Unlock the ease and satisfaction of selling

A doorstep pick-up service design for Valyuu

Master Thesis - Appendix
Enya Zuo

I love the earth like
I love my phone
valyuu

Unlock the ease and satisfaction of selling
A doorstep pick-up service design for Valyuu

_____

Master Thesis - Appendix

Enya Zuo
5305918
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September, 2023

MSc. Strategic Product Design
Faculty of Industrial Design Engineering
Delft University of Technology

_____

Graduation committee

Chair | Erik-Jan Hultink
Mentor | Kate McMahon

In collaboration with Valyuu
Mentor | Jingwei Ren

CONTENTS

IDE Master Graduation

Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

⚠ **USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT**
Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser.

STUDENT DATA & MASTER PROGRAMME

Save this form according the format "IDE Master Graduation Project Brief_familyname_firstname_studentnumber_dd-mm-yyyy".
Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1 !

family name	Zuo	
initials	E	given name Enya
student number	5305918	
street & no.		
zipcode & city		
country		
phone		
email		

Your master programme (only select the options that apply to you):

IDE master(s): ( ) IPD ( ) DfI (★) SPD

2nd non-IDE master: _____

individual programme: ___ - ___ - ___ (give date of approval)

honours programme: ( ) Honours Programme Master

specialisation / annotation:
( ) Medisign
( ) Tech. in Sustainable Design
( ) Entrepeneurship

SUPERVISORY TEAM **

Fill in the required data for the supervisory team members. Please check the instructions on the right !

** chair	Erik Jan Hultink	dept. / section:	DOS
** mentor	Kate McMahon	dept. / section:	DOS
2nd mentor	Jingwei Ren		
	organisation:	Valyuu B.V.	
	city:	Gorinchem/Rotterdam	country: NL

comments (optional)

Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v..

⚠ Second mentor only applies in case the assignment is hosted by an external organisation.

⚠ Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

APPROVAL PROJECT BRIEF
To be filled in by the chair of the supervisory team.

chair   Erik Jan Hultink   date 10 - 05 - 2023   signature _____

CHECK STUDY PROGRESS
To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair.
The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: _____ EC

Of which, taking the conditional requirements into account, can be part of the exam programme _____ EC

List of electives obtained before the third semester without approval of the BoE _____

( ) YES   all 1st year master courses passed
( ) NO   missing 1st year master courses are:

name _____ date ___-___-___ signature _____

FORMAL APPROVAL GRADUATION PROJECT
To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **.
Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks ?
- Does the composition of the supervisory team comply with the regulations and fit the assignment ?

Content: ( ) APPROVED ( ) NOT APPROVED
Procedure: ( ) APPROVED ( ) NOT APPROVED

comments

name _____ date ___-___-___ signature _____

IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30   Page 2 of 7
Initials & Name   E   Zuo   Student number 5305918
Title of Project   Doorstep pick-up service design for Valyuu sellers

Doorstep pick-up service design for Valyuu sellers _____ project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple.
Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date   24 - 04 - 2023   08 - 09 - 2023   end date

Valyuu is an innovative startup that is promoting a more sustainable world through its online circular economy marketplace platform. It encourages people to engage in the practice of recycling and reselling used digital products. In doing so, it aims to reduce e-waste and carbon footprint while promoting the full use of digital products.

The idea behind Valyuu is to build a community of like-minded individuals who are committed to living a sustainable life. By promoting the reuse of digital products, Valyuu hopes to encourage people to think twice before discarding their used digital products, and instead consider reselling them, prolonging their lifespan and reducing the need for new products.

Valyuu's market strategy is C2B for seller, and B2C for buyers. Namely the online marketplace provides a platform for sellers to sell their products to Valyuu, and for buyers to browse and purchase them from Valyuu. In a future-oriented view, Valyuu aims to develope their market influence on recycling all kinds of used digital products in NL and develope its product category into bigger-sized digitals like iMac according to their roadmap. Also, the platform works for individuals to reach a wider audience, for future possible C2C market growing: sellers post their selling product and directly sell it to buyers.

As previous research from Luxin shows (see image/figure 1) , Valyuu's selling strategy for sellers is devided into 2 plans: "Best value" and "Fast pay". "Best value" is applied when people's device is in an overall good condition. Valyuu will test the device after they receive them and offer a higher price for the sellers within 10 days. While if the device have some tiny damages, Valyuu offers another plan called "Fast pay". Compared to the other plan, it gives the seller shorter time to receive the payment (within 24 hours after Valyuu receive the product). Valyuu will not check the device in detail but sell it to refurbishers later on. But if people's device is not in a good condition and is considered by the platform as non-reusable, Valyuu would suggest sellers to pack it togehter with other devices that can be sold to recycle them or put in e-waste containers to earn Valyuu credits. During these process, pick-up process is considered as crucial for sellers. An easy, efficient and convenient way to sell the products will enhace user experience and prevent sellers from going away to other platforms like facebook marketplace.

What's more, Valyuu is thinking of making sellers feel closer to their brand identiy. They are seeking ways to create an enjoyable and streamlined experience for sellers when selling their used digital products. Valyuu also recognizes the importance of trust between sellers and platform, as it is an important factor in the success of any trades. This project aims to grow seller's market in the long run by fostering an efficient and secure environment when handing over the products to Valyuu physically.

space available for images / figures on next page

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Initials & Name   E   Zuo _____   Student number 5305918 _____
Title of Project   Doorstep pick-up service design for Valyuu sellers

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introduction (continued): space for images

image / figure 1:   Market strategy of Valyuu _____

image / figure 2:   Ansoff's strategic opportunity matrix _____

IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30   Page 4 of 7
Initials & Name   E   Zuo _____   Student number 5305918 _____
Title of Project   Doorstep pick-up service design for Valyuu sellers

PROBLEM DEFINITION **

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

PROBLEM:
How does Valyuu meet the needs of used digital product sellers through appropriate means in order to achieve efficiency, ease, and resonation of brand in doorstep pick-up service?

Based on this topic, this project aims to detect the reasons that people at present retreat from Valyuu's selling service, as well as factors that lead people to think of as efficient, easy, and resonated that could enhance the user experience from the sellers' perspective in Valyuu's market scope. Standing on previous data and research, the action of physically getting in touch with sellers would lead them to solve problems face-to-face, efficiently finish the selling process, and emotionally get closer to Valyuu's brand. Thus the design concept will allow Valyuu to differentiate itself from competitors by higher sale rate and selling conversion rate. Practically, doorstep pick-up service is within the scope of supply chain, but stagewise this project only focuses on the period from people making a selling order online to the product successfully being picked up to the platform.

SOLUTON SPACE:
The aim of the project is to introduce a service design positioned as a "product development" (referencing Ansoff's strategic opportunity matrix, see image 2), which will enable Valyuu to enhance its selling service and attract a larger pool of sellers.

ASSIGNMENT **

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, ... In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

I will be working on a doorstep pick-up service system design with touchpoints that contribute to an efficient and convenient user experience when sellers want to sell their used digital products to Valyuu, as well as a roadmap of implementation strategy.

Methodwise, I'll follow the steps of contextmapping (preparatory - sensitizing - session - analysis - communication) to generate a holistic view of the present situation and context. Desk research like literature review, competitor analysis, trend analysis will accompany all the way throguh the process. In the end of researching phase, I'll reach a research result to answer my research question to narrow down the topic and support my ideation.
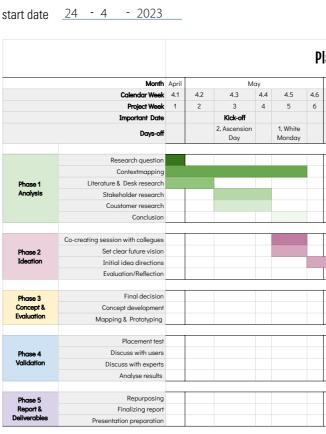
Service design, testing, and implementation also account for an important part in this graduation project. Deliverables will include stakeholder and customer analysis, a system map, as well as a roadmap of implementation strategy.

PLANNING AND APPROACH **

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

start date   24 - 4 - 2023   8 - 9 - 2023   end date

Planning for graduation project

In this project, I'll focus on 5 phases in total.

I'll spend the first 5 weeks mainly researching including generating contextmapping, literature research, and customer and stakeholder research. Some of the research progress will be introduced during my kick-off meeting.

After researching, I'll work on ideating together with colleagues in Valyuu to generate a service concept of doorstep pickup. And these will be reported at the mid-term meeting.

Different ideas will be evaluated and I'll reach a final decision and go deep into it in Phase 3. During this, I'll mainly work on my own and later on validate my design outcome and implementation strategy together with colleagues in Valyuu for further grey tests. In my greenlight meeting, I'll cover my results from these activities and finish 80%-90% of my master thesis.

The final phase is spared for me to check the whole project and finalize my report.

Initials & Name   E   Zuo   Student number   5305918

Title of Project   Doorstep pick-up service design for Valyuu sellers

MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, ... Stick to no more than five ambitions.

In this graduation project, I would like to expand my knowledge of strategic design by applying it in a real-world context with Valyuu. A good thing to me is that Valyuu has already taken the pick-up service design into their roadmap horizons so that I can easily build on previous research results as well as product data to develop further. What is most attractive to me is that my project works as a consistent activity to reach their future vision.

My ambitions in this project are listed below.

1. Get a holistic view of the project.
Service design acquires researching stakeholders, touchpoints, and different stages. I need to develop a holistic view while looking into details and integrating results into a concept.

2. Integrate emotion into practical experience.
This project includes not only making it an efficient and convenient experience for sellers but also creating a resonance with Valyuu's brand identity on an emotional level. Designers possess a unique ability is to tap into intuition and creativity to generate new ideas and solutions. How to involve emotional value in a practical service design would be fun yet challenging for me.

3. Think in real context and validate the result with stakeholders.
Valyuu has provided me with a stimulating vibe that allows me to exercise my design-thinking abilities by tackling practical problems. My goal for this project is to achieve a balance between high-level design thinking and real-world context testing and implementation.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.

Initials & Name   E   Zuo   Student number   5305918

Title of Project   Doorstep pick-up service design for Valyuu sellers

Appendix B Competitor analysis

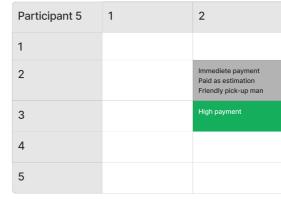|	5 Star Rate	Service	+	-
Coolblue	81%	Ecommerce and doorstep delivery	Convenient to repair if product go wrong though with higher price fast and transparent	Package left at a drop point Unclear description of the product Product Delay Price going up and down
Northladder	96%	Pre-owned cell phone selling	Free pick-up & data-wipe Transparent information Honest, friendly	
Apple	19%	Trade-in service	Good quality friendly and honest	service system error happens a lot
Marktplaats	12%	Online trading	Compare between a lot of products Remind you of possible threats	A lot of liers Buyers have a high risk of getting cheated Poor customer service
Getir	81%	Grocery shop and delivery	Fast and easy Friendly driver	Refund delay Time delay Not clearly staing the BBE
Flink	11%	Grocery shop and delivery	Fast delivery	Send wrong products Bad quality of the products Unreasonable pricing strategy
Gorillas	22%	Grocery shop and delivery	Friendly drivers Keep the time	Lie to customers Slow responses
Super suds		Laundromat service drop off service	Nice and helpful employees	
Van Spreuwel transport	31%	Doorstep delivery	Constant communication to customers Product and driver is traceble Friendly driver	Parcel left outside; a lot of communication of one delivery
Compostable	92%	Product	Goodlooking product and package Unique handwrite note	
Dynalogic	57%	Logistis and doorstep delivery	Trace up to date Friendly	Horrible customer service Lack of accountability Let customer carry a big package herself to her home
TSN Groen	73%	Doorstep delivery	Keep the time and to the door	Not being able to contact
Budbee	77%	Last mile delivery Budbee box	Select time freely See driver's position Constant communication	Sometimes not promise
DHL	30%	Doorstep delivery Installation service	Friendly and nice delivery driver	Packages left outside the house Damaged products Too much communication
Jos Dusseldorp	67%	Doorstep delivery Installation service	English OK Friendly drivers	Products are not placed at the agreed spot Service doesn't match the promised one Late delivery
Vos Logistics	54%	Doorstep delivery Installation service	Transparent communication Quick customer service Careful delivery	Service doesn't match the promised one Damage of the products Late delivery

Appendix C Kano evaluation

Participant 1

Participant 1	1	2	3	4	5
1			Immediate payment High payment Sell everything	Easy process Free shipping	
2			Paid as estimation	Friendly pick-up man Trustworthy platform	
3					
4					
5					

Dysfunctional (columns) / Functional (rows)

Participant 2

Participant 2	1	2	3	4	5
1	High payment	Friendly pick-up man	Immediate payment Free shipping Trustworthy platform		Easy process
2		Sell everything	Paid as estimation		
3					
4					
5					

Dysfunctional (columns) / Functional (rows)

Participant 3

Participant 3	1	2	3	4	5
1		Immediate payment High payment Sell everything	Easy process	Friendly pick-up man Trustworthy platform	Free shipping
2		Paid as estimation			
3					
4					
5					

Dysfunctional (columns) / Functional (rows)

Participant 4

Participant 4	1	2	3	4	5
1		Free shipping	Easy process High payment	Friendly pick-up man	Sell everything
2			Trustworthy platform	Paid as estimation	Immediate payment
3					
4					
5					

Dysfunctional (columns) / Functional (rows)

Participant 5

Participant 5	1	2	3	4	5
1			Sell everything		
2		Immediate payment Paid as estimation Friendly pick-up man	Easy process Trustworthy platform		
3		High payment	Free shipping		
4					
5					

Dysfunctional (columns) / Functional (rows)

Participant 6

Participant 6	1	2	3	4	5
1	Sell everything		Free shipping	Immediate payment	Easy process High payment Friendly pick-up man Trustworthy platform
2					
3					
4					
5			Paid as estimation		

Dysfunctional (columns) / Functional (rows)

Summary

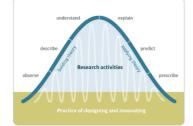|	Must-have	Performance	Delighter	Reverse	Indifferent
	Start by designing this	Can be added after must-have factor	Can be added after performance factor	Avoid it	can be ignored
Easy process		2	3		1
Immediate payment	1		4		
High payment		1	3		1
paid as offered				1(?)	2
friendly people		1	3		1
Free shipping		1	4		1
Trustworthy platform		1	2		3
Sell everything		1	3		

Appendix D Autoethnography analysis

Figure 4.1: the model of Smulders and de Bont (2012) to describe theory building as an interplay between research activities, and practice activities.

data. The unit of analysis are the activities of the researcher (designerly thinking) and the interactions of the researcher with others (design as a social process). The method of autoethnography does not have a long

Ellis and Bochner (2000) define autoethnography as *"autobiographies that self-consciously explore the interplay of the introspective, personally engaged self with cultural descriptions mediated through language, history, and ethnographic explanation"* (p. 742). Chang (2008) describes

as well. First, van Maanen (1988) mentions the 'realistic tales', in which the writer writes as precise as possible an account of what happened. Of course, the account is coloured by the observation of the writer, but the value of these texts is to provide a clear and overall understanding of the social or cultural context.

Second, there are 'confessional tales'. The focus here is not so much on a detailed description but rather to describe how, for example, personal biases, character flaws or bad habits from the writers influenced the cultural and social process. Van Maanen states how the writer takes a stance that can be 'embarrassing', and that a confessional tale can be like a confession of the writer.

Third, there are 'impressionist tales', which highlight rare and memorable moments in the process of doing fieldwork. The focus here is on 'the moment' that is interesting. The writer feels in the cultural and social context that something is going on that is worth exploring in more detail. Impressionist tales differ from confessional tales by having more emphasis on the social context than on the personality of the writer.

Figure 8.3: Knowledge framework on entrepreneurial action in education (Middleton & Donnellon, 2014)

Why I think of using Picnic

Enya Zuo

Recently, I have been busy with my graduation project, so I often work between home and school. I pass by a supermarket on my way home, but because I always carry a large computer, I cannot buy many things on the way. I have heard of Picnic, a shopping platform that delivers goods to your door. As long as you place an order on the same day, it can be delivered in the evening or the next day. Therefore, I decided to use Picnic to order some daily necessities.

How do I feel during placing order in Picnic

Enya Zuo

When I first opened the Picnic APP, the interface was entirely in Dutch, which made it difficult for me to use. However, with the help of pictures and translation software (when necessary, I translated some product category nouns), I can browse and interact relatively smoothly.
At first, I only wanted to buy some toiletpaper and milk. After I added these two items to my shopping cart, the system prompted me that I needed to spend €35 to get free delivery. I was a bit embarrassed because I was willing to pay for the delivery fee, but I did not need €35 worth of products. Picnic intercepted my operation chain, and I had to reach the €35 threshold.
So I went back to the product interface and added some food items like frozen meat, eggs, cheese, etc.
The red dot in the lower right corner of the interface reminded me of how much money I had spent, which I thought was intuitive and convenient.
After finally reaching €35, the system prompted me for the delivery time. I was thrilled to see that there was an option to deliver on the same day, but because I am a relatively indecisive person, I chose the next day.
After completing the payment, Picnic reminded me that I could add forgotten products to my shopping cart before 11 pm that day. I think it's a great design experience for someone like me who often forgets things.

Waiting till doorstepping

Enya Zuo

After receiving the message that I could add items, I repeatedly looked at Picnic's product list, but in the end, I did not find any essential products.
The next day, I went out in the morning and did not return until the afternoon. I was worried about missing the delivery time all the way home, but fortunately, I arrived home earlier than expected. Shortly after I got home, my doorbell rang about half an hour earlier than the estimated time range.

Doorstepping

Enya Zuo

A guy in casual clothes was at the door with many plastic bags full of things, speaking a lot of Dutch to me. Because I couldn't understand Dutch, I asked tentatively in English, "Is this from Picnic?" The guy continued to reply to me in Dutch, and I felt embarrassed, so I said, "I don't understand Dutch. Do you speak English?" He then switched to English, apologized, explained, left the bag at my doorstep, and left.
Looking at the bags on the ground, I remembered that I left a €0.35 deposit for the shopping bag when I ordered from Picnic, but I don't know how to return these plastic shopping bags now. I remember seeing the iconic uniform and visual delivery process on Picnic's website, but it did not show up in my app, and I don't know why. It was because there was no prompt, and I relied on my guess to confirm that it was a delivery from Picnic, and the delivery man arrived half an hour early. I feel that this shopping experience is somewhat unsatisfactory.
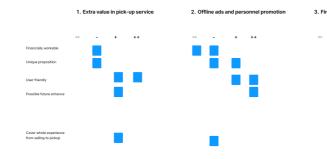
Appendix E Harris Profile

Criterias to judge the ideas

1. Extra value in pick-up service

Nature sustainability Raise people's awareness of sustainability during the service	**Pickup guidance** Expose the process to the seller. Behave according to doorstepping guide.	**Automated process** Make the process as automated as possible to avoid any disputes.	**Pickup man/product endorsement** Guarantee customer's rights through proof/endorsement	**Fast response** If there's no response, system could automatically send a apology email to the customer.
Immediate payment Make the payment clear (cash/digital transfer) when meeting face-to-face. Send a notification email as soon as possible.	**Smile delivery** Always be friendly and patient to customers.	**Handwritten messages** A written note to the people who would buy this product	**Position track** The customer can visually keep in touch with pickup man all the time. They can send messages to pickup man as well.	**Strict protocol** Fast process cheaper operation cost
Encourage selling Ask if sellers have more units at home to sell/remind sellers they can sell more on the website				

3. Financial triggers

Deals Combo deals/referral deals to promote selling	**Ad-hoc add on** When people choose to use this service, they will be offered special marked reward	**Voucher after sell** When customer place an order, send a voucher to them	**Free extra services** Fix product problems/...
Reward system Get a reward system to keep customer within Valyuu.	**Price comparison** Show clearly if price is going up and down.	**Price comparison** Clearly state the price and display comparison among platforms	**Connect the offered price with service** Higher offered price of the pre-owned products if they choose the service

2. Offline ads and personnel promotion

Promote to related channels Posting ads on related channel websites	**Offline hubs** Set hubs to provide professional advice. They should be easy to be recognized. Can be a movable truck.	**Movable branding** Promote brand with vehicles	**Brand fashion** Iconic truck with branding design

4. Customer engagement

Engagement loop Send flyers to customers to promote the service/show footprint/online invites	**Life cycle tracement** Expose life cycle of the sold product to the user.	**Sustainable community** Set a sustainable community for customers to chat, share information, promote sales, etc.

	1. Extra value in pick-up service	2. Offline ads and personnel promotion	3. Financial triggers	4. Customer engagement
Financially workable				
Unique proposition				
User friendly				
Possible future enhance				
Cover whole experience from selling to pickup				

Appendix F Validation set-up

Aim of concept validation:
To see if the concept suits to the company's roadmap
To see to what extent would they want to sell their product to Valyuu

Participant sampling: in-house operator, marketer, heads

About me...

I've used doorstepping logistic service before

The platform/service I've used was/were

This concept helps me...(rating 1-5)

save time and money

feel at ease and efficient of selling products

more willing to sell to platform

make the process less hassle

get a recognition of Valyuu's brand message

like to sell more at Valyuu

feel more trustable on Valyuu

This concept helps Valyuu...(rating 1-5)

to expand it's market scope

gain customer in a financially workable way

to give some new space for further development

What do you feel when your first see this concept?
What are you still missing in the concepts? or needs to be improved?
You've got a high score for X, why?
Among the needs, what do you think as the most important?
Is anything unclear to you?