and easiest platform in the market including insurance. In Finland's rental market, Clas Ohlson, Nettivuokraus.com, Commu App and Tori.fi are competitors for Lainappi but they are not focused on consumer item rental but rather more in a bigger scale, they are also not as secure and easy to use as the Lainappi application. That also implies that there is a good chance

to capture the top spot in the market right away before other competitors emerge. As a result of the lack of precisely comparable rivals in the Finnish industry, Lainappi has an advantage to develop and learn before new businesses begin to enter the market.



2.1.4 Future forecast on sharing economy market

The item rental market is highly dynamic and subject to rapid changes, influenced by consumer trends, technology, and economic conditions. Marketplace Risk (2022) has listed a few trends that will modify the future of sharing economy platforms, one being blockchain technology. Blockchain is a technology that documents transfers across device networks (Marketplace Risk, 2022), providing a safer option for traditional transaction services and databases. The article explained that blockchain offers an innovative framework for the sharing economy because it increases individuals to supervise their own personal data. Furthermore, professionals have mentioned that the trend in using sharing economy platforms to increase due to increasing awareness on sharing economy and shifting consumer behaviour and preferences, additionally individual cost savings and demand for service access over ownership (Marketplace Risk, 2022). Understanding these trends in beneficial when considering the sharing economy market and its prospects in Finland, especially when planning to enter a new market.

However, following Mintel's Global Consumer Trends report (2023), that covered future trends of 2024, consumers are concerned about the environmental impact of businesses. Additionally, based on an article by McKinsey explainers (2023), majority of generation Z are ecologically aware therefore anticipating companies to show their dedication towards sustainability. They also prioritize values towards sustainable practises and climate change stands out as a top concern for them. In Mintel's report (2023), they stated that customers that are worried are unlikely to change their behavior towards more sustainable actions, additionally expressing businesses to take the lead with their adaptation. Based on these viewpoints, Lainappi may face challenges with consumers that are unlikely to change their actions. On the other hand, focusing on generation Z and their concerns about the environment and their perception towards sharing economy, McKinsey explainers (2023, p.4) has researched that "Consumption is about access rather than ownership" for the generation Z, thus providing Lainappi an opportunity with the younger generation.

2.2 Sustainable development and green economy

2.2.1 Sustainable development

Sustainable development is crucial to secure a stable future. Henderson and Loreau (2023) has noted that sustainability can be defined as the implementation of actions that enables the present generation to satisfy their necessities while ensuring the same for the future population. As shown in figure 4, sustainable development is divided into different segments which are economic, social, and environmental (Al-Taai, 2021). In addition, the main goal for all these dimensions is to ensure a sustainable world. The goal of environmental development is to achieve a greener economy with actions such as efficient resource use and biodiversity reduction, to ensure a sustainable environment, whilst keeping in mind needs of future populations. The aim of economic development, on the other hand, is to improve society by elevating manufacturing techniques, scaling up production through enhancing expertise and resources, and developing higher-quality institutions. In contrast, social development aims to enhance and flourish overall human welfare (Al-Taai, 2021). To sum it up, the goal of sustainable development is to seek synergy between all dimensions.

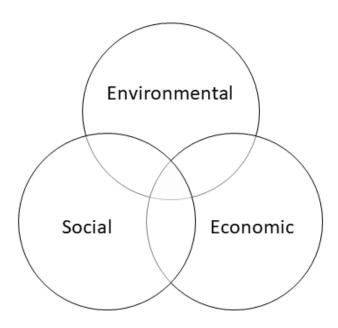


Figure 4. Dimensions of sustainable development (Al-Taai, 2021)

Actions towards a sustainable world have been put at risk by the war between Ukraine and Russia and the COVID-19 pandemic, especially health, education and poverty have been remarkably affected (United Nations, 2023). Additionally, the climate change has been amplified. According to a special report implemented by the United Nations, greenhouse gasses are pushing the Earth's temperature. The temperature is currently at 1,1°Celcius above pre-industrial levels, and projections indicate they may surpass 1,5°Celcius by 2035. This will increase extreme weather conditions (United Nations, 2023, p.3). Considering these challenges, to achieve a sustainable world even more actions and efforts are required globally.

2.2.2 Green economy

Green economy holds considerable importance in shifting the economy towards a sustainable and lasting world. The concept behind green economy is to understand the link between the economy and the environment. It provides a framework for sustainability (Adamowicz, 2022, p. 6). The United Nations environmental program UNEP specifies green economy as "one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities" (United Nations, 2011, p.76). Nevertheless, in accordance with Al-Taai (2021), green economy's primary goal is to decrease greenhouse gas emissions and environmental pollution at the same time optimizing resources and energy utilization and hindering biodiversity loss. He also stated that to accomplish this, restructuring guidelines and principles that slow down

the development of green economy is essential in organizations. In simple terms, moving from "brown" economy, which often neglects its environmental harm, towards an environmentally sustainable economy is crucial for organizations to achieve a greener economy.

Furthermore, green growth means combining economic and environmental policies to support economic growth by offering new opportunities for new resources while protecting the environment. The idea is to pursue economic growth without harming any natural resources. In simple terms, green growth addresses economic improvement while emphasizing ecological durability (World Bank, 2012). To achieve green growth, different approaches can be used. "Economic instruments such as taxes, subsidies, and trading schemes" can be used to encourage environmentally friendly actions, also providing information, and changing policies and regulations can encourage sustainable practices (European Environment Agency, 2011, p.97). Nonetheless, as previously stated, to achieve green economy, actions within organizations related to guidelines and principles are needed, moreover, the transition towards green economy can be carried out by combining economic and social objectives and ensuring that they are mutually reinforcing, while ensuring sustainable development (AI-Taai, 2021). These efforts and actions will contribute towards a world that is both environmentally friendly and green.

2.3 Sharing economy and sustainability within student housing foundations in Finland

The sharing economy is increasing into the everyday life of student housings in Finland. It is typical for student housing in Finland to include shared features such as laundry rooms, study rooms, storages, saunas, and other recreational spaces. Moreover, several student housing foundations offer a platform for car and bike sharing. Car sharing is provided by Turku Student Village Foundation (TYS), Student Housing Foundation in Vaasa (VOAS), Student Housing Foundation of Northern Finland (PSOAS), Tampere Student Housing Foundation (TOAS) and Central Finland Student Housing Foundation (KOAS), to name a few, whereas bike sharing is provided by TOAS, PSOSAS, specifically for exchange students only (PSOAS, 2023), KOAS and Domus Arctica Foundation in Rovaniemi (DAS). KOAS provides a flea market for the student residents in the apartments to "donate, exchange or sell" their unused items within the KOAS community (KOAS, 2023). Besides these features mentioned, sharing economy does not play a significant role in the student housing communities.

Many of the student housing foundations encourage students about ecological practices. According to TOAS sustainability report (TOAS, 2023) TOAS promotes their tenants to engage in recycling practices rather than discarding items whereas TYS prioritize sustainability by addressing environmental aspects such as energy and water utilization, as well as waste disposal. Their goal is to achieve carbon neutrality by 2029 (TYS, 2022). POAS, that provides rental apartments for students in Tampere, is addressing climate change by promoting increased sustainability in housing production and reducing carbon footprint of construction as well as providing possibilities for recycling and promoting environmental awareness (POAS, 2022). On the other hand, PSOAS (2023) is committed to sustainability in every action they take, for example with environmental collaboratively. Even if sharing economy practices does not play a significant role within student housings in Finland, the foundations are aware of the environmental situation and are taking actions towards sustainability.

2.4 Renting

This chapter covers advantages and disadvantages on renting, especially item renting. Through item rental, businesses can obtain assets and equipment that they might not otherwise be able to buy but which are necessary for their operations. Additionally, it can prevent from needing to take out a sizable loan in order to purchase equipment altogether and liberate operational funds for usage in other parts of a company. Additionally, if a product requires frequent maintenance, can soon become obsolete, or if utilized infrequently, renting or leasing is a suitable option (NIbusinessinfo, 2023).

According to Danes (2013), renting significantly expands the pool of possible customers. Consumers who might not have visited a store to buy equipment might be interested in renting a certain item. Furthermore, if customers plan to rent equipment from the store, they probably will return later to buy the equipment. Another advantage Danes (2013) mentioned is that existing consumers have the option to rent an item that they previously could not have justified buying. Furthermore, moving on to leasing. Leasing means renting products, such as a car, for a certain length of time in exchange for regular rental payments and under hire purchase agreements, a down payment is made to cover the cost of the asset, with the remaining amount to be paid overtime in instalments (Nibusinessinfo, 2023). Despite the fact that leasing is typically more expensive, the biggest benefits of leasing equipment are financial. If funding isn't available from other sources, as it

is for certain small enterprises, then it might be a good alternative. For those who do have the money to buy it, it is also a way to save money. In instances where a client finds it challenging to justify the expenses or obtain financing for updated items, choosing rental becomes an appealing alternative until they are financially prepared for a purchase. Moreover, in certain situations, rental income might experience a rise even in times of economic downturn (Danes, 2013).

While there are many advantages of renting items, it also has disadvantages. The ease of upgrading items through renting equipment may be convenient, although for customers, renting equipment comes with some issues. When considering renting equipment, the first problem that comes to mind is that since it is not the consumer's property, any damage or breakage will result in a debt to the owner. If they entirely owned the product, this would not be the case. Rental companies need to address customer concerns about the calibre and condition of rented goods in order to keep their customers' trust. All human relationships like romantic and platonic as well as familial, commercial, political, and medical rely heavily on trust. For example, it is considerably more difficult to gain from a professional relationship if one does not trust their consumer guidance. Simply defined, trust is a deep belief in someone's reliability, sincerity, or competence (Thagard 2018). This argument is important due to trust being one of the most important factors between contacts in the market of renting.

2.4.1 Renting versus owning

One of the most important decisions that people and organizations make about asset management and consumption is whether to rent or buy items. This choice could have a notable impact on lifestyle, personal finances, the environment, and other areas. The following are important areas to think about while renting or buying. To begin with, renting has cheaper up-front fees in comparison to ownership, this is particularly valid for expensive goods like houses, cars, and highend equipment. There is a lot of flexibility while renting. Without having to make the long-term financial commitment that comes with ownership, there is an option to upgrade or modify the item periodically. One benefit that renters frequently enjoy is having their service provider handle maintenance and repairs. Time and money can both be saved by doing this. Renting can provide access to items such as fancy cars or specialist equipment that might be too costly to buy altogether. Depending on the situation, renting may turn out to be more environmentally beneficial since it can prolong the life of products and lower the need for new ones. Because consumers

have more influence over tangible products than they do over intangibles, which results in a higher sense of psychological ownership. The way tangible items are consumed can vary significantly from the consumption patterns of intangible goods (Kim & Jin, 2020).

The Finnish market has a strong focus on sustainability, and consumers may prefer renting over purchasing for environmental reasons. Rental services provide access to a broad range of items without the need for maintenance, storage, or disposal, which appeals to urban dwellers. Renting equipment can be more cost-effective for Finnish consumers, especially for items with limited use or seasonal requirements. Thematic focus areas of Business Finland include zero waste and circular economy, holistic health and wellbeing, carbon neutral and resilient energy system, digitalization-based productivity boost, and engaging immersive experiences (Business Finland, 2023).

Homes and other assets have a propensity to increase in value over time. Owners are able to alter and personalize their properties anyway they like. This is especially important for homeowners who have the means to alter their living arrangements. Owning equipment ensures a stable working environment because there is no need to worry about the owner cancelling the lease or increasing the rent. In some circumstances, especially when it comes to products that are planned to be kept for a long time, ownership may end up being more affordable in the long run. For instance, paying off a mortgage may be more advantageous financially than paying ongoing rent. Not everyone finds homeownership suitable, yet both renting and purchasing offer financial advantages (Haury, 2022).

Renters do not have to pay property taxes or upkeep and repair expenditures, in contrast to homeowners. Homeowners must pay for the installation and upkeep of amenities that are typically provided at no cost to tenants. While buying a home with a mortgage necessitates a sizeable down payment, it is common to request a security deposit equivalent to the monthly rent when leasing a property. Less expensive energy bills, greater flexibility in selecting their place of residence, and access to otherwise inaccessible amenities like fitness centres and swimming pools are all advantages for renters (Haury, 2022).

According to Behrend (2020) sharing items is a notion of sharing economy that involves providing localities the entry for products and equipment based on specific needs, thus enabling meeting

demand by focusing on a small number of frequently used items, emphasizing eco-friendliness. Nevertheless, as Behrend (2020) mentions, the environmental benefits gained from sharing items requires traveling between users, thus may have a notable impact on the environmental benefits of item sharing.

2.4.2 Renting and affordability

Over the past years, a significant surge in popularity occurred for the concept of collaborative consumption, often known as the sharing economy, in which people share access to ownership of goods including vehicles, clothing, and lodging. Peer-to-peer communities and communication technology advancements have made it possible for users to plan sharing activities across a variety of web platforms. Sharing tangible assets like furniture, clothing, and home goods as well as intangibles like music, space, and automobile rides is a part of collaborative consumption. The latter includes activities like buying and selling old consumer products as well as renting, trading, and exchanging. (Kim and Jin, 2020)

Consumer spending and the demand for rented items can both be impacted by economic downturns. The kinds of goods that people are interested in renting may change because of changes in client's behaviour as well as selections. For Finnish consumers, renting equipment can be more economical, particularly for products with irregular or seasonal usage. The cost of renting the equipment has a major effect on affordability. Depending on the type of equipment, the condition of it, the location, and the duration of the rental, the cost of rental might vary significantly. Rental companies are frequently offering promotions, savings, and packages, which can lower the cost of renting for consumers. For some consumers, sustainability and rental affordability are related to each other. As a more environmentally friendly and sustainable alternative to ownership, they may choose to rent products like clothing or technological devices. Gramlin (2023, p.3) represents this change with the question "How can consumers be willing to spend but prioritize affordability?" Because they no longer buy "just because." Economic concern hasn't made us spend less, but rather spend with intention" (Gramlin, 2023, p.3).

2.5 Phone applications

A phone application, also referred to as an app, is designed specifically crafted for functionality on a mobile device, such as a phone, tablet, or watch. Generation Z prioritizes user-friendliness on service-based applications and companies have succeeded in adapting their plans to align with the preferences of Generation Z (McKinsey explainers, 2023). Mobile applications are meant to be used on mobile devices, differing from desktop software, tailored for desktop computers, and online platforms that operate through browsers rather than directly on the mobile device (Rouse, 2020)

Countless of applications are available now as a result of the desire of the public for apps driving a rapid expansion into new markets, such as ticket sales, order tracking, GPS and location-based applications, and mobile games. Apps like email, calendars, and contact databases were first designed to help with productivity. Many apps demand internet connectivity. Users can download apps via app shops, which are either certain types of websites or apps. The limited hardware resources of early mobile devices may have prevented programs from multitasking, but now their specialization adds to their desirability by letting users choose exactly what their devices can accomplish (Rouse, 2020).

2.5.1 Security and privacy concerns

In the future, mobile app developers will have to prioritize user data security and privacy. Authentication, authorization, and improper management of personal data are the main privacy risks with phone applications. The majority of individuals give their data to applications without giving it any thought, and they also frequently use weak passwords, which increases the likelihood that their data will be misused and end up in the wrong hands. User personal data is collected by numerous commercial projects. Although the goal of this kind of data collection is to enhance services, most customers are worried about the possibility of leaks. In addition, a few major social media companies have a reputation for leaking user data. People begin to experience a constant sense of surveillance (Kravchenko, 2021).

An app may request permission to access personal data from the smartphone, including call records, calendar entries, email contacts, and location information, when a user downloads it. Applications may collect this data for valid reasons, for instance, a ride-sharing app need the location data of the phone to pick up users. The user should be informed, though, that app developers will have access to this data and might disclose it to other parties, such businesses creating locationand interest-based targeted advertisements (CISA, Privacy and Mobile Device Apps, 2022).

2.5.2 Future of phone applications

There are no signs that the rate at which mobile apps are being developed is decreasing. Cutting-edge technologies like Blockchain, Virtual Reality (VR), Augmented Reality (AR), and Artificial Intelligence (AI) are always changing how mobile app development is done. Furthermore, wearables and phones tend to focus more on their apps. Mobile apps will increasingly integrate machine learning (ML) and AI to provide more sophisticated and personalized user experiences. This includes recommendations for customized content, voice assistant natural language processing, and predictive analytics. It is expected that applications for AR and VR, which offer interactive and immersive experiences, will grow in popularity (Zaheer, 2023).

Faster data rates and lower latency will be made possible by the implementation of 5G networks, opening new opportunities for mobile apps. Among these are high-definition streaming, augmented reality activities, and in-the-moment remote collaboration. The adoption of more robust encryption, biometric authentication, and data transparency features will be influenced by new rules and user expectations.

2.6 Summary of literature review

The literature shows that the trend of sustainability and sharing economy has grown in Finland and is continuing to grow all the time among individuals and businesses, factors such as global warming and economic downfall are playing a major part of this trend, additionally positive shift towards consuming habits are changing towards sharing economy friendly ways, for example reducing household ownership. These trends are positive from the viewpoint of Lainappi and does look encouraging looking into the future. Especially, recognizing that university students are already open to engaging in actions towards sharing economy (Martínez, González, Parra-López &

Barrientos-Báez, 2021), this aligns with evolving sharing economy practices within the student housing in Finland. This offers an opportunity to explore and understand Lainappi's potential to enhance the sharing culture in the Finland's student housing market therefore adding sharing economy practices within the student housing because currently they are limited.

Sustainable development is essential for a stable future, encompassing economic, social, and environmental dimensions (AI-Taai, 2021). It aims to achieve a greener economy, efficient resource use, and biodiversity reduction while considering future populations' needs. The literature of student housing foundations in Finland shows that the foundations are taking actions towards sustainable development, including the environmental aspects therefore shifting their practices towards a greener economy and encouraging their tenants with different eco-friendly practices such as recycling.

Mobile app-based item rental services are rare in Finland, which means that studying the market and competition is challenging. The sources to find information from were limited in the field of item rental. However, Generation Z's preferences towards an easy access rather than owning and emphasis on user-friendly experiences in phone applications (McKinsey explainers, 2023) offers an opportunity for item rental services, such as Lainappi, to succeed. In the future, Al will be increasingly used in the mobile applications to deliver individualized experiences and VR will become more popular in various fields (Zaheer, 2023), this aligns with the nature of Generation Z as they are referred as "digital natives" (McKinsey explainers, 2023, p.2).

Moving on to renting versus owning, the decision to rent or buy holds a significant choice implicating lifestyle, personal finances, and environmental impact additionally offering flexibility, cheaper (Kim & Jin, 2020). In Finland, the market focuses on sustainability, and renters may prefer renting over purchasing for environmental reasons. Economic downturns can impact consumer spending and demand for rented items, with rental equipment being more economical for products with irregular or seasonal usage. The cost of renting equipment can vary significantly, and rental companies often offer promotions, savings, and packages to lower the cost. Some consumers prioritize affordability as a sustainable alternative to ownership, choosing to rent products like clothing or

technological devices (Kim & Jin, 2020). With the growth of digital technology, people are increasingly willing to share and rent items, especially the younger generation Z, expanding this practise from informal sharing among acquaintances to more formalized processes that involve businesses.

To sum up, the literature offers valuable insight about consumer behaviors and preferences, and comprehension about Generation Z's preferences. Additionally providing understanding about the growing trends in sustainability and sharing economy, environmental awareness among users and student housings commitments towards ecological practices, as well as mobile applications and the future of technological advancements.

3 Methodology and implementation

This section addresses the methodology and its implementation of this research, including research approach, research scope, data collecting and analysis as well as the ethics of the conducted research. This part of the thesis is crucial because it addresses its trustworthiness and transparency of this research. According to Saunders, Thornhill, and Lewis (2009) systematic research includes these qualities: systematic data collection and analysis, additionally research must have an intention. Consequently, during the planning stage of the thesis, a strategy was implemented to ensure a well-organized and methodological approach to the research.

3.1 Research approach

While planning research, it is crucial to understand the philosophies and different research approaches for a successful study and systematic research. Since, the topic of this study is rarely new, inductive research approach was chosen, because the aim is to understand the connection between people and the service, therefore based on the collected data conceptual frameworks can be evaluated and analyzed (Saunders et al., 2009). In addition, when the objective is to gain a better understanding of the subject, with limited information, this study is exploratory, therefore enabling modification and adjustments in the study based on the outcomes (Saunders et al., 2009).

3.1.1 Research design

This research uses a mixed method research, signifying that quantitative as well as qualitative data was gathered. Nair and Prem (2020) stated that a mixed method research delivers a greater comprehension combining both methods, rather than using only one of the methods. For that reason, the methodological choice for this study was based on gaining a more profound understanding. In this research it is valuable to gather data from both potential end-users, meaning college and university students, and from the people that enable the use for this service, in this case the personnel of the student housing associations. Furthermore, primary data for this study derives from a survey conducted to students, whereas secondary data derives from personnel interviews. Quantitative data was gathered with a questionnaire while interviews were conducted to gather qualitative data. The intention of quantitative strategy was to gather numerical data, and the intention of qualitative strategy was to gather verbal dialogue. Our choice of implementing data collection was to collect quantitative and qualitative data simultaneously with a parallel design (Azorin and Cameron, 2010), since quantitative and qualitative data are not dependable from each other. The idea behind this is complementarity (Saunders et al., 2009), meaning that the aim is to combine both data to gain a better comprehension of the topic, and the demand for this rental service, therefore offering valuable information for this study to respond to the research questions.

Figure 5 represents the parallel design of our research based on Harvard Catalyst mixed method research designs (Harvard Catalyst, n.d.). The aim of the methodology is to collect and analyze the data from a survey (qualitative) and from interviews (quantitative) to then compare the data and later to interpreted. The most attention will be drawn to our quantitative research, because the survey enables to have the most valuable data regarding this thesis topic.

PARALLEL DESIGN

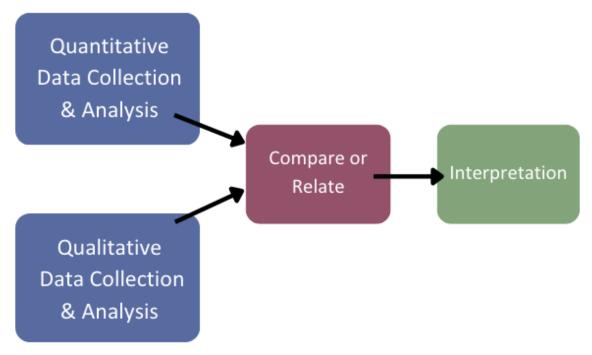


Figure 5. Parallel Design - Mixed method (Reprinted from Harvard Catalyst, n.d.)

Quantitative research

The quantitative data, likewise, the primary data, on this thesis was gathered with a questionnaire aimed at higher education students. The choice to conduct a questionnaire was based on the value of connecting with a specific audience (Saunders et al., 2009), as well as the aim to gather a maximum amount of numerical data to determine the level of interest in using the Lainappi service. This strategy enables to have data from a broad spectrum and allows to see the connection between factors (Saunders et al., 2009). The survey was formed with Google Forms platform to ensure an effortless user experience. Other reasons Google Forms was the decision, was to allow access for the target group to fill out the survey anywhere at any time, the platform offers a wide range of technological support regarding survey design and data collection and analysis, in other words, the data gathered is being organized in the platform to mitigate the time of the analysing process.

In the planning stage of the questionnaire, forming simple questions (see Appendix 1.) and a fast phase survey was designed, taking the target groups patterns into account. Considering university and college student being the target group answering the survey, it must be easy and seamless to

fill out whilst not taking too much time to fill out. To ensure that, multiple choice questions were conducted as well as selection boxes, in addition few voluntary open-ended questions. After planning and executing the survey questions into Google Forms, testing was undertaken. In other words, the questionnaire was sent to people uninvolved in this study to test and informing the authors with possible inconveniences while filling out the survey.

Moving on to data collection, the questionnaire was open for three weeks enabling to gather enough data, in that time 72 answers were collected. This is a sufficient number of answers regarding this study, therefore providing needed information, moreover, an overall picture of the survey objectives. The desire before conducting this survey was to collect 70-80 answers, hence this can be considered successful. The survey was sent to university and college students in Finland through personal connections, with frequent reminders.

Qualitative research

The qualitative data, likewise, the secondary data, for this research was gathered with interviews. When planning the qualitative part of this research, it is crucial to know the goal of the interviews, in other words, what information is needed to respond the research questions. To achieve the goals, the interview was based on semi structured interview method. A semi structured interview is based on structured questions that enable an open discussion between the interviewed and interviewers, the idea of these questions are to create a base for the interview (Palonen and Kylmä, 2022). The semi-structure interview method was chosen because the author of this study aims to explore new possible concepts for Lainappi by collecting data from the field professionals feeling, perspectives and thought about this service thus enabling the writers to answer the research questions (DeJonckheere & Vaughn, 2019). During planning stage of designing the qualitative research questions, the outline of the questions was made, ensuring an effortless interview in agreed timeframe. Open-ended questions were asked in the interviews, see appendix 2. Invitation and permission to interview was sent by email and the interview was held via Zoom platform with both authors of this thesis and the interviewee. The interviews lasted each around 30 minutes.

To gain reliable data of the practicalities of potential commissioning of the service, it must be carefully considered who to interview. Two personnel of student housing associations were interviewed, the customer relations director at Helsinki region foundation for student housings' (HOAS)

and the housing office manager at Central Finland Student Housing Foundation (KOAS) by the authors. The decision to interview these professionals was to collect valuable information for a possible market entry because they offer local insights of the customers, in this case the student residents, behaviour and concerns related to the usage of the Lainappi box concept. On the table 1 below, the interviewees profiles are represented, including their title, responsibilities, their organisation, and numerical data from the housing foundations.

Table 1. Profiles of interviewees

Title	Responsibilities	Organization	Residences/Residents
Housing office manager	Customer-related tasks	Central Finland housing association (KOAS)	Approximately 3000 students, 300-400 apartments
Customer relations director	3	Helsinki region student housing foundation (HOAS)	130 housings, 1800 residents 10 500 apartments

3.2 Data analysis

The qualitative data was analyzed by hand and with the help of Google sheets, and its analytical tools, with making tables and coding, the survey data ergo quantitative data was analyzed with Google sheets. The data analysis plan was created to answer the research questions of this study. It involved categorizing the survey data to identify necessary factors and elements, therefore answering those questions, and understanding the connection between variables. This helped the researcher to identify important variables enabling to conduct a systematic analysis, Google sheets allowing to see all data at once, moreover allowing visual presentation of the data. Additionally, including categorizing of the interview data to align with the plan. Aligning Saunders et al. (2009) expression on data analysis tools, "graphs, charts, statistics allows us to help, explore, present, describe and examine relationships and trends within our data" (Saunders et al., 2009, p. 414) those tools are being used for providing a visual representation of the research's survey data. In addition, charts and tables were created to visualize interview data.

Qualitative data was categorized by three themes in Google sheets. Theme 1 included the interviews comments about problems that the Lainappi service might face, Theme 2 included opportunities of the service and Theme 3 included comments about the concerns and opportunities regarding location of the services. Those three main themes were decided to align with the survey

questions and its findings, and those themes were discussed the most during the interviews. After the main themes were decided, tables were created with citations that were transferred into codes. The codes were divided into four sections and aspects, they were location, usage, and profitability, Lainappi application, and living comfort improvement within student housing. This enabled a comprehensive and visual representation of the qualitative data of this study.

3.3 Plan for quality and ethics

Saunders et al. (2009), stated that a plan for ethics is important to ensure effective research, which implies that all data related to the individuals included in this study are reasonable. The mentioned perspective was taken into account in the planning stage of collecting data and in the data analysis stage. This chapter covers the plan concerning data privacy, quality, and ethics.

The authors implemented a plan to keep data private, to ensure ethical matters. The following aspects were considered in the quantitative approach, based on various aspects Saunders et al. (2009, p. 185) have listed regarding ethical matters: The privacy of the participants, participating in the survey being optional, offered an option for not mentioning ones gender to avoid any shame or distress, answering question about nationality and housing was not mandatory, additionally no names or other personal data were collected for this research, thus none of the participants can be linked based on their answers. The European Commission (2023) has stated personal data as data that refers to any details associated with an individual or an individual capable of being recognized. In the beginning of the survey an "introductory letter" (Saunders et al., 2009, p.179) was implemented, assuring the respondents privacy matters, further, the purpose of the survey. The answers for the survey were deleted after this research was conducted.

Regarding the interviews, names, working status and workplace was collected. The interviews were recorded and downloaded in the personal Cloud and computers of the writers of this thesis, for data analyzing purposes only, handled privately within the computers of the authors, and deleted afterwards. Permission to record the interview was asked before the interview. The authors guarantee that only they had access to the data of this study.

Furthermore, discussion concerning the privacy matters of the company Lainappi has been initiated with one of the founders of Lainappi. They have given the authors permission to publish all

data related to the company including results. In that matter, this study is not violating any privacy of company secrets.

4 Results

In this chapter the results of the interviews and answers of the survey will be shown and opened into a text format and visually. The results come from a survey made for university and college students that was answered by 72 students from different cities across Finland. The respondents are from multiple different nations and areas, which gives the answers a diverse point of view, however most of the responses came from Finland. In addition to the quantitative survey, two interviewees were spoken to from two student housing associations. These interviewees work in influential roles where they would be able to affect the company's decision in starting a cooperation with the Lainappi app. The goal of the interviews was to learn more about the foundations' willingness to buy this product and software so they could offer it as a service to their clients, as their support adds relevance to the research.

4.1 Current market environment

As mentioned before, the overall response number was 72 including 61,1 % of the answers from women and 38,9% from men, no other gender options were chosen. There are slightly more answers from women, however the gender of the respondents has a relatively small impact on the research findings. The largest age group that answered the survey was 21 - 23 years old's, who contributed 38,9% of the answers in the survey. The second largest age group was 24 - 26 years old's who contributed 30,6% of the answers to the survey. Additionally, students aged 27 or more contributed 25% of the answers to the survey and 5,6% of the answers are from the age group of 18-20 years old. So, the vast majority of the respondents represent Generation Z.

As stated, most (80,6%) of the survey respondents are citizens of Finland. In addition to these answers, there were also respondents from multiple different countries. 4,2% of the answers were from other European Union countries, 4,2% from Russia, 2,8% from Sri Lanka, and 2,8% from Bangladesh. 1,4% per country of the answers came from following countries and areas: Zimbabwe, Asia, Iran, and Morocco. Regarding the cities, most of the respondents live in Jyväskylä (63,9%), and a fair amount, 15,3%, live in Tampere. 6,9% of the respondents live in the Helsinki Area. The

following cities were also mentioned, including under 3% of the answers: Turku, Seinäjoki, Sirkka, Kuopio, Joensuu, Vaasa, and Utrecht (Netherlands).

Moving on to the status of the respondents. The majority (58,3%) of the respondents were students who are working while studying and the rest (41,7%) were full-time students. The time that respondents worked while studying varied around 10 - 30 + hours in a week. 40,5% of the respondents work 30+ hours a week during studying, 23,8% of the respondents worked 10-20 hours a week, 19% of the respondents worked 20-30 hours a week and 16,7% of the respondents worked less than 10 hours a week.

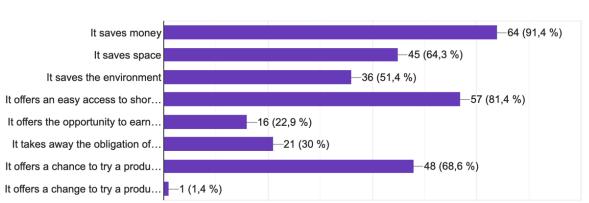
Out of all participants, 29,2% live in student housing and 70,8% of the respondents do not live in student housing. Most respondents that lived in student housing lives in Central Finland's housing associations (KOAS) apartments, which made up 52,4% of the respondents that lived in student housing. Tampere Student Housing Foundation, TOAS and Soihtu, that offer student housing in Jyvaskylä, both respectively had 14,3% of the respondents living in their apartments. In addition, there were multiple other respondents who contributed 4,8% of the answers such as: KUOPAS, Sevas, SSH, HOAS, POAS and TYS.

Regarding the Lainappi app, 18,1% of the respondents had heard about Lainappi before the survey and 81,9% of the respondents had not heard about the app before this survey. The vast majority (56%) of respondents that have heard about the company, had heard about it from a friend, additionally, 28% of them had heard about it from social media and 2% had seen the Lainappi box. Other respondents had heard about it from other sources such as the news. Furthermore, more advertisements about the company and its services were proposed by respondents of the survey.

The results on how the box service would ease the lives of the students or increase their life quality are shown in table 2. The majority (91,4%) of the respondents indicate that it would save money and 81,4% expresses that it would offer quick access to temporary equipment needs. A popular answer that 78,6% of the respondents expressed was that the service offers a chance to try out an item without buying it. Other answers included saving the environment due to people not buying items for their own therefore producing less waste. 30% of the respondents indicated

that it takes away the obligation of maintenance, which eases living, and 22,9% answered that it offers a chance to earn money by putting items for rent themselves.

Table 2. Lainappi services effects on life quality



40

60

80

20

In what ways would this service make your life easier or better? 70 vastausta

Service demand

Based on the results of the conducted survey, the need for service is more on the positive side from the viewpoint of Lainappi due to 33,3% of overall respondents answering that they would need this service and 55,6% of the respondents answering that they might need this service. Only 11,1% of the respondents answered that they do not need this service. Among all respondents, 20,8% of them have used a goods rental applications or services before, whereas 79,2% of them have not. However, to make a better comprehension of the market and its demand it is crucial to see the correlation between students that work while studying and full-time students on Lainappi's service utilization and their willingness towards item renting.

Furthermore, focusing on full-time students' need for the service, the overall number of answers of full-time students was 31. Based on the results, hesitation for the service demand is noticeable since a fair majority (53,3%) answered "maybe" when asked about the need for the service. How-

ever, 36,7% of the full-time students answered "yes" while the rest 10% answered "no". Comparing the data, 42 of the survey respondents were students that worked along with their studies, weekly workload varying from zero to over 30 hours. Among all working students, the need for the service was hesitating as well as the full-time students. Majority of them answered being unsure about their needs towards the service, still 31,7% of them recognize the need, and 9,8% of working students do not see the need for the service.

Service utilization

Proceeding to the potential utilization of the service, 36,7% of the full-time students answered "yes" while the rest answered "no". The hesitation trend continues, when asked if the students would use the service, since 46,7% of the respondents answered "maybe" when asked if they would use the Lainappi box if it was in their housing association (table 3) or campus (table 4). As shown in tables 3 and 4, almost half of the respondents still answered "yes" for usage in housing associations and school campuses, and only a small percentage of full-time students answered "no". Based on these results, it is clear that there is potential for using the service.

Table 3. Usage of Lainappi box in housing association, full-time students

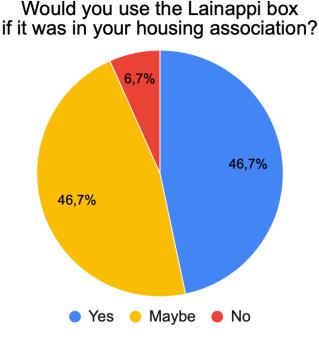
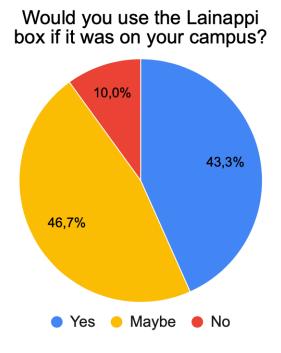


Table 4. Usage of Lainappi box on campuses, full-time students



Moving on to the potential use of the service among working students, only 2,4% of the working students would not use the Lainappi box service, if it is located in own's housing association, the same percentage is concerning the usage if the box would be on campuses. The correlation of usage is seen between students that work less hours compared to students that work full-time alongside their studies. Table 5 represents that students whose weekly working hours are ten or less would use the Lainappi box service more broadly, compared to students working full-time (table 6), where only 17,6% of them would surely use the service. Additionally, the same amount, within full-time working students, who answered "yes" for using the service, answered "no" as well. As presented in the tables 5 and 6, the hesitation towards using the service increases for student who work more, given that they earn more money compared to the students that work less. An interesting insight, shown previously in table 3, is that working student that work less are more likely to use the Lainappi box service in own housing association compared to full-time students.

Table 5. Usage of Lainappi box in housing association, working students (10h or less)

Would you use the Lainappi box if it was in your housing association?

Respondents working 10 hours or less per week

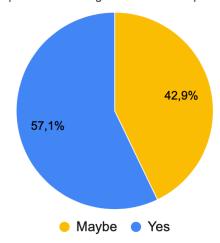
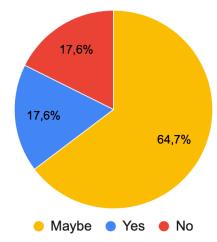


Table 6. Usage of Lainappi box in housing association, working students (full-time)

Would you be willing to use the Lainappi box if it was in your housing association?

Respondents working full-time (30 hours or more per week)



When examining the usage of Lainappi box in campuses, among working students, the same trend continues as in the usage in housing associations. However, as shown in table 7 below, the vast majority (71,4%) of students working ten hours or less weekly are more likely to use the Lainappi box, if located in campus, rather than location being their own housing association. Also, students

working full-time are more likely to use the service on campus rather than housing association, as seen from table 8. Additionally, the hesitation percentage of usage in housing association is higher (64,7%) than in campus (52,9%) among full-time working students whereas, the lack of usage is higher in housing associations than campuses.

Table 7. Usage of Lainappi box on campuses, working students (10h or less)

Would you use the Lainappi box if it was on your campus?

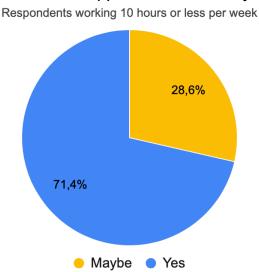
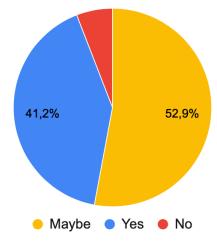


Table 8. Usage of Lainappi box on campus, working students (full-time)

Would you be willing to use the Lainappi box if it was on your campus?

Respondents working full-time (30 hours or more per week)



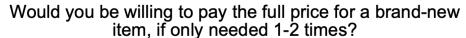
Based on the interview analysis, both opportunities and challenges were pointed out in the interviews concerning the usage of Lainappi, however more concerns were discussed rather than opportunities. One of the interviewees have tested a platform within their housing association with a company that has similar features than Lainappi. The outcome of that testing period was that university students, referring to students living in student housings based on the interviewee's experiences, "prefer to use platforms that they are familiar with", rather than an outer source "trying to provide" them a service to use. A social media channel named Jodel came up as a preferred channel for students to use when wanting to rent items. The interviewee mentioned that "it is easier" to place a casual renting notice than using the app, because another application would be harder and takes more effort due to process of signing in. Thus, it is challenging to offer new platforms for students that already have a working system on their own.

The other interviewee mentioned a problem that using many apps or channels for housing is difficult for the users and would affect the usage negatively. The housing association have their own platform for apps and information concerning the living in that housing association and therefore they would prefer to provide all their services in that place, including the possible cooperation with Lainappi by inputting the rental service in their own systems.

Willingness to rent

Examining the willingness to rent among full-time students, they were asked about their readiness to purchase a brand-new item, such as a drill or a window cleaner that they might only use one or two times, then inquired about their openness to rent that item in question for a few euros. Table 9 demonstrates that a vast majority express the lack of willingness to purchase a brand-new item, however as shown in table 10, the majority are willing to rent the same product for a few euros. As depicted from tables 9 and 10, hesitation is discovered here as well.

Table 9. Willingness to buy brand-new products, full-time students



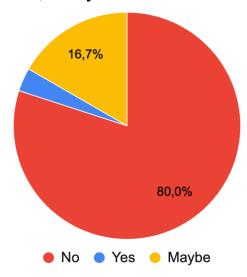
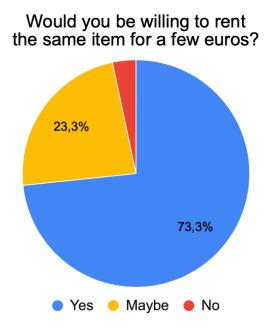


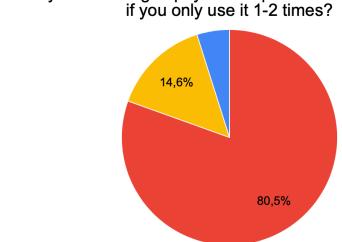
Table 10. Willingness to rent, full-time students



Next, moving on to analyzing working students' willingness to rent. Table 11 shows the overall willingness among all working students, and 80,5% of them would not purchase a brand-new product, for example a drill, if they only use it a few times. 14,6% of them are hesitant and 4,9%

would purchase the item or product. There are some differences based on the amounts of weekly working hours on the willingness to buy a new product for little use. All students working 20 hours and under answered that they would not buy a brand-new product. The percentage decreases the more hours students work, 12,5% of students working 20-30 hours per week hesitated about purchasing, but still 87,5% of them would not purchase the item. Nevertheless, among students working full-time, 11,8% of them would surely purchase the item, and 29,4% of them might purchase the new product. Compared to students that work less hours, only 58,8% of the full-time working students would not purchase the new product.

Table 11. Willingness to buy brand-new products, working students



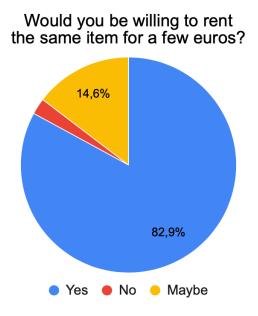
No

Would you be willing to pay the full price for a brand new item, if you only use it 1-2 times?

As has been pointed out previously, the following question was if the respondents would be willing to rent the item or product in question for a few euros. As shown in table 12, 82,9% of the overall working students would rent the same product for a few euros, whereas 14,6% of them might or might not rent, only 2,4% are not willing to rent. Weekly working hours affect the perceptions of this as well, since every student working 10 hours or less answered that they would rent the product, whereas 70,6% of the students that work full-time along with their studies. 5,9% of the students working full-time answered that they would not rent the item, and 23,5% are hesitating.

MaybeYes

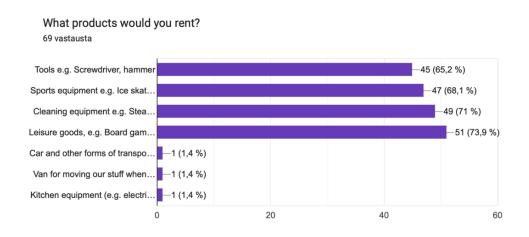
Table 12. Willingness to rent, working students



4.2 Practicalities of the box concept

To execute the usage of the Lainappi box service, it is necessary to discover the target group's preferences on what item they would use. As shown in table 13, the most popular category of products to rent would be leisure goods, including for example board games, or a beer pong table. Other popular product categories are cleaning and sports equipment as well as tools. One respondent suggested kitchen equipment, such as an electric mixer.

Table 13. Product preferences



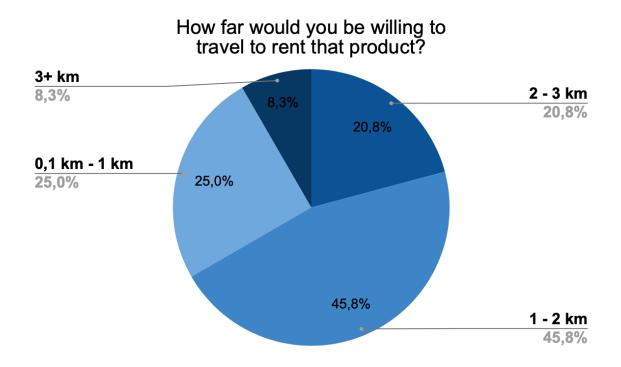
During the interview with KOAS housing manager, a topic related to sharing economy practices was discussed. KOAS offers their residents rooms for donating items in good shape for everyone to use in the building. They also offer a "survival kit" for exchange students and other foreign students but it was mentioned that it does not include all that they need for their stay. The idea of the items in the "survival kit" are to be reshared for new foreign students. KOAS also has a secondhand shop, as mentioned in the literature review, where items are exchanged. This idea could be adopted with Lainappi and KOAS booking platforms.

Location of the service

The location of the box service is playing a crucial role in usage rate, and it was a matter in the interviews that caused the most concerns and conversation. One of the interviewees mentioned that their "tenants are all over the city" making it challenging to regarding to fairness in service access. During the other interview, a limited demand due to location was worrying, based on the interviewees' previous experiences with a similar company. The cooperation with a similar company turned out unprofitable due to the location issues of the service. Since Helsinki is such a large city the users of that service believed that traveling such a long distance to rent was challenging. However, the service had few users but because it was not enough the company was forced to increase its prices, thus losing the few customers that used the service. Based on that discussion the location on campuses was brought up. The interviewee said that the campuses might be the best option for the location but addressing concern about the campuses being so spread out that might affect the usage negatively.

The results of the survey, regarding the location issue, are shown in table 14 below. The majority of respondents would be ready to travel 1-2 kilometers to rent and 25% of them would be ready to travel only under one kilometer. 20,8% of the respondents are willing to travel 2-3 kilometers and 8,3% of them are ready to travel more than three kilometers. Based on the results, to enable a profitable usage rate, the service must be close to the users.

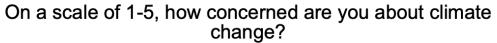
Table 14. Travel distance to rental services

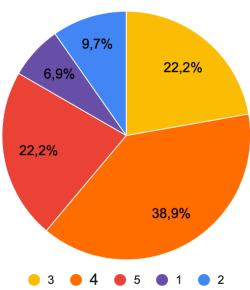


4.3 Environmental aspect

Table 15 shows the concerns among students towards climate change on a scale of one to five, five being very concerned and one representing "not at all concerned". Number two is referred to as "slightly concerned", number three is referred to as "moderately concerned" and number four as "quite concerned". A vast majority of the respondents are quite concerned following with very concerned and moderately concerned. Only a small number of respondents are not concerned at all or only slightly concerned. These results show that environmental concerns are present among university students, the average being 3,6% meaning that students that answered the questionnaire are quite concerned about climate change.

Table 15. Climate change concerns





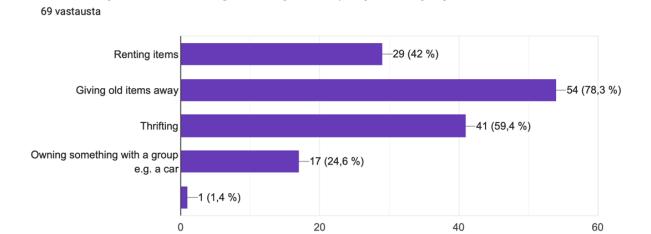
Next examining the need of the service based on the climate change concerns. Respondents that feel the need of this Lainappi box service or might feel the need are on average more concerned about climate change compared to the small number of respondents that do not feel the need for the service. Students not feeling the need for the service are on average moderately concerned, whereas students that feel the need or might feel the need for the service are on average quite concerned about climate change.

Nevertheless, 94,4% of the respondents feel that the Lainappi service has positive impact on the climate change, additionally, revealing that less product consumption, and less waste are most significant environmental benefits of the service. Also reduced carbon footprint being listed as an environmental benefit of the service. Other comments about the environmental benefits were about reduced emissions due to unnecessary travel to a store to buy a product instead of renting the product within own housing.

Actions towards sharing economy

Discovering students' everyday sharing economy action giving old items away is the most popular practice, on top of that thrifting being very popular, as presented in table 16. Other factors showed that 42% of the respondents rent items and 24,6% of them share ownings for example, owning a car with a group of people. To look even further, people who answered that they feel the need for the service are thrifting the most out of all respondents furthermore the students who answered that they might feel the need for the service or do not feel the need are "giving old items away" the most compared to everyone else.

Table 16. Sharing economy practices



In what ways does the sharing economy show up in your everyday life?

4.4 Summary of Results

A survey of 72 university and college student in Finland provided light on the possible adoption and usage patterns of university and college students in Finland by providing information about their demographics, awareness of, and attitudes toward the Lainappi app. Additionally providing a solid foundation for the authors to inform Lainappi's about its potential market entry plan with offering the preferences of their target market.

The survey revealed that most respondents expressed a need for the service, with 33.3% expressing a definite need and 55.6% saying they might need it. The majority of respondents had used goods rental applications or services before, and 82.9% would rent items for a few euros. The interviews gave the writers knowledge that student housing associations were interested about the co-operation with Lainappi, especially KOAS that saw it as a truly possible opportunity, therefore there is a demand for the app, however the concerns appeared, such as lack of usage or location will be considered when conducting a short-term plan for Lainappi.

Most respondents are concerned about climate change, with 94.4% believing Lainappi has a positive impact on it by reducing product consumption, waste, and carbon footprint. This tells that the rise of sharing economy and positive effect on climate would attract customers from the student market.

5 Conclusion and discussion

This chapter provides an overview of the results, answers to the research questions as well as theoretical and practical implications, assessment of process, research limitations and thoughts for future research.

5.1 Answering the research questions

RQ1: How is the market environment currently for Lainappi, is there demand for this service within the student housing market in Finland?

Based on the literature and the results on this research, there is a potential market for Lainappi in the housing market in Finland. Despite the fact that item rental services are rare in Finland, the global sharing economy trend is increasing, in other words the perspective is shifting towards easy access rather than ownership, especially among young adults, providing Lainappi a valuable market niche to enter to. As mentioned in the literature, student housing foundations in Finland are addressing environmental practices even if sharing economy practices are not widely embraces. This shows that the student housing foundations are open to new ideas supporting ecological aspects, also validated in the interviews with student housing representatives.

The results showed that 36,7% of full-time students expressed a certain interest in the Lainappi box service, while 46,7% were open to the idea, this shows that the target audience are willing to adopt the service. Additionally, as Martínez-González, Parra-López and Barrientos-Báez (2021) stated, University students are open to take actions associated with the sharing economy. Therefore, Lainappi has a potential entry in the student housing market.

Location wise majority are willing to use the service, or are open to use, in own housing association as well as campuses. Additionally, preferring campuses as a location that would enable access to everyone fairly. Offering the service on campuses allows access for students not living in student housings, offering a wider user group for Lainappi. The differences between working students and full-time students were minor. Even if working students are more willing to rent instead of buying, the numbers are so close to each other that different approaches when thinking about marketing strategies are not necessary.

Nevertheless, it is necessary to reflect on the challenges and concerns that appeared during the research. The main concerns that rose were platform preferences and lack of usage. It was mentioned that college students prefer other platforms rather than new mobile apps that require signing in. Even though Lainappi's significant advantage is secure renting with insurance, it is crucial for them to invest in marketing and raising awareness, especially when Lainappi is not familiar for the students as a target group. To sum up, there is a promising market for Lainappi, however, success depends on marketing strategies, service implementation, enhancing awareness and trust towards Lainappi among students.

RQ2: Which potential ways can be found that would promote new market segment entry?

As mentioned before, Lainappi may have difficulties because users may not utilize the product to the extent required for it to be profitable for Lainappi. Other channels such as Jodel or Whatsapp are examples of forums and apps that are familiar to the students and are using them to rent equipment or seek assistance from others. However, these platforms do not provide security whereas Lainappi provides insurance for the items and safety to all parties included with a rental. Emphasizing the security of the rental process is necessary to stand within channels and shift actions on their Lainappi app.

New market segment entry can be found from collaboration with universities and student associations to make the product familiar to students as well as building trust. To ease the shift on starting to use a new platform, as was revealed in the meeting with KOAS, providing Lainappi application to the same digital platform with all KOAS services is beneficial, previously mentioned as KOAS booking platform. To apply this same idea on university collaboration, Lainappi could include their services on platforms that university students use during their studies to keep up with their courses and student news, Tuudo named platform to name one.

RQ3: Based on the outcomes of this research, what ought to be a short-term plan for Lainappi?

Lainappi should take these steps to gain trust and awareness to be able to enter this new market segment therefore increase their usage rates by expanding it for younger audiences. Firstly, since the awareness of the brand is quite low, Lainappi should focus on advertising. Social media and word-of-mouth practices have proven beneficial, based on the results. With social media Lainappi could collaborate with student unions to increase trust among students. Marketing should include emphasizing affordability, safety, and convenience of renting rather than buying. This ought to be beneficial due to the research results as well as the literature, where Genereation Z prefer effortless usage rather than possession (McKinsey explainers, 2023). Also based on the literature, as younger people value ecological aspects (McKinsey explainers, 2023), Lainappi should focus on this in their marketing as well. Different marketing strategies might come in handy for working students, who are more willing to buy a product instead of buying, and full-time students because their attitudes towards renting are different between them, however the difference between those two groups therefore different marketing strategies are not needed.

Secondly, Lainappi should consider the location of the boxes carefully. The Lainappi box service should be somewhere everyone has access to so that it remains profitable. Even if there is demand for this service in the student housing market, this study showed that entering boxes on campuses would be more beneficial than entering them into student housings. As mentioned before, this permits all students to use, not just students living in student housings. To accomplish this market entry into the campuses, Lainappi ought to reach universities to showcase their product and concept, aiming collaboration. Based on the interview and questionnaire, Jyväskylä has

the greatest demand, therefore Lainappi should approach academic institutions in Jyväskylä. Additionally, Jyväskylä is a compact city with short traveling distances that enables fever boxes to add in central locations, compared to Helsinki where this would not work, like mentioned in the interview with HOAS customer relations director.

Lastly to increase usage rates, Lainappi ought to customize the products in the box for students' needs. As shown in the results, students would mainly rent leisure goods, cleaning, and sport equipment as well as tools. Kitchen and homeware were mentioned too, homeware mainly focusing on international exchange students. By customizing the products for students, renting is more likely. To succeed in this, Lainappi should follow and be aware of trends, therefore providing items aligning with various trends.

By measuring competition, focusing on university cities like Jyväskylä and analyzing engagement and usage rates, Lainappi would successfully enter a new market, later expanding it to the student housing market because there is demand. By following this short-term plan Lainappi can focus on building a strong foundation in these market segments and providing footwork in student communities. Furthermore, growing awareness and trust and overtime expanding their service, within student housings and campuses, to other cities, such as Tampere.

5.2 Theoretical and practical implications

Based on the results, as previously stated 24,6% of the survey participants owns items with a group, for example a car, points out that the sharing economy is increasing in Finland. Additionally, sharing economy platforms focusing on transportation are succeeding and that trend is already becoming substantial in Finland.

Based on the answers, there could be a lot of possible users of the app in the customer segment of students and students living in student housing associations. Although most of the answers said that they would maybe use the app and box, which means that the number of users would be uncertain and therefore a risk to move on with the cooperation. However, there is a possibility that it would work because many respondents said that they would rather be willing to rent a pricy product that they do not use that often than buy one for themselves offering a market segment for Lainappi among higher education students.

Students who feel that they need to practice sharing economy are thrifting thus probably more experienced with sharing and the green economy. Due to their tendency to give away goods, people who could need items have started to ponder about the sharing economy but are still not buying, renting, or getting their goods from other sources. They supply their own items, as opposed to those who already recognize the need for the service and buy used goods. To many people, renting appears to be a more sensible choice than buying secondhand items. Therefore, awareness towards green and sharing economy practices must be increased to attract more users by for example advertising.

The researchers of this study learned from the interviews that the service could be implemented on college campuses rather than at housing associations, where it would have a larger potential customer base. It would be feasible to collaborate with both the universities and the student housing associations given they have good working relationships. This could be challenging in Helsinki due to the city's size but promising in Jyväskylä. Thus, it is crucial to think about the service location, preferably situated in a place that is easily accessible for everyone in order to continue being profitable.

In the market analysis, a conclusion was made that Lainappi may have difficulties because users may not utilize the product to the extent required for it to be profitable for Lainappi because higher education students are accustomed to utilizing the same forums and apps that they have used for a long period of time. Facebook groups, Jodel, and Whatsapp are a few examples of these forums and apps that people have used for years to rent equipment or seek assistance from others. Other difficulties can include the fact that, in order to keep customers' trust, rental organizations need to address consumer concerns about the caliber and condition of rented goods. Both conventional brick-and-mortar rental shops and online marketplaces compete for customers in the consumer equipment rental sector, which can be fiercely competitive.

5.3 Assessment of the research process

The research process lasted for around three months starting from the halfway of August 2023.

Once the idea and area to work on was given by the company Lainappi, the ideation and planning process started, followed by choices and methods as well as ethical matters described in the methodology chapter. The research questions 2 and 3 remained the same, however the research

question 1 was modified. At first the question was only about the current market environment for Lainappi, later the demand for the service within student housing foundations was added because the authors realized that that was crucial information for this study to reach more specific results. Respondents of the survey represented higher education students and they were selected purposively to reach wanted results.

This research used both qualitative and quantitative approaches, also referred as triangulation (Tuomi & Sarajärvi, 2018). This method, according to Metsämuuros (2011), is essential for obtaining reliable data. When considering the reliability and validity of this thesis, it is necessary to evaluate whether the ethical principles and the validity of the methods used, as well as mentioning the researcher's own relationships towards the study (Tuomi, & Sarajärv, 2018i). Ethical matters have been taken into account during the whole research process, for example with the letter of introduction in the beginning of the survey and the anonymity of the respondents remained. Other ethical matters were discussed in the methodology chapter. The relationship between the authors of this research towards the company Lainappi as well as their relationship towards the respondents that the authors were familiar with did not affect this study.

Regarding the validity of this study, differences between interpretations may have occurred. For example, the term sharing economy was not opened and explained in the survey, therefore the term might hold varying interpretations for different people. Additionally, some questions can be ambiguous. For example, the question "Do you feel that the service has positive effects on climate change" in the survey can be interpreted also in a way that the service has an impact on global warming in a negative way. Many of the respondents were Finnish and the survey was in English, this might also affect the interpretation of the questions if the questions were not understood correctly.

Furthermore, the process went well because clear roles and tasks were divided for both researchers. However, there were few difficulties faced throughout the study process, such are participants schedules, organizing interviews, limited literature on item rental, and data collection. Those caused delays in data collection and required modifying the research schedule. Nevertheless, despite a few solvable challenges, the research process was effortless.

5.4 Limitations of the research

One of the biggest limitations to the process was lack of information and studies around item renting. The sample size is also one of the main study limitations. The limited number of participants in the study may restrict the applicability of the results to a larger demographic. Time and resource restrictions were among the practical obstacles that led to the reduced sample size. As a result, it is essential to be cautious when extending these findings to bigger and more varied groups.

During the research process, when answering research questions two and three ergo providing potential market entry ways and applying a short-term plan for Lainappi, it was noticed that they survey lacked questions that would have allowed the students to tell their ideas about preferable ways for advertisement, and what ways would help them to shift to a new application or platforms. It was researched that these problems occurred, but this study did not answer to what ways are necessary for young adults to use this service. However, this study showed the challenges of usage with the target group in question. To continue, open-ended questions were not answered thus created lack of answers and data. This could have been prevented with making the questions mandatory rather than optional.

Potential bias may be introduced by the data collection procedure, which mostly relies on surveys and interviews. Respondents may give responses that they believe to be socially acceptable, which could compromise the data's quality and dependability. Despite the fact that secrecy and anonymity were preserved, it is crucial to acknowledge the potential for response bias. To conclude, the research results gave an optimistic outlook but a bit uncertain due to the answers and questions being mostly vague so that left some unanswered questions and blank spaces in the result information.

5.5 Thought for future research

Sharing economy is growing in Finland and environmental concerns are increasing, therefore future research in this field is necessary to ensure a sustainable shift towards green economy and sustainable world. Additionally, technology is developing therefore digital marketing plays a significant role in marketing, especially when targeted to a younger audience, in this case college and

university students. Future research could study student's customer behavior deeper, what influences their actions towards sharing economy, and what could be the best way to advertise these services. Would it be beneficial to advertise Lainappi in Jodel? Moreover, studying the impact of social media on sharing economy and students consuming behaviors.

Moreover, further studies in this field could examine a larger range of students as a market to provide a more complete picture since the main focus of this study was restricted to explore the possibility of extending Lainappi's market to student housing organizations. Therefore, the results may not be applicable to other cultural or geographical contexts because the research was done in a specific geographic region and cultural environment and the conclusions might not be easily applied in other situations. Additionally, to discover further, experiments on Lainappi box implementation would be needed to understand how it would perform.

References

Adamowicz, M. (2022). Green deal, green growth and green economy as a means of support for attaining the sustainable development goals. Sustainability, 14(10), 5901.

Al-Taai, S. H. H. (2021). *Green economy and sustainable development*. IOP Conference Series, 779(1), 012007–012007. Retrieved from https://iopscience.iop.org/article/10.1088/1755-1315/779/1/012007/pdf

Amanda C. Haury. (2022). 10 Reasons Why Renting Could Be Better Than Buying. Investopedia. Retrieved from https://www.investopedia.com/financial-edge/1112/reasons-renting-is-better-than-buying.aspx

Azorin, J. M. and Cameron, R. (2010). The Application of Mixed Methods in Organisational Research: A Literature Review. *The Electronic Journal of Business Research Methods*. Retrieved from https://academic-publishing.org/index.php/ejbrm/article/view/1257/1220

BARBU, C. M., BRATU, R. Ş., & SÎRBU, E. M. (2018). Business Models of the Sharing Economy. *Revista de Management Comparat Internaţional*, *19*(2), 154–166. Retrieved from https://doi.org/https://doi.org/10.24818/rmci.2018.2.154

Basselier, R., Langenus, G., & Walravens, L. (2018). NBB Economic Review. *The rise of the sharing economy.*

Behrend, M. (2020). *Buying versus renting: On the environmental friendliness of item sharing.* School of Economics and Business, Kiel University. Retrieved from https://www.sciencedirect.com/science/article/pii/S1361920920305940

Business Finland. (2023). *Thematic Focus Areas*. Retrieved from https://www.businessfinland.fi/48fc14/globalassets/finnish-customers/about-us/bf-temaattiset-painopisteet-en.pdf

Calem, R. E. (1991). When Leasing or Renting Makes \$ense. *Home Office Computing, 9(3), 46.* Retrieved September 5, 2023, from https://janet.finna.fi/PrimoRecord/pci.cdi proquest reports 200653073?sid=3099827922

CISA. (2022). Privacy and Mobile Device Apps. *Cybersecurity & Infrastructure Security Agency*. https://www.cisa.gov/news-events/news/privacy-and-mobile-device-apps

Curtis, S. (2020). Sharing Platform Workbook: Describing business model choices in the sharing economy. IIIEE, Lund University.

Danes, L. (2013) Take Advantage of Your Rental Potential. *GreenIndustry.com*, Retrieved from https://www.proquest.com/docview/1424384328?parentSes-sionId=dz7tVs5D2thEJRm3dmkZTu3cR7lImzSMAecqLtzCFqA%3D&accountid=11773

DAS. (2023). DAS Bike. *Domus Arctica Säätiö [Domus Arctica Foundation]*. Retrieved from https://www.das.fi/en/DASiaa?id=c261885d-03b1-4b46-8127-7c74044fd94d&title=DAS-Bike#

Demailly, D., & Novel, A. S. (2014). The sharing economy: make it sustainable. *Studies*, *3*(14), 14–30.

European Commission. (2020). Communication from the commission to the European Parliament, the council, the European economic and social committee and the committee of the regions. *European Commission, COM(2020), 98 final.* Retrieved from https://eur-lex.europa.eu/legal-con-tent/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN.

European Commission. (2023). What is personal data? Retrieved from https://commission.europa.eu/law/law-topic/data-protection/reform/what-personal-data_en

European Environment Agency. (2011). Europe's Environment – An assessment of assessments. *Green economy*. Retrieved from https://www.eea.europa.eu/publications/europes-environment-aoa/chapter3.xhtml.

European Parliament. (2023). Circular economy: definition, importance and benefits. *European Parliament*. Retrieved from https://www.europarl.europa.eu/pdfs/news/ex-pert/2023/5/story/20151201ST005603/20151201ST005603 en.pdf

European Parliament. (2023). Greenhouse gas emissions by country and sector (infographic). *European parliament*. Retrieved from https://www.europarl.europa.eu/news/en/headlines/society/20180301STO98928/greenhouse-gas-emissions-by-country-and-sector-infographic

Gramling, Kathy. (2023). How consumer affordability, loyalty and trust were redefined in the age of AI. EY. Retrieved from https://www.ey.com/en_us/consumer-products-retail/consumers-redefine-affordability-loyalty-and-trust

Grand View Research. (2023). *Mobile Application Market Size, Share, & Trends Analysis Report.* Retrieved from https://www.grandviewresearch.com/industry-analysis/mobile-application-market

Harvard Catalyst. (n.d.). *Getting started with mixed methods research*. Harvard Catalyst. Retrieved from https://catalyst.harvard.edu/wp-content/up-loads/2021/09/HCAT_CEP_MixedMethodsResearch-Accessible.pdf

Haury, A., C. (2022). 10 Reasons Why Renting Could Be Better Than Buying. *Investopedia*. Retrieved from https://www.investopedia.com/financial-edge/1112/reasons-renting-is-better-than-buying.aspx

Henderson, K., & Loreau, M. (2023). A model of Sustainable Development Goals: Challenges and opportunities in promoting human well-being and environmental sustainability. *Ecological Modelling*, 475, 110164.

Kim, N. L., & Jin, B. E. (2020). Why buy new when one can share? Exploring collaborative consumption motivations for consumer goods. *International journal of consumer studies, 44(2),* 122-130. Retrieved from https://janet.finna.fi/PrimoRecord/pci.cdi proquest journals 2350216986?sid=3099872343

KOAS. (2023). KOAS living services. *Central Finland student housing foundation*. Retrieved from https://www.koas.fi/en/tenants/koas-booking/koasliving/

Lainappi. (2023). Lainappi.fi Retrieved from https://en.lainappi.fi/lainappi.

Lainappi. (2023). Use. Lainappi.fi Retrieved from https://en.lainappi.fi/lainappi-app

Marketplace Risk. (2022). *The Global Sharing Economy: Emerging trends and opportunities for 2022 and beyond.* Marketplace Risk. Retrieved from https://www.marketplacerisk.com/post/the-global-sharing-economy-emerging-trends-and-opportunities-for-2022-and-beyond

Martínez-González, J.A., Parra-López, E. & Barrientos-Báez, A. (2021). Young consumer's intention to participate in the sharing economy: An integrated model. *Sustainability (Basel, Switzerland)*, 13(1), 1-22. Retrieved from https://www.mdpi.com/2071-1050/13/1/430

McKinsey Explainers. (2023). What is Gen Z? *McKinsey Company*. Retrieved from https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-gen-z#/

Metsämuuronen, J. (2011). *Tutkimuksen tekemisen perusteet ihmisteiteissä*. [Basics of conducting research in human sciences]. International Methelp, Booky.fi.

Mintel Group Ltd. (2023). 2024 Global Consumer Trends report. Mintel. Retrieved from https://insights.mintel.com/rs/193-JGD-

439/images/Mintel_2024_Global_Consumer_Trends_Eng-

 $lish.pdf?mkt_tok=MTkzLUpHRC00MzkAAAGO4jC3c5nnkAYLNFFoXeE7RCONHCERr2qKlEFg1mcbadaVJ878qsJttzLMBE3k3DbPHrhZh3hrImkG_Pr0UUm6ydbGZZ-hA1w9h9Ap8UfGqLw2$

Nair, S. S., & Prem, S. S. (2020). A Framework for Mixed-method Research. *Shanlax International Journal of Management*, 8(2), 45-53.

NIbusinessinfo (2023). Decide whether to lease or buy assets. Nibusinessinfo.co.uk. Retrieved from https://www.nibusinessinfo.co.uk/content/advantages-and-disadvantages-renting-business-equipment

Palonen, M., & Kylmä, J. (2022). Avoin haastattelu ja teemahaastattelu aineistonkeruumenetelminä laadullisessa hoitotieteellisessä tutkimuksessa. [Open interview and thematic interview as data collection methods in qualitative nursing research] *Hoitotiede, 34*(4), 281-294. Retrieved from http://ezproxy.jamk.fi:2048/login?url=https://www.proquest.com/scholarly-journals/avoin-haastattelu-ja-teemahaastattelu/docview/2767486931/se-2.

POAS. (2022). Vastuullisuusraportti 2022. [Sustainability report 2022]. *Pirkan Opiskelija-asunnot OY.* Retrieved from https://poas.fi/wp-content/uploads/POAS-Vastuullisuusraportti-2022.pdf

PSOAS. (2023). PSOAS Bikes for exchange students. *Pohjois-Suomen opiskelija-asuntosäätiö*. Retrieved from https://staging.psoas.fi/en/housing-guide/psoas-bikes-for-exchange-student/

PSOAS. (2023). PSOAS Car. *Pohjois-Suomen opiskelija-asuntosäätiö*. Retrieved from https://www.psoas.fi/en/housing-guide/psoas-car/

PSOAS. (2023). The values of PSOAS. *Pohjois-Suomen opiskelija-asuntosäätiö*. Retreived from https://staging.psoas.fi/en/general-information/the-values-of-psoas/

PwC. (2015). Consumer Intelligence Series "The Sharing Economy". *PricewaterhouseCoopers*. Retrieved from https://www.pwc.fi/fi/palvelut/tiedostot/pwc-cis-sharing-economy.pdf

Rouse, Margaret. (2020). Mobile Application. *Techopedia*. Retrieved from https://www.techopedia.com/definition/2953/mobile-application-mobile-app

Saunders, M. N. K. Thornhill A. & Lewis P. (2009). Research methods for business students (Fifth). *Pearson Education*.

Shuldiner, Moses (2022) Renting vs Owning. *The Globe and Mail.* Retrieved from https://www.proquest.com/docview/2701387454/D8E82BC9243D4AC1PQ/3?accountid=11773

Sitra. (2019). Resurssiviisas kansalainen. [Resource-wise citizen]. Kantar.

SOA Ry. (2023). Home. *Suomen opiskelija-asunnot SOA Ry.* [Finnish Student Housing Association] Retrieved from https://www.soa.fi/en.

Statista. (2023). Smartphone penetration rate in Finland 2017-2022. *Statista*. Retrieved from https://www.statista.com/statistics/564602/share-of-smartphone-users-in-finland/

Thagard, P. 2018. What is trust? Retrieved from https://www.psychologytoday.com/us/blog/hot-thought/201810/what-is-trust

TOAS. (2023). Vastuullisuusraportti 2023. [Sustainability raport 2023]. *Tampereen Opiskelija-asuntosäätiö*. [Tampere Student Housing Foundation]. Retrieved from https://toas.fi/vastuul-lisuusraportti-2023-toiminnan-vastuullisuus/

Tuomi, J., & Sarajärvi, A. (2018). *Laadullinen tutkimus ja sisältöanalyysi*. [Qualitative research and content analysis]. (Revised edition). Tammi.

TYS. (2022). Turku student village foundation annual and sustainability report 2022. *Turku Student Village Foundation*. Retrieved from https://tys.fi/wp-content/up-loads/2023/08/TYS_Vastuullisuusraportti_2022_en.pdf

United Nations Environment Programme. (2012). *UNEP 2011 annual report*. Retrieved from https://wedocs.unep.org/20.500.11822/8053.

United Nations. (2023). The Sustainable Development Goals Report 2023: Special edition. *United Nations*. Retrieved from https://unstats.un.org/sdgs/report/2023/The-Sustainable-Development-Goals-Report-2023.pdf

VOAS. (2023). Shared cars. *Vaasan opiskelija-asuntosäätiö*. [Student Housing Foundation in Vaasa] Retrieved from https://www.voas.fi/Tenants/Shared+car on 18.9.2023 at 14.00.

Watts R. (2022). *Investing In the Shared Economy*. Forbes. Retrieved from https://www.forbes.com/sites/randywatts/2022/02/25/investing-in-the-shared-economy/?sh=7e179e537af5

Worl Bank. (2012). *Inclusice Green Growth: The Pathway to Sustainable Development*. International Bank for Reconstruction and Development/International Development Association or The World Bank.

Yaraghi, N., & Ravi, S. (2017). The current and future state of the sharing economy. *Available at SSRN 3041207*.

Zaheer A. (2023). The Future of AI in Mobile App Development. Spiceworks. Retrieved from https://www.spiceworks.com/tech/artificial-intelligence/guest-article/role-of-ai-in-mobile-app-development/

Appendices

Appendix 1. Survey

Letter of introduction: This questionnaire will offer us valuable information for our thesis research. The aim of the questionnaire is to discover how eager consumers are to support the sharing economy and utilize the Lainappi app. The goal of the survey is to determine whether or not student housing has a need for such a service. Answers are anonymous and it takes only a few minutes to fill. Thank you for answering. Please write open answers in English. Mandatory questions are marked with *.

DEMOGRAPHICS QUESTIONS

- Gender* (Man/ Woman/ Other/ Do not want to say)
- Age* (18-20/ 21-23/ 24-26/ 27+)
- Where are you from? (Finland/EU/Other)
- City that you live in.* (Helsinki area/ Tampere/ Jyväskylä/ Turku/ other)
- Status* (Student/ Working student)
 - Question for working students: How many hours do you work in a week? (Less than 10/10-20/20-30/30+)
- Do you live in student housing?* (Yes, No)
 - Question for those living in student housing: In what Student Housing Foundation's apartment do you live in? (HOAS/ HYY/ KOAS/ TOAS/ POAS/ TYS/ Other)

LAINAPPI BOX SERVICE

Lainappi is a Tampere-based company founded in 2020. The business is based on an innovative household item rental service offered to consumers and business customers. The service works through a user-friendly mobile application, where users can rent items from each other, such as tools, sports equipment and other household items. The platform focuses on short-term rentals. Their mission is to encourage people to rent items instead of purchasing them, therefore promoting green and sharing economy. Furthermore, the users are able to earn and save money by using the service. In addition, Lainappi has physical self-service boxes, where from users may rent items by only interacting with the mobile app.

- Have you heard about Lainappi before?* (Yes/ No)
- Where have you heard about Lainappi? (Social Media/ News/ Seen the box/ From a friend/ Other)

RENTAL SERVICES

- Have you used goods rental applications or services?* (Yes/ No)
- Do you feel the need for such a service?* (Yes/ No/ Maybe)
- Would you use the Lainappi box if it was in your Housing association?* (Yes/ No/ Maybe)
- Would you use the Lainappi box if it was on your campus? (Yes/ No/ Maybe)
- What products would you rent? (Tools e.g. Screwdriver, hammer/ Sports Equipment eg. Ice skates, basketball/ Cleaning equipment e.g. Steam cleaner/ Leisure goods e.g. Board games, beer pong table/ Other)
- In what ways would this service make your life easier or better? (It saves Money/ It saves space/ It saves the environment/ It offers an easy access to short-term equipment needs/ It offers the opportunity to earn money/ It takes away the obligation of maintenance/ It offers a chance to try a product without buying/ Other)
- Would you be willing to pay a full price of a brand new drill, a window cleaner, etc., if you only use it 1-2 times?* (Yes/ No/ Maybe)
- Would you be willing to rent the product for a few euros? (Yes/ No/ Maybe)
- How far would you be willing to travel to rent that the product?* (0,1km 1km/ 1km 2km/ 2km 3km/ 3km+)
- Do you have proposals for the development of the service? (Open answer)

ENVIRONMENTAL QUESTIONS

- On a scale of 1 to 5, how concerned are you about climate change?*(5=Very concerned 1=Not at all) (5/ 4/ 3/ 2/ 1)
- Do you feel that the service has positive effects on climate change? (Yes/ No/ Maybe)
- What kind of environmental benefits do you think the service has on climate change? (Less waste/ Less consumption of materials/ Reduced carbon footprint/ Other)
- In what ways does the sharing economy show up in your everyday life? (Renting items/ Giving old items away/ Thrifting/ Owning something with a group e.g. a car/ Other)

Appendix 2. Interview questions

1.	Who are you, what organization do you represent and what are your main responsibilities?
2.	How many student residences do you have, and how many residents do you have?
3.	Have you heard about Lainappi?
4.	How is the sharing economy reflected in the everyday life of your student residences?
5.	Do you lend or ask for items to rent between student living in your residence, e.g. is there a group or a platform for this?
6.	What practical environmental practices are you doing?
7.	What positive environmental impacts do you think this box concept has?
8.	Have you been contacted by a competitor or a similar company?
9.	Would the service be necessary, and do you think it would support the sharing economy?
10.	Do you think this could improve the living comfort within your student residences?