Unlock the ease and satisfaction of selling

A doorstep pick-up service design for Valyuu

Master Thesis
Enya Zuo

I love the earth like
I love my phone

valyuu

Preface

This thesis serves as a reflection on the invaluable lessons learned during my 2-year time at Delft University of Technology. When I first set foot in the IO faculty's gates, I didn't expect to gain so much from this place. My journey of the master study has been a transformative experience, one filled with intellectual growth, personal development, and a deepening appreciation for design. I extend my heartfelt gratitude to the esteemed friends in the faculty, professors, and mentors who guided and inspired me throughout this process.

Thank you EJ and Kate,

During the six months of the project, you provided me with valuable advice on both academic and practical matters. Your clear guidance was especially helpful when I felt confused about my project. Although we didn't have many opportunities to meet in person, all of your suggestions were incredibly valuable to me. I believe I will continue to remember them as I enter my career. With your assistance, I discovered that working on this project and writing the thesis is a gradual learning process. It has been enjoyable to explore new theories in this field under your guidance.

Thank you Jingwei,

It is my great honor that you are willing to entrust such an important and long-planned service design project to me. I still remember in the beginning of the project, you asked me if you are dedicated to take on this project and if you love this topic. I can feel that your ambition has a strong resonation with me. During the project, you are both my mentor and my senior, and I still remember many of our interesting, sometimes off-topic but nevertheless valuable talks. Besides providing me with guidance on the project, I'm really grateful that you helped me smooth out many interpersonal relationships within the company, allowing my sessions and workshops to run smoothly, through which I learned a lot aside from professional knowledge.

Thank you my beloved Mom, Dad and my cattie Shaoji,

Even though we are separated by more than 7000km, it is your love and mental support that encourage me to keep going and have brought me here today. I can't wait to meet you in the coming months.

Now, to people who'd like to continue with reading this thesis, I hope you enjoy it!

左恩雅 Enya Zuo
20 September, 2023

Executive summary

Valyuu, a circular digital device trading start–up, is currently facing the problem of losing customers during the order placement process. In order to address this issue, I have been given the task of designing a doorstep service that will streamline the seller's user flow from placing an order to receiving payment. While doorstep services are not new in the market, Valyuu needs a service design that is tailored to their specific needs. With the research question "How can Valyuu meet the needs of pre–owned product sellers through appropriate means to achieve efficiency, ease, and resonance of branding in doorstep pick–up service?" in mind, I conducted research in three main areas: Valyuu's brand position, doorstep service, and the behavior of selling pre–owned devices. (Chapter 1)

I conducted background research to gather information about the market and competitors. This helped me gain a better understanding of the overall landscape. (Chapter 2) I also reviewed relevant literature to gather insights and knowledge that would inform my research and design process. (Chapter 3) To gather more specific insights, I conducted interviews with 14 participants who were divided into three groups representing different personas: Elite Resellers, Charm Merchants, and Passionate Connectors. These personas represent different types of sellers with varying goals and selling channels. (Chapter 4)

Based on Valyuu's target audience being Elite Resellers, the design opportunity lies in converting more Charm Merchants into Elite Resellers and attracting more Elite Resellers to use Valyuu's platform. The research question is refined to be "How can we maximize seller performance and conversion on Valyuu's platform through doorstep pick–up service?" (Chapter 5)

I facilitated a co–creation workshop with Valyuu's in–house staff and a designer friend from TU Delft to gather ideas from different perspectives. I also conducted a brainstorming session myself, guided by the design direction mentioned earlier. (Chapter 6) All the ideas generated from the co–creation workshop and brainstorming session were clustered using the Kano model. The "must–have" and "performance" ideas were then incorporated into a service scenario. (Chapter 7)

The service scenario was validated with Valyuu's in–house designer, marketer, and friends who had used the doorstep service before. Based on their feedback, I made iterations to the service details and designed the core touchpoints, as well as an implementation strategy. (Chapter 8) Due to time limitations, there are still areas of the service that can be improved. I provided suggestions for future enhancements. These suggestions are presented at the end of this thesis. (Chapter 9)

Contents

01
Introduction

1.1
Company and strategy

Valyuu is a innovative startup which builds a platform dedicated to encouraging people to pay attention to pre-owned electronic products. It encourage people to recycle them to extend their lifespan, and prevent them from becoming e-waste. Currently, Valyuu has two business models (see Figure 1.1): recycling pre-owned products from sellers, and selling refurbished products to buyers at a low price. This project mainly focuses on the former, aiming to enhance the user experience of sellers from the process of placing an order on the platform to shipping their product to Valyuu.
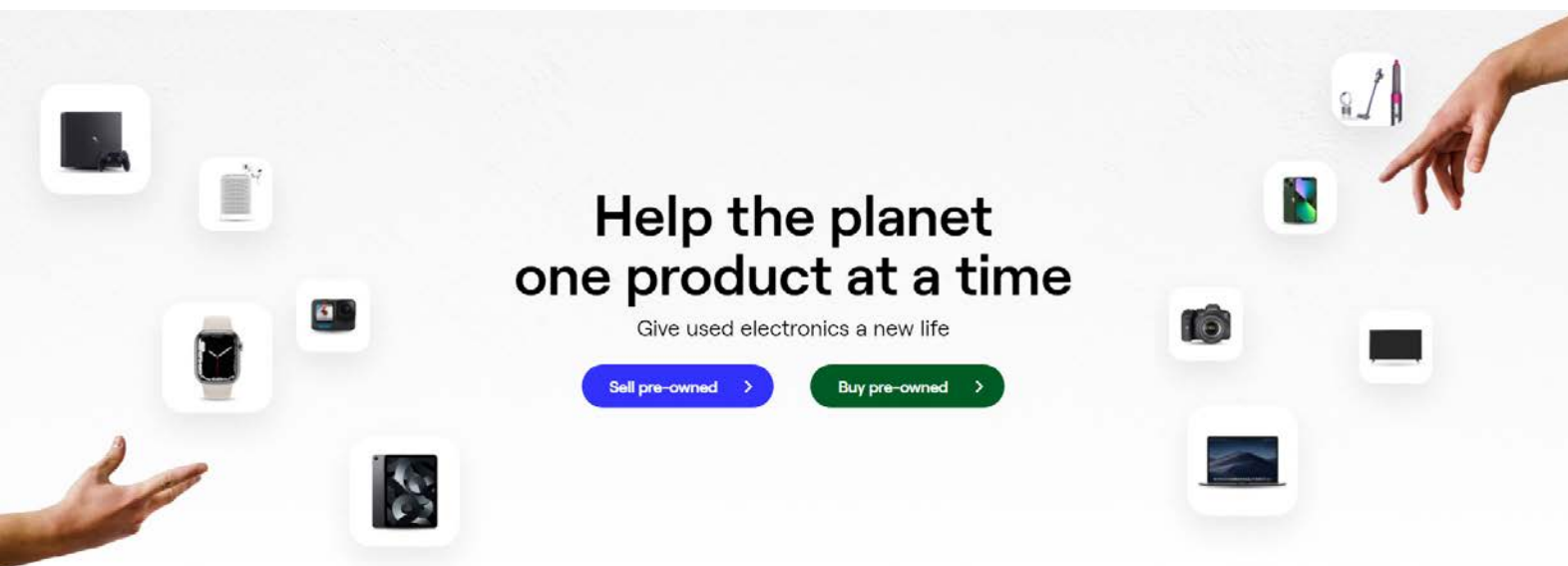

Figure 1.1. Valyuu's 2 business models

In order to attract more sellers and expand their market, Valyuu values user-centric thinking and tries to constantly iterate the platform. At present, they have also discovered some problems in their existing products and operations that need to be addressed:

1. Make selling process efficient

Valyuu offers two plans in their selling model: the Fix plan and the Flex plan. The Fix plan, also known as "fast pay," allows the seller to receive payment within 24 hours of Valyuu receiving the product, but usually results in less money for the seller. The Flex plan, also known as "best value," only applies when the product is in overall good condition. Valyuu will offer payment after carefully checking all the product's conditions, which takes longer than the first option.

To expedite the process of shipping the product from the seller to Valyuu, a doorstep service could be introduced to make the overall process easier and more convenient. This would also result in faster payment.

2. Seek unique selling points

As an innovative startup, Valyuu is trying to differentiate itself from others in the market to attract more investors. After investigating Dutch pre-owned selling platforms, an in-house doorstep pick-up service would be a standout feature for Valyuu.

3. Problems in current user experience

Logistics: Sellers have reported receiving frequent reminders from Valyuu about their shipped products. This is due to an information gap between Valyuu and the cooperating logistics company, leading to confusion for the sellers in the middle.

Communication: There are some obstacles when sellers answer questions provided on the platform, such as not fully understanding hidden problems or cheating the platform to earn more money.

Sudden change of mind: Due to time lag, some sellers change their mind from selling to Valyuu to giving to family or friends, which takes less time and effort to get rid of their pre-owned products. Therefore, it is necessary to reduce the time from when people think about selling something to actually receiving payment.

1.2
Project position

Doorstepping pick-up service aims to introduce a new selling mode that seeks to streamline the selling process for sellers, making it more efficient and hassle-free. It is expected to garner motivation and participation from sellers, who will be able to complete the entire selling process with greater ease and convenience. This service will also provide buyers with an added level of convenience, as they will be able to receive their purchases right at their doorstep, eliminating the need for them to travel to a physical location to ship their product or book reservation themselves.

The strategic positioning of this service can be considered using Ansoff's growth matrix (see Figure 1.2). This 2x2 matrix divides into four distinct strategic positions. The horizontal axis focuses on the angle of existing and new products and services, while the vertical axis focuses on existing and new markets. This matrix helps to identify a strategic plan that ensures economic and financial conditions for achieving profits. (Loredana, 2017) Based on existing reports and literature, Valyuu has already identified its target users and market position for the platform. Therefore, the focus of research and delivery for the doorstep pickup service will mainly be on enhancing the current online selling experience with the addition of in-person interaction during doorstep pickup for sellers, in order to improve the overall user experience when selling.

Together with Valyuu's three co-founders, I analyzed the potential combinations of market and product. As a result, product development — which refers to the creation of new products with the goal of replacing existing ones to increase the organization's market share — was identified as a suitable strategy for introducing a doorstep pick-up service. This is because the positioning of

the doorstep pick-up service is to streamline the user experience by building upon existing selling experiences, and utilizing a combination of online and offline services to replace the current online-only seller experience.
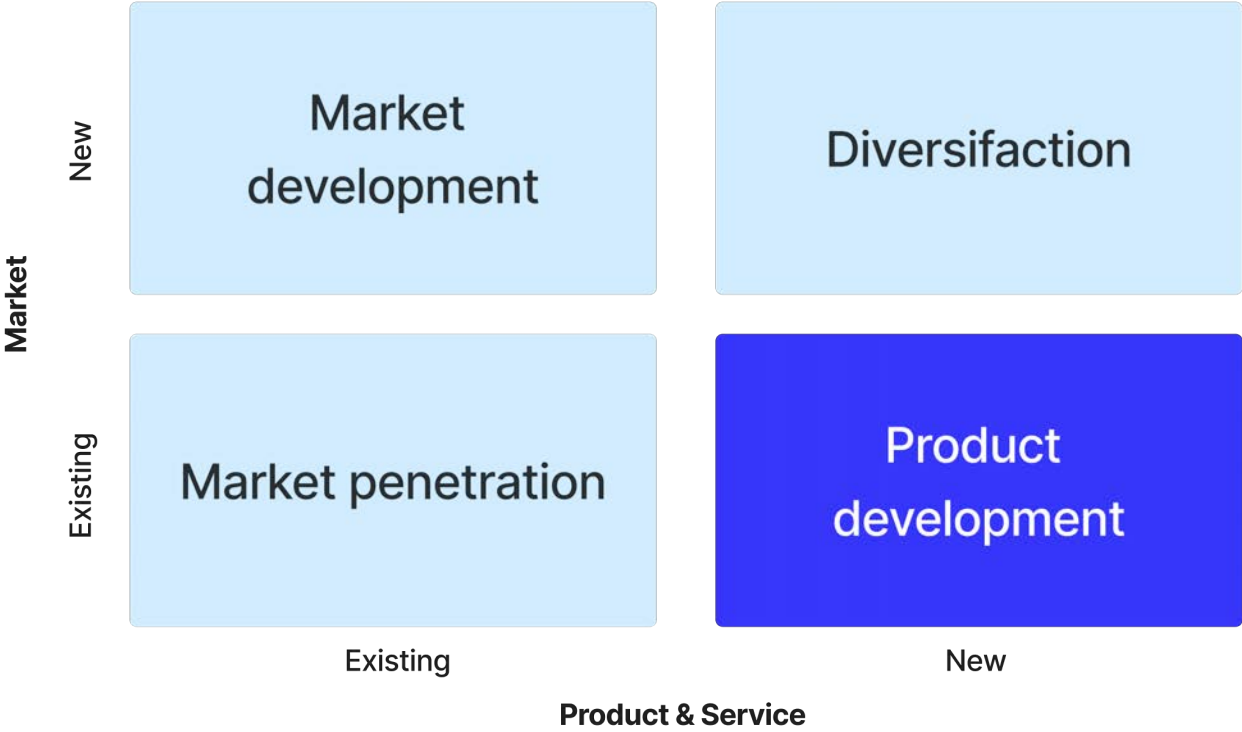

Figure 1.2. Ansoff's growth matrix

1.3
Challenge

Valyuu's future vision in 2028 is to become a full-line and full-lifecycle pre-owned marketplace in the Netherlands. Combining the previous report and the interview with the co-founder, it can be seen that doorstep pick-up service is the beginning of Valyuu's transformation from an online platform to a combination of online and offline services. As we can see from the existing report, this stage is where Valyuu begins to build its social impact by expressing the uniqueness of its services. However, there is still no comprehensive and mature business model for doorstep pick-up service for selling pre-owned goods in the Netherlands. To design the service, it is crucial to investigate the current status, people's needs, and other factors. The research question of this project can be summarized as:

1.3.1 What are seller's needs in selling pre-owned products?

To bring the service closer to users and integrate with existing selling modes, it's necessary to analyze their needs. This project aims to enhance user satisfaction, retention, and growth by improving the convenience and simplicity of user selling experience. To achieve this, I will start by looking at existing reports and literature on the important factors that influence customer satisfaction, loyalty, and happiness in user experience, then apply these insights to the context of this project to better understand what Valyuu sellers need during their selling experience.

1.3.2 What should be considered in doorstepping logistic service?

Valyuu hopes to launch doorstepping as a unique selling point. As the current logistics companies cannot satisfy the demand for convenience from Valyuu's sellers and convenience is a crucial factor that they consider when choosing to sell pre-owned products[]. Valyuu believes that integrating an in-house logistics service into its business model can become one of the important factors in generating product differentiation and gain recognition from investors. Therefore, to research the integration of logistic services with Valyuu's current selling model, I plan to refer to the existing end-to-end e-commerce companies in the Netherlands, such as Coolblue and Picnic, and summarize the points that Valyuu can learn from their doorstep service model.

1.3.3 What are Valyuu's outstanding points in implementing the service?

As an innovative startup, it is crucial for Valyuu to seek out points of differentiation and innovation from other startups. In the process of implementing the doorstepping pick-up service, it is important to fully consider Valyuu's existing resources and capabilities. Through talks with the company co-founders, I learned that the online order conversion rate and return rate are 2 important indicators to test if the project will be a success. These metrics will help Valyuu understand how well the doorstepping pick-up service is being received by customers and whether or not improvements need to be made. For a startup, efficiently utilizing limited company resources and capabilities for later on rapid product testing is important. Therefore, clearly defining Valyuu's existing resources and capabilities that can provide services for the doorstepping pick-up service is essential for the project's ultimate success. By doing so, Valyuu can ensure that it is using its resources effectively and efficiently to offer a high-quality and innovative service to its customers.

1.4
Stakeholder
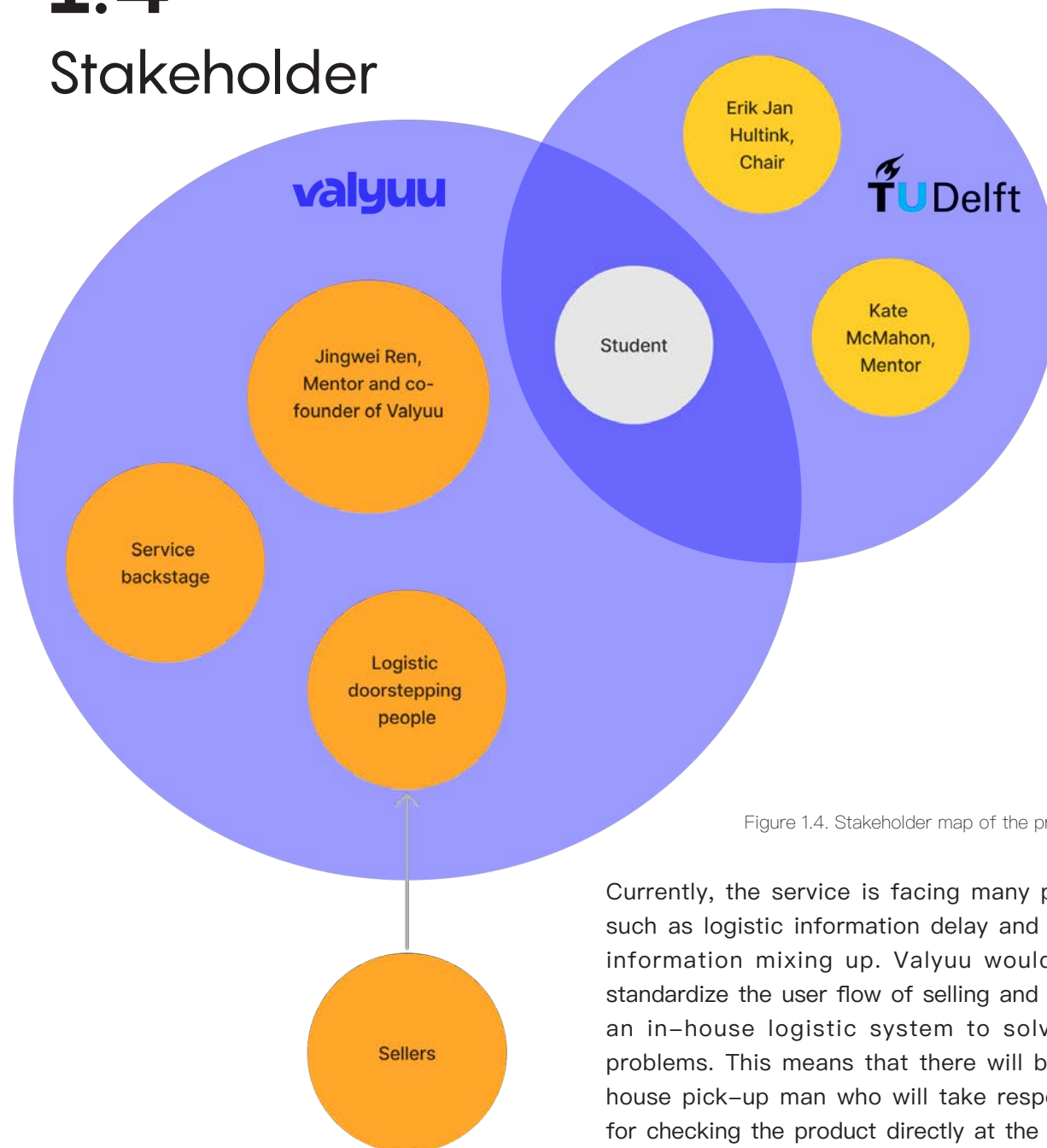
Figure 1.4. Stakeholder map of the project

As Figure 1.4 shows, this project is a collaboration between Valyuu, a trading platform for circular pre-owned products, and TU Delft. With the academic support of Erik-Jan and Kate from TU Delft, the aim of this project is to address existing issues in the seller's experience when interacting with the platform. Additionally, the team aims to launch a service design that connects online and offline channels to simplify the process.

Currently, the service is facing many problems such as logistic information delay and payment information mixing up. Valyuu would like to standardize the user flow of selling and integrate an in-house logistic system to solve these problems. This means that there will be an in-house pick-up man who will take responsibility for checking the product directly at the doorstep and deal with payment. Therefore, the online and backstage service will be easier for the seller because their selling will end up at the doorstep after getting payment. From the seller's perspective, the service will mostly focus on the stage before they meet the pick-up man. From Valyuu's perspective, making the pick-up information up-to-date and all payment information clear will be an important focus.

1.5
Project structure

The conduction flow of this project is basically to first get an understanding of the existing market scope of doorstep service, people's perception off selling pre–owned device, and Valyuu's background. With the knowledge of these, solutions of the doorstep service is generated, which is a typical diverging – converging flow. Therefore, the double diamond model can be a suitable guidance to direct this project.

Discover

During the define phase, I primarily investigated Valyuu's background, the current market situation of doorstep services, and people's habits of selling pre–owned products. I also utilized theories such as the Kano model and SERVQUAL model to support the project, which provided valuable knowledge to understand the context of doorstep service.

Define

The aim of this phase is to define the opportunity for innovation while maintaining the basic function of doorstep service. Because doorstep service is not a new model in the market, but it is new for Valyuu.

Develop

The goal of this phase is to generate as many ideas as possible to address the problems identified in the previous stages. After several rounds of brainstorming, the ideas were then grouped into different themes, and some were selected for integration. A initial concept presented by a service scenario and a blueprint are created based on these ideas.

Develop

The aim of this phase is to validate if the concept meets the stakeholder's needs and present the final design. This phase includes a detailed service map and touchpoint designs explanation.

Discover **Define**

Discover **Deliver**

Milestones

Understanding Valyuu,
Get initial view on doorstepping and selling behaviour

Generate insights
Define target groups and design approach

Transform insights into needs
Ideation and conceptualization

Validate concepts
Envision the future
Discuss the blanks

Actions

Background introduction
Project position
Research question

Competitor analysis
Context analysis
Literature review
Interview

Coding and clustering
Linking literature with insights
Define user profile
Define desgin direction

Design brief refining

Co–creation session
Personal brainstorming
Initial concept generating
(Scenario & Blueprint)

Validation with stakeholders
Service development
Implementation strategy plotting
Noting down blanks

02
Project Context

2.1
Trend analysis

① Omnichannel retailing
To see the importance of combining online and offline
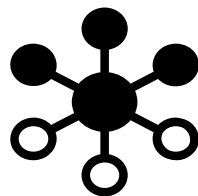
Omnichannel refers to the integration of all available channels to provide a seamless and consistent customer experience across both online and offline channels. This has become an important trend as it enhances customer retention and brand experiences (Yin et al., 2022). It also directly impacts customers' perceptions of their shopping journey, leading to greater engagement, increased sales, and reduced likelihood of switching to another retailer (Cocco and Demoulin, 2022). When compared to purchasing products solely online, people prefer to place an order online and then experience the products physically before deciding whether or not to pay for them (Ming et al., 2018). This reduces the risk of dissatisfaction with the product and delayed refunds. Physical interaction is a critical component of an omnichannel strategy for companies. (Adivar et al., 2019)

② Internet +
To gain digital transformation and development

"Internet+" is a concept that emphasizes the integration of the internet with various industries, sectors, and aspects of society. It leverages the power of the internet and related digital technologies to enable synergistic interactions and deep integration between traditional industries and the digital realm. In China, where "Internet+" has been widely embraced, studies have shown that it has a positive impact on low–carbon development. Specifically, it has reduced carbon intensity, energy intensity, and carbon density, leading to a more sustainable future for the country. Furthermore, the development of "Internet+" has spurred a new wave of urban green innovation, increasing efficiency and further promoting sustainable development. As a result, it has become an essential part of China's strategy for economic and environmental growth. (Zhang et al., 2021) The development of "Internet+" has led to an upward trend in urban green innovation efficiency (GIE). (Luo et al., 2023)

③ Data transparency
On the one hand protect user's data, on the other hand make the service transparent
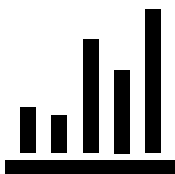
As the era of Industry 4.0 arrives, there has been a significant debate regarding the tension between privacy and confidentiality (Vilhuber, 2023). Some possible solutions include redesigning the European electronic identity (Mooij, 2023). Users benefit greatly from Industry 4.0, but it also creates threats such as data scams. Therefore, it is important for digital services to manage transparency properly and disclose information because users need to access the information they need to make decisions (Chung et al., 2022). Additionally, previous studies have shown the importance of informing the user of possible biases and damages arising from digital service systems (Saldanha et al., 2022).

④ Sustainability awareness
To become a motivation for both seller and company to take action
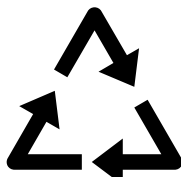
Sustainability has become a widely recognized concept in today's society. As more people move towards sustainable consumption, sustainable lifestyles are becoming increasingly normalized. This normalization brings positive possibilities for better adoption of sustainable ways of living (Rakic, 2015). Sustainable Lifestyle Marketing of Individuals (SLMOI) is an activity that promotes sustainable lifestyles and is considered the foundation of sustainability, leading to positive environmental and social outcomes (Shirani, 2014). However, despite its positive impact on promoting sustainable awareness among customers, there are still barriers such as lack of time, financial resources, specific information, and insufficient conditions that may impede people from taking sustainable actions (Brendzel–Skowera, 2021).

Also, it's important to consider that a company's willingness to adopt sustainable practices may create barriers for the service. Sustainable actions can often pose challenges in terms of availability and cost, as some companies may not be willing to compromise on profit margins.

⑤ Brand recognition
To imporve customer's loyalty and satisfaction
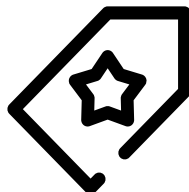
A brand is the identity of a platform. The perception of a brand determines how much people know about it and how far its reach extends. Previous studies have shown that investing in doorstep branding can create a positive brand experience for consumers and reduce return rates (Page Moreau, 2019). Consumers can get in touch with a brand in various ways, while doorstepping can be a direct approach. A better brand experience can directly affect consumer satisfaction and loyalty towards the brand. Furthermore, consumers' perception of a brand's personality is influenced by their brand experience, which in turn affects their satisfaction and loyalty towards the brand (Brakus et al., 2009).

2.2
Competitor analysis

To evaluate a company's strengths and weaknesses, competitor analysis can provide an overview of the competing market and help us understand Valyuu's position. A good starting point is the "two-stage framework" developed by John Wiley and Sons (Bergen & Peteraf, 2002). According to this theory, two separate tasks need to be performed: competitor identification – to determine who the competitors are; and competitor analysis – to compare companies' capabilities and become aware of the focal company's position.
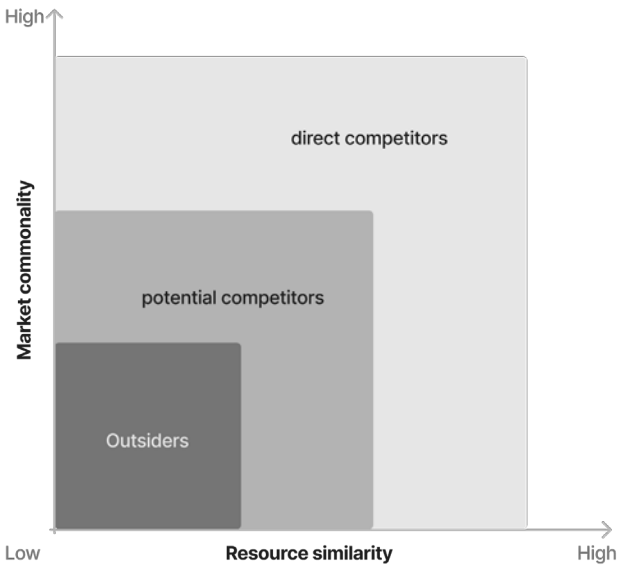
Figure 2.2.1. Competitor identification matrix

As figure 2.2.1 shows, competitors can be classified into direct competitors, potential competitors, and ousiders, based on the degree of resource similarity and market commonality. Resource similarity refers to the extent to which two firms possess comparable strategic resources and capabilities. Market commonality describes the degree to which two firms compete in the same product or geographic markets (Bergen &

Peteraf, 2003). Direct competitors are the ones that have high resource similarity and market commonality with the focal company. Potential competitors have high resource similarity but low market commonality, and they may not necessarily serve the same customer needs. Some competitors are outside the focal company's scope are with low resource similarity and market commonality. But this doesn't mean that we can ignore them cause the focal company has developing dynamics and might touch upon these later on.

In our context, "resource" refers to the products and services that Valyuu offers to customers, such as pre-owned product testing or doorstepping. "Market," on the other hand, refers to a customer-to-business (C2B) selling and business-to-customer (B2C) shopping model. However, as the company develops, it also aims to expand the market to involve customer-to-customer (C2C) interactions in their business model. Therefore, we should consider dynamic development when comparing different companies.

Therefore, companies that provide recycling and refurbishing services for used products and devices such as Coolblue, Apple trade-in service, and Northladder are considered direct competitors of Valyuu. Potential competitors include companies that offer doorstep services like Getir or sell products to individual buyers like Marktplaats. Although these companies may not directly compete with Valyuu, they may provide insights for Valyuu to further develop itself. Outside of the industry, there are logistics and last-mile delivery services, which are currently outside of Valyuu's business scope but could indicate future development opportunities.

Figure 2.2.2. Competitor analysis

Concluding from the above competitor analysis graph, we can detected some of the strenths and weakness of Valyuu by identifying the charateristics from those mentioned companies.

Valyuu's strengths

1. Standardized testing with reports from Valyuu are useful in ensuring the product's condition and clarifying it with sellers.
2. The platform has reliable branding elements.
3. Valyuu has clear and competitive pricing due to no intermediaries.

Valyuu's weaknesses

1. Valyuu experiences delays in the logistics system because they collaborate with outsourced logistic companies.
2. Valyuu lacks brand promotion, making the platform less competitive than older brands like Marktplaats and official platforms like Apple.
3. There are payment confusions when Valyuu deals with large numbers of products at one time.

03

Literature Analysis

3.1
Detecting needs and customer loyalty

3.1.1 Use Kano model to identify degree of feature needs

As an innovative startup, Valyuu is always striving to detect user needs and continuously iterating their product. Compared to giants, they are more flexible and closer to users. The company has invited customers and conducted online surveys to gather user insights to improve their product. Based on previous reports, 8 important points are frequently mentioned in customer feedback: easy process, immediate payment, high payment, paid as offered, friendly people, free shipping, trustworthy platform, and selling everything. These are considered the most important factors that would lead to a better user experience in Valyuu's context. However, in the surveys, customers wrote these viewpoints as big and broad without indicating if they see them as major problems or areas for improvement.

Therefore, I would like to utilize the Kano model evaluation to differentiate between must-have, performance, and delighter needs. This will also aid in making better trade-offs between customer satisfaction and producer capacity (Xu et al., 2008).

What is most interesting is that, this model help us to identify degree of need from must-have, performance to delighter. Figure 3.1 shows how they perfoms.

The red line represents the essential features that are the basic requirements of a product or service for customers. If these needs are not fulfilled, customers will be completely disappointed and as a result, they will leave. Meeting all the essential needs does not necessarily mean that customers will be happy because they believe that these features should exist theoretically. The blue line represents the performance needs that should be met according to customer perception. The more these needs are met, the happier the customers will be. Examples of such features are cost and ease of use. These features will undoubtedly lead to satisfaction, and if they are absent, customers will be dissatisfied. The green line represents the delighters, which are not necessarily expected by customers at the beginning, and therefore, they will not be sad if they are not present in the product or service. However, if they are present, customers will be very satisfied and delighted.

Figure 3.1. Three features in Kano model

<div style="background:#d4f03a">

How did Kano model helps the project

1. With the theory of Kano model, I classified the user needs mentioned in Valyuu's previous research, and gained a basic understanding of their priorities and importance.

2. In Chapter 6, I clustered the ideas generated during the co-creation session and individual brainstorming process into "must-have" ideas, "performance" ideas and "delighted" ideas, and identified which ideas should be implemented in the service at different developing horizons.

</div>

3.1.2 Keep customer's loyalty in Duffy's framework

Customer loyalty is a crucial factor for the long-term success and profitability of a business. It is product differentiation that leads to high attachment and preference among customers, resulting in loyalty to the product or service (Griffin, 1995). To determine the level of customer loyalty, certain characteristics can be used as indicators. These include repeated purchases, commitment, willingness to persuade others to use the product, and willingness to recommend it (Heskett, 2002). It's important to note that not all of these features are in a linear relationship with loyalty. For example, when satisfaction reaches a certain level, loyalty increases dramatically. At the same time, when satisfaction declines to a certain point, loyalty drops equally dramatically (Bowen & Chen, 2001). Indicators mentioned here are essential for measuring customer loyalty and can contribute significantly to the development and profitability of a business.

Then it comes to the question of how to build loyalty for a product or service. Currently, there are trends showing that building customer loyalty is a business strategy instead of just a marketing program. This means that the process can be standardized and it's good to develop a framework of loyalty strategy for a company (Duffy, 1998). The framework provided by Duffy is a good start to detect where Valyuu positions itself and what can be done.

1. **Define the business objectives**: There should be some business objectives like conversion rate and return rate that should be identified in order to reach a direction of where to start for building loyalty.

2. **Understand the customer and develop a value proposition**: Valyuu is constantly gathering customer feedback from online surveys and

implementing them into platform design modifications with innovation around their brand value proposition: certainty, convenience, and memorability.

3. **Design the program**: In Duffy's framework, it is suggested that program structure like reward system, earning and redemption rules, and communication channels can be useful for the product or service.

4. **Implementation of the program**: In Duffy's framework, determining various channels through which the company launches the project is important.

5. **Measure and optimize**: It is mentioned that continuously measuring the program's performance and optimizing it can be good for the program.

Other than methods to develop programs, Griffin also emphasized the importance of empowering in-house employees and providing them with appropriate training and resources to improve customer loyalty (Griffin, 1995). For example, employees should always behave according to the brand values when dealing with user problems or communicating with users in-person. This is important to consider when designing a doorstepping experience, as there will be physical interaction between the pick-up man and the seller. Providing behavioral or in-house training for pick-up men would be useful in this case.

> **How did Duffy's framework helps the project**
>
> One of the important aims of launching the doorstep service is to enhance the user experience and to gain customer loyalty to the platform. The theory helps in designing guidance for the pick-up man, clarifying their tasks and identifying important considerations, such as the purpose of the doorstep service, understanding user priorities, and adhering to Valyuu's proposition.

3.2
Service design framework

3.2.1 Servqual Model

When designing a service, it's important to know how to measure its quality. Therefore, Servqual model is used to measure the quality of service. Servqual model is a tool that helps to identify gaps between customer expectations and perceptions of the service quality. Therefore, the company can improve their service quality and customer loyalty (Zeithaml et al., 2021).
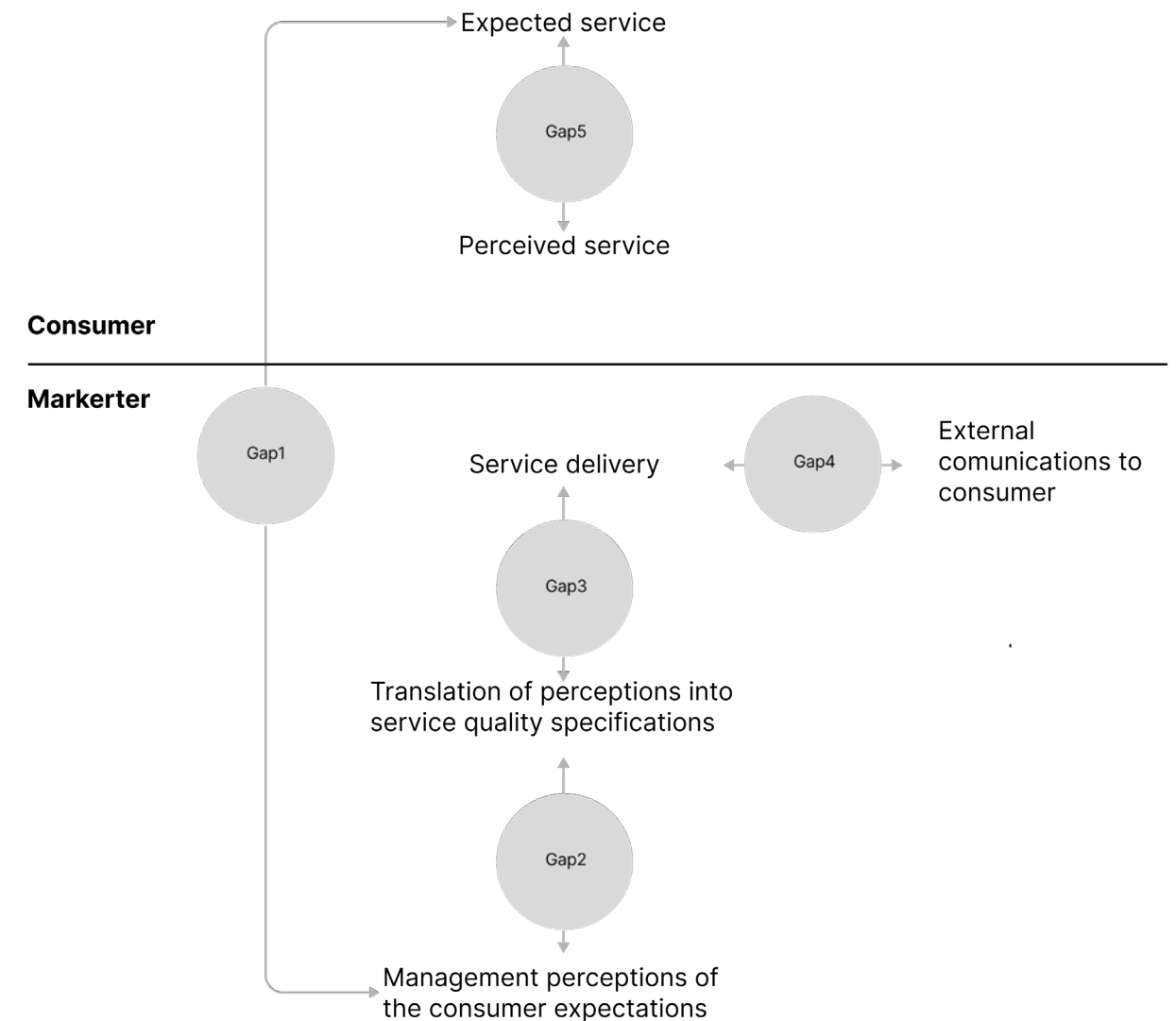
Figure 3.2. Five gaps in servqual model

Seeing figure 3.2, this model consists of two parts: the customer and the company. It mainly discusses the gap between perceived service and expected service, known as the zone of tolerance. Gap 1 exists between what the customer thinks the company will deliver and what the company thinks the customer wants. This gap may exist because the company may not conduct research on what the customer needs and wants, i.e. market orientation. The company's lack of knowledge of customers forms this gap. Gap 2 is the difference between the company's perception of customer expectations and customer-driven service designs and standards. It mainly relates to the service design of properly transferring user needs to a service system. Gap 3 is the gap between the service itself and the delivery of the service. For example, service employees who do not know how to work properly in the service system can create a big gap. Gap 4 is the gap between service delivery and communication, such as ads or promotions. It is important not to over-promise on service delivery. In other words, if the promises of the service do not match the reality, the zone of tolerance becomes narrower. Gap 5 is the difference between the customer's perceived service and expected service.

As a developer of the doorstepping pick-up service, I want to ensure that customers are satisfied with the service throughout the entire process, from placing their order online

to physically handing it over to the pick–up personnel. Therefore, the service can be divided into two main parts: online ordering and offline pick–up.

Regarding online ordering, Van Iwaarden et al. applied the Servqual model to website design and found that factors such as navigation, search options, structure, the ability to assess the trustworthiness of the service offered, and personalized attention to customers (such as user recognition and customization) greatly affect the service quality of a website (van Iwaarden et al., 2003). On the other hand, a previous study by Meidute–Kavaliauskiene et al. has shown that customer expectations for offline logistics systems in terms of responsiveness do not differ but that expectations for tangibles, such as the appearance of vehicles, equipment, and facilities, as well as the appearance of personnel, differ significantly (Meidutė–Kavaliauskienė et al., 2021).

How did SERVQUAL model helps the project

Knowing that there can be 5 gaps in service design, it serves as a guidance to me when I design the service. By coding the interview scripts in Chapter 4, user's viewpoints are gathered, which minimizes Gap 1 between perceived expectations and customer expectations. In order to minimize Gap 2, insights from the interviews are transformed into opportunities and needs after coding. In Chapter 7, detailed service scenarios and blueprints help translate design concepts into reality to minimize Gap 3. In Chapter 8, adjusting the promotion strategy helps minimize Gap 4. Finally, the implementation strategy roadmap addresses the mismatch between perception and expectations to minimize Gap 5.

3.2.2 Customer journey

Under the era of increasingly complex customer behavior, previous study has shown that it's good to develop a customer journey map (CJM) to get an understanding of customer experience (Lemon et al., 2016). Van Boeijen mentioned that it is helpful to construct understanding and resulting visualizations to discuss insights with audience (van Boeijen et al., 2020).Therefore in order to analyse seller's viewpoints throughout the selling process, as well as mapping all related touchpoints into a linear timeline, CJM can be a usefull tool. This method help to detect which touchpoints are more or less critical to customer experience (Rosenbaum et al., 2016).

To create a CJM, start by examining interactions from the customer's perspective and identifying opportunities for improvement (Temkin, 2010). This process begins with collecting internal insights about the service and developing a hypothesis. It's important to note that all relevant stakeholders across all functions and channels should be kept in the scope. In addition, any gaps in existing research should be identified. When integrating insights from customer research, it's helpful to use different methods to gain insight and fill any gaps. Finally, it's crucial to map valuable insights into a CJM. During this stage, it's important to avoid adding too much detail and strive for visual clarity to ensure the CJM is user–friendly for your audience.

How did customer journey helps the project

In Chapter 4, under the guidance of CJM, I divided the service into 3 stages and compared the differences and similarities between interview results and previous work to summarize design opportunities. This allowed me to generate a CJM for each user profile. By comparing these customer journey maps, I further generated ideas.

04
Synthesizing

4.1
Insights in previous study

Coming back to the research question: "How can Valyuu meet the needs of pre–owned product sellers through appropriate means to achieve efficiency, ease, and resonance of branding in doorstep pick–up service?", we have already discussed Valyuu's outstanding points and chances detected in the competitor analysis. And this chapter will mostly focus on investigating people's viewpoints on what constitutes a good selling pre–owned product and doorstep pick–up service.

SERVQUAL model mentioned that there's usually a gap exists in service design because the company doesn't know what customers what.

To get a start, in Valyuu's previous research, there were already some features of the user needs detected. They are distributed among many

qualitative data, I found eight high–frequency appeared features: easy process, immediate payment, high payment, paid as estimation, friendly pick–up man, free shipping, trustworthy platform, and getting everything sold. According to the Kano model, they can be classified as must–have needs, performance needs, or delighted needs. I'm curious about how people perceive them and I created a survey to investigate.

I invited 6 friends of mine who have sold pre–owned digital products before to complete the survey. Method–wise, I arranged paired questions related to the eight features, and asked participants to rate their level of satisfaction if they have or do not have the specific feature. The responses were rated on a scale of 1 to 5, indicating whether they loved or hated the situation. I used a matrix (see figure 4.1) to see how they view each features in their mind. I
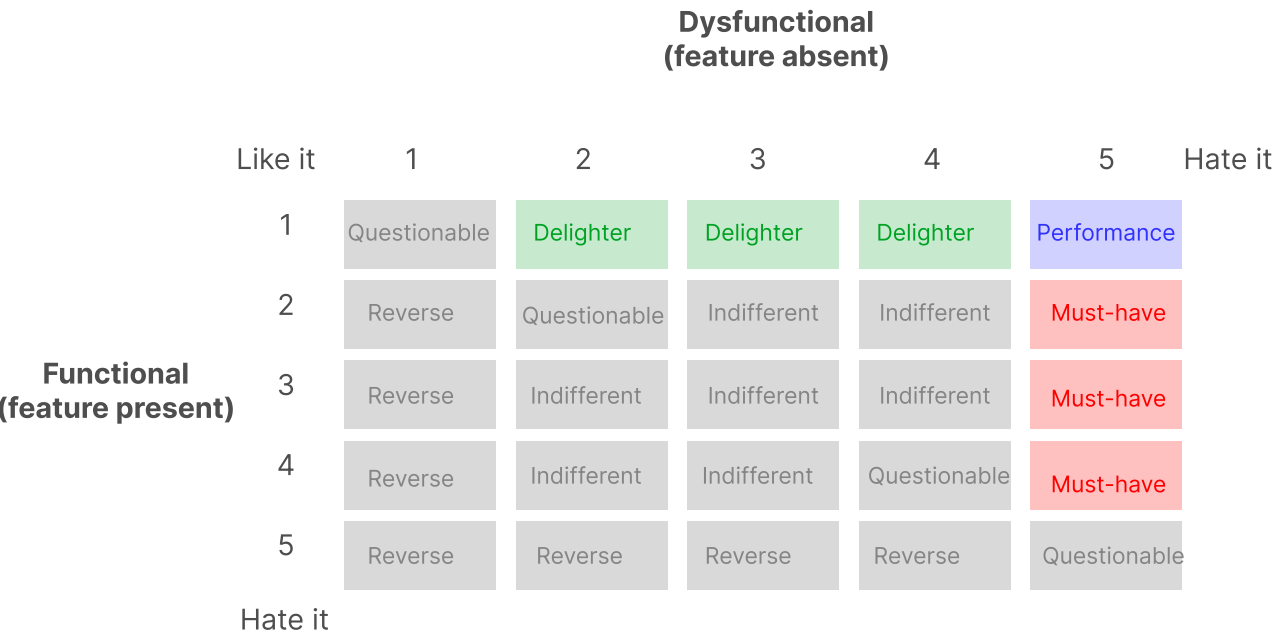
Figure 4.1. Three features in Kano model

mapped each person's results seperately.

Horizontally, it represents what people think if the feature is presented. Vertically, it represents what people think if it is absent. Aside from the 3 kinds of features that have already been mentioned in Kano model, "indifferent" means customers don't care and "Reverse" means if features exist, they

will annoy customers.

Therefore we can get an result for each person of what they think. After getting the outcome of each of the features per person, I combined them into one form to see how many people perceive a certain feature as a must–have, performance, or delighter.

Results of the analysis

Out of the 8 features, easy process, immediate payment, high payment, friendly personnel, free shipping, and selling everything are considered to be delighters. However, one individual believes that immediate payment must be a must–have feature, while 1–2 people consider the remaining features as performance. Additionally, individuals perceive paid as offered and trustworthy platform as less important.

4.2
User interview

Taking the key features detected in Chapter 4.1, in order to gain a deeper understanding of the selling and doorstep pick–up, we organized 2 rounds of interview session.

4.2.1 Interview round 1

Qualitative research of interview round 1

Goal: Obtain an overall understanding of doorstep pick–up and people's past experiences of selling pre–owned products.

Result: We interviewed 6 participants with experience selling different kinds of pre–owned products and having different doorstep pick–up experiences.

Interview guide

Before the interview session, participants are provided with a sensitizing sheet in which they can put their sold pre–owned product and recall their selling memory. The interview is conducted in a semi–strucutred way, namely the interviewer would response to the interviewee or continue on asking deeper questions according to the interviewee's answers. The interviewer first ask for interviewee's basic information like age, living place and products that they've sold to others. Afterwards, a interactive conversation will take place under the guidance of the following questions:

· Why you initially bought this product?
· Why do you need to sell this product?
· Through what ways or channels did you sell it to your buyer?
· Difficulties/Complaints during the process?
· Nice things during the process?
· What's your feeling after you sell it to others?

4.2.2 Interview round 2

After gathering contextual knowledge of selling pre–owned products and doorstep pick–up, we rephrased our interview guide and questions to better understand detailed perceptions of these areas.

Qualitative research of interview round 2

Goal: Obtain deeper knowledge of people's perceptions of different stages in selling pre–owned products as well as doorstep pick–up experiences.

Result: We interviewed 8 participants with experience selling pre–owned digital products.

Interview guide

The process will basically follow the last round. But questions will be more detailed and the whole session will be more struced.

Theme 1: Overall selling process

- Q: For demographical purpose, could you introduce yourself (your age, where you live and what did you sell to the platform/Valyuu)?
- Q: What was the selling experience?
- Q: How did you feel about the process?
  Follow up questions: Why? Any **nice things** during the process? Any **difficulties** during the process? **Prons and cons** of using this platform/Valyuu?
- Q: Have you ever thought of using other platforms?
  Follow up questions: Why you finally came to this platform/Valyuu?

Theme 2: Pre and during selling

- Q: What are the **important factors** do you expect during your experience of selling pre–owned products?
- Q: Are they met during your process of selling to the platform/Valyuu?
  Follow up: Is there **an impressive moment** during your experience?
- Q: How did you communicate with the platform/Valyuu?
- Q: Where did you hear of the platform/Valyuu?

Theme 3: Post selling

- Q: How do you feel about the time gap of start selling to get the payment?
- Q: Do you want to sell again to this platform?
  Follow up: What factors or reasons make you think of this?
- Q: Would you recommend to others? Why?

Theme 4: Ideal service

- Q: Could you tell me about **an impressive service** you've experienced before?
- Q: What will be your **ideal experience** of selling your pre-owned products?
- Q: How would you define "easy" in selling experience?
- Q: How would you define "efficient" in selling experience?
- Q: Have you ever felt resonated with a brand?
  Follow up: What are the impressive branding experience in your mind? (Convention/pop-up activities/package designs)
- Q: What do you think of a doorstepping experience?
- Q: What do you expect from pick-up man?
- Q: Would you perfer offline hubs around the city that your can bring your products to and ask for help, or a doorstepping people to pick up your product?
- Q: What do you think of donating part of your payment to charities?

After listening back to the interview record and scanning through the transcript, important quotes were highlighted and a coding was fomulated according to it. Each participant's codings are stored as different colors and shapes on post–its. This helps to trace back to the original data in transcripts and therefore easier for the later on works.

4.3
Clustering

Figure 4.3.1 shows that all codings gathered from participants were clustered into 15 themes: "efficient process", "easy process", "related people", "logistics and shipping", "ToB and ToC differences", "platform being well–known", "clarifying", "extra value", "communication", "pricing", "branding", "payment", "selling factors", "service design", and "donation".

These 15 clusters were mapped into different stages in the user experience flow using a customer journey map (CJM) (see figure 4.3.2) that was divided into three main stages: pre–service, service, and post–service.

Insights from "efficient process", "easy process", "communication", and "service design" cover all three stages since the insights from these clusters apply to the entire user experience.

Insights from "pricing" and "platform being well–known" mainly focus on the pre–service stage since they serve as triggers for sellers to think about the platform or consider selling pre–owned products.

Insights from "payment" and "related people" are relevant to the service stage, when buyers and sellers physically interact with each other.

Insights from "clarifying", "donation", and "extra value" are mostly mentioned after the service in order to build trust and encourage customers to return to the platform.

Insights from "platform branding" cover both the pre–service and service stages, while insights from "logistics and shipping" cover both the service and post–service stages.
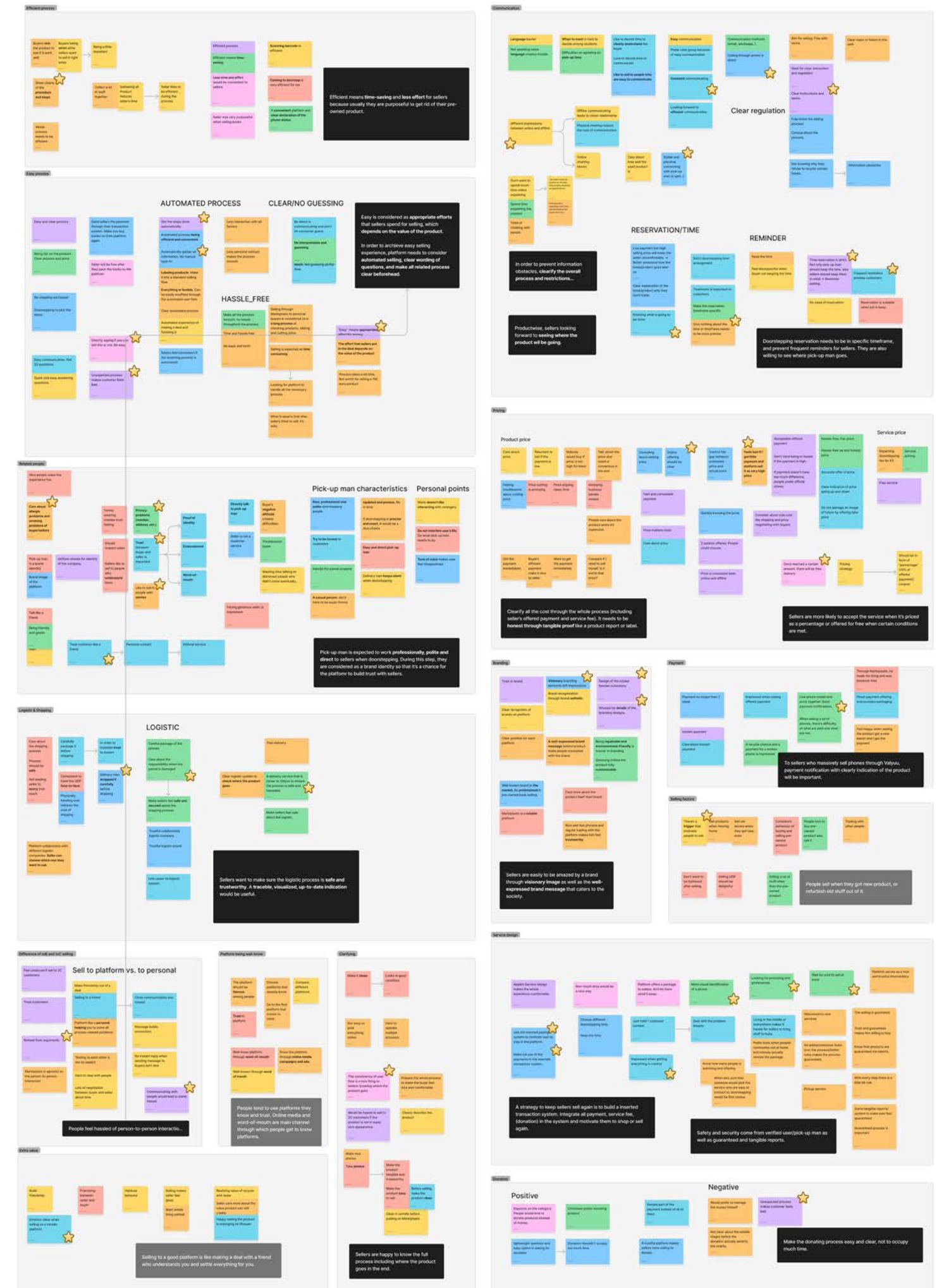
Figure 4.3.1. 15 initial clusters
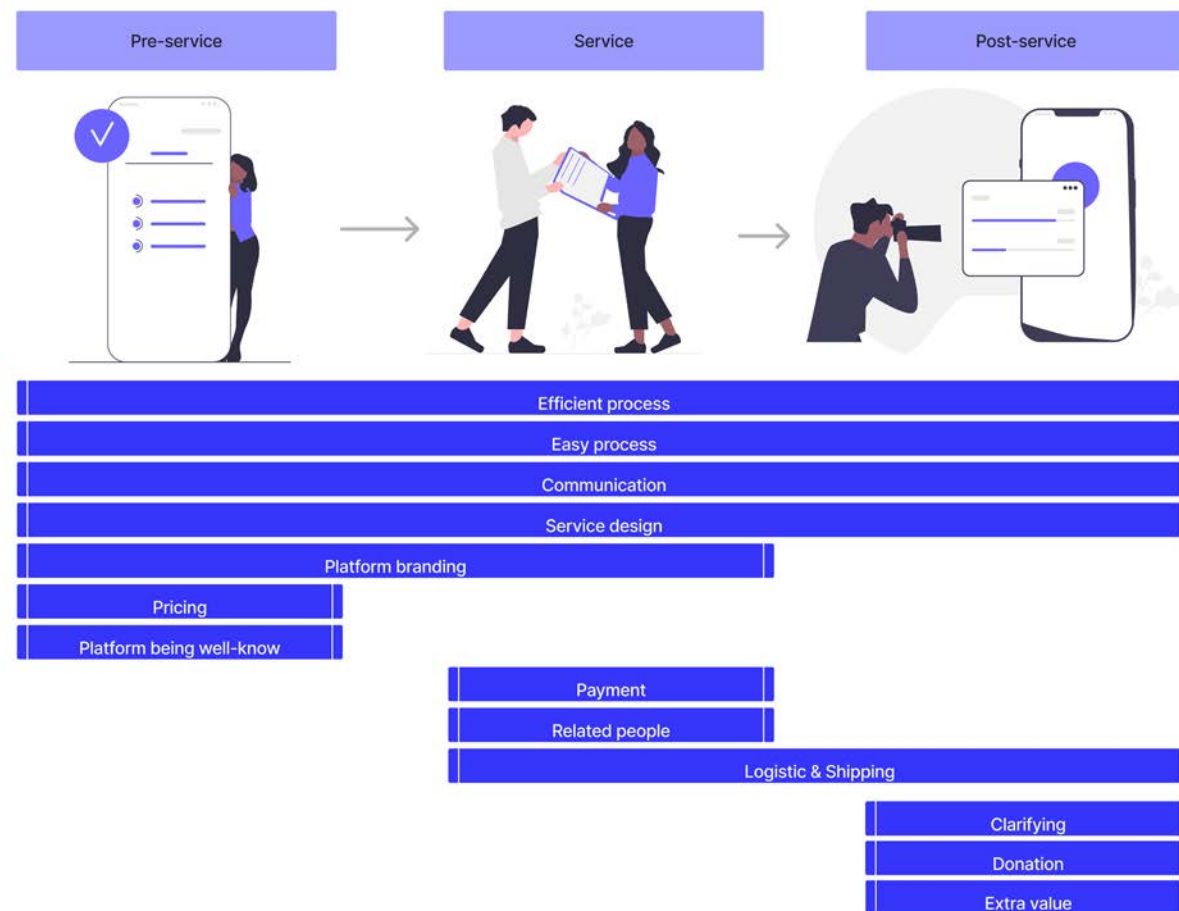
Figure 4.3.2. Overall customer journey

4.4
User profile

While in the interview stage, there are some significant differences between the interviewees. Some of them sell to business platforms while some of them sell to personal buyers. This creates big difference in their view and perception of certain experience. Therefore, I'd like to dived the interviewee into different groups and cluster their insights again to see the difference among them. To understand the difference, figure 4.4.1 shows the two axis underlying these profiles.

The vertical axis stands for their selling channel, namely if they are selling to a business or a personnel. This forms totally different experience because usually selling to business would be more

efficient but probably less payment, and selling to personnel means hassling on communication and price negotiation. This allows us to understand interviewee's selling background and thus compare between them.

The horizonal axis stands for people's viewpoints on selling price. Price is a highly mentioned factor in the interviews and most people mentioned that the first thing come to their mind during the selling process is how much their product worth. While there are also people who simple want to get rid of their products and don't care about price that much. And this is not related to the different channels through which they sell.
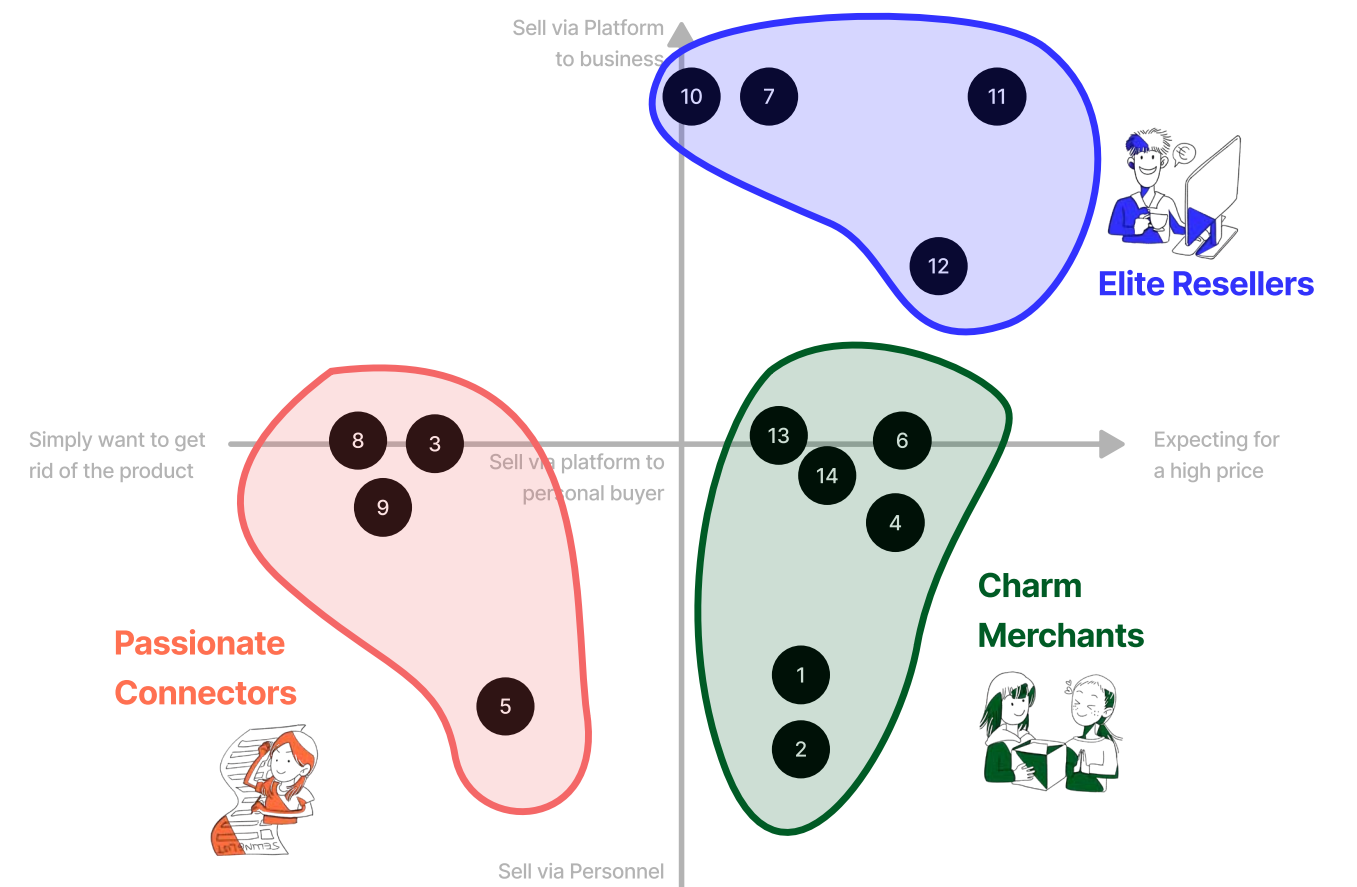
Figure 4.4.1. Matrix of user profile

Figure 4.4.2 shows the 3 profiles. Detailed introduction of the 3 users can be viewed below. In order to provide a comprehensive understanding of each of them, their position in the matrix, quotes from the interviewees, and a detailed description of their main characteristics can be seen in the poster. By examining these elements, the diverse perspectives and unique qualities of each profile can be detected when comparing them.
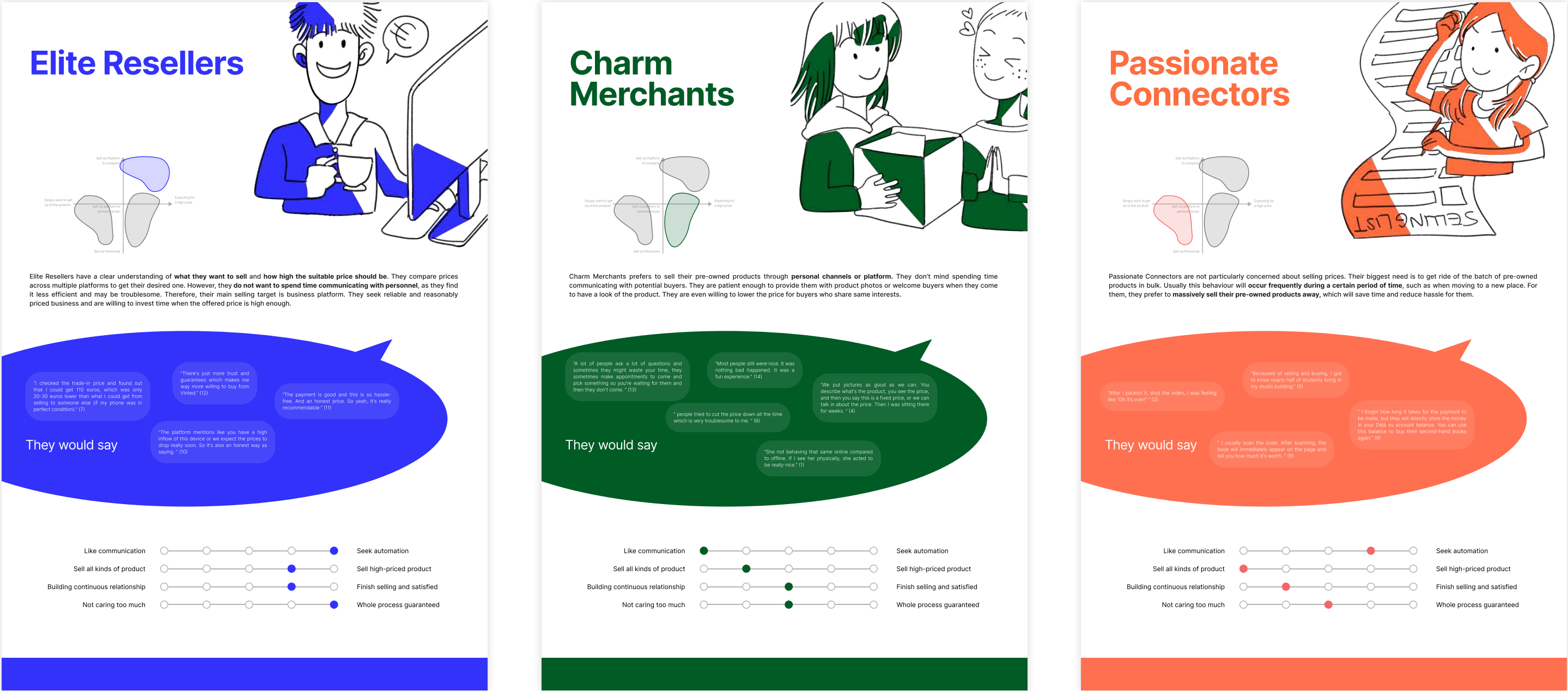
Figure 4.4.2. User profiles

4.5
Reclustering

After clarifying the characteristics of each user profile, I reclustered the codings (see Figure 4.5). I grouped together the coding of participants from the same user profile and compared how people under different user profiles have different viewpoints within the same theme in the original cluster.

The details of the participant's viewpoints of the 3 profiles and the difference and similarity among them can be found in the following chapter.

All participant's clustered codings

Elite Reseller's coding clusters

Charm Merchant's coding clusters

Passionate Connector's coding clusters

Figure 4.5. Divide the coding according to 3 profiles

4.6
Insights from 3 user profiles

The SERVQUAL model mentioned that there can be a gap between perceptions of the consumer expectations and translation of perceptions into service specifications. In order to minimize the gap, I looked into the difference between the detected insights and previous work, and to generate related design opportunities. In this way, needs are translated to service design opportunities in a solid way in order to prevent poor design quality. This Chapter started the analysis with the 3 user profiles. For each user profile, the insights from the codings are clustered into 3 stages: pre–, during and post–. Since doorstep itself is not a brand new idea, I compared most of my findings with previous work to seek some innovative points in between. Opportunities helped in the ideation as well as blueprint designing.

Doorstepping pick-up - Elite Reseller

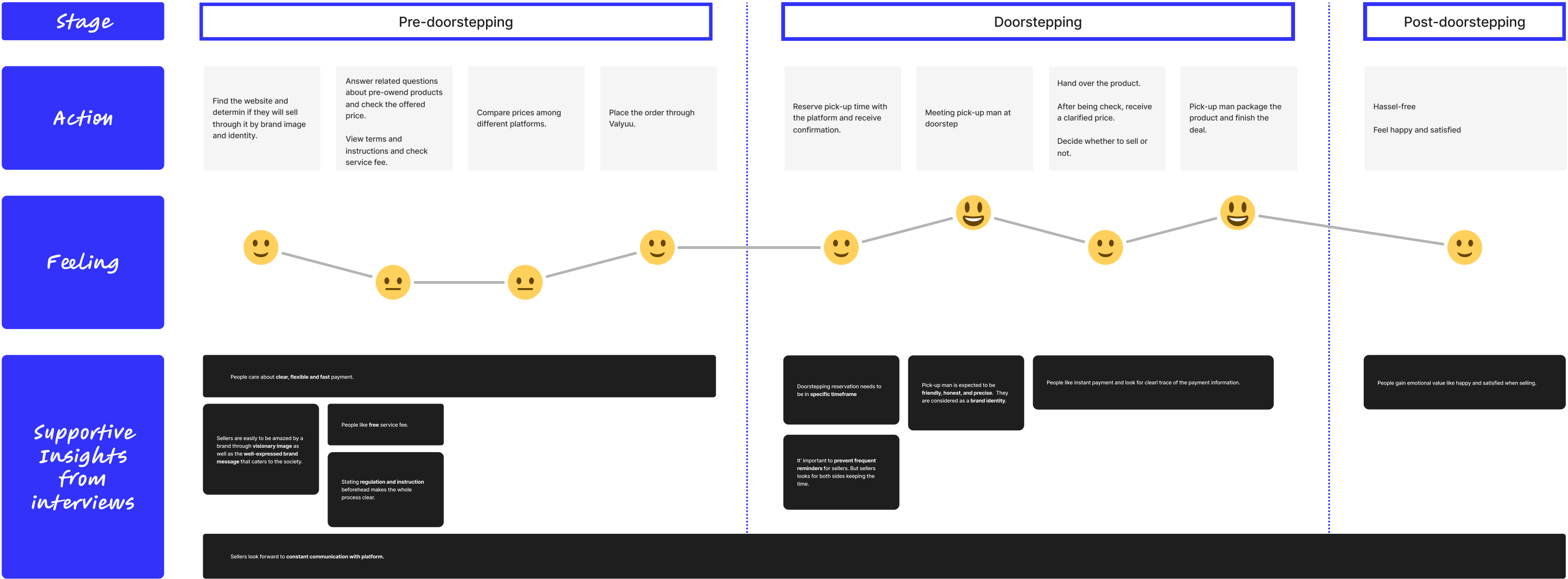| Construct	Definition	Evidence	Previous work	Differentiation or elaboration on previous work	Opportunity
Brand promotion	Sellers are easily to be amazed by a brand through **visionary image** as well as the **well-expressed brand message** that caters to the society.	"…but the thing behind the product is that there is like an impact because you contribute to cleaner ocean. So there's like a really yes. So there's a really sustainable element behind it." (12) "This time I received an Apple gift card was the first time I realized there was a sticker inside. I like these small details because they show Apple's culture." (7)	Brand design as well as intangible attributes influence brand perception. (Seimiene and Kamarauskaite, 2014; Balakrishnan et al., 2009)	Nowadays, companies understand the importance of establishing a brand image and clarifying intangible attributes, such as the brand message. However, Valyuu, a startup company, currently lacks marketing experience. Valyuu's brand assets are only used internally as guidance for employees at present.	ER1 After establishing the brand, it is crucial for a startup company to **promote tangible and intangible brand assets through multiple channels.**
Clear instruction and terms	Stating **regulation and instruction** beforehand makes the whole process clear for sellers.	"I am a relatively traditional person and I have always felt that this kind of second-hand transaction needs some assurance. I don't think Apple has any reason to argue with me. As a big company, it doesn't need to do this. Apple trade-in is very clear and has a very clear regulation. All I have to do is go there, give them my phone, and they will give me money." (7)	Assurance statment affects e-commerce consumer's concern. (Mousavizadeh et al., 2016)	Previous studies have suggested that assurance statements help build consumer trust. The idea is to present assurance statements, such as regulations and terms, along with other related information, **in a more prominent way to users.**	ER2 Let the user know clearly what the **regulations and steps of doorstep service** are. Highlight the role of **Valyuu in providing assurance and endorsement** for their pre-owned products.
User-oriented reservation	Doorstepping reservation needs to be in **specific timeframe** so that users won't spend much time waiting. Also prevent frequent reservation reminders.	"…like, pretty like some delivery service. Give it a time box like 4 hours, which is ridiculous. I cannot stay for 4 hours because I've things to do. I'm called 24/7 for my own job. So, I mean I cannot spend 4 hours sitting in one place when there's a problem at the airport." (11)		To the author's knowledge, the literature has not specifically discussed the reservation timeframe and reminders in the context of doorstepping pick-up.	ER3 The reservation needs to be specific and flexible.
Staff being a brand identity	Pick-up man is expected to be **friendly, honest, and precise.** They are considered as a **brand identity**.	"…updated and precise. … your delivery pickup service person is coming in an hour and then two hours you're still not there … I'm maybe get quite irritated by which is not really justified maybe. " (12) ".. If you are from a big company, I expect you to at least provide your employees with uniforms so that I know which company they are from. " (7)	The brand image and identity have a positive and significant effect on customer purchase decisions. (Supardin, 2022)	**The staff in the company also contributes to the brand identity**. Unlike stable brand assets like a logo or advertisement, a pick-up person interacts directly with customers. Therefore, it is crucial for them to **understand the brand message**, as a positive doorstepping interaction can leave customers with a favorable impression of the brand.	ER4 The pick-up man needs to **behave and act under the guidance of Valyuu's brand identity,** with the aim of smoothly finish his tasks at doorstep.
Transparent information	People like **instant payment** and look for **clear trace of the payment information.**	"So if you have like a page or something that notifying that this one has been sold… Or at least send me payment notifications." (11)	Transparency of financial information is a key factor in building customer's trust. (Kundeliene and leitoniene, 2015)	Under this construct, the interviewees mentioned specific perceptions of **transparent information**, such as payment traceability. Transparency, in our context, refers to providing clear and direct information about the offered price, payment details, and the destination of the pre-owned product.	ER5 Expose the **necessary steps** in the service process. **State the information of their device** which relates to the payment.
Emotional value	People feel **happy and satisfied** after they get payment from selling.	"… But I'm happy that the product and enlong its lifespan." (10)	Positive emotions were more effective in driving people towards sustainability. (Rakib et al., 2022)	While the literature mentions that positive emotions motivate people, we discovered that engaging in sustainable behavior also generates positive emotions. This creates a positive cycle for sustainable behavior.	ER6 Gather same minded customers together.

The sequence of the constructs follows the stages from pre–, during, to post–. We can clearly identify the needs and opportunities that customers desire during this experience. This evidence serves to support the creation of the customer journey map.

Elite Reseller's customer journey

Scenario: a doorstep service when he sells his pre-owend device to a platfrom

Stage	Pre-doorstepping	Doorstepping	Post-doorstepping

Action

Pre-doorstepping:
- Find the website and determin if they will sell through it by brand image and identity.
- Answer related questions about pre-owend products and check the offered price. View terms and instructions and check service fee.
- Compare prices among different platforms.
- Place the order through Valyuu.

Doorstepping:
- Reserve pick-up time with the platform and receive confirmation.
- Meeting pick-up man at doorstep
- Hand over the product. After being check, receive a clarified price. Decide whether to sell or not.
- Pick-up man package the product and finish the deal.

Post-doorstepping:
- Hassel-free
- Feel happy and satisfied

Feeling

Supportive Insights from interviews

- People care about **clear, flexible and fast** payment.
- Sellers are easily to be amazed by a brand through **visionary image** as well as the **well-expressed brand message** that caters to the society.
- People like **free** service fee.
- Stating **regulation and instruction** beforehead makes the whole process clear.
- Doorstepping reservation needs to be in **specific timeframe**
- Pick-up man is expected to be **friendly, honest, and precise.** They are considered as a **brand identity**.
- It' important to **prevent frequent reminders** for sellers. But sellers looks for both sides keeping the time.
- People like instant payment and look for clearl trace of the payment information.
- People gain emotional value like happy and satisfied when selling.
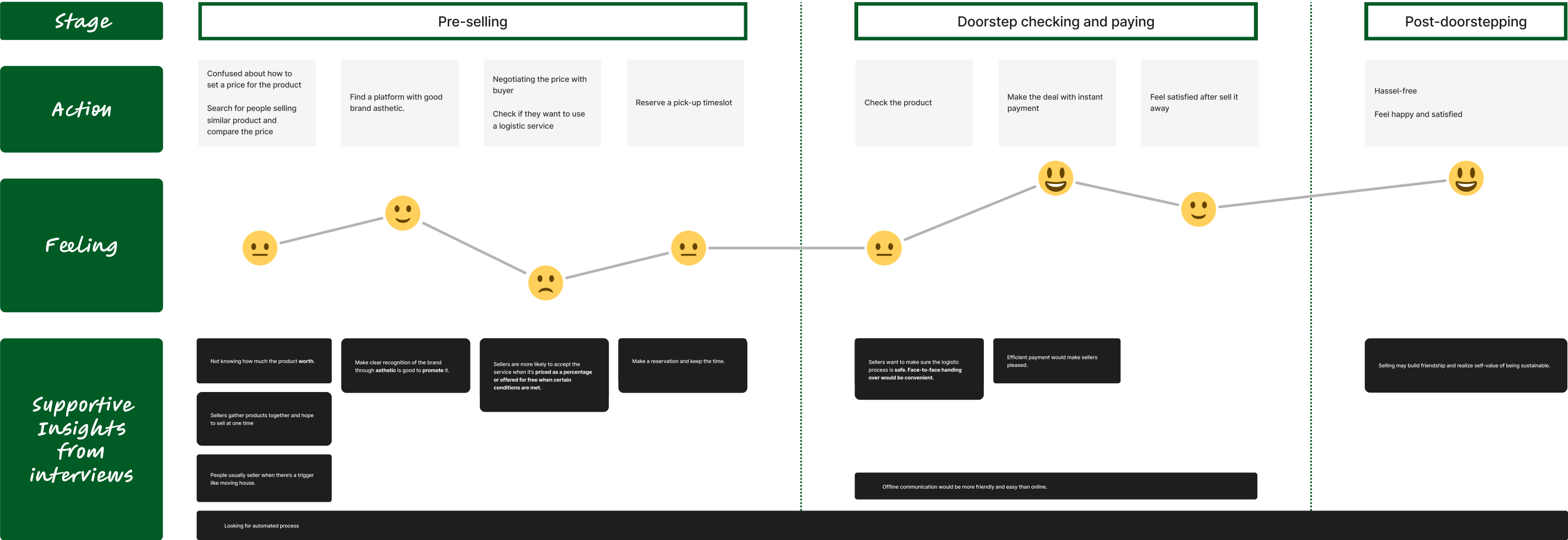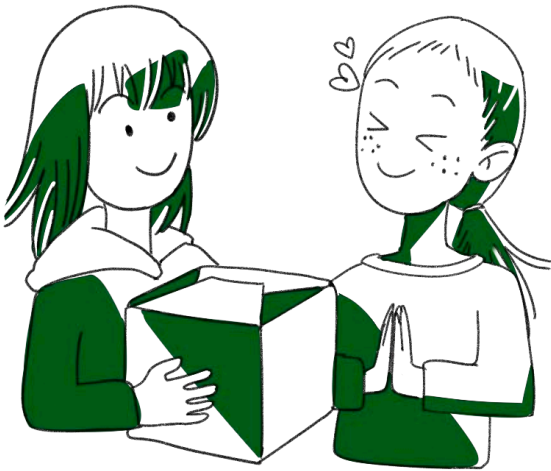- Sellers look forward to **constant communication with platform.**

Pre-owned product selling - Charm Merchants

Construct	Definition	Evidence	Previous work	Differentiation or elaboration on previous work	Opportunity
Storing products	Sellers like to **store** products and hope to sell at one time. This usually happens when there's a **trigger** like moving house.	"… But if the pick-up person also gathered all the products it would be nice. My cost of time is bigger than my earned money. " (1)	Numbers of consumer electronics are just stored at home and become waste (Ylä-Mella et al., 2022)	People often ignore their used electronic products until they reach a point where they feel the need to get rid of them. This creates **an immediate need to package and sell these items.**	**CM1** **Collaborate** with moving compaies. **Promote the service at certain periods** like back-to-school month.
Guarantee	Verify or label the product and seller to guarantee the process.	"…I can just give it back but because they send like already the label with it so you can put it on the bag and just send it without you printing anything or having to do anything, it makes it easier if you had a problem and you contact their customer service." (13)	Product labelling schemes are regularly offered as a solution to support circular economy. (Meis-Harris et al., 2021)	The concept of labeling, as mentioned in literature, can be applied to transform people's daily behavior. This can also be related to selling platforms by **using verification labels.**	**CM2** Valyuu can provide the **verification of the device**. Thus make customers feel guaranteed during their experience.
loyalty programs and rewards	Reward system and balance system would make customer come to the platform again.	"For example, if you give them two coins, they will reserve the book for you. When it becomes available, you will have priority. I like these small features and find them useful." (9)	Loyalty programs aim to increase customer retention and encourage repeat purchases. (Griffin, 2005)	The payment system can be seen as a way to build loyalty, as most people sell products to earn money. Therefore, in e-commerce platforms, **using payment as a loyalty trigger** is beneficial.	**CM3** Give seller's **financial rewards** and attract them consumer again at Valyuu.
Troublesome in-person interaction	Negotiate the price to reach a consensus is somtimes **time-consuming and troublesome.**	"…And people tried to cut the price down all the time which is very troublesome to me. So that it left me with the feeling that I felt it pretty difficult. I'm not a customer service so I don't want to reply to you all the time. " (6)		To the author's knowledge, previous theories have not focused on the negative effects that in-person negotiation can have on the selling experience. Negotiating sometimes **harms selling efficiency.**	**CM4** Make the process as **automative** as possible. Guide the pick-up man what to say and **avoid unnecessary interaction.**
Keep the promise	Feel **hasseled** when facing negative attitude and not keeping appointment.	"…a lot of people ask a lot of questions and sometimes they might waste your time, they sometimes make appointments to come and pick something so you're waiting for them and then they don't come. " (13) "She, I felt that it was a little bit disrespectful of her because I was waiting for her and she did, she didn't come." (13)	Trust is an important aspect for successful business relationships in the current turbulent marketing environment. (Ashnai et al., 2016)	This need for trust and keeping promises applies not only in a business context but also in **customer selling contexts**, to avoid one-time deals and maintain a positive brand image.	**CM5** The pick-up man needs to keep every thing **clear**. If there is any discrepancy from the previous commitment, it is necessary to **clearly explain the reasons.**
Offline being safe and easy	People like to sell to friendly people, and to whom understands them. **Face-to-face handing over would be convenient and direct.**	"It was pretty impressed to me that the girl was firstly asking a lot to me and I thought she's a bit hard to deal with. But it turns out to be that physically she was a nice one even though she asked a lot. She not behaving that same online compared to offline." (1)	Online retailers can select physical store mode to make customers better experience the product. (Fan et al., 2019)	Not only retailers, meeting and experiencing product in C2C selling also helps buyer to **efficiently finish the buying experience** and in-person meeting is considered to be **more direct and easy** than online chatting.	**CM6** The pick-up man can make **every testing step clear** to the seller. And **transfer the payment to the seller efficiently** if there's no other problem.
Form friendship and realize self value	Selling may build friendship and realize self-value of being sustainable.	" Even though I sold for just 30 euro, I still think that it's nice to make it usable to others." (1)		To the author's knowledge, the mindset of realizing self-value through sustainable behavior has not been specifically discussed in previous studies.	**CM7** Make seller clear **where the device goes after Valyuu picks it up.** Build **community** of same-minded people.

Charm Merchant's customer journey

Scenario: A selling process of meeting with buyers physically to sell a pre-owned product

Stage	Pre-selling				Doorstep checking and paying			Post-doorstepping
Action	Confused about how to set a price for the product Search for people selling similar product and compare the price	Find a platform with good brand asthetic.	Negotiating the price with buyer Check if they want to use a logistic service	Reserve a pick-up timeslot	Check the product	Make the deal with instant payment	Feel satisfied after sell it away	Hassel-free Feel happy and satisfied
Feeling								
Supportive Insights from interviews	Not knowing how much the product **worth.** Sellers gather products together and hope to sell at one time People usually seller when there's a trigger like moving house.	Make clear recognition of the brand through **asthetic** is good to **promote** it.	Sellers are more likely to accept the service when it's **priced as a percentage or offered for free when certain conditions are met.**	Make a reservation and keep the time.	Sellers want to make sure the logistic process is **safe. Face-to-face handing over would be convenient.**	Efficient payment would make sellers pleased.		Selling may build friendship and realize self-value of being sustainable.

Offline communication would be more friendly and easy than online.

Looking for automated process

Pre-owned product selling - Passionate Connectors

Construct	Definition	Evidence	Previous work	Differentiation or elaboration on previous work	Opportunity
Purposeful selling	Sellers are **purposeful** to get rid of their pre-owned product.	"...Because I have a strong purpose, I hope to have less contact with them, preferably no contact at all." (8)	purposeful behaviour requires a single valued objective. (Jensen, 2001)	The primary objective within our context is to effectively manage products. Aside from this goal, people generally do not place as much importance on factors such as communication or payment.	PC1 Make the process other than handling product **less hassle.**
Consistent in selling and buying	People who have a habit of buying pre-owned products also like selling them.	"I need to use them. My screen was too small so that I bought my monitor. I bought them as second-hand product as well." (5)	Habitual behaviors demonstrate the strongest effect on e-waste recycling intention. (Aboelmaged, 2021)	Knowing that habitual behaviours contributes giantly to people's intention of going green, we say it also leads user to **connect buying and selling**, thus to form a **consistent user experience in this sustainable experience** of selling pre-owned products.	PC2 Use rewards to **transform** seller to buyer/buyer to seller at Valyuu.
Trustworthy logistic	Sellers want the logistic to be trustwothy.	" Because it is JD, their doorstep service is more reliable, and JD has a good reputation. Their partner is also reliable. They come to your doorstep, you pack the item, and they take it away. They also help with packaging. That's it." (9)	The relationship between online trust and perceived risk is important for consumers' purchase intentions on platforms. (Lăzăroiu et al., 2020)	While logistics may be considered a secondary factor in online business, it is also crucial for consumers to establish trust. A logistics company **with a good reputation will positively impact the selling experience.**	PC3 Collaborate with outsourced company which has a **good reputation.**
Automated selling	In order to archieve easy and efficient selling experience, platform needs to consider **automated selling**	"One factor is that I can order with just one click, and the platform already has my personal information so I don't have to fill in my address information." (9)	Digital adoption can influence salespeople's interactions with customers and benefits will vary for different buyers. (Singh et al., 2019)	When implementing digital automation in the selling process, it is important to clarify user acceptance and determine which aspects can be automated and which require human involvement.	PC4 While making the process automated, there shoud be **personal intervention when necessary.**
Knowing full story	Sellers are happy to know the full process including where the product goes in the end.	"Déjà vu builds a community, so if someone buys your book, you receive a message telling you who bought it. Although I didn't pay much attention to this, I think this experience is better than some other platforms." (8)	In e-commerce post service, it's a chance to build relationship between retailer and consumer. (Ferraz et al., 2023)	To build a relationship, there are some suggested ways like effective communication and addressing consumer problems promptly. However, we believe that the retailer can also play an active role as an initiator of the relationship. It's beneficial for the platform to proactively share product information to demonstrate trustworthiness and show that they care about the consumer's satisfaction.	PC5 Expose the full life cycle to the seller.

Passionate Connector's customer journey

Scenario: A selling process of the doorstepping process when they sell pre-owned products to a platform
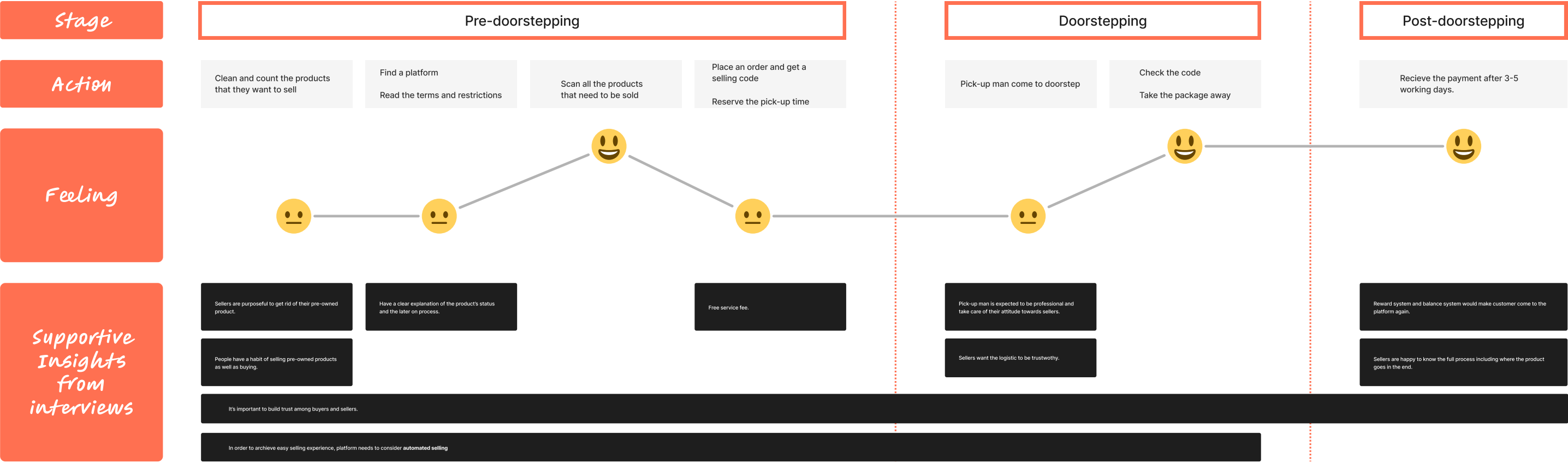
05
Design Refining

5.1
Design direction

It can be detected that the closest group at which Valyuu is presently targeting are "Elite Resellers" who aims to sell to platform while looking for a high price for their used device. Therefore, in order to develope a service that suits to the target group and gain benefit for Valyuu, there are 2 directions that can be considered.

Direction 1
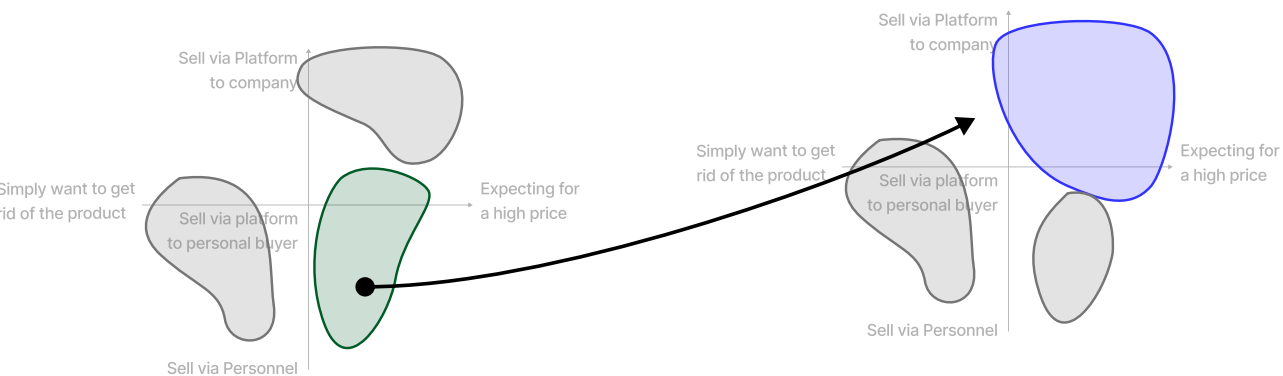
Figure 5.1.1. Direction 1, transforming Charm Merchants into Elite Resellers

Direction 1 focuses on transforming "Charm Merchants" into "Elite Resellers" (see Figure 5.1.1). Both groups belong to the positive direction of the horizontal axis, which means they both prioritize the price of the product. However, they differ in terms of the channels of sales they use.

To turn C2C users into platform sellers, there are several strategies we can use. One approach is to help them realize the advantages of selling on the platform. On the other hand, we can also include some Charm Merchants' insights in the doorstepping service, which Elite Reseller didn't mention during the interview. For example, by emphasizing the importance of building strong customer relationships and providing personalized service, we can create a more engaging and effective sales experience for our sellers. By incorporating these insights into our business model, we can ensure that we are meeting the needs of a diverse range of users and delivering value to them.

Direction 2
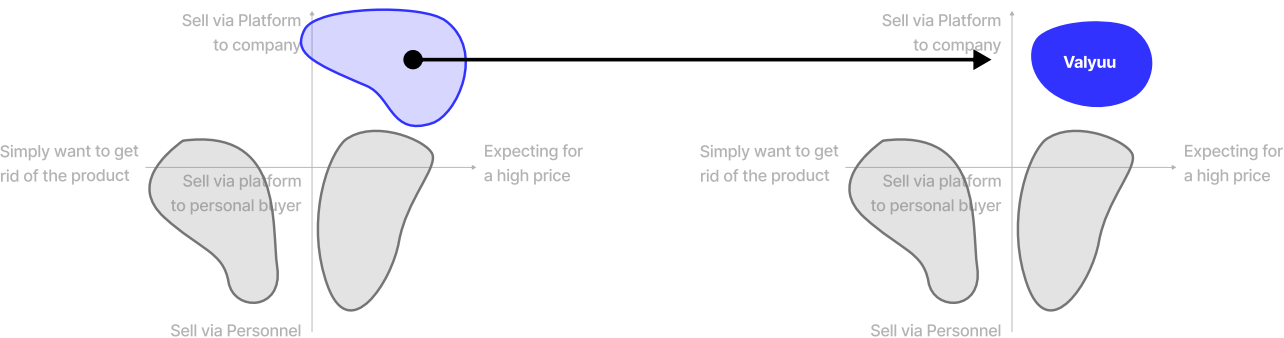
Figure 5.2.2. Direction 2, scope the Elite Resellers down to Valyuu's user

In direction 2, identifying that Elite Resellers are Valyuu's target users, we hope to attract as many of these target customers as possible to our platform for selling (see Figure 5.2.2). Therefore, in addition to incorporating insights from Charm Merchants, we also need to strengthen Valyuu's unique advantages. Based on the conclusions from competitor analysis, we can learn from the strengths of direct competitors, thereby enhancing Valyuu's unique competitiveness in the market.

5.2
Design brief refining

Previously, we posed the research question: "How can Valyuu efficiently and effectively meet the needs of pre-owned product sellers while creating a strong brand image through doorstep pick-up service?" Based on previous research, we can see that introducing a new selling mode that includes both online and offline settings helps to achieve this goal. There are two clear directions from which we can design this new mode. Therefore, by incorporating these directions, we can refine the design goal as follows:

> **"How to maximize seller performance and conversion on Valyuu's platform through doorstepping pick-up service?"**

Sub–design goal 1: Maximizing seller performance

To focus Valyuu's target audience on Elite Resellers, it may be useful to measure seller performance on the platform. To differentiate Valyuu from its competitors, we can incorporate insights generated from competitor analysis to identify their unique strengths that Valyuu currently lacks. By integrating these strengths into Valyuu's context, we can attract more Elite Resellers. (see Figure 5.2.1)

Figure 5.2.1. Maximizing seller performance

Sub–design goal 2: Enhancing conversion

On the other hand, it is also a goal for Valyuu to convert Charm Merchants into Elite Resellers, thus enlarging the targeted group. As stated in Chapter 5.1, one way to do this is to compare the different insights between Charm Merchants and Elite Resellers. (see Figure 5.2.2)
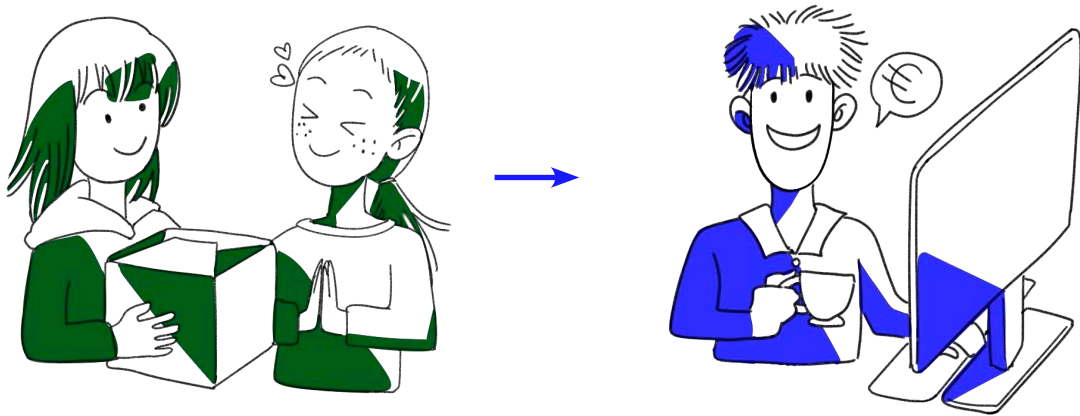
Figure 5.2.2. Transforming Charm Merchants into Elite Resellers

Design requirement list

Throughout the research and refinement process, we have already identified insights, views, or wishes from users that would guide the direction for the final concept. From these, I would like to create a service design that properly translates user needs into practice. Below is a list of required attributes that the design should meet on a basic level, namely "must–have" attributes.

Required attributes:
(1) The design should be based on the present experience of Valyuu users and make it user–friendly for the target group.
(2) The design should refer to and reflect insights from context research as well as interviews. The needs of users should be properly translated into the service system.
(3) Details in service design should be clarified in order to make it easy to implement.
(4) The design should take efficiency, ease, and brand resonance into consideration.
(5) The service should help build Valyuu's brand image as well as brand impression and trustworthiness.
(6) The design should be in a financially workable strategy.
(7) The service should be affordable to customers.

06
Ideation

6.1
Ideation approach

Figure 6.1 shows the flow of the ideation process. After receiving the basic design approach from the previous chapter, I integrated personal brainstorming and a co-creation session within the company to gather ideas. In this way, the ideas will cover aspects of creative thinking as well as theoretical analysis. Individual brainstorming helps me take a step back to the original problem and see the big picture. The co-creation session involves different thoughts from people with various backgrounds, such as data science, engineering, marketing, etc.

Once the ideas have been gathered, I work with my mentors to establish guidelines for clustering and selecting the ideas that I can move forward with. The previous co-creation session also helps in determining these guidelines. Therefore, the ideas that meet the guidelines will be selected and integrated into a desired service.

After selecting the ideas, a scenario is generated from them. Also, because the ideas from the previous stage are randomly written with different abstraction levels, generating a scenario also helps to level them and make it easier for me to continue with the detailed blueprint design.
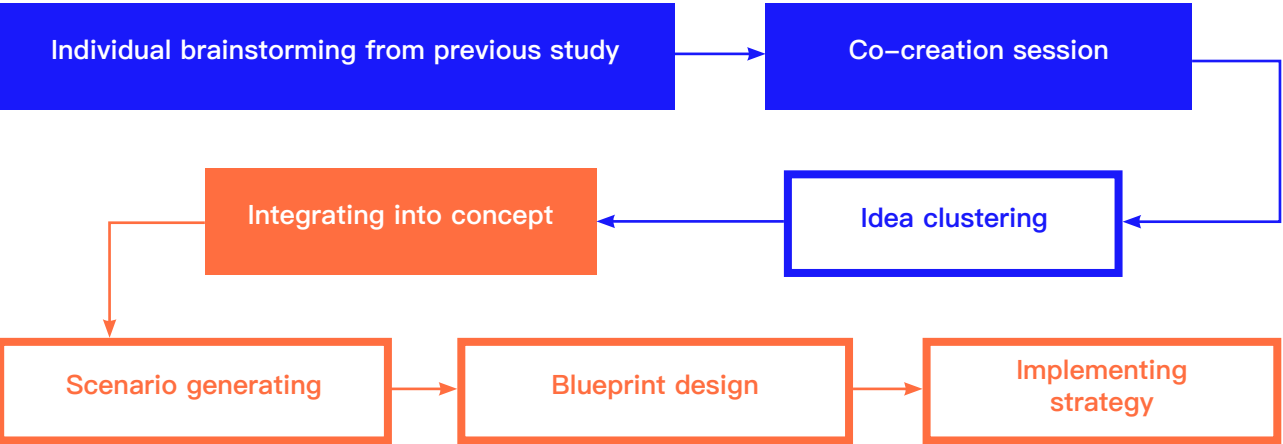
Figure 6.1. Steps taken in the conceptualisation

6.2
Analysis from previous research

6.2.1 Ideas from comparing Charm Merchants and Elite Resellers

Comparing the 2 user profiles, we can start by seeing from the 3 service phases: pre-doorstepping, doorstepping and post-doorstepping. From the evaluation of the interviews, we can see that Charm Merchants care more about customer guarantee, user rewards, pick-up man's interaction skill, sustainable value, etc. compared to Elite Resellers. Figure 6.2.1 are some ideas based on this finding.
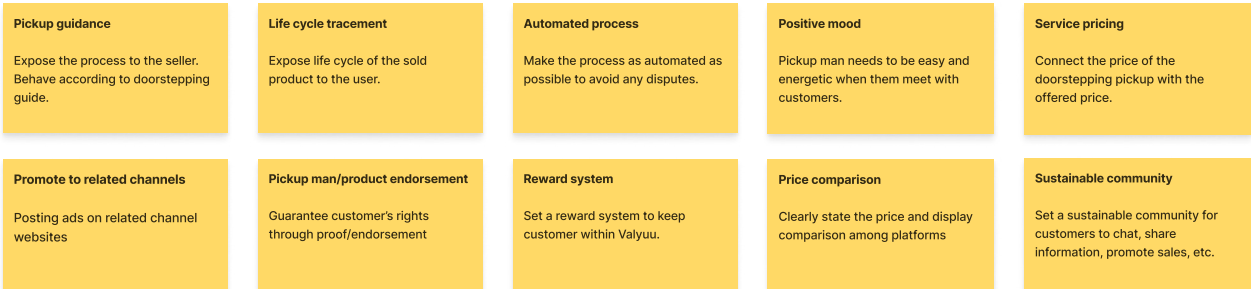
Figure 6.2.1. Ideas generated from comparing 2 profiles

6.2.2 Ideas from Scoping down Elite Resellers to Valyuu's target group

Seeing comments from Trustpilot and experiencing competitor services, I got some inspirations from them. Taking Valyuu's identity into consideration, ideas in Figure 6.2.1 are generated as ways to convert more customers into Valyuu's scope.

Figure 6.2.1. Ideas generated from scoping down Elite Resellers

6.3
Co-creation session

Flower Association

Restating the probelm

Brainstorming

Sequencing

Idea finalization

Role playing discussion

1. Problem finding

2. Idea finding

3. Acceptance debating

Figure 6.3.1. Steps in co–creation session

To gather creative ideas from both a business and innovative perspective, I organized a co–creation session and invited Valyuu employees, as well as a student from the faculty of Industrial Design Engineering at Delft University of Technology. The purpose of this session was to generate initial ideas on the refined problem of "How to maximize seller performance and conversion on Valyuu's platform through doorstep pick–up service?".

6.3.1 Session planning

The session is divided into three parts: problem finding, idea finding, and acceptance debating. (see Figure 6.3.1) As the facilitator and problem owner, my first step was to help the participants fully understand the context. Before the session began, I presented the three user profiles and two directions to the participants. This approach generated an overall understanding of my research on the topic. The participants were later divided into two groups, which brainstormed ideas for the two directions.

Part 1 Problem finding

After people were divided into separate groups, I presented my problem to them. For each of the groups, participants were asked to write down their thoughts around two central words, "pick–up service" and "conversion" (group 1)/"seller performance" (group 2). This method was introduced by Heijne and van der Meer as "Flower association". This step mainly served for participants to get a deeper understanding of the given problem and prepare them to rephrase the problem as perceived.

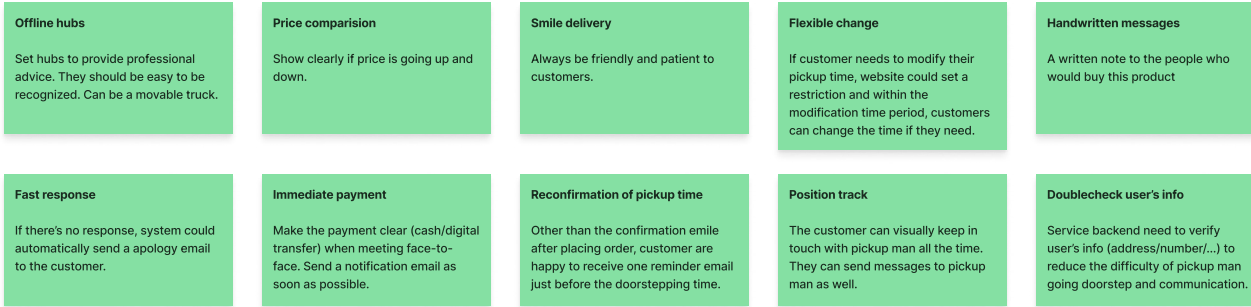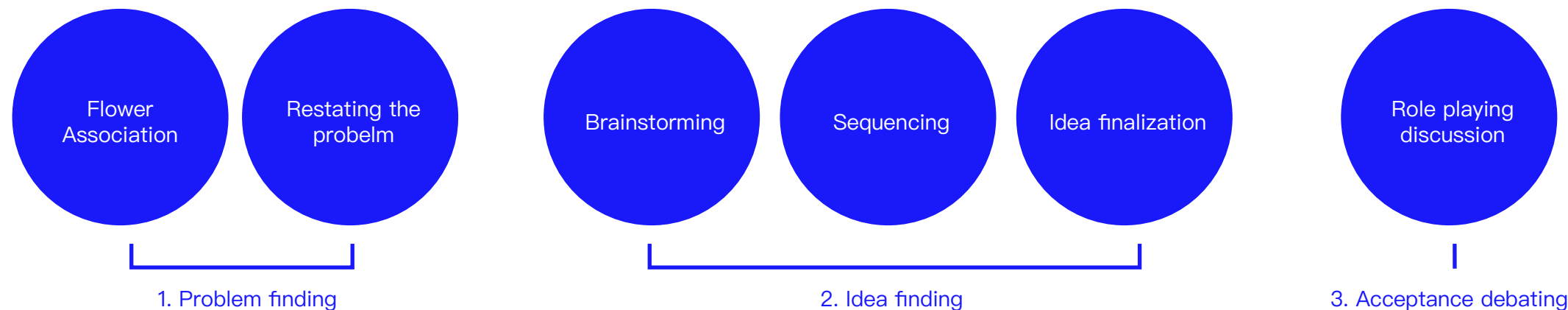As a result, group 1, which worked on conversion, rephrased their problem as "How does a financially healthy pick–up service maximize seller conversion, retention, and increase brand visibility?" They were interested in figuring out financially workable solutions to attract more people to come to Valyuu, and therefore enhance customer conversion.

Group 2, working on maximizing seller performance, rephrased their problem as "How to maximize high customer loyalty and high referral while picking–up high–quality products in the highest quantity?" On the one hand, they would like to increase existing customer loyalty to the brand. On the other hand, they are also thinking about ways to make customers sell more products.

Part 2 Idea finding

Based on the rephrased problem, each group brainstormed solution ideas accordingly. Additionally, they were also asked to come up with criteria from which people could judge the ideas. Based on the top 2 selected criteria, participants were asked to plot all their ideas in a matrix which 2 axes are marked by the 2 criteria. The outcome can be seen in figure 6.2.2.

People dot–voted their favorite ideas and clustered some of them, saying the similar things or can be combined. Since people have selected the criteria, it's interesting to see that most selected ideas appeared in the top right corner, which is considered to be both in a positive side for the 2 axes. People later on dug into the top–voted ideas and finalized them.

Figure 6.3.2. People in the co–creation session

Part 3 Acceptance debating

In this part, participants in the two groups pitched their finalized solutions to each other. People were set with the role of "customer", "service provider", and "pick–up man". Taking the role, people in the other group judged if the idea catered to their needs or if there were some problems left. Then the solution became clear to me as a problem owner. I planned to take these finalized ideas as a start and inspiration for my concept.

6.3.2 Session outcomes

Outcomes are the most valuable outputs from this session. I started gathering ideas during the brainstorming part. Even though some of them may not be selected as top–voted, they still inspire me from different perspectives. Other than the selected final ideas, I also kept the rest of them in my process to serve as inspirations.

Criterias when judging ideas
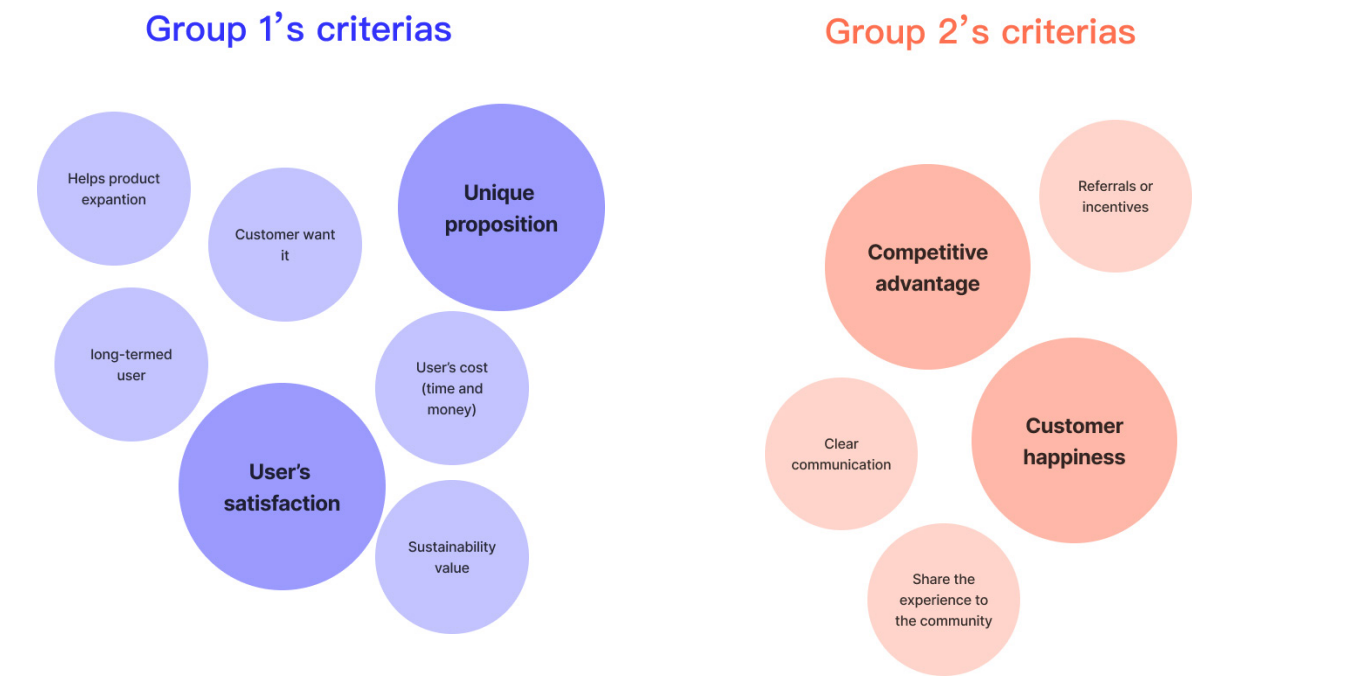
Figure 6.3.3. Different group's criterias

Each group wrote down criteria for judging the ideas. Interestingly, although people wrote down different points, the top selected ones were pretty similar. Group 1 voted for a unique proposition and user satisfaction, while group 2 thought competitive advantage and customer happiness mattered most. Comparing the selected pairs, a unique proposition leads to a competitive advantage, indicating that they share similar characteristics. User satisfaction and happiness are related to customer loyalty and perception of user experience. We can roughly see that the two matrices have similar horizontal and vertical axes. And the top–right corner is considered to be a sweet spot for this project. The voted ideas from the session are listed below.

Figure 6.3.4. Ideas generated in the session
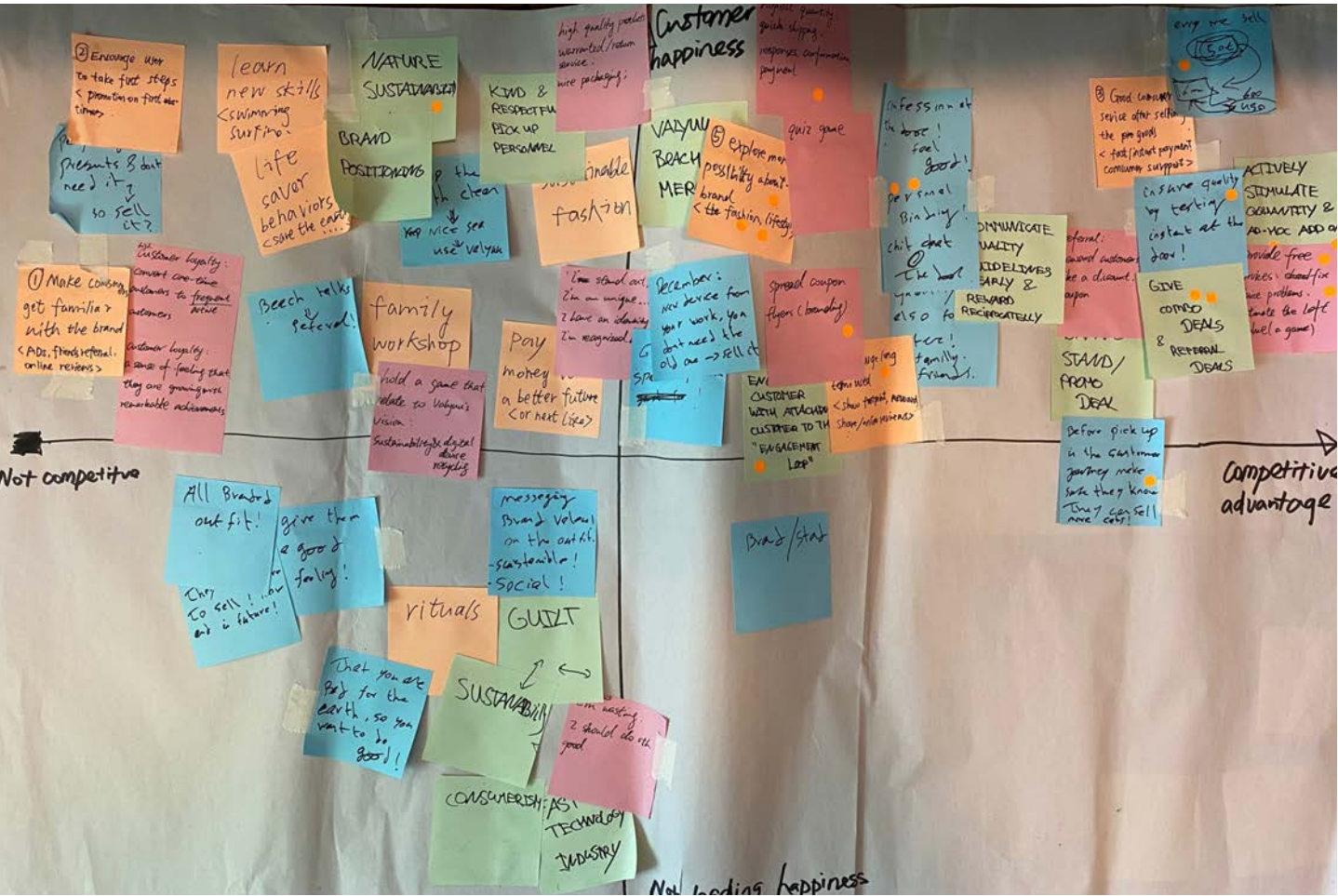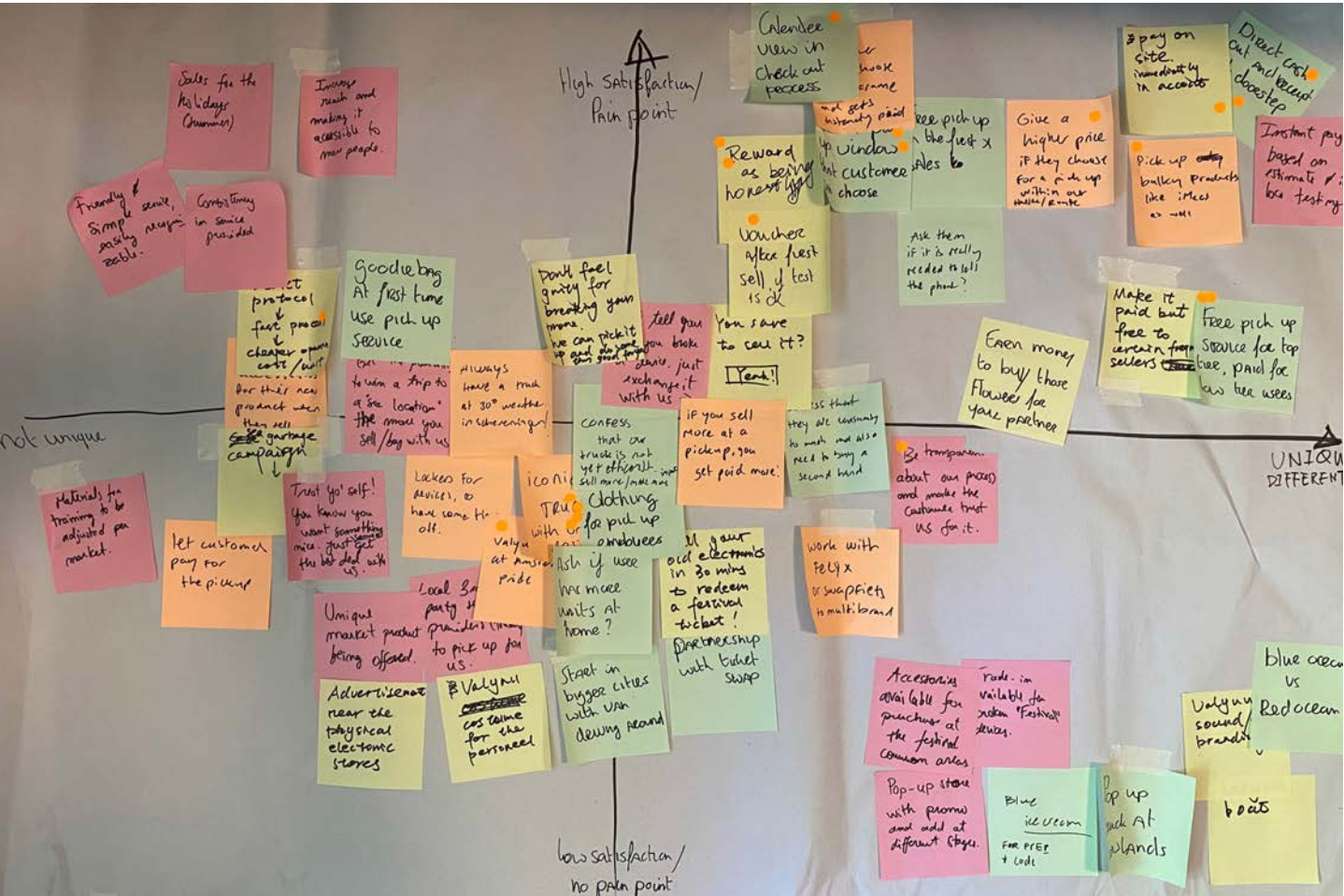
Figure 6.3.5. Clustered ideas in the session

6.4
Conclusion

Figure 6.4. Clustered ideas by Kano model

After gathering all concepts from previous stage, I clustered them into 3 categories. There are must–have, performance, and delighted needs in Kano model as described in Chapter 3. The clustering method was referring to this model. "Must–have" ideas are ideas related to the basic structure of this service and can be tested out in the MVP version. "Performance" ideas are more difficult to realize than "must–have" ideas considering Valyuu's present resource, but is good to keep in the roadmap and develop in the future. "Delighted" ideas pointed out a good direction to develop but still needs to consider some better ways to realize

considering the reality.

Cluster 1. Must–have ideas

These ideas touched upon aspects like timeframe choosing, process exposure, pick–up man behaviours, endorsements and encouragement. These are ideas that can be directly integrated into the service. After discussing with company employee, those ideas are considered as basic infrastration of the service and can be tested and implemented rapidly.

Cluster 2. Performance ideas

These ideas touches upon increasing customer's engagement. Ideas like reward system building and voucher offering are good ways to realize engagement loop but these ideas still needs some time to build and implement.

Cluster 3. Delighted ideas

As stated in previous chapter, doorstepping service is not a new thing, but it is new to Valyuu. Therefore during the ideation phase,

we considered not only ideas to build the basic structure of the service, but also ideas that can make Valyuu's doorstepping service stand out from competitors. Deligted ideas mostly covers this aspect. During the discussion with my mentors, we found out some of them may be hard to realize, but the aim of this idea can be useful and we can consider other ways to realize it. Also, ideas with an exclamation mark are presently outside the scope of doorstepping pick–up service, but they are good to keep when Valyuu develops further.

07

Conceptualization

7.1
Service scenario

1
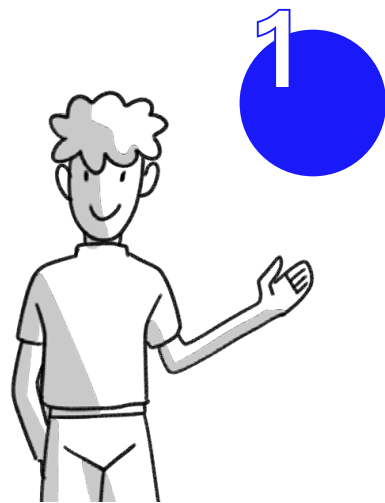
This is Max.

After buying a brand new iPhone, Max decides to sell his old phone away. He has never used pre–owned product selling platfroms before. But he heard Valyuu from his friend and decided to have a try, because Valyuu offered a high price for his used iPhone. He's totally new to Valyuu, but thanks to the clear guidance, he's able to complete the whole user flow.

Max places an order and notices the service.

After Max successfully placed an order, there are 2 options offered for him: send the device himself or doorstepping pick–up service, which charges a 3 euro fee. Max is worried if there are problems happening during the shipping process, he chooses the doorstepping service.

2

3

Once confirmed the timeframe, Max receives a confirmation email

The email includes when and where the pick–up man will come. Also the seller is able to see the profile of the pick–up man.

Max selectes the doorstepping timeframe

There are different timeframes offered for customers on Valyuu's website.

4

5

Max cleans all personal accounts and data

Before selling to Valyuu, Max cleans his iClould account and backs up his personal data in his old phone. This will make the process of testing easier for the pick–up man when doorstepping.

6

There's a notification before the pick–up man coming to doorstep. Max is able to see the movement of the pick–up man

On the date of doorstepping, Max receives a notification saying that the pick–up man is approaching, and he will arrive in 30 minutes. There will be a reminder for him to clean his account and data as well.

7
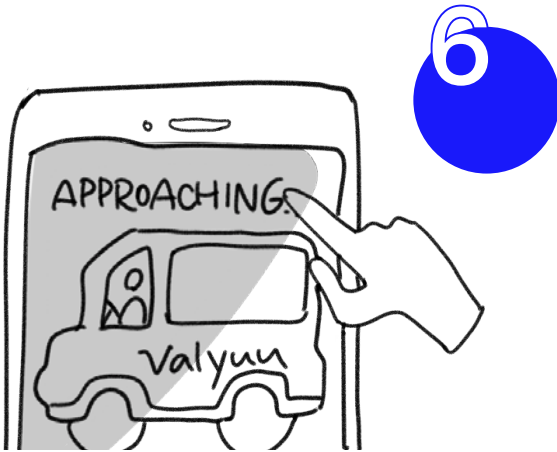
Pick–up man tests the device in front of Max.

Pick–up man makes everying clear to the seller at doorstep. The whole process will last for 15 minutes.

After testing, payment is transfferred to Max.

Since Max chose the immediate payment plan on the website, the payment is directly transferred to Max's account after testing.

8
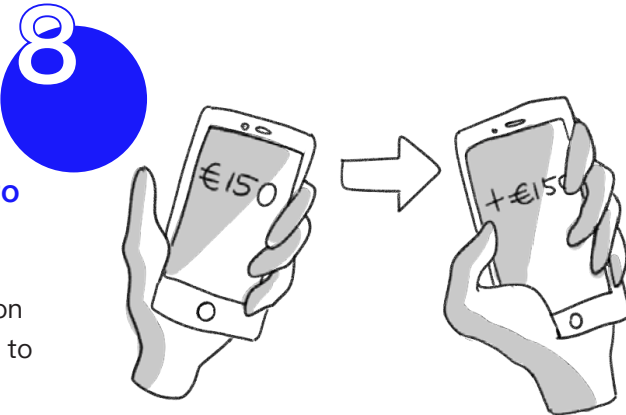
Max gets a ceremonial feeling when he finishes the process

Since Max's description of the device's status matches with what was tested out, he is offered with an extra voucher. Max is happy when he finishes the selling process and is very satisfied about the payment and voucher he got. He also gets an invitation to the membership since he's a first–time seller on Valyuu.

Few days later, Max sees his device was sold out.

Even though Max's user flow literally ends after he got the payment, he can still view the life cycle of his old phone. He knows that after recycling, Valyuu fixed some problems and later on it is sold to someone else. This clarification gets him know more about Valyuu's recycling process and fullfill his interest in where his device go in the end.

As a member to Valyuu, Max is able to get extra bonus, latest information, etc.

Special membership authority allows Max staying connected with Valyuu's platform and promotes possible second–time consuming on Valyuu.

7.2
Special condition and solution

7.2.1 The seller forgets to clean the account or data

🔍 **Condition**

It will cost a lot of extra effort and time if the user don't clean their account or data. Though Valyuu is able to forcely clean user data, it's impossible to clean it if user's account is logged in. Therefore it's crucial for users to clean their personal thing in their device before they sell to Valyuu.

⚙ **Solution**

Create a reminder for user to clean their account and data in the recomfirmation email before doorstepping. Stating that the backup time would be cost around 1 hour or more.

7.2.2 The seller's personal information is not entered properly

🔍 **Condition**

When user entering their personal information like delivery address manually, there can be some mistake during the process from previous competitor analysis. It would create some hassle for pick–up man during the doorstepping process.

⚙ **Solution**

1. Backstage verification: Reconfirm that the user's address/number is valid by using a background database.

2. Use plug–ins to automatically generate the user's information from what they've saved in the browser.

7.2.3 The seller is selling multiple devices in one order

🔍 **Condition**

We've known from the interview, some people do the selling for a business. Therefore they have the chance of selling multiple devices at the same time. This will increase the time that the pick–up man spend at their doorstep and also creates some hassle when pick–up man needs to take their devices away.

⚙ **Solution**

1. State in the confirmation email that the process will take a bit long time because of large amount of devices.

2. Clearly mark each of the device. After testing, the confirmation email should include clear information of all devices.

7.2.4 Big different between the described situation and the tested result

🔍 **Condition**

It could happen that the seller is not aware of the device situation or want to cheat to the platform, the tested result is of high difference to the described situation.

⚙ **Solution**

State to the seller that the price can be different to the offered one, because the listed reasons that is different to what he described online.

7.3 Blueprint

	Pre-doorstepping					Doorstepping				Post-doorstepping	

Service senario

- Placing selling order online
  - What are the models?
  - How many you want to sell?
- On sales overview page, choose if you want your devices to be picked up at doorstep
- On checkout page, choose specific timeframes
- A feedback confirmation email of order placement and chosen timeframe will be emailed to user.
- The seller cleans all the personal account and backs up their data in their device.
- If the seller needs to change the time, they can do that before 12 hours of doorstepping.

- On the confirmed date of picking up, the seller will be able to see the pickup man and his/her route.
- Once pickup man departs, a notification will be pushed to the seller
- The seller meets the pickup man and hands the device to him/her.
- Get the payment if the seller chooses Fast Payment plan.
- Sign to finish the process. Receive an email of selling success. Get extra Voucher if the test result meets the online description. Get credits. Get an invitation to the membership community.
- Stating to the seller the payment will be transferred to the seller's account after it is sold by Valyuu if the seller chooses Best Value plan.

- They can track where the product goes or to whom Valyuu sells.
- Sellers can view news and chat in membership community.

Line of interaction

Front stage

- Expose service **pricing and process**, including extra credit point if they choose to be picked up
- Provide timeframe availability
- Send an email to customers about **service steps and order detail**. Stating that they need to **clean their account and data.** If the seller sells multiple devices at one time, they will be confirmed that the process will take more time.

- Send a reconfirmation about the pickup time at pickup man's departure
- →The pickup man is offered with a **guidance**. After reading the guidance, they behave accordingly to it at doorstep. →Pickup man **test the device**
- →**Confirm payment** to the seller →Ask if they have something else to sell to make a **combo**
- →Ask the seller to sign his name as a finish →Inform the seller there will be a **voucher** for them if they're honest →Email clarifies all details of the selling device(s) →Calculate the credits in the seller's account
- Credits: To first time user: notification on how to use the credits To all: Credit changing notification
- Track where and whom the product sells to

Line of visibility

Back stage

- Providing service information
- Calculate the total price plus service fee
- Automatically generate the order information

- Provide the user profile of the pickup man Record pickup man's location
- After testing, the result will be uploaded to the system database
- Payment details will be uploaded to system database.
- Payment details will be uploaded to system database. Reward system building. Calculate user's credits.
- Build database of product tracement

Supporting materials

- **Webpage/APP** Placing order
- **Webpage/APP** Introducing service process and place service order
- **Webpage/APP** Timeframe choosing Pickup man profile
- **Email & APP** The order and pickup details

- **Email & APP** Pickup man's departure and reminder of cleaning data and account
- **Doorstep guidance for pickup man**
- **Email & APP** Seller sign to finish the process Get a notification of finishing by email and APP.
- **Webpage/APP** Viewing the later on stages of the device
- **Webpage/APP** User their credits, share information, etc.

Figure 7.3. Initial blueprint

As mentioned in the SERVQUAL model, there can be a gap between service design and delivery. To minimize this gap, I mapped each scene of the service scenario onto the blueprint and analyzed both the front-end and back-end aspects. This ensured that the service was solid and feasible. The evidence serves as possible touchpoints that the seller can use to engage with the service.

Looking into the blueprint from above, the user scenario is devided into 3 main stages:
1. Pre-doorstepping, namely all the action user and service provider needs to do before the date of doorstepping.
2. Doorstepping. This stage includes all actions on the date of doorstepping until the seller gets the payment of their device.
3. Post-doorstepping. This stage focuses on the actions after the seller get the payment, including extra offers and community building.

Horizontally, the Blueprint is devided into 3 parts: service scenario, frontstage, and backstage.
Service scenario shows from seller's perspective about how they behave during the whole user flow.
Frontstage refers to how the service provider support the service system, which is visible to the seller.
Backstage is invisible to the seller but provides supporting elements like data and algorithm that helps frontstage works smoothly.

08

Deliverable

8.1

Validation with stakeholder

After planning the initial blueprint for the concept, I invited various stakeholders to validate the scenarios and blueprint in order to assess its feasibility. Through their feedback, I hope to identify areas in the concept proposal that can be adjusted and determine if the concept addresses the problems and needs of the users.

8.1.1 Participant sampling

A group of six persons participated in my evaluation session. There are in-house designer, marketer, and users who have previously used doorstep services. Their ages ranged from 25 to 40. Among them there are 3 females and 3 males. According to the Nielsen Norman Group, a minimum of five participants can effectively identify the most common problems and opportunities, which makes the combination of the session participant group workable to ensure the identification.

8.1.2 Session set up

The main goal of this session is to see if the concept suits the company's roadmap and to determine the extent to which they would like to sell their product to Valyuu. The entire session lasts approximately 20 minutes for each participant and takes place via Zoom meeting.

As the facilitator, after presenting the scenario of the service to the participants, they are required to fill out a Google Form and rate various elements related to the service on a scale of 1–5. Based on the participants' ratings, the facilitator will ask open-ended questions regarding specific elements that received notable ratings for the participants to answer.

The goal of the session is to evaluate if the service scenario meets the following assumptions:

1. This service helps people better understand Valyuu, and it aligns with Valyuu's brand positioning: offering certainty, convenience, and memorable experiences to customers.

2. Compared to existing solutions (where customers have to send the products themselves with free shipping), sellers are more willing to complete their selling order with the doorstep service, thereby increasing conversion rates.

3. By establishing doorstep service and membership, the aim is to build more trust among users towards the platform.
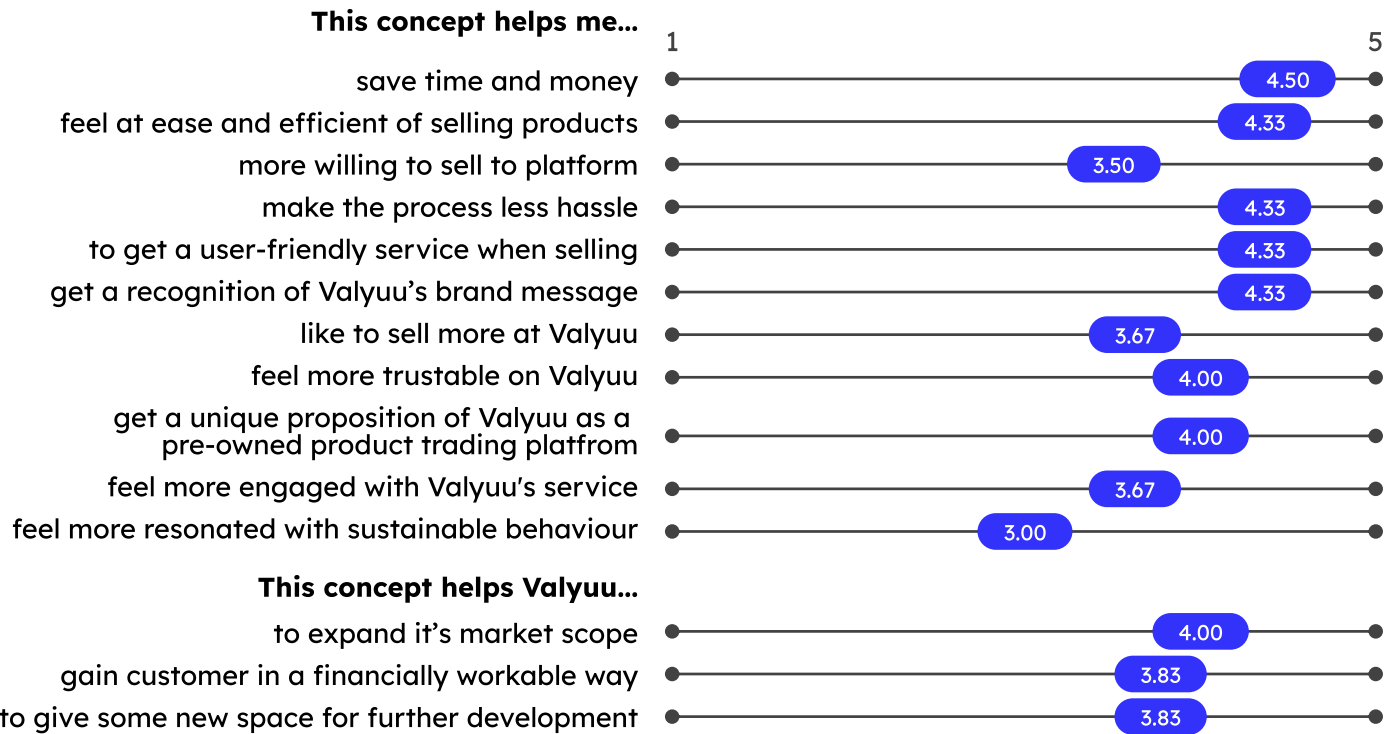
Results that worth to note (averaged score <4 in the survey)

The results indicate that people have lower expectations for being more willing to sell to Valyuu or sell more at Valyuu.

Participants mentioned in their response that they do not have a frequent need to sell electronic products. Unlike recycling old clothes and books, the demand for electronic products is much smaller. Therefore, if we want to attract more customers to increase their interactions with the Valyuu, it's good to consider expanding the product portfolio, such as recycling cables and batteries.

People do not feel a strong connection to the brand in the service scenario.

From a market perspective, the current form of service is not very innovative, and Valyuu struggles to establish brand recognition through the service itself. Additionally, the service lacks sufficient content for users to perceive sustainability. Therefore, integrating the concept of sustainability into the service is a crucial starting point for iterating the concept.

In terms of company development, a financially workable MVP testing plan needs to be customized.

The in-house designer and marketer have expressed concerns about the profit model and ROI of this service. Therefore, in the initial stage, it is necessary to test some basic capabilities to validate the correctness of the model. These capabilities include online timeframe selection, doorstep testing and payment, etc. Functions related to finance, such as membership and credit, can be implemented in horizon 2 of the roadmap.

Define the unique value proposition of Valyuu in doorstep service.

The survey results indicate that people are uncertain about the future direction of this service, and it is difficult to identify new opportunities for further development at present. As mentioned earlier, doorstep service itself is not a super innovative concept. For example, coolblue combines doorstep service with its white goods sales business to provide installation services to customers when doorstepping. Pre-owned product selling platforms like Swappie and verkopen.nl collaborate with outsourced logistic companies like DHL and postNL. Therefore, it is crucial for Valyuu, considering its intention to introduce an in-house doorstep service system, to find a value proposition that sets it apart from other ordinary logistic platforms.

8.1.3 Key takeaways

Make the delivery process efficient and arrange it reasonably according to geographical regions.

Compared to competitor companies, we can be combined with outsourced logistics companies or large offline mobile repairing hubs into this service system. In this way, owners of repairing shops can also become part-time Valyuu test man, helping payments reach users' hands earlier.

"In areas with sparse populations, such as small towns and villages, there is a need for more efficient strategies to deal with the situation."
"If I am very close to the shipping point, I can send it myself. I don't feel this service very efficient."

This concept helps me...

	1	5
save time and money		4.50
feel at ease and efficient of selling products		4.33
more willing to sell to platform	3.50	
make the process less hassle		4.33
to get a user-friendly service when selling		4.33
get a recognition of Valyuu's brand message		4.33
like to sell more at Valyuu	3.67	
feel more trustable on Valyuu	4.00	
get a unique proposition of Valyuu as a pre-owned product trading platfrom	4.00	
feel more engaged with Valyuu's service	3.67	
feel more resonated with sustainable behaviour	3.00	

This concept helps Valyuu...

to expand it's market scope	4.00	
gain customer in a financially workable way	3.83	
to give some new space for further development	3.83	

Figure 8.1. Results of people's rating

It's good to expand the portfolio of Valyuu.

Selling electronic devices is not a frequent need at the moment. People can hardly say that they are more willing to consume or not.To let existing users understand the advantages of Valyuu and Valyuu's desire to expand the portfolio, the pick-up man can ask sellers after completing testing and payment if they still need to dispose of other small electronic waste like wires and batteries.

"I am just selling idle equipment and I will not accelerate the upgrade process because of this service. It is not a necessity for me."

The service can be combined in the future membership system.

In Valyuu's future membership system, doorstep service can become a part of it. Once users apply for membership, they can choose different subscriptions, among which doorstep service can be one of the benefits enjoyed by members.

"I expect to receive perks in the membership, such as 12 doorstep services per year."

Pick-up men need to have a high level of professionalism to ensure that the test results are reliable.

The most important interaction in this service occurs between the pick-up man and the seller. In the user research section, interviewees also mentioned that the behavior of the pick-up man represents the brand image of Valyuu. If the doorstep process satisfies the seller, they will have a good impression of Valyuu and think of Valyuu when they need to sell pre-owned devices in the future. On the other hand, for the company, because there is a time difference between the pick-up man testing the device and the company receiving and registering the device, it is necessary to ensure the professionalism of the pick-up man in order to avoid unnecessary disputes.

"What should be done if potential problems are not noticed during the home visit for recycling?"
" The service attitude of the pick-up man is very important."

Doorstep recycling has multiple potential risks. Safety and effectiveness in the process need to be ensured.

Valyuu can play a role in guaranteeing various aspects during this service, such as insurance for doorstep process, insurance for test results of pre-owned products, and guaranteeing the transaction process for both parties in the future C2C model. Additionally, Valyuu's platform can provide endorsements for pre-owned products, making consumers trust the platform more during the process of selling or buying.

"What should be done if the test results do not match the results at the warehouse?"
"What should be done if the payment calculated by the pick-up man after the test is unsatisfactory to the seller?"

For users with a large number of products to sell, the time required for doorstep testing needs to be considered and informed to the seller.

If the user purchases a large quantity of devices at once, it is necessary to clarify the testing time required with the user in advance by email. When scheduling the pick-up time, it is necessary to consider that no other pick-up missions can be scheduled during this testing time around the same area .

"What should I do if I want to sell a large quantity of devices?"

8.1.4 Summary

Looking back on the assumptions mentioned in the session set up, we can detect results to them.

Assumption 1:

To some extent, this service can promote Valyuu's branding. However, for Valyuu to truly make an impact, the execution of the service, as stated in gap 5 in the SERVQUAL model, is crucial. It is important for sellers to have a positive experience with the doorstep service, meeting their expectations and creating a memorable experience with the sellers. These will ensure that when users need to sell a pre-owned device again, they will think of Valyuu and become repeat customers.

During the service process, the behaviours of the pick-up men represent the brand image of Valyuu. Their performance directly impacts the sellers' sense of certainty and convenience. Therefore, Valyuu should prioritize the training and performance of pick-up men to ensure that users have a satisfactory and enjoyable experience.

Assumption 2:

Some participants mentioned that they would prefer to sell their products to Valyuu because of the convenience of the doorstep service. However, there were also participants who mentioned that it is convenient for them to send products to hubs where they live, which raises questions about the necessity of doorstep service. From the company's perspective, there are limited resources for the development of the service. It is important to plan the number of pick-up men, city coverage, and collaboration with outsourced logistics companies with the limited resources. In big cities, pick-up men can drive Valyuu's vans to conduct doorstep tests and pick-ups. For remote areas and small cities with low demand of selling pre-owned devices, the current collaboration model with postNL can be maintained. In this way, limited resources can be maximized for pilot testing.

Assumption 3:

Participants mentioned that their trust in Valyuu mainly comes from the service quality. At the same time, people are concerned about liability issues during the process. Valyuu can consider incorporating a guarantee function into its business scope or collaborating with outsourced insurance companies. This way, sellers no longer need to worry about transportation risks during the selling process and the risk of discrepancies between test results and the products received by the company. Shifting the risk from consumers and employees like pick-up men to the service providers is a more reassuring approach.

Therefore, what can be iterated to the concept are listed below:

The implementation strategy

· Modify logistics service mode based on the regions
· Make users aware of Valyuu's portfolio expansion

Service design

· Ensure the professionalism of pick-up men
· Ensure there are no information gaps between stakeholders
· Allow users to have a more comprehensive understanding of the selling process
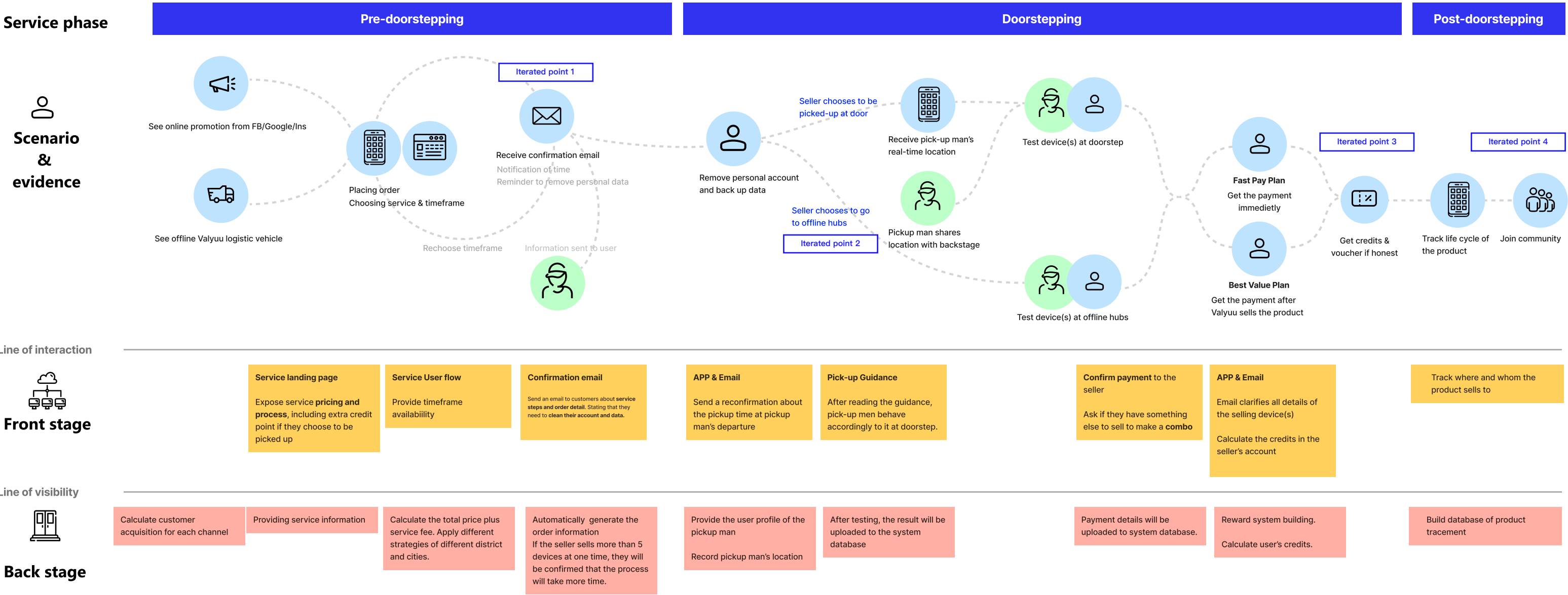
8.2
Concept iteration

Figure 8.2. Iterated blueprint

Stage 1: Pre-doorstepping

The concept in Stage 1 is in relation to opportunity ER1–3 and CM1. The purpose of this stage is to make users aware of the service through external channels such as online advertisements and website banners, thus to guide them to place selling orders. This stage primarily utilizes promotions to introduce first-time consumers to Valyuu and the doorstep service, attracting them to the Valyuu platform for selling.

Service promotion

Promotions are divided into two categories: online placements (including external channels and Valyuu's website) and offline promotions (such as light boxes and Valyuu's van). The current mainstream channels for online placements include Google search ads, Google display ads, Facebook, Instagram, etc., but collaborations with moving companies like Atlas can also be considered. The main goal of these placements is to attract first-time consumers. Ads on Valyuu's website are used to attract existing Valyuu users and provide guidance for users brought in by external channels. Additionally, efforts can be intensified during times such as the back-to-school season in September and Christmas in December to encourage people to sell their old devices to Valyuu when moving or upgrading.

Guidance to the service

After guiding users to Valyuu, the service landing page is an important touchpoint. It introduces users to the basic information of the doorstep service and provides them with a convenient ordering function. Furthermore, sellers will be asked on the checkout page if they require doorstep service, seamlessly integrating the service into the existing user flow. After users successfully place an order, the confirmation email will contain all useful information and reminders. It should clearly inform users that they need to clean personal data and accounts before the doorstep appointment, and if they are selling more than 3 devices, it may result in a testing time of more than 40minutes, setting the user's expectation regarding the time required for testing.

Iterated points are some concepts that differ from the initial blueprint. The new concept derives from the comments of participants in the validation session.

Stage 2: Doorstepping

The process of Doorstepping is the most crucial part of the entire service, as it covers the interaction between the seller and the pick–up man. The concept in this stage contains opportunities in ER4, 6, and CM2–6. The system will analyze the address filled in by the user on the checkout page. If the address is within the service coverage area, the user will be prompted to choose the doorstep service. If it is not within the current service area, the user will be provided with the option to get an onsite testing and payment at an offline hub or to send the device to the company themselves.

Information transparency

Once the pick–up man sets off, their information will be updated real–time on the app, allowing the seller to have a clearer view of the pick–up man's location and estimate the doorstep time. This ensures information transparency throughout the process.

After the pick–up man completes the testing, he/she will verify the payment information with the seller. There are two types of payment transfer methods: if the user chooses the Fast Pay Plan, the payment will be directly transferred to their bank account at doorstep; if the user chooses the Best Value Plan, they will receive the payment within seven working days after the device is sold by Valyuu. All these processes will be recorded in the APP for the seller to check at any time.

Build Seller's Loyalty to Valyuu

If the pick–up man's testing results match the description provided by the user on the website, meaning the payment after the pick–up man's inspection matches the estimated payment on the website, the user is considered an honest user and will receive a thank–you card with a 10% voucher from Valyuu. This means they can enjoy a 10% bonus when selling or a 10% discount when purchasing. At the same time, they will also accumulate credits for future consumption on Valyuu.

At iterated point 2, the participant in the session mentions we need to consider how to maximize the use of existing resources in remote areas to achieve the design goal of allowing users to receive payment immediately after an onsite test, making the process hassle-free. In this regard, it's a good idea to collaborate with existing electronic repair and retail stores, as the owners of these stores generally have knowledge in testing digital devices. They can apply to become test man from Valyuu and take on this job as a side gig aside from their main job at the store. Valyuu can hire them to cover areas where the service currently cannot reach, while also providing convenience to sellers.

At iterated point 3, the thank-you card is an important offline touchpoint. We hope to reach out to users through tangible and sustainable elements to create a better impression of Valyuu's branding. Therefore, aside from a user flow that could have been completed purely online, I have added an physcial thank-you card. This card is used to provide proof of the user's completed transaction, instructions for voucher redemption, and reminders for credit increase. Additionally, this small card can be planted as a metaphor for the sprouting of their ideology of going green after the user completes this selling process.

Stage 3: Post–doorstepping

As mentioned before, we want users to not only be one–time users, but also to think of Valyuu as their first choice whenever they need to deal with electronic waste. It is important to maintain users and ensure that their first experience is perfect. As opportunities ER5 and CM7 mentioned, after users complete payment, they can still check the whereabouts of their phone within the app and see how Valyuu handles the products they received, giving sellers transparent information of the phone's life cycle. In addition, after each first–time user completes a purchase, we will invite them to join the membership. This way, they can receive timely updates and benefits.

At iterated point 4, there are 2 types of membership: basic (free to join) and premium (with paid subscriptions). Any customer who has made a purchase or sell on Valyuu's platform can automatically join the membership for free, which is the basic membership. They can enjoy basic rights, such as choosing whether to subscribe to Valyuu's notifications, accessing discounts and use thier credits to purchase. After users become basic membership, they can choose to upgrade to premium one for additional services, such as free doorstep service several times a year and electronic device repairing service, etc.

8.3
Implementation strategy

2023 — **2024** — **2026** — **2030** — **Future Vision**

Horizon 1	Horizon 2	Horizon 3
Enhancing user experience	**Building trust**	**Engaging and interacting**

KPI focus

Seller's satisfaction & Converison

ROI

Brand recognition

Sellers' needs From user profiles

Elite Reseller	Clear instruction and terms	User-oriented reservation	Staff being a brand identity	Transparent information	Emotional value	Seeking for brand promotion
Charm Merchants	Looking for guarantee	Safe and easy offline interaction	Looking for indirect pricing	Promise needs to be kept	Retreating from troublesome in-person interaction	Form friendship and self value	Looking for system to keep loyalty

Service expansion When to introduce

- Service introducing
- Timeframe choosing — Re-choosing
- Confirmation email sending — Confirmation email & APP notification
- Pickup man step tracking — Real-time location tracking
- Transportation of pickup man — Transportation with branding
- Valyuu logo badge wearing — Valyuu's suite
- Manually testing device(s) — Automatically testing device(s)
- Digital payment
- Confirmation email after payment — Confirmation email & APP notification
- Getting voucher
- Collecting credits — Joining community and integrate credit into a reward system

Service resource

In-house resource	MVP testing	Business department analysis	Developing Valyuu APP	Designing pickup materials	Integrating reward system	Branding design	Tracking system
Outsourced							

Business model

C2B	C2B & C2C

Channel

| Webpage | Email | Guidance | APP | Webpage | Email | Guidance | APP | Webpage | Email | Guidance | Branding promotion |

"Valyuu Doorstep: Sell your device with ease and satisfaction"

Sellers can sell their pre-owned devices to Valyuu or to other buyers on Valyuu's platform with fast and easy doorstepping pick-up service.
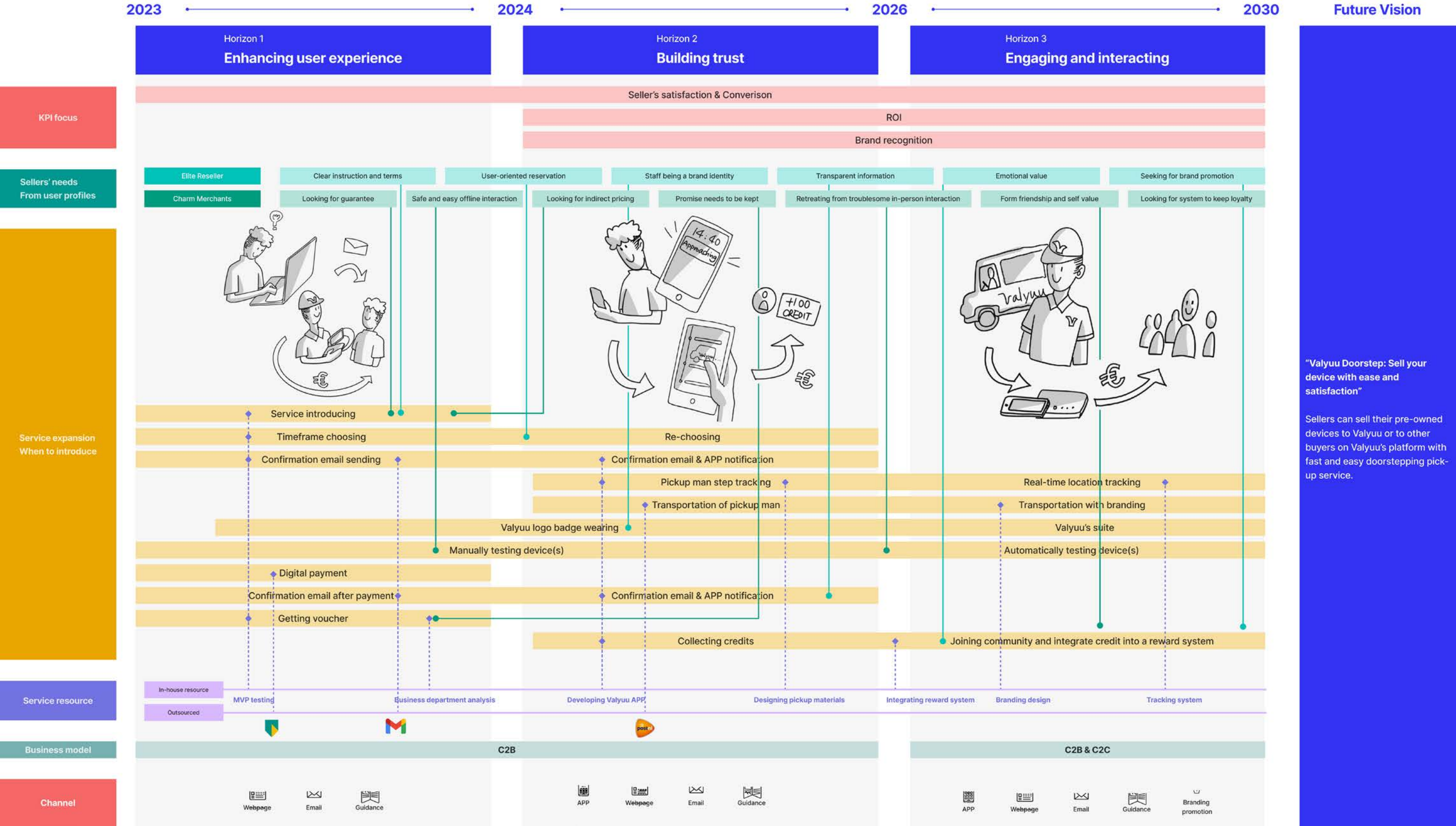
Figure 8.3. Roadmap of implementing the service

8.3.1 Goal and future vision of the roadmap

This roadmap is used to consider how to implement the service blueprint mentioned in Chapter 8.2. Due to objective constraints such as time and investment, some functions of the service cannot be implemented at the beginning. There may exist a gap as SERVQUAL model mentioned between the perception and expectation. Therefore, the roadmap divides the entire implementation into three horizons: improving experience, building trust, engaging and interacting. The future vision is divided into different implementation steps in order to make the customer's perception and expectation match with each other. Under these three horizons, each stage has a different focus for the service. Horizon 1 focuses on testing the service system and collecting user feedback to verify whether it improves selling efficiency and enhances user experience. Horizon 2 integrates more functions into the Valyuu APP and communicates with users through handy notifications. Horizon 3 emphasizes brand promotion on top of a mature service system, enhances brand exposure through offline

pickup and delivery behavior, and increases user stickiness within the service system.

The future vision of this roadmap is "Valyuu Doorstep: Sell your device with ease and satisfaction." Considering the development of technology and service system, we believe that this vision will be achieved in 2030. Valyuu hopes to improve the user experience by introducing doorstep pick-up service, maximizing the efficiency of the selling experience, and ensuring that more people do not give up on selling orders on Valyuu due to hassles such as needing to pack and ship items themselves or having time constraints. Therefore, one of the most important indicators for this service is seller's conversion. In the process of service development, the service will be expanded into a specific logistics service, enabling people to not only be more efficient and easy during the C2B selling process, but also providing specific delivery to the C2C market to ensure the safety of products and avoid transportation risks for sellers and buyers.

8.3.2 Horizons

Horizon 1. Improving experience – Building an MVP doorstepping pick-up service system that enhances the efficiency of selling a pre-onwed device to Valyuu.


The service in this horizon mainly addresses fundamental needs and provides a basic framework for the service system. This horizon prepares Valyuu to offering logistics services.

At this stage, we introduce the concept of doorstepping pick-up service to sellers and add the option of doorstepping to the original user flow when placing an order, making the process more seamless. Users can browse the introduction of the service to understand the specific operation mechanism and choose whether to use it. At the same time, basic timeframes and confirmations will be provided to users as well.

In this horizon, the pickup man will be taken over by the current inspector. Therefore, they have almost no learning cost, only need to ensure the safety of the product during transportation and the wording and behavior during the doorstepping process. This is a low-cost testing method. Also, in this horizon, we have prepared vouchers for honest sellers to encourage them to sell multiple times.

Horizon 2. Building trust – Enhancing the service system based on developed APP system and develope trust between Valyuu and sellers.
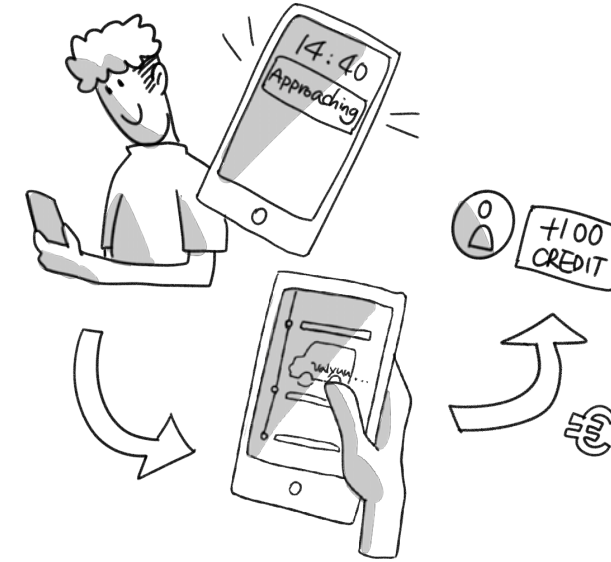
In Horizon 2, the App will be launched around 2024. Users can receive more timely notifications about logistics information in the APP. These detailed information can make users feel more convenient to feel Valyuu's sincerity and high transparency information, thus establishing their trust in Valyuu. During the doorstepping process, the pick-up man's attire will be more professional, reflecting the brand identity. Compared with Horizon 1, in addition to user conversion and retention, Horizon 2 pays more attention to ROI measurement. In this horizon, opportunities for future scale expansion, such as the form of pick-up man and transportation, will be considered.

Horizon 3. Engaging and interacting – Stimulating customers on Valyuu platform to actively interact with membership.

Compared with Horizon 2, Horizon 3 enhances the details of the APP, such as real-time tracement of pick-up man. At the same time, branding promotion is also a focus in Horizon 3, enhancing Valyuu's brand awareness through customized paint for pick-up vehicles, pick-up man's clothing, and other means. In addition, Horizon 3 attempts to consolidate users by building a membership community. Users have a credit system in the community, which can accumulate credits through purchase behavior and use them in the next purchase. Such a circular economic system can maintain user retention in Valyuu. At the same time, the establishment of the community also meets the emotional value needs mentioned in the interview. Horizon 3 prepares for future user scale expansion.

TIme arrangement

Considering Valyuu's overall development plan, and the fact that this service is a brand new product, the MVP testing version of Horizon 1 will be implemented and user-tested quickly. After verifying the feasibility of the solution, it will be gradually improved to become Horizon 2 within one year. As a startup, Valyuu needs time to sort out its business model and make membership mechanisms based on user needs. Therefore, there is a two-year transition period in Horizons 2 and 3 to improve services. Valyuu's ultimate goal is to be able to acquire most types of used electronics within Europe and build a C2C trading platform by 2030.

8.4
Touchpoint Analysis

As described in the roadmap, we need to implement an MVP solution that can be tested. Therefore, here we have selected touchpoints mentioned in Horizon1 as examples to explain the mechanism of the service through prototypes.

| The seller want to sell his used device at Valyuu. So he went to the website to check how much his device worth. | He browsed the selling page and notified a service banner. | He clicked the banner and scans through the webpage which introduces the doorstep service. | He finds the service very convenient and places an order, and used the service introduced to him. | At the date, the pick-up man comes to doorstep and test the device for the seller. | After everything is clear, the seller will receive a plantable thank-you card from Valyuu's pick-up man. |

Touchpoint 1

Ads on Valyuu's selling page and service's landing page
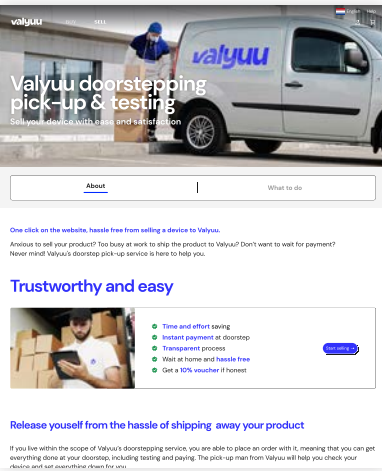
Touchpoint 2

Function pages for user to select the service and arrange doorstep timeframe

Touchpoint 3

Guidance for pick-up man what to do at doorstep

Touchpoint 4

Thank-you card for selelrs

Promotion Banner & Service landing page

As mentioned in the SERVQUAL model, there can be a gap between service delivery and service promotion. Therefore, it's important to remember that the promises made in promotional materials should align with the actual service. This is especially crucial when conducting external channel promotions.

While the main focus of this touchpoint design is internal promotion on Valyuu's webpage, it is also necessary to ensure that the information displayed on the promotion banner accurately reflects the reality of the service.

The user flow

The seller want to sell his used device at Valyuu. So he went to the website to check how much his device worth.

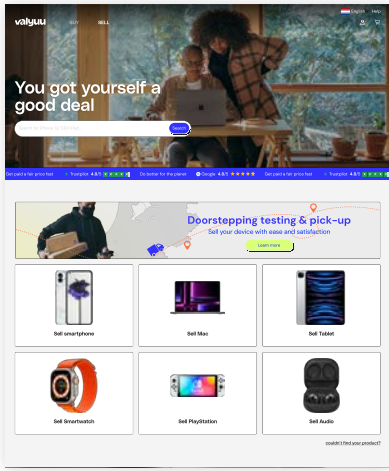He browsed the selling page and notified a service banner.

He clicked the banner and scans through the webpage which introduces the doorstep service.

He finds the service very convenient and places an order, and used the service introduced to him.
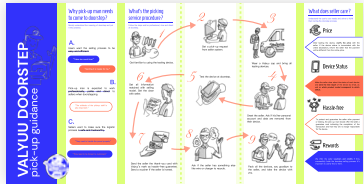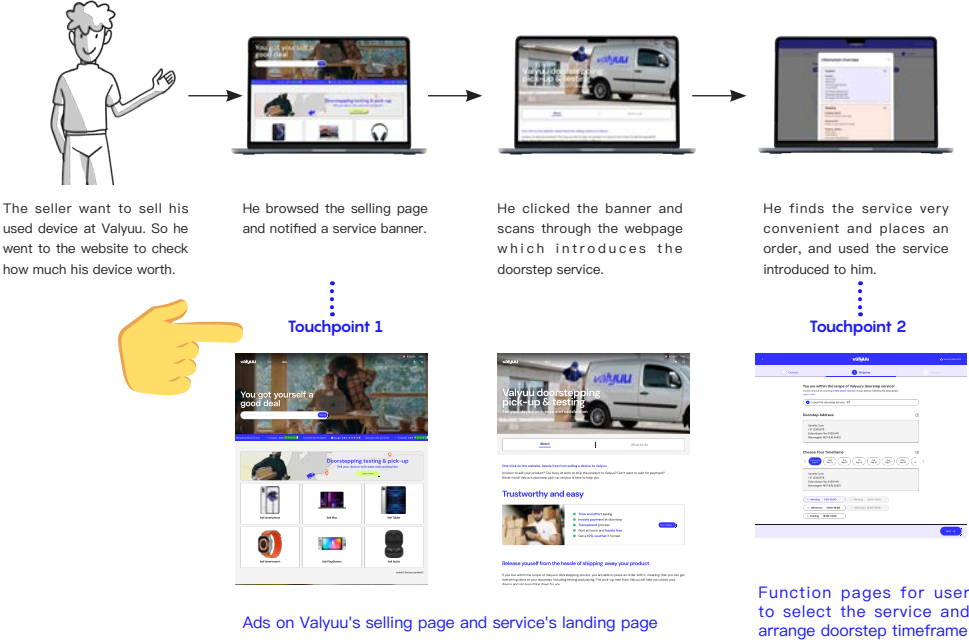
Touchpoint 1

Ads on Valyuu's selling page and service's landing page

Touchpoint 2

Function pages for user to select the service and arrange doorstep timeframe

This promotion banner is used to raise customer's awareness of the newly launched service. It plays a crucial role in increasing customer engagement and encouraging more people to sell their products on Valyuu. Valyuu's doorstep service aims to provide a convenient and efficient way for individuals to sell their items, saving them valuable time and effort.
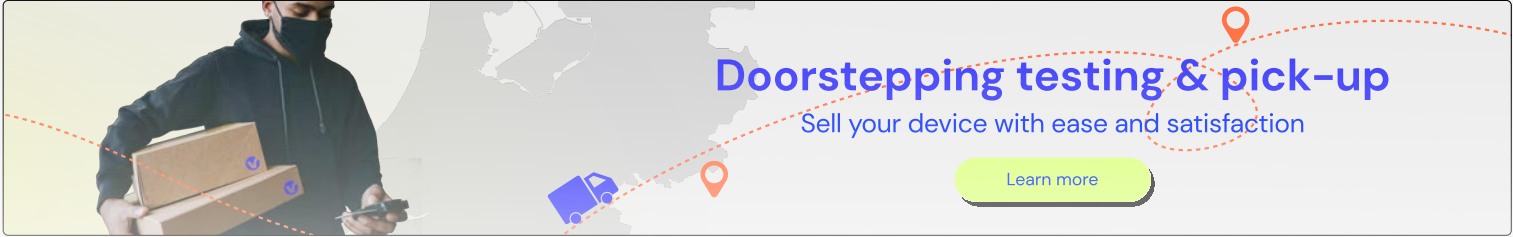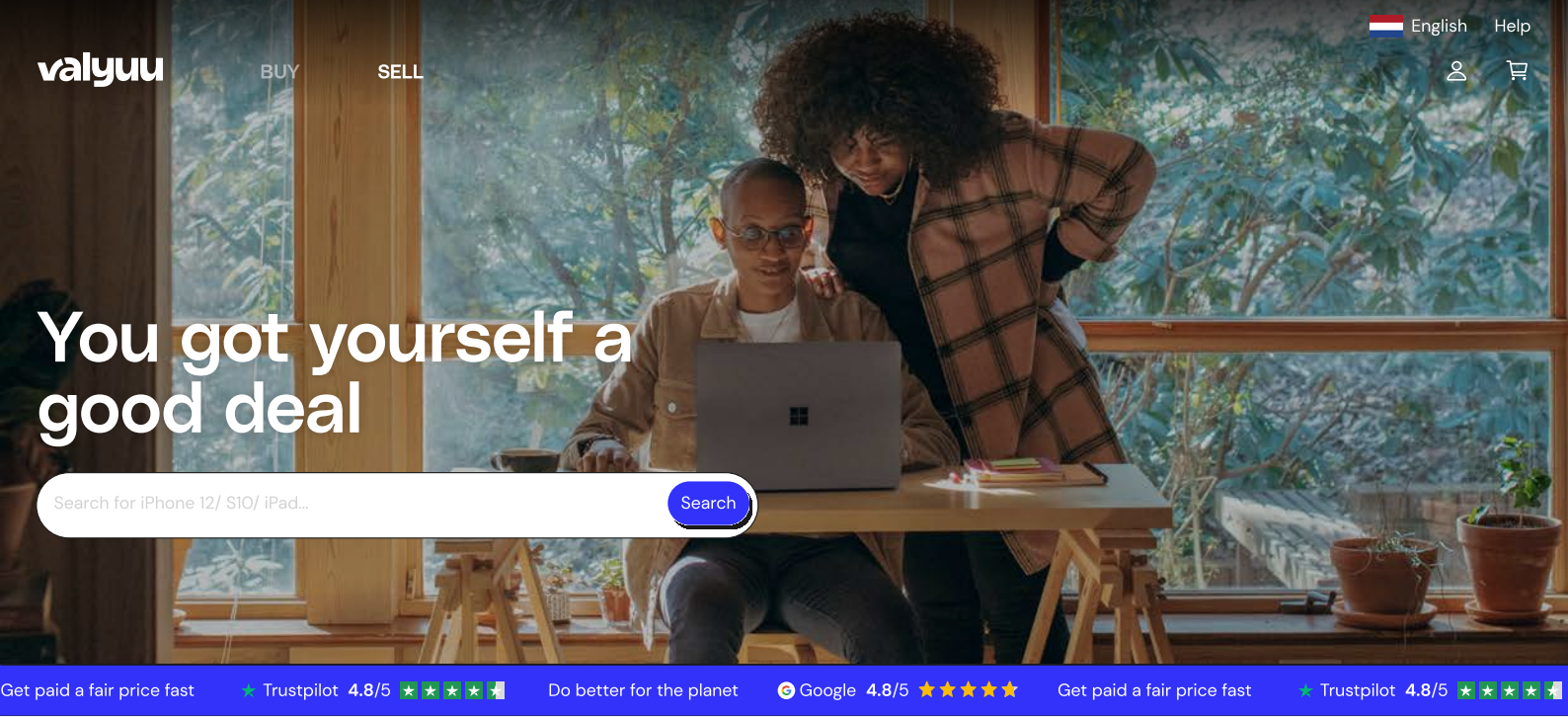
Touchpoint 1

Promotion Banner

After clicking on the banner, it directs the customer to the service landing pages.
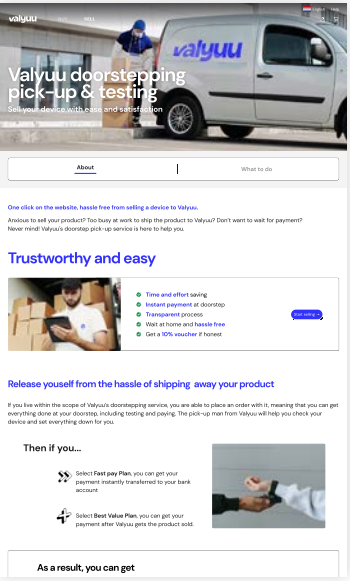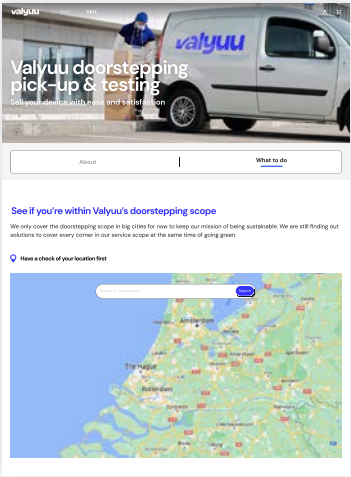
Service landing page "About" Tab

After clicking on the banner, customers will be directed to a service landing page introducing the basic information about the doorstep service.

1. Navigator

The purpose of the navigation bar is to provide sellers with a clear understanding of the reasons behind doorstep service and the benefits. Sellers who are interested in learning about the mechanism of doorstep service can easily switch to the "what to do" tab to check if their area is within the service's area.

2. Benefits of doorstep service at-one-glance

In order to highlight the key advantages of using doorstep service, sellers are well-informed about the benefits right in this banner. By saving time and effort, sellers can also maximize their financial profits. The button placed next to the benefits further streamlines the order placement process, enabling sellers to quickly access the selling interface and experience the convenience of the service.

3. Standout points of Valyuu's doorstep service

The standout features of doorstep service include on-site inspections and the option of immediate payment through the Fast Pay Plan.

4. Clarifying rewards after finishing payment

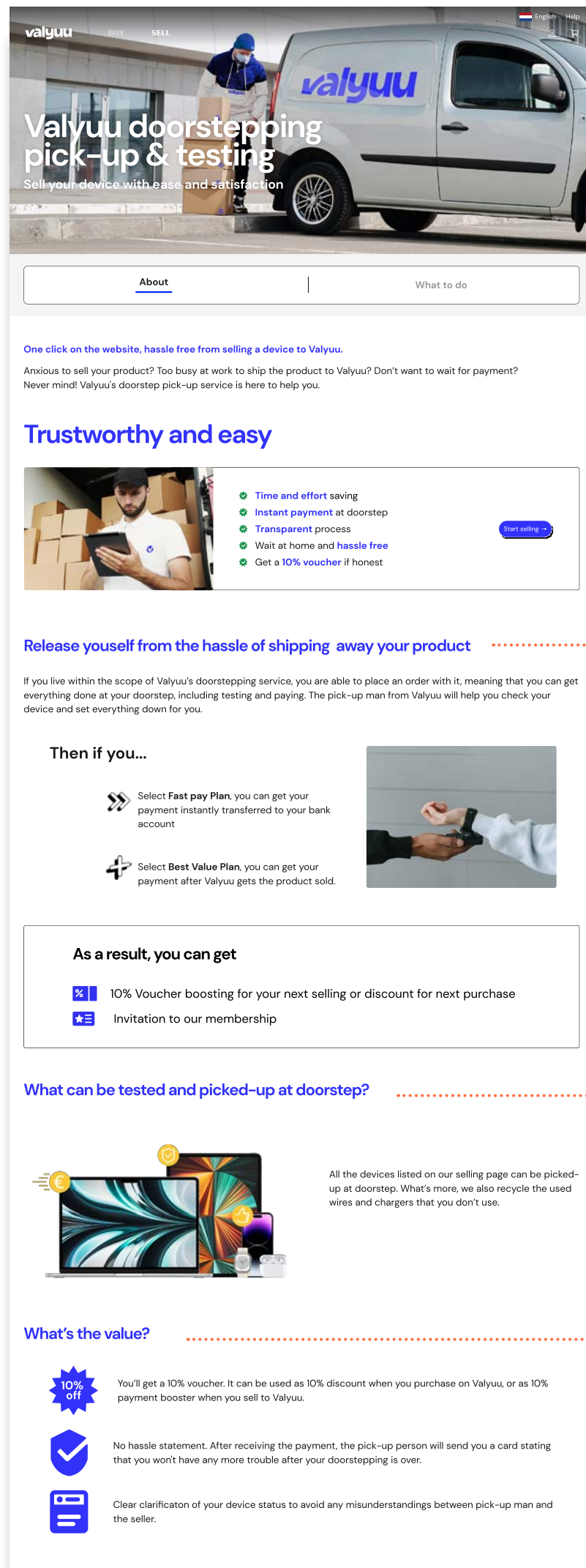Sellers can enjoy additional benefits such as extra vouchers and membership invitations after the payment. The 10% voucher can be used in either selling or buying.

5. Devices that can be picked-up at doorstep

During the MVP testing phase, the testable devices can be limited to the existing products of Valyuu, such as smartphones, tablets, computers, etc. However, during the pick-up process, the pick-up man can ask the user if there are any other e-waste items that need to be disposed of or if they expect Valyuu to help with recycling. If so, the pick-up man can take them away when they leave. This also serves as a quick survey to understand in which direction Valyuu should expand its product portfolio in the future.

6. Value to sellers

This section summarizes the advantages of Valyuu doorstep service for sellers, making it an ideal choice. By using Valyuu doorstep service, sellers can easily sit at home and wait for the pick-up and testing without having to deal with the hassle of logistics themselves. This greatly saves the seller's time and energy.

Service landing page "What to do" Tab

During doorstep service, it is important to confirm whether the seller's address falls within Valyuu's service area. To check if it is covered by Valyuu's doorstep service, the seller can use the map provided on this webpage. By searching for the address on the map, the seller will also be able to see the service area of the doorstep service. And since the service is developing all the time, there can be an expansion of the coverage area in the future.

When Valyuu's service area is not covering the address

In order to not discourage customers, the seller is suggested to use normal shipping ways.
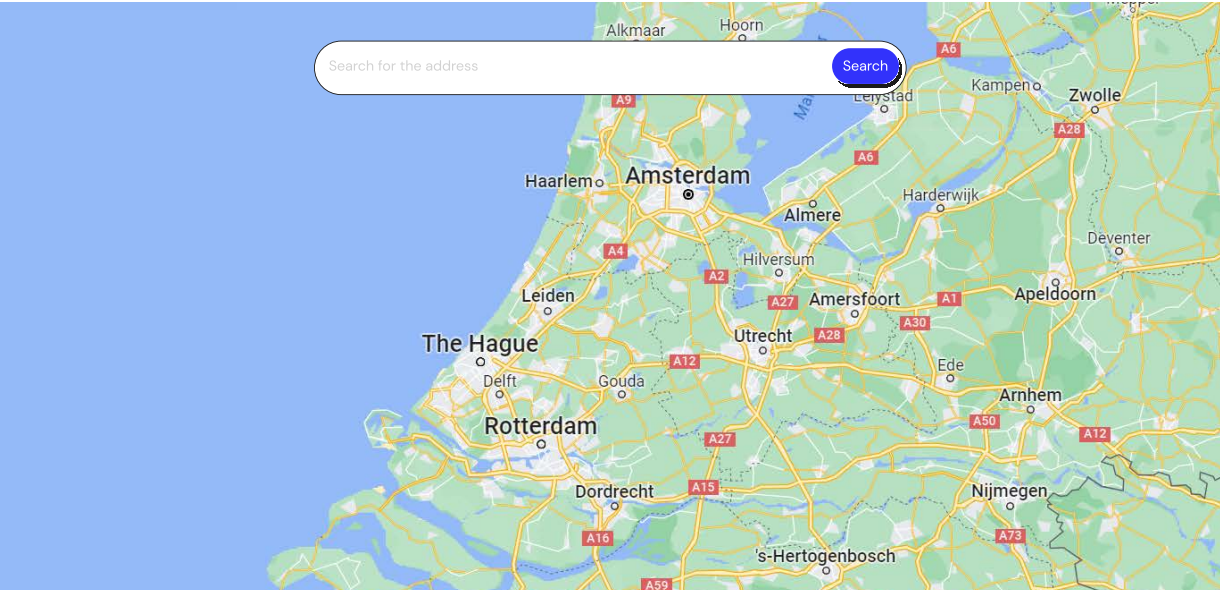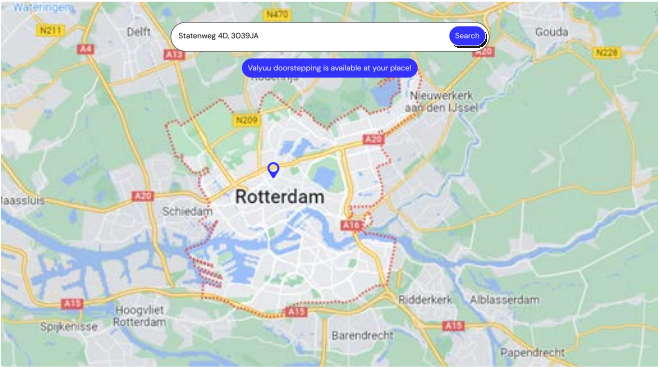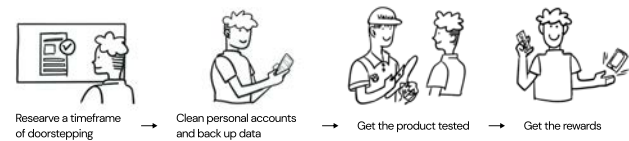
When the address is within Valyuu's service area

There will be a sentence saying that the service is available at the seller's place appeared below the searching bar. Then the seller can see the user flow of the service appears under the map. The button below will direct him/her to the selling page.

Service user flow

The whole service user flow is integrated into the original one. When filling in information on checkout page, there will be an extra checkbox under "shipping" tab for sellers to choose if they need the service or not. If they choose the service, after selecting timeframe, they can get an overview of the whole order with doorstep information in the end.

The user flow

He reviewed the selling page but without a service banner.

He clicked the banner which introduces the doorstep service.

He finds the service very convenient and places an order, and used the service introduced to him.

At the date, the pick–up man comes to doorstep and test the device for the seller.

After everything is clear, the seller will receive a plantable thank–you card from Valyuu's pick–up man.

Touchpoint 1

Touchpoint 2

Touchpoint 3

Touchpoint 4

Add on Valyuu's selling page and service's landing page

Function pages for user to select the service and arrange doorstep timeframe

Guidance for pick–up man what to do at doorstep

Thank–you card for selelrs

---

valyuu   🔒 secure payment

| 1 Contact | 2 Shipping | 3 Payment |

Account

Set a password and register your account quickly, after registration you can check the progress of your order on the website.

already have an account? log in

Email
1234valine@gmail.com

••••••••

••••••••

Vanella   Cook

15-04-1994

+31   12345678

Nederlands

3439 MN   14a

Edisonbaan

Nieuwegein

Next →

next page

After the seller completes the description of the basic information for the device, on the checkout page, the address provided by the seller will be checked to see if it falls within the service area.
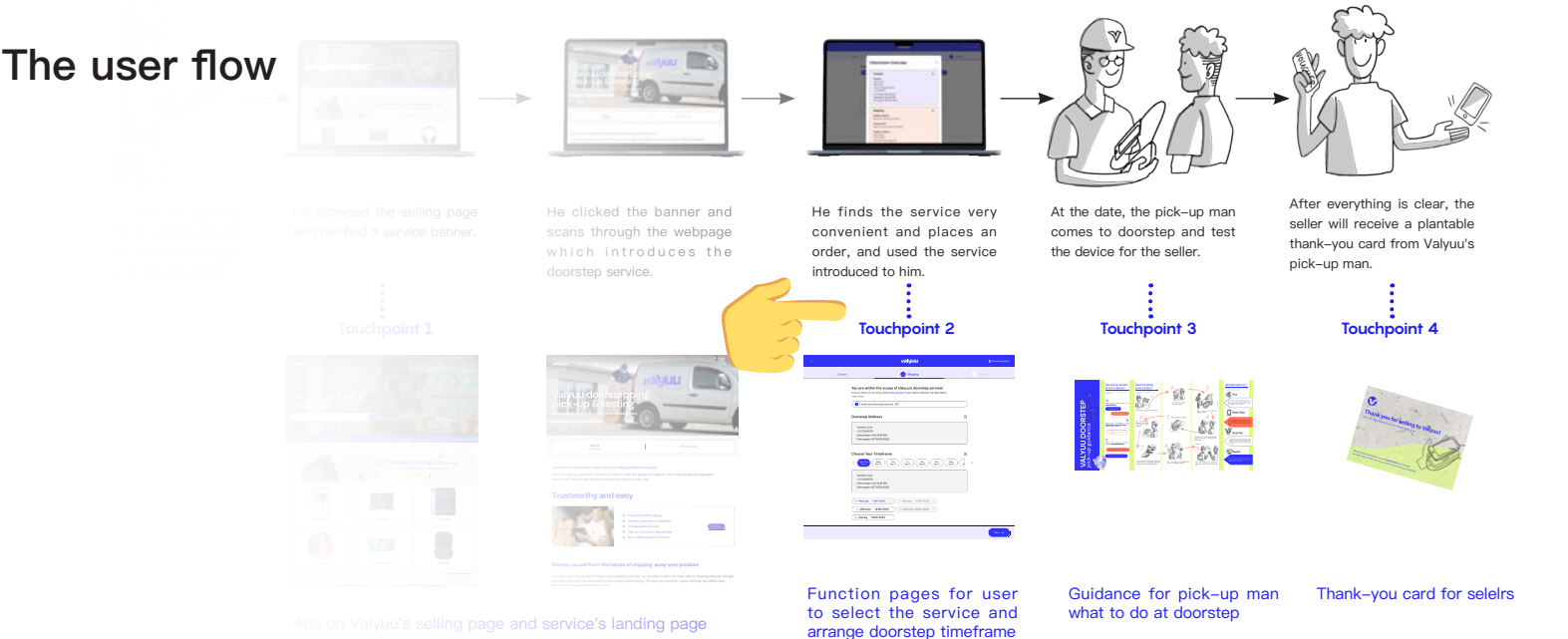
---

valyuu   🔒 secure payment

| ✓ Contact | 2 Shipping | 3 Payment |

You are within the scope of Valyuu's doorstep service!

There's chance of receiving a **10% extra voucher** if your device matches the description. Learn more

○ I need the doorstep service. **€2**

Shipping Address   ✎

Vanella Cook
+31 12345678
Edisonbaan 14a 3439 MN
Nieuwegein NETHERLANDS

Free Shipping Label

Shipping costs are on us. How do you want to receive the shipping label?

○ Email me and I will print it myself.

○ Post the shipping label to my address

Next →

If it is within the service area, there will be an option for the seller to choose the doorstep service with an extra fee of € 2. If not, the seller will be directed to ship the product themself.

valyuu

🔒 secure payment

✓ Contact → **2** Shipping → ③ Payment

You are within the scope of Valyuu's doorstep service!

There's chance of receiving a **10% extra voucher** if your device matches the description.

Learn more

⦿ I need the doorstep service. **€2**

Doorstep Address ✎

Vanella Cook
+31 12345678
Edisonbaan 14a 3439 MN
Nieuwegein NETHERLANDS

Choose Your Timeframe ✎

‹ | **Tomorrow Sep 12** | Wed Sep 13 | Thu Sep 14 | Fri Sep 15 | Sat Sep 16 | Sun Sep 17 | Mon Sep 18 | ... ›

Vanella Cook
+31 12345678
Edisonbaan 14a 3439 MN
Nieuwegein NETHERLANDS

☀ **Morning   7:30–10:00** | ☀ Morning   10:00–12:00

🌤 Afternoon   14:00–16:00 | 🌅 Afternoon   16:00–18:00

🌙 Evening   18:00–21:00

Next →

This page follows the original user flow of shipping.

valyuu

🔒 secure payment

‹ | ✓ Contact → ✓ Shipping → **2** Payment

Payment

⦿ 🏦 Bank Account   [card icons] 💳 VISA ... 🍎Pay GPay

Your bank account details are secured.

Account Name
V. COOK

Bank Number
NL06 INGB 0123 456 789

○ Valyuu Credits

○ Donation

○ Referral Program TBD

Submit →

valyuu

🔒 secure payment

‹ | ✓ Contact → Shipping → **2** Payment

Information Overview ✕

Contact ✎
Account
Vanella Cook
1994.04.15
1234valine@gmail.com
+31 12345678
Informatica Nederland B.V.
Edisonbaan 14a 3439 MN
Nieuwegein NETHERLANDS

Shipping ✎
Shipping method
Doorstep

Date and time
Sep 12, 7:30–10:00

Doorstep address
Vanella Cook
+31 12345678
Informatica Nederland B.V.
Edisonbaan 14a 3439 MN
Nieuwegein NETHERLANDS

Payment ✎
Pay to bank account
V. COOK
NL06 INGB 0123 456 789

By continuing you agree to our T&Cs and that you have read our Privacy Policy.

Confirm

Submit →

All related information will be displayed on the overview page.

Service timeframe choosing

When users choose to take the doorstep service, they need to choose the doorstep time. They can choose the timeframes in the following 1 month. Each day is devided into 5 sections. But if there are special conditions like a certain seller is selling multiple devices in the morning, the time cost needs to be conisdered in the timeframe display to other sellers.

Guidance for pick-up man

The user flow

He clicked the banner and scant through the webpage which introduces the doorstep service.

He finds the service very convenient and places an order, and used the service introduced to him.

At the date, the pick-up man comes to doorstep and test the device for the seller.

After everything is clear, the seller will receive a plantable thank-you card from Valyuu's pick-up man.

Touchpoint

Touchpoint 3

Touchpoint 4

Function pages for user to select the service and arrange doorstep timeframe

Guidance for pick-up man what to do at doorstep

Thank-you card for selelrs

According to Duffy's framework (see Chapter 4) and opportunity ER4 and CM4, building customer loyalty is crucial for the success of a business. In the service process, the pick-up man plays a vital role as they directly interact with the sellers and provide service to them. It is important for them to understand the customer and their service objectives. Additionally, the service proposition and Valyuu should establish guidelines for the pick-up man's behavior to ensure a positive brand impression on our sellers. In order to make pick-up man behave properly and finish their tasks at doorstep, the guidance can be provided to them when they are new to the job position.

VALYUU DOORSTEP
pick-up guidance

I love the earth like I love my phone
valyuu

Why pick-up man needs to come to doorstep?

Quickly understand the meaning of doorstep and put it into practice.

A.
Users want the selling process to be **easy and efficient.**

"Takes too much time!"

"Sending it is hassle for me."

B.
Pick-up man is expected to work **professionally, polite and direct** to sellers when doorstepping.

"The attitude of the pickup staff is also important."

C.
Sellers want to make sure the logistic process is **safe and trustworthy.**

"They need to handle the parcel properly"

"They need to be honest to customers"

What's the picking service procedure?

Follow the steps and be professional, nice and direct at doorstep.

1 Get familiar to using the testing device.

2 Get a pick-up request from seller system.

3 Wear a Valyuu cap and bring all testing devices.

4 Greet the seller. Ask if his/her personal account and data are removed from their device.

5 Test the device at doorstep.

6 Get all information matched with selling model. Get the clear with seller.

7 Send the seller the thank-you card with Valyuu's mark as hassle-free guarantee. Send a voucher if the seller is honest.

8 Ask if the seller has something else like wire or charger to recycle.

9 Pack all the devices, say goodbye to the seller, and take the device with you.

What does seller care?

Understand the user's core needs and strive to fulfil them during this doorstep process.

Price
After testing the device, **clarify the price** with the seller. If the device status is inconsistent with the online declaration, inform the seller that the payment will be different from the online price.

Device Status
Make the seller clear about the status of each device and **send the test report** of the device by email, as well as **which product model correspond to which status.**

Hassle-free
To protect and guarantee the seller after payment or testing, the pick-up man should offer the seller a guarantee card indicating the completion of the transaction and that they are no longer responsible for the device.

Rewards
We offer the seller **vouchers and credits** if they successfully finish the doorstep selling process, it's important to clarify this to them.

VALYUU DOORSTEP pick-up guidance

Why pick-up man needs to come to doorstep?

Quickly understand the meaning of doorstep and put it into practice.

A.
Users want the selling process to be **easy and efficient.**

"Takes too much time!"

"Sending it is hassle for me."

B.
Pick-up man is expected to work **professionally, polite and direct** to sellers when doorstepping.

"The attitude of the pickup staff is also important."

C.
Sellers want to make sure the logistic process is **safe and trustworthy.**

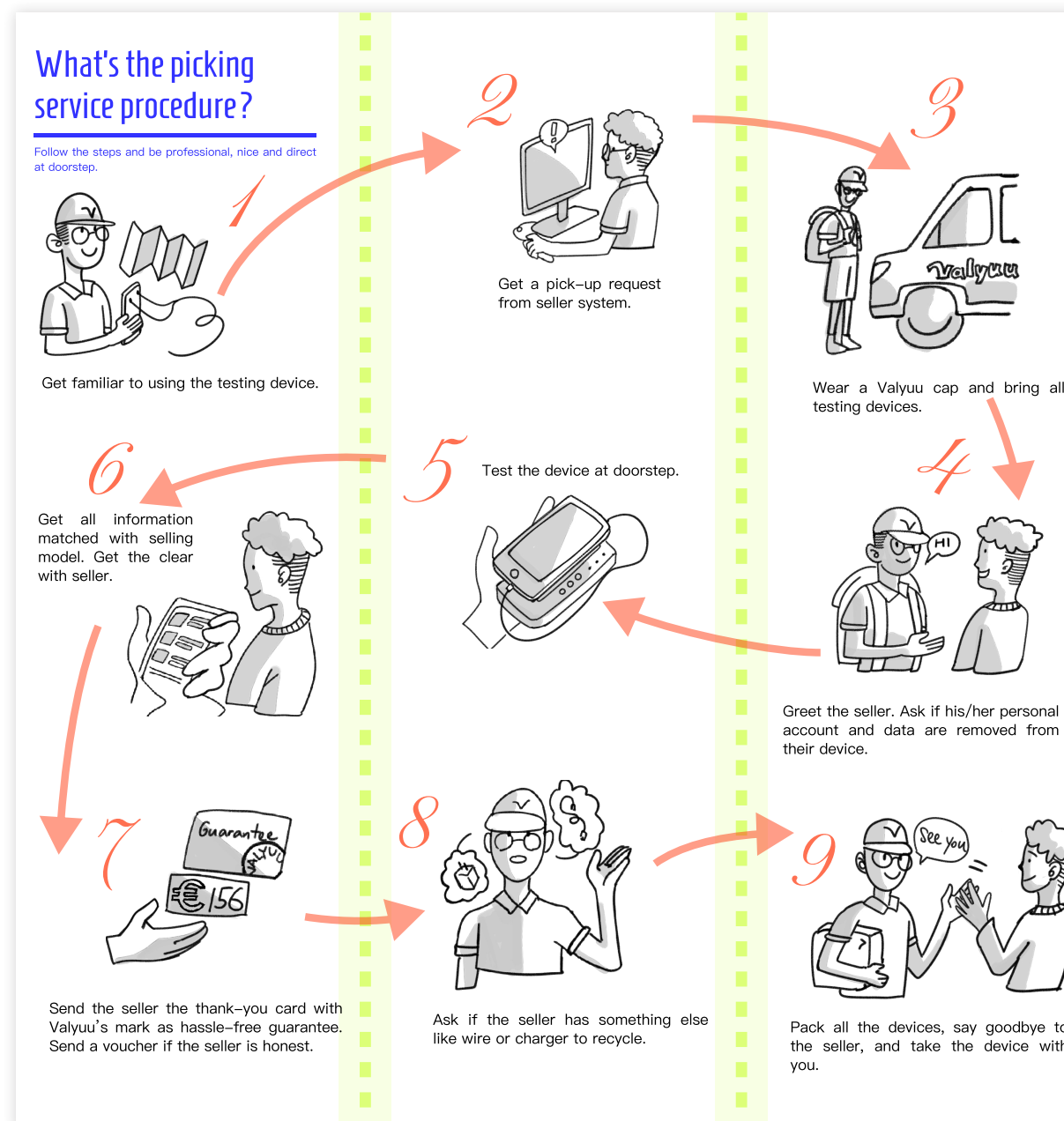"They need to handle the parcel properly"

"They need to be honest to customers"

I love the earth like I love my phone
valyuu

Evidence to show the necessity of doorstep service

The core findings from user interview as well as concept validation that regards to the pick-up man are listed here. These quotes can make them believe that their work matters a lot to our customers.

Illustrations to show the steps of doorstep

Although the pick-up person is already familiar with the process of testing devices at Valyuu's office, there is a chance that they may not be clear about what to do and say when they are at the user's doorstep. Additionally, there are some specific tasks that we would like the pick-up man to do. These include double-checking if the data and account have been cleaned, offering the seller a thank-you card, and asking the seller if there is anything else they would like to sell to Valyuu.

What's the picking service procedure?

Follow the steps and be professional, nice and direct at doorstep.

1 Get familiar to using the testing device.

2 Get a pick-up request from seller system.

3 Wear a Valyuu cap and bring all testing devices.

4 Greet the seller. Ask if his/her personal account and data are removed from their device.

5 Test the device at doorstep.

6 Get all information matched with selling model. Get the clear with seller.

7 Send the seller the thank-you card with Valyuu's mark as hassle-free guarantee. Send a voucher if the seller is honest.

8 Ask if the seller has something else like wire or charger to recycle.

9 Pack all the devices, say goodbye to the seller, and take the device with you.

What does seller care?

Understand the user's core needs and strive to fulfil them during the doorstep process.

Price
After testing the device, **clarify the price** with the seller. If the device status is inconsistent with the online declaration, inform the seller that the payment will be different from the online price.

Device Status
Make the seller clear about the status of each device and **send the test report** of the device by email, as well as **which product model correspond to which status.**

Hassle-free
To protect and guarantee the seller after payment or testing, the pick-up man should offer the seller a guarantee card indicating the completion of the transaction and that they are no longer responsible for the device.

Rewards
We offer the seller **vouchers and credits** if they successfully finish the doorstep selling process. It's important to clarify this to them.
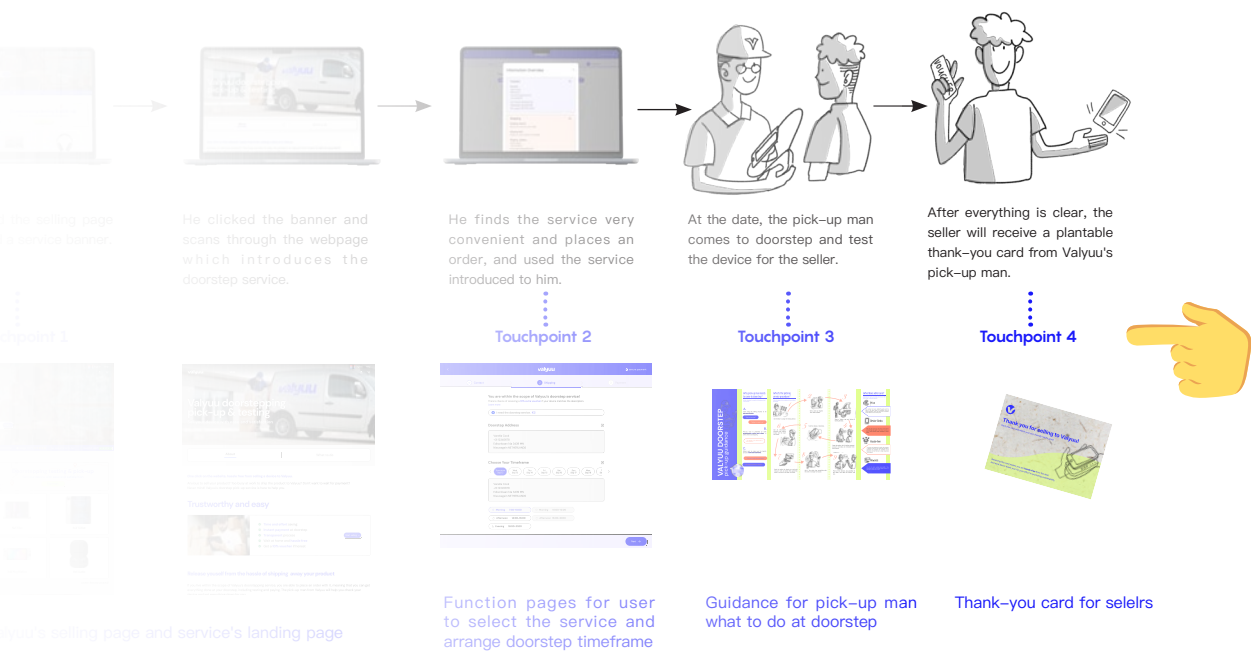
The key points that sellers care about

Person-to-person interaction can be complex. It is important to identify the most important points that sellers care about during the doorstep process to ensure effective communication.
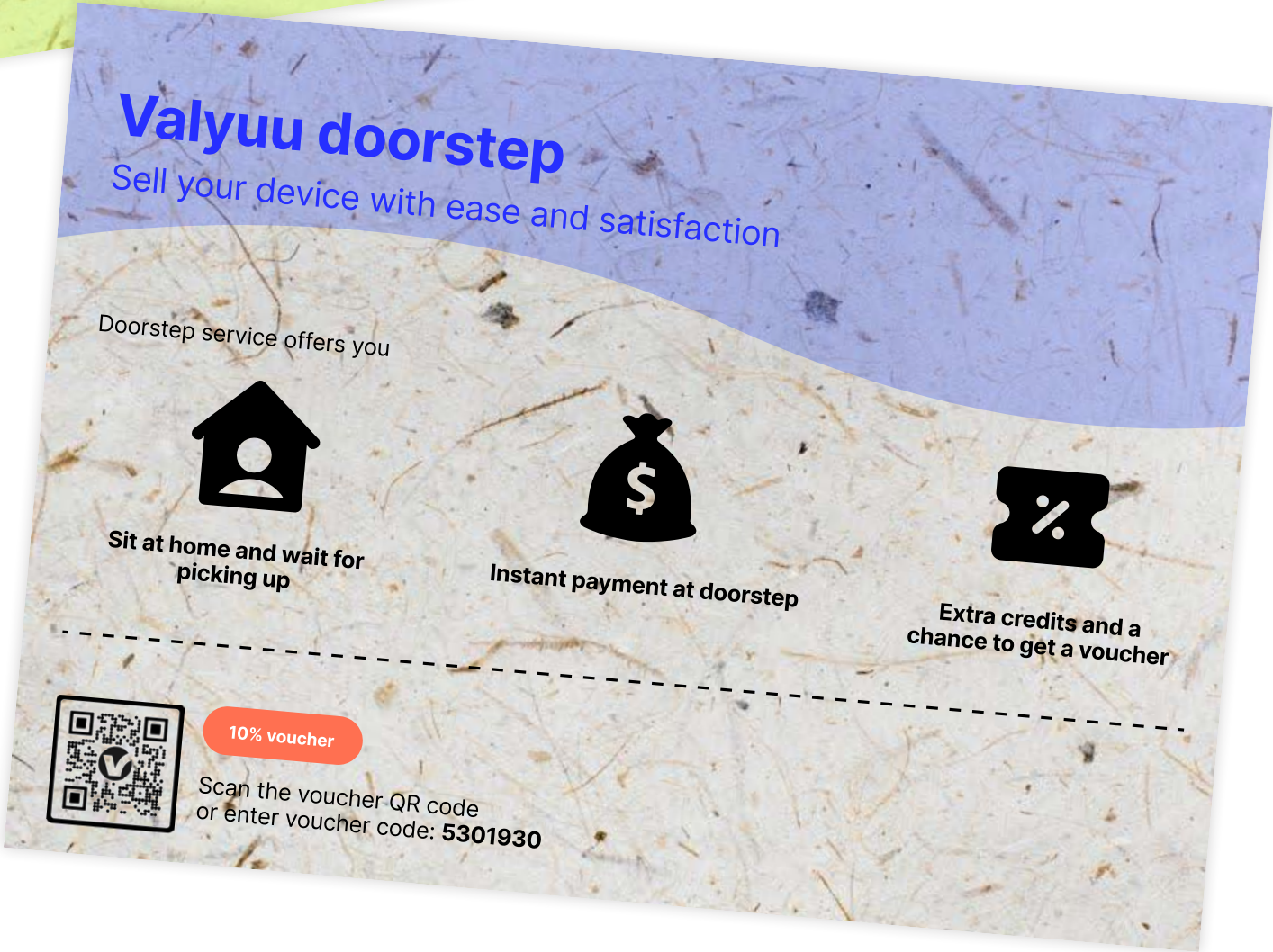
The user flow

He clicked the banner and scans through the webpage which introduces the doorstep service.

He finds the service very convenient and places an order, and used the service introduced to him.

At the date, the pick-up man comes to doorstep and test the device for the seller.

After everything is clear, the seller will receive a plantable thank-you card from Valyuu's pick-up man.

Touchpoint 2

Touchpoint 3

Touchpoint 4

Function pages for user to select the service and arrange doorstep timeframe

Guidance for pick-up man what to do at doorstep

Thank-you card for selelrs

After the service is finished, we would like to give the seller some physical gifts. As originally being an online-operated company, Valyuu's interactions with users mostly occur digitally. When the doorstep service provides Valyuu with an opportunity for offline contact with the seller, we want to leave users with some tangible gifts.

Therefore, we designed this thank-you card. It will be presented to the seller by the pick-up man upon successful completion of the service. This card is made of plantable paper, symbolizing that the seller's sustainable behavior can sprout. There's a QR code and a voucher number printed on it, making it convenient for users to use it directly.

Thank you for selling to Valyuu!

Plant this card and watch your eco-friendly habits grow!

Receiving this card means you are **hassle-free** from the deal.
And we'd like to thank your for your effort in promoting sustainability.

Valyuu doorstep

Sell your device with ease and satisfaction

Doorstep service offers you

Sit at home and wait for picking up

Instant payment at doorstep

Extra credits and a chance to get a voucher

10% voucher

Scan the voucher QR code
or enter voucher code: **5301930**

09
Conclusion

9.1
Discussion

9.1.1 Determine service area coverage

In Chapter 7, it has been mentioned that when we implement the doorstep service, the service area is a crucial factor that we need to consider. While we know that big cities have more population and have a bigger possibility that more people sell their pre-owned devices. We can research this with the digital device purchasing rate and therefore have an estimation about the digital device's abandon rate. Therefore, we can list these cities/regions and match them with the existing test people in Valyuu. In this way, we can choose some cities to start with implementing the service.

9.1.2 Online touchpoint greyscale test

Before launching the service, we need to conduct a greyscale test of the online touchpoints (touchpoint 1&2). In this test, we will focus on several important points. We will assess if the banner is influencing the normal user flow and if it is eye-catching enough to attract the attention of sellers.

To ensure clarity for sellers, we will test the thank-you card during the initial several doorstepping processes. This will help us determine if the information on the card is clear enough for sellers to understand.

For touchpoint 3 the pick-up man guidance, we will invite test men from Valyuu at present to assess their understanding of the guidance and to address any concerns or doubts they may have during the process.

9.1.3 Special conditions

During the doorstep process, there are some special conditions to consider to ensure a smooth service.

· The timeframe can be modified, but it needs to be done at least 12 hours before originally determined time.

· If the estimated price after the test differs significantly from the price estimated on the website, the pick-up man needs to clarify the reasons with the user. They should explain that specific criteria were not met as indicated by the seller online and provide the test results as evidence.

· If the mobile phone out of battery, the testing cannot be done. The pick-up man should inform the user to charge the phone. If the schedule is tight for the day, the pick-up man can advise the seller to select a different timeframe. If the schedule allows, the pick-up man can wait at the doorstep or proceed to the next appointment and return to test the device later.

A general solution is to clearly inform the seller in the confirmation email about what needs to be done and what is not necessary to them.

9.1.4 Concept profitability

The doorstep service is not aimed at making a significant profit itself. Instead, its goal is to increase user conversion and retention through the service. Additionally, there are intangible benefits such as trust-building and mobile advertisement on Valyuu's van. Overall, we can test whether the number of sellers who place an order and successfully complete it has increased, as well as whether the number of customers visiting the Valyuu platform has increased.

9.2
Project Conclusion

In this project, our goal is to design a service that not only meets the basic doorstep service needs but also creates a strong brand impression. That's why we say "doorstep service is not a new concept, but it is new for Valyuu." The research focused on three aspects: Valyuu's brand, doorstep service, and selling pre-owned devices. The research followed a qualitative method, combining desk research and interviews.

To launch a service design, we used the SERVQUAL model to address the 5 gaps in our designs. We conducted thorough interviews to gather user viewpoints and turned them into insights and opportunities to minimize gap 1, which is the gap between perceived expectations and customer expectations. The insights were then transformed into opportunities and service system needs by coding the interview data, aiming to minimize gap 2. Detailed service scenarios and blueprints helped reduce gap 3, which occurs when translating design concepts into reality. We adjusted the promotion strategy to minimize gap 4, which is related to conscious marketing. The implementation strategy roadmap helps address gap 5, which involves the mismatch between perception and expectations.

This thesis's biggest contributions in academia and business are:

1. The identification of three segmented pre-owned product seller's personas, along with the evidence and reasons behind their formation.
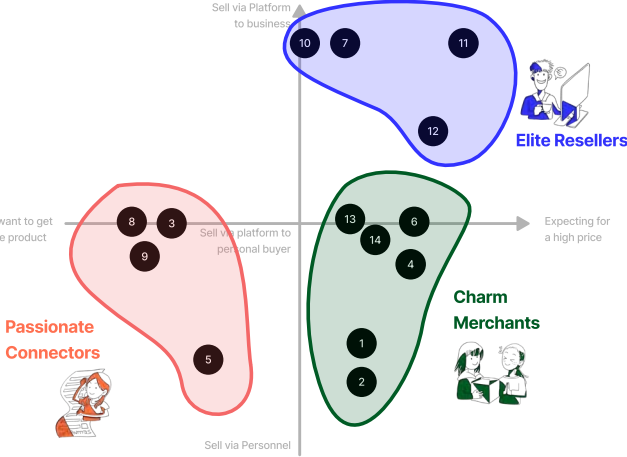
2. A separate coding method for qualitative data collected during the interview session.

3. A service solution that meets the basic requirements of doorstep service and aligns with Valyuu's specific brand positioning.
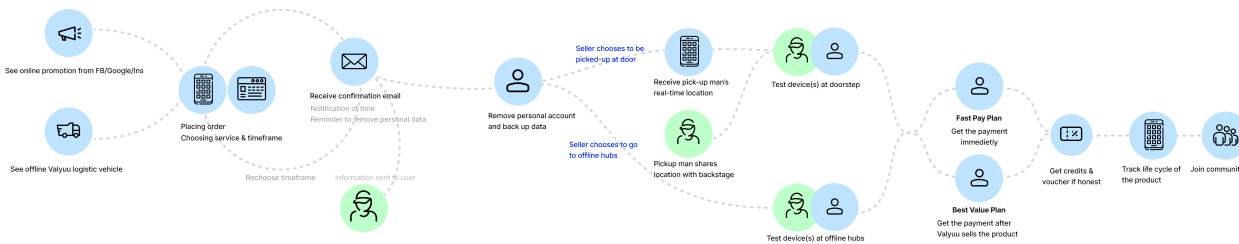
Reference

Aboelmaged, M. (2021). E–waste recycling behaviour: An integration of recycling habits into the theory of planned behaviour. Journal of Cleaner Production, 278, 124182. https://doi.org/10.1016/j.jclepro.2020.124182

Adivar, B., Hüseyinoğlu, I.Y., & Christopher, M. (2019). A quantitative performance management framework for assessing omnichannel retail supply chains. Journal of Retailing and Consumer Services, 48, 257–269. https://doi.org/10.1016/j.jretconser.2019.02.024

Ashnai, B., Henneberg, S. C., Naudé, P., & Francescucci, A. (2016). Inter–personal and inter–organizational trust in business relationships: An attitude—behavior—outcome model. *Industrial Marketing Management, 52, 128–139. https://doi.org/10.1016/j.indmarman.2015.05.020

Bergen, M., & Peteraf, M. A. (2002). Competitor identification and competitor analysis: A broad–based managerial approach. Managerial and Decision Economics, 23(4–5), 157–169. https://doi.org/10.1002/mde.1059

Balakrishnan, B. (2009). The impact of brand personality on brand preference and loyalty: Empirical evidence from Malaysia. Journal of Targeting, Measurement and Analysis for Marketing, 17(3), 205–216.

Bergen, M., & Peteraf, M. A. (2003). Scanning dynamic competitive landscapes: a market–based and resource–based framework. Strategic Management Journal, 24(10), 1027–1041. https://doi.org/10.1002/smj.331

Bowen, J.T. and Chen, S. (2001), "The relationship between customer loyalty and customer satisfaction", International Journal of Contemporary Hospitality Management, Vol. 13 No. 5, pp. 213–217. https://doi.org/10.1108/09596110110395893

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand Experience: What is It? How is it Measured? Does it Affect Loyalty? Journal of Marketing, 73(3), 52—68. https://doi.org/10.1509/jmkg.73.3.052

Brendzel–Skowera, K. (2021). Circular Economy Business Models in the SME Sector. Sustainability, 13(13), 7059. https://doi.org/10.3390/su13137059

Chung, W.Y., Nam, J., Ryong, K., & Lee, D. (2022). When, how, and what kind of information should Internet service providers disclose? A study on the transparency that users want. Telematics and Informatics, 70, 101799. https://doi.org/10.1016/j.tele.2022.101799

Cocco, H., & Demoulin, N.T.M. (2022). Designing a seamless shopping journey through omnichannel retailer integration. Journal of Business Research, 150, 461–475. https://doi.org/10.1016/j.jbusres.2022.06.031

Dey, B. K., Sarkar, M., Chaudhuri, K., & Sarkar, B. (2023). Do you think that the home delivery is good for retailing? Journal of Retailing and Consumer Services, 72, 103237. https://doi.org/10.1016/j.jretconser.2022.103237

Duffy, D.L. (1998), "Customer loyalty strategies", Journal of Consumer Marketing, Vol. 15 No. 5, pp. 435–448. https://doi.org/10.1108/07363769810235910

Fan, X., Wang, J., & Zhang, T. (2021). For showing only, or for selling? The optimal physical store mode selection decision for e–tailers under competition. International Transactions in Operational Research, 28(2), 764–783. https://doi.org/10.1111/itor.12748

Ferraz, R.M., da Veiga, C.P., da Veiga, C.R., Furquim, T.S., & da Silva, W.V. (2023). After–Sales Attributes in E–Commerce: A Systematic Literature Review and Future Research Agenda. Journal of Theoretical and Applied Electronic Commerce Research, 18(1), 475–500. https://doi.org/10.3390/jtaer18010025

Griffin, J. (2005). Customer loyalty: how to earn it, how to keep it. New York, Lexington Books.

Helmi, S., Ariana, S., Supardin, L. (2022). The Role of Brand Image as a Mediation of The Effect of Advertising and Sales Promotion on Customer Purchase Decision. Journal of Economics and Sustainable Development, 13(8).

Heskett, J.L. (2002), "Beyond customer loyalty", Managing Service Quality: An International Journal, Vol. 12 No. 6, pp. 355–357. https://doi.org/10.1108/09604520210451830

Jensen, M. (2001). Value Maximisation, Stakeholder Theory, and the Corporate Objective Function. European Financial Management, 7(3), 297–317. https://doi.org/10.1111/1468–036X.00158

Jin, M., Li, G., & Cheng, T.C.E. (2018). Buy online and pick up in–store: Design of the service area. European Journal of Operational Research, 268(2), 613–623. https://doi.org/10.1016/j.ejor.2018.02.002

Kundeliene, K., & Leitoniene, S. (2015). Business information transparency: Causes and evaluation possibilities. Procedia – Social and Behavioral Sciences, 213, 340–344. https://doi.org/10.1016/j.sbspro.2015.11.548

Lăzăroiu, G., Negurið, O., Grecu, I., Grecu, G., & Mitran, P. C. (2020). Consumers' Decision–Making Process on Social Commerce Platforms: Online Trust, Perceived Risk, and Purchase Intentions. Frontiers in Psychology, 11, 478039. https://doi.org/10.3389/fpsyg.2020.00890

Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. Journal of Marketing. https://doi.org/10.1509/jm.15.0420

Simonse, L. (2017). Design Roadmapping. BIS publisher

Loredana, E.M. (2017). The Use of Ansoff Matrix in the Field of Business. *Annals of the „Constantin Brâncui" University of Târgu Jiu, Economy Series, Special Issue, volume II/2017.

Luo, Y., Lu, Z., & Wu, C. (2023). Can internet development accelerate the green innovation efficiency convergence: Evidence from China. Technological Forecasting and Social Change, 189, 122352. https://doi.org/10.1016/j.techfore.2023.122352

Meidutė–Kavaliauskienė, I., Vasilienė–Vasiliauskienė, V., & Vasiliauskas, A. (2021). Identification of sectoral logistics service quality gaps by applying SERVQUAL method. Transport, 35(4), 419–434. https://doi.org/10.3846/transport.2020.13879

Meis–Harris, J., Klemm, C., Kaufman, S., Curtis, J., Borg, K., & Bragge, P. (2021). What is the role of eco–labels for a circular economy? A rapid review of the literature. Journal of Cleaner Production, 306, 127134. https://doi.org/10.1016/j.jclepro.2021.127134

Mooij, A.M. (2023). Reconciling transparency and privacy through the European Digital Identity. Computer Law & Security Review, 48, 105796. https://doi.org/10.1016/j.clsr.2023.105796

Mousavizadeh, M., Kim, D. J., & Chen, R. (2016). Effects of assurance mechanisms and consumer concerns on online purchase decisions: An empirical study. Decision Support Systems, 92, 79–90. https://doi.org/10.1016/j.dss.2016.09.011

Nielsen Norman Group. (n.d.). Why You Only Need to Test with 5 Users. Retrieved from https://www.nngroup.com/articles/why–you–only–need–to–test–with–5–users/

Page Moreau, C. (2020). Brand Building on the Doorstep: The Importance of the First (Physical) Impression. Journal of Retailing, 96(1), 155–167. https://doi.org/10.1016/j.jretai.2019.12.003

Rakic, M., & Rakic, B., (2015). Sustainable Lifestyle Marketing of Individuals: the Base of Sustainability. Amfiteatru Economic. 17. 891–908.

Rakib, M. A. N., Chang, H. J., & Jones, R. P. (2022). Effective Sustainability Messages Triggering Consumer Emotion and Action: An Application of the Social Cognitive Theory and the Dual–Process Model. Sustainability, 14(5), 2505. https://doi.org/10.3390/su14052505

Rosenbaum, M. S., Losada Otalora, M., & Contreras Ramírez, G. (2017). How to create a realistic customer journey map. Business Horizons, 60(1), 143–150. https://doi.org/10.1016/j.bushor.2016.09.010

Saldanha, D.M.F., Dias, C.N., & Guillaumon, S. (2022). Transparency and accountability in digital public services: Learning from the Brazilian cases. Government Information Quarterly, 39(2), 101680. https://doi.org/10.1016/j.giq.2022.101680

Seimiene, E., & Kamarauskaite, E. (2014). Effect of brand elements on brand personality perception. Procedia – Social and Behavioral Sciences, 156, 499–504. https://doi.org/10.1016/j.sbspro.2014.11.216

Shirani, F., Butler, C., Parkhill, K., Henwood, K., Pidgeon, N., & Groves, C. (2014). "I'm not a tree hugger, I'm just like you': Changing perceptions of sustainable lifestyles. Environmental Politics, 24(1), 57–74.

Singh, J., Flaherty, K., Sohi, R. S., Deeter–Schmelz, D., Habel, J., Le Meunier–FitzHugh, K., Onyemah, V. (2019). Sales profession and professionals in the age of digitization and artificial intelligence technologies: concepts, priorities, and questions. Journal of Personal Selling & Sales Management, 39(1), 1–21. https://doi.org/10.1080/08853134.2018.1557525

Temkin, B. D. (2010). Mapping The Customer Journey For Customer Experience Professionals. Forrester Research, Inc.

Van Boeijen, A., Daalhuizen, J., & Zijlstra, J. (2020). Delft Design Guide. BIS Publishers.

Van Iwaarden, J., van der Wiele, T., Ball, L., and Millen, R. (2003), "Applying SERVQUAL to Web sites: an exploratory study", International Journal of Quality & Reliability Management, Vol. 20 No. 8, pp. 919–935. https://doi.org/10.1108/02656710310493634

Vilhuber, I. (2023). Reproducibility and transparency versus privacy and confidentiality: Reflections from a data editor. Journal of Econometrics, 235(2), 2285–2294. https://doi.org/10.1016/j.jeconom.2023.05.001

Xu, Q., Jiao, R. J., Yang, X., Helander, M., Khalid, H. M., & Opperud, A. (2009). An analytical Kano model for customer need analysis. Design Studies, 30(1), 87–110. https://doi.org/10.1016/j.destud.2008.07.001

Ylä–Mella, J., Keiski, R. L., & Pongrácz, E. (2022). End–of–Use vs. End–of–Life: When Do Consumer Electronics Become Waste? Resources, 11(2), 18. https://doi.org/10.3390/resources11020018

Yin, C., Chiu, H., Hsieh, Y., & Kuo, C. (2022). How to retain customers in omnichannel retailing: Considering the roles of brand experience and purchase behavior. Journal of Retailing and Consumer Services, 69, 103070. https://doi.org/10.1016/j.jretconser.2022.103070

Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2021). Services Marketing: Integrating Customer Focus Across the Firm (3rd ed.). McGraw–Hill Education.

Zhang, W., You, J., & Lin W. (2021). Internet plus and China industrial system's low–carbon development. Renewable and Sustainable Energy Reviews, 151, 111499. https://doi.org/10.1016/j.rser.2021.111499

Master Thesis

Enya Zuo, 5305918

September 2022, in Rotterdam, NL