

Preface

Before you go through this thesis, I would like to give a brief introduction about myself as well as the journey in this project.

I am a spd student. Although I want to explore the business side of design, I am also passionate about user experience. Nine months ago last October, I learned from my friend Lei about Food & eating design lab. As a sensitive taster, I got interested in the topics of food and design, then, as you could expect, I got this graduation opportunity to work on a design project about food and eating. The journey was not easy at first, I raised many proposals and got a bit lost about what kind of project I would like to work on, I also feel nervous and stressed at certain points while doing this project. But these problems were solved later on with the help of others and my effort. I conduct this project as the researcher and designer under the guidance of my supervisory team: Rick Schifferstein and Pinar Cankurtaran. I would like to thank you for your academic support and mental encouragement that help me go through this long process.

Much thanks to my friends who helped me achieve this project, Junyao, Wenhao, Tingwei, Hanchu, Ben, Yuyuan, Zhenyu, Wenwen, Fanzhe and so on, to help me with my project and give me encouragement to support.

Thank myself for keeping trying and becoming confident and fearless during the long process, and for my parents who always support me financially and mentally.

I hope you can enjoy the reading.

Wei

August 2022

Abstract

The delivery food has been embedded in our daily lives. With just a few clicks, people can enjoy the food without cooking or going to restaurants. The existence of such products brought a new Online Food Delivery (OFD) market for the platform, new jobs for the deliveryman and new lifestyles of eating. However, this system lies problems, mixing plain user experience, business homogeneity and low deliveryman salary. Firstly, the customer service is limited to only transferring the food, this simple service can not supply user experience well. Secondly, there is little differentiation among platforms, making delivery companies hard to survive in the competitive market. Thirdly, the deliveryman in this system can not earn much.

Facing this mixed problem, innovation in experience optimization can solve the issue. By enhancing customer experience, delivery companies can also distinguish themselves in the market. At the same time, the experience provider(deliverymen) may also earn money for providing the optimized experience.

To solve this problem, I framed the initial research question: How can delivery (company) service enhance the food& eating experience? I also chose the company Eleme as the project background. Then I researched users, services and businesses, and define the design goal & requirements. After this, I did design development and evaluation. The research phase includes literature study, interviews and other types of analysis, it helped me understand the context and get insights to frame the design goal and requirements. These insights gave me clues to make four types of Persona based on the user motivation to eat delivery food. As I want to include all types of users in the OFD system, I framed the design goal as "HMW help Eleme innovate service in different customer experiences to differentiate itself in the market (and make money) ?". With this question, I ideated different solutions and directions. Among these directions, the deliverable as modular tools can best achieve the goal and meet the requirements. After comparison, the concept"Lego my dining" is developed. It is a set of tools (including digital and physical forms) that serve as modules to enhance the customized user experience for deliverymen and different consumers. Afterwards, I deepened the design and evaluated it. In conclusion, the final design sufficiently fulfils the design goal and contributes to experience and service design in the OFD industry.

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Content Map

This map shows the approach of this project. On the right side illustrate the steps I take during this graduation project, In between each step is the key output that leads the design process. On the left side are the corresponding chapters for the design steps.

Frame design goal &

State design

requirements

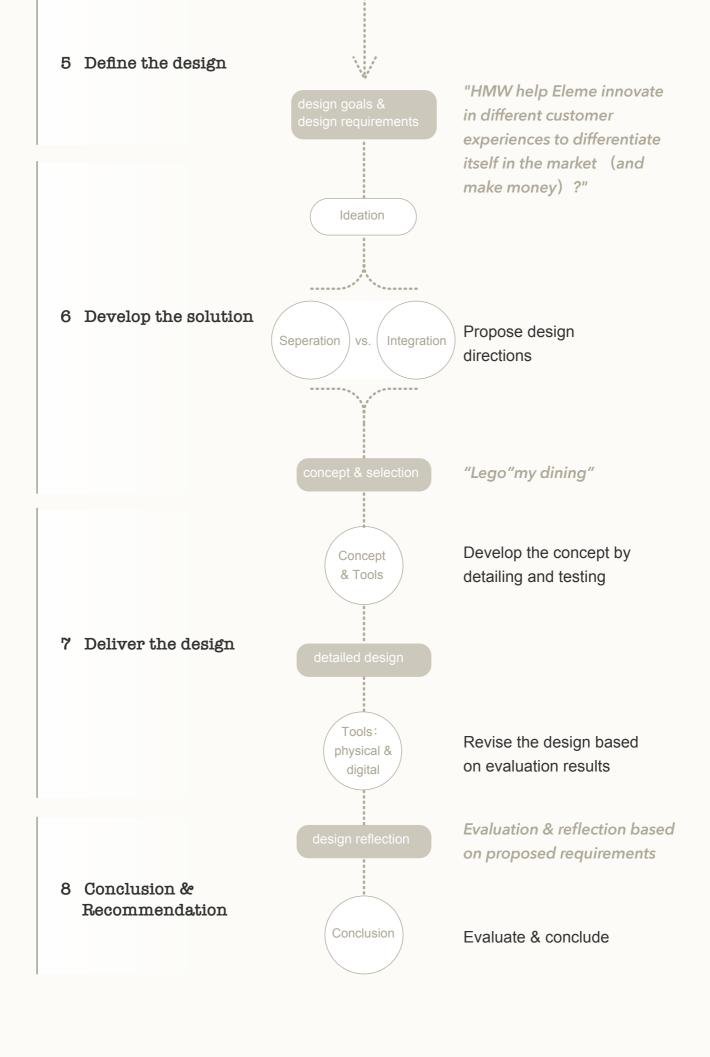
context Frame research question 1 Project "How can delivery (company) enhance food& eating experience" business 2 Business Research Conduct research & interviews service Service Research user 4 User Research Insight clusters on three conclusion on 3 aspects aspects

desirability

viability

feasibility

5 Define the design



Project Intro

Project Scope

I choose the OFD (Online Food Delivery) for my project context because of its boosting trend and limited research projects in this field. Delivery food has been increasingly common in people's eating lives while there is not enough academic research about the delivery food experience. According to a survey by Statista (2022), OFD industry is expected to grow 9.9% annually from 2019 to 2023, with this industry boosting (Zhang et al, 2021). Besides, covid and lock-out situations brought consumers from restaurants to their homes (Novita et al, 2020). We can see that eating delivery food has been one of the important scenarios in food consumption. However, there are not enough research or design projects about the OFD industry, making this gap worthwhile researching on.

To further scope down my project, The context of a Chinese company Eleme is chosen. Owing to China's large population and cheap labour force(Qiu, 2022), China has been one of the largest OFD markets. This fact lays the ground for researching different eating scenarios, as the Chinese context can get rich insights and perspectives on eating delivery food. To further scope down the project, a giant company in the market, Eleme, is selected for my project, with the reason that Eleme is feasible and profitable for its innovation.

Initial Problem

Within the project scope, I found that the delivery service now only focuses on transporting the food on time by deliverymen. This brought a mixed problem to this OFD system. Firstly, the simple food transferring service can not supply user experience well, especially in some memorable scenarios like a festival celebration. Secondly, Eleme can not get many advantages in the competitive and homogenized market, there is little differentiation among platforms. Thirdly, the deliveryman in this system does not have a stable and decent salary.

To solve this mixed problem, service innovation in experience for Eleme could be the solution. It can not only solve the experience issue but also help with business and deliveryman. Sipa (2017) pointed out that innovation could be the way out of a competitive market, innovation in food& eating experience can influence the consumption decision of different delivery platforms. Besides, optimising service level can let deliverymen charge more so that have a higher income.

Appendix 2.1 shows the brief of this project, with all the information above, I framed the research question: "How can delivery (company) provide services that enhance the food& eating experience?"

Food experience dimensions

To answer the question "How can delivery (company) provide services that enhance food& eating experience?", I firstly looked into what food & eating experience is and the aspects to analyze it, to give me, as the project owner (PO), clues to capture a better eating experience.

Food experience relates to a bigger scope, experience. In this field, there are ways and structures to analyze it (e.g., Brakus et al, 2009; Hekkert and Schifferstein, 2008; Schifferstein, 2010; Vyas and van der Veer, 2006, as cited in Schifferstein, 2020), which gives references to evaluate the food experience in a structured way.

These dimensions give PO a framework for looking at food experiences, thus helping to define and evaluate a good experience. In Chapter7, the evaluation of the design deliverable uses this framework to see the experience optimization.

There are five aspects that this project could evaluate on:

- A sensory dimension with perceptions of five senses
- An aesthetic aspect of the product in terms of liking, attractiveness or appreciation
- An affective evaluation containing emotions and feelings that are triggered by product interaction
- An intellectual dimension consisting of cognitive links, thoughts evoked and meanings learned
- A behavioural dimension about actions to, with, or evoked by a product

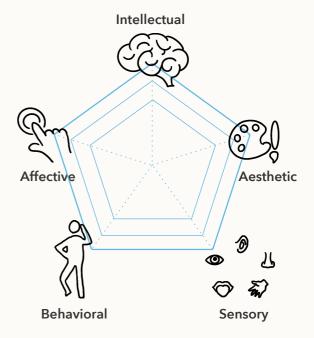
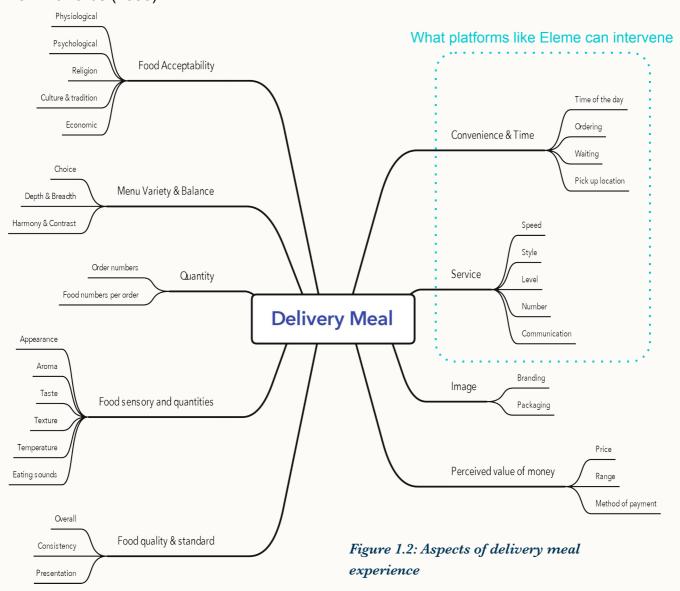


Figure 1.1: Experience aspects

Delivery meal experience

Aspects of delivery meal service

Experience with delivery food includes not only the eating process, but also the preparation before eating, like buying groceries and cooking, or events that happen after eating, like food waste (Schifferstein, 2020). For delivery food, Figure 1.2 shows an overview of the factors that affect the dining experience of delivery food. The overview structure is adapted from Edwards (2000).



The experience of delivering food is composed of various factors. However, When looking from a delivery platform (like Eleme)'s perspective, what influence the experience most are the "Service" category and "Convenience & Time" category (as other aspects could only be influenced by restaurants now). Therefore, this project will scope down to these two aspects for the innovation of solution.

Delivery meal experience

Focus of this project

What platforms like Eleme can intervene

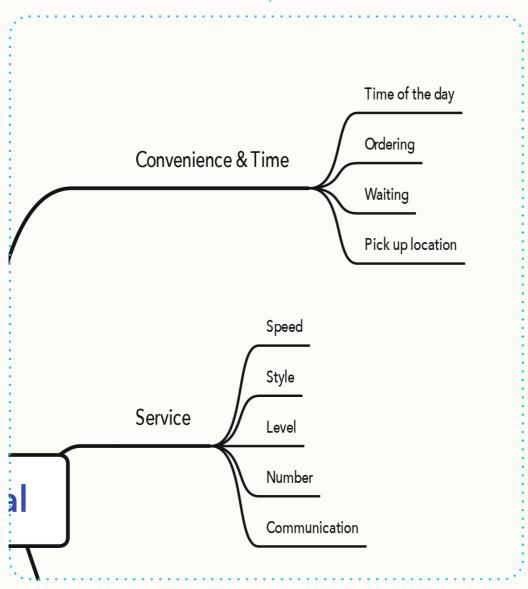


Figure 1.3: Focus of this project on delivery meal experience

These two aspects and nine themes give clues on how to scope down the user experience of delivery food. This structure gives hints on interviewing users. For example, in Appendix 4.1, questions" Looking(memorizing) the delivery orders, where is your destination? ", and "When do these orders happen?" is derived from the aspects "Picking up location" and "Time".

Experiencers

Convenience Value

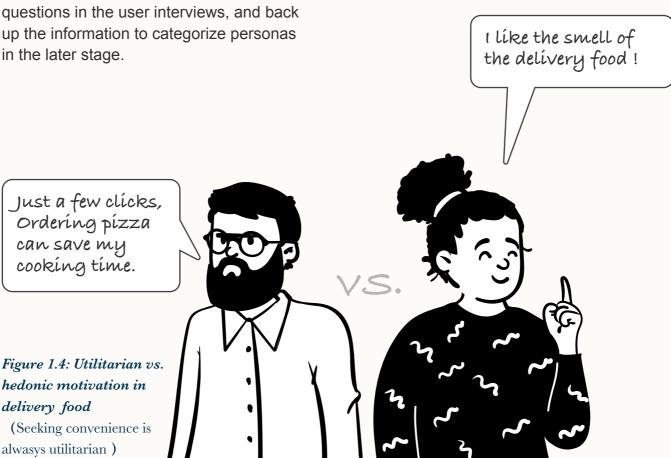
Das(2018) analysed the data from 153 online delivery users, concluding that "doorstep delivery" and "convenience (on the app)" are the two most important factors for using delivery food. In other words, the motivation for the current delivery users focuses on effortlessness to get the food. Moreover, another study also addressed that convenience is the most important motivation followed by price, pleasure, health and concern about weight (Marquis, 2005).

Therefore, It is apparent that convenience is one of the key motivations and values for its users now. This insight will help me understand the users more, give background information for follow-up questions in the user interviews, and back up the information to categorize personas in the later stage.

Hedonic Motivation

Another motivation for delivery food is from the hedonic perspective (Nejati and Moghaddam, 2013), but it remains unclear about its degree. Utilitarian vs. hedonic motivations for consumer behaviour are widely documented in the marketing literature (Kim, 2006). However, in the food and beverage category, Being a hedonic or utilitarian good depends not only on the food category but also on how users perceive the food. When the satisfaction is related to the multisensory experiences of the delivery of food, the user is hedonic-driven.

This finding also gives me insights into personas, hinting me to think about hedonic-driven scenarios in further design.



Project Approach

Conclusion -

This project will use service design perspective, not only because one of the key equity of Eleme is service, but also the fact that the project aims to have long-term effect on different stakeholders

What

Service design is an interdisciplinary approach that focuses on the service that an organisation provides to the user. For example, a messaging app on a smartphone is meaningless without an internet connection. Service design is a genetic approach, it builds upon a number of other design types and does not have a single clear set of methods or terms. Besides, the user-centric perspective is always applied in service design.

This graph shows the difference between experience design and service design. While experience focuses on the human-interface interaction, service design also looks into backup systems, but still originated in experience design.



Figure 1.5: Illustration about experience design and service design

Why

The reason I choose service design as my design perspective is that:

- 1) The key equity of Eleme is the ordering and delivery service
- 2) From Eleme's business model, There are many stakeholders involved in the ecosystem for innovation. Service design can consider this aspect.
- 3) This graduation project is only a small piece/ proposal to start the innovation. I want this project to aim for longer-lasting interactions.

How

Van Boeijen et al(2020) proposed steps in service design:

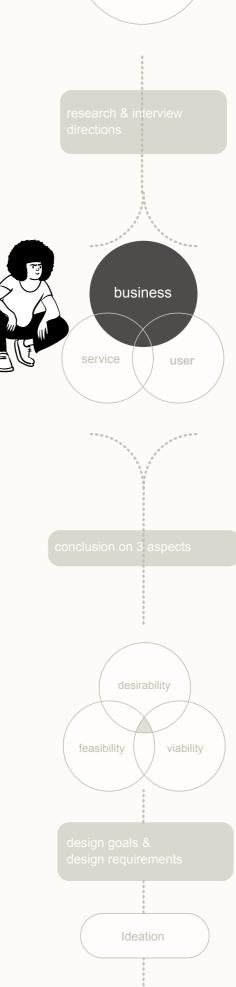
- 1) Build a holistic view of the user's context and service possibilities
- 2) Visualise the intangible interactions over time
- 3) Develop an interdisciplinary and shared language

This project will follow these structured steps.



BUSINESS RESEARCH

To answer the question "How can delivery (company) provide services that enhance food& eating experience? ", This chapter will introduce the business context of Eleme, from the Chinese OFD industry to the company introduction and ordering details. After showing the basic information, competitors and SWOT would explain where the business challenge and opportunity lies for Eleme.



OFD in China

The business part starts with the analysis of Chinese OFD.

From quantity to quality

Zhao et al (2021) pointed out that the online-to-offline (O2O) food delivery industry in China is moving from quantity to quality. The market growth drops sharply since 2014 and is below 20% in 2020. Consumers will compare products and services on the market, so the competitiveness lies in the quality of the service and product.

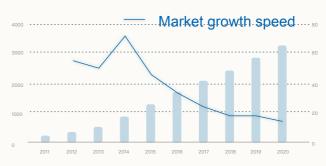


Figure 2.1: OFD Market in China

Daily life integration

Although the market growth decreases, China still has a large market in OFD industry by its large population and cheap labour force (Qiu, 2022). Many people eat delivery food quite often, and this service has been embedded into people's daily lives. One evidence is that Eleme reports showed that the destination of delivery food is not focused on one place, people will order delivery food at their homes, when they work, go the school, at a hotel, or even at a mall and hospital. There are many eating scenarios to research.



Figure 2.2: Delivery food destinations & distribution

Homogeneity

The products and services on the market are still very similar on the consumer side. This homogeneity for consumer perception lies in the similar interfaces, ordering procedures and delivery service. Figure 2.3 compares different delivery interfaces where the interface is much similar in icon layout and restaurant choices. With this similarity, the function that the platform offers and the service that consumers can get are quite similar.

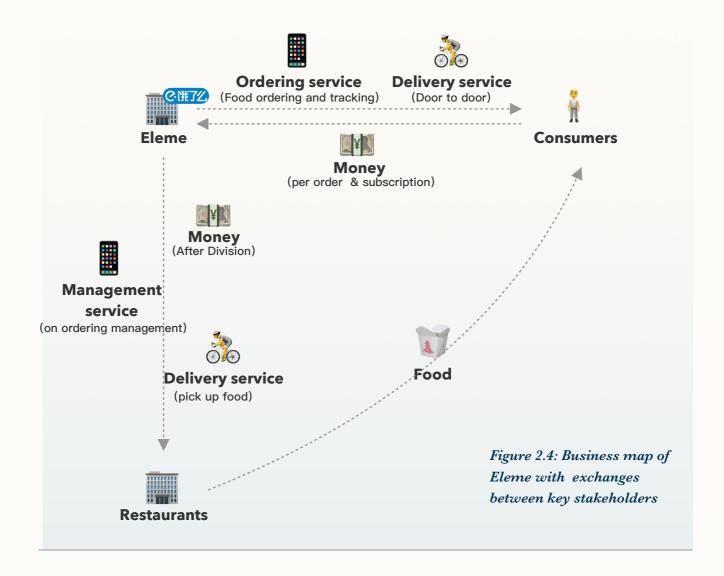


Figure 2.3: Interface of the delivery Apps

Company Intro

Eleme is an online food ordering and delivery platform launched by Mark Zhang and Jack Kang in Shanghai, in 2008. In April 2018, Eleme was acquired by the Alibaba Group and continues to operate independently.

Like Figure 2.4, Eleme's business map shows the main business is the ordering service and delivery service. The ordering service provides consumers with the App to order and track the food from various restaurants, in the meantime, offers an ordering management system for restaurants. The delivery business provides consumers service to get the food on time, and assistance for restaurants to hand out the food and run their delivery business.

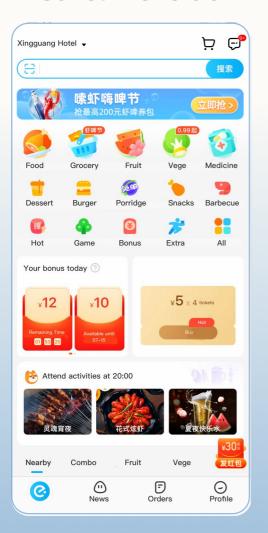


Eleme Apps

As a platform that connects users, deliverymen and restaurants, the ordering system includes apps on these three sides.

On the consumer side, users can order, pay and track the food via Eleme, the orders will be in the system and sent to the other stakeholders (deliveryman and restaurant). On the deliveryman side, the employee can accept, navigate and manage customer orders, there is also a rating system where customer comments can influence the deliveryman's salary. On the restaurant side, the App is used for taking and managing orders. All these three sides belong to the platform Eleme.

Consumer side



Deliveryman side Restaurant side





Figure 2.5: Eleme homepages on user, deliveryman and restaurant side

Ordering on Eleme

On the consumer side, the use of the Eleme app could be categorised into four stages: choosing, confirming, waiting and commenting.

Choosing

On the homepage, users can browse the restaurants, choose one restaurant to order, and then add food to the basket.

Confirming

When the ordering is done, users will check the contact info and the summary of the order, then press the confirm button.

Waiting

While the order is being prepared, users can check the status of the food(info like being prepared by restaurants, or, on the way will be shown). At this stage, users could also call or message the restaurant or the deliveryman.

Commenting

After receiving the food, users could rate and comment on both delivery and restaurant. These comments will be shown on the ordering page when other users are making the consumption decision, or let the deliveryman have punishment on the salary.

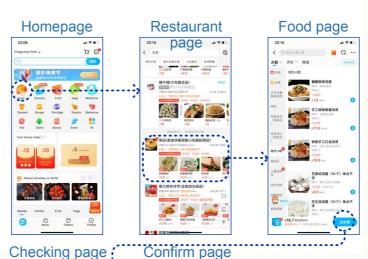








Figure 2.6: Eleme ordering process_Consumer side

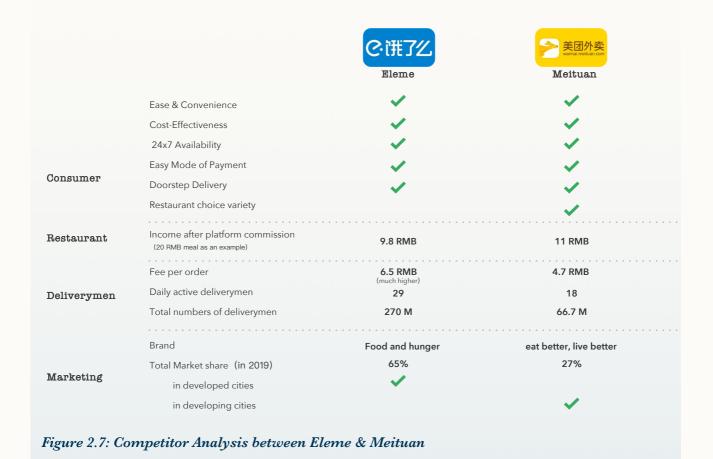
Competitor Analysis

About food delivery platforms, there are two giants in the Chinese market: Meituan and Eleme. They together account for more than 90% of the food delivery market share, and the rest are occupied by restaurant-exclusive platforms such as Home Delivery for KFC. Therefore, to innovate and make profits for Eleme, the analysis of the competitor is made to spot Eleme's opportunity for innovation.

Conclusion

Compared to its main competitor, Eleme is weak in the scale, price, restaurant choices and so on. However, Eleme's unit salary for deliverymen is high, and the brand focus on "food and hunger" rather than speed

The competitor analysis looks into four sides: consumer, restaurant, delivery and marketing. Externally, consumer experience influences order numbers and the profit a company can earn. Das (2018) 's framework about consumer perception in the delivery service is used for the benchmark on the customer side. The analysis also looks at another partner, restaurants' interest as a longer and stronger cooperation can help platforms gain customer orders. Internally, the study focuses on delivery resources as a good customer experience needs to be back up by the service resources. Another internal factor to look at is the marketing aspect as it shows the current business context and the company's further steps.



SWOT Analysis

Strengths

About 1/3 market share Reliable brand image

(Food and hunger-related)
Stable management system
More unit salary for deliverymen
More market share in developed
cities

Easier for innovation because of the medium scale (compared to Meituan)

Opportunities

Expand new business
Position to higher-end market
Rebrand Eleme
Have more functions

Weaknesses

Higher prices for consumers

(compared to Meituan)

Fewer restaurants cooperated Less active users Smaller scale

Competitive market

Threats

other services.

The innovation may be copied from competitors.
Users may have no need for

To deepen the analyzing phase and spot opportunities, a SWOT analysis is made to spot Eleme's innovation strategy.

Among many conclusions from the analysis, "Given the condition of the competitive market, Eleme's all-around weakness in scale and funding

(compared to Meituan) leads to the recommendation that we expand new business in the mid-to-high-end market, in favour of an attempt to win the competition." Besides, its larger occupation in developed cities gives room for Eleme to test its innovation with its reliable brand image to high-income citizens.

Business Research Conclusion

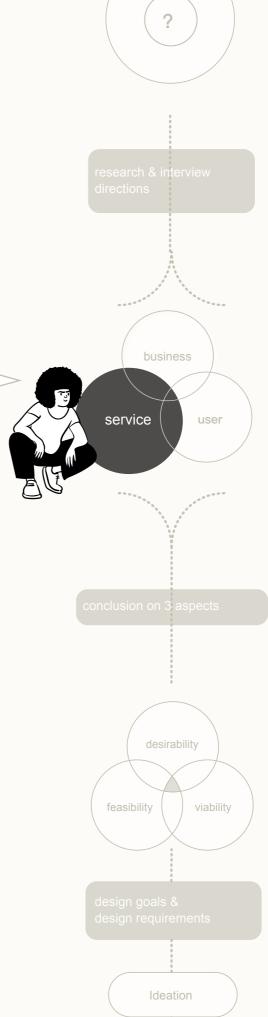
- The market is going from quantity to quality of the food and service. As the user growth speed drops rapidly, existing users will compare the products. But now what all the platforms offer (ordering and delivery service) are homogenous and focus on relatively low-end market.
- The largest competitor, Meituan, beats Eleme in benchmarks like scale, price, restaurant resources and so on. Eleme only get the advantage in "food-related" brand image (while Meituan focuses on speed) and higher unit salary for deliveryman
- Given the condition of the competitive market, Eleme's all-around weakness in scale and funding (compared to Meituan) leads to the recommendation that we expand new business in the mid-to-high-end market, in favour of an attempt to differentiate ELeme and win the competition.
- Considering the main equity for Eleme is the service, the new business should aim at the mid-to-high-end market with an optimised service, and deepen the brand image on eating.



SERVICE RESEARCH

To answer the question "How can delivery (company) provide services that enhance food& eating experience? ", This chapter will look into the delivery service from the service on the market (standard & customized) to see possible service forms.

After that, PO (Project Owner) will look at the current service of Eleme in more detail by interviewing the deliveryman, to know the current stage better for innovation.



Standard delivery service

There are two types of delivery:
Standardized and customized. The standard delivery like Eleme offers a solution to get numbers of food from place A to B on time. On the consumer side, users could only get the ordering system and the packaged delivery food according to their requests, but this standardization can help Eleme run about 5 million orders per day(Alibaba, 2022).

This standard delivery service is supported by multiple systems as Figure 3.2 shows. On the deliveryman side, there are training, rating and salary systems for deliverymen, while restaurants incorporate financial and order management systems to run the standard delivery service. The fast running of all these systems ensures a large daily transaction volume.



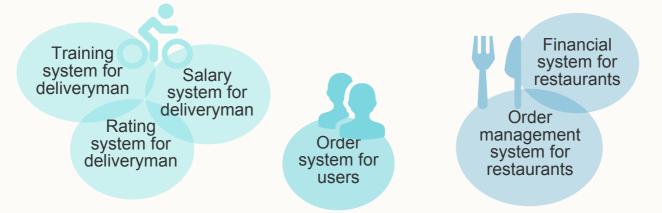


Figure 3.2: Systems to support the standard delivery service

Customized delivery service

The other type of service, which is very customized, always appears in a high-end restaurant or during lock-down. On the customer side, it offers more than food but also services like setting the table, according to the specific customer needs.

This customized delivery service is restaurant-based and does not require complex systems to support. The communication between consumers and restaurants is direct and always does not involve third parties.

Haidilao Hotpot (China)









Set the table

Plate the food

Boil the ingredient

Fantacy face show

Haidilao Hotpot offers at-home services, which include setting the table, plating the food, boiling the ingredient, and performing an at-home fantasy face show, to offer a fine dining experience at home.

Firadis (Japan)









Chef & waitress at home

Serve the food

Cook at home

Clean the kitchen

Firadis offers a home-chef experience, which brings food and people to your home, Cook in the kitchen so that customers can eat the meal fresh.

Hanno Restaurant (Netherland)









Emails attaching Snack for the movie/music list movie

Board games

Themed meal with

During lock-down, Hanno restaurant offers themed set meals (themes are such as Indonesia, Chinese and Thailand) for delivery, this theme also applies to the music/movie list via emails, as well as the board games. All these attachments are with the themed meal, to offer a more cultural eating experience before, during and after the meal.

Standard vs. Customized

Standard Service



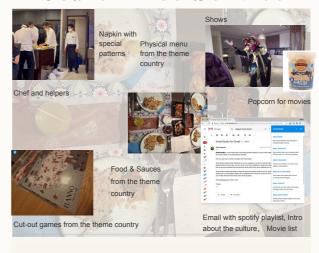
The goal is to take the food from place A to B on time

Does not require service skills

The market is big with "mass production"

The experience of eating is unremarkable

Customized Service



The goal is to offer an advanced food experience at home

The service provider needs to be trained and have certain styles

The market is niche

The experience of eating is much better

Figure 3.4: What standard& customized service offers to the consumers

Being the opposite type, both services have their strength and weakness. The standard service is suitable in mass production while it does not give an optimized consumer experience. At the same time, the customized service could increase consumers' satisfaction (Ding, 2016), offering a better experience but may only have a niche market due to its limited scale.

To solve the problem of homogenized services, Eleme can learn from both types of services. In other words, Combining both strengths (mass production + better experience) can be the opportunity for Eleme to innovate.

Deliverymen Interview

To understand Eleme's delivery system better, I also interviewed deliverymen from Eleme, to see how the service provider interacts with the system now, and gain more insights into the delivery system.

As PO(Project Owner) is unable to interview off-line due to the physical long distance with Eleme deliveryman, the interview goes online. There are two requirements for the deliveryman interviewee:1) Have delivery experience for longer than 3 months, to make sure the interviewee understands the delivery procedure so that PO can get sufficient information. 2) Being social-media active so that PO can reach them online.

Based on these requirements, PO found four deliverymen of Eleme who are willing to take the interview. Appendix 3.1 shows the material supporting the whole process, including the interview template, video screenshots and note clusters.

Research question: How do deliverymen provide their service?

The purpose of this study is to understand the current service from the deliveryman's perspective, what is the context, procedure and pain points currently, in order to know the delivery system better (for insights), and make a service blueprint.

There are three themes in my interview:

- Context of delivery
- Delivery process
- Perception of the delivery system and task

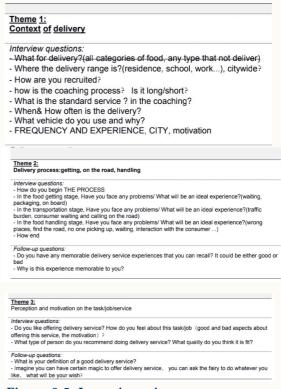


Figure 3.5: Interview pictures

Deliverymen Interview

"I was a restaurant waiter before covid, (During covid I have to be a deliveryman but) I am still in this dining industry and have those service skills"

Male age 25 1 yrs experience work 5days/ week

"I am afraid of customer 'dislikes' because I will be fined (from salary)."

"I am in debt, so like the way that hard work can quickly pay off in this industry."

Female age 32 1 yrs experience work everyday

Male age 30
2 yrs experience work 5days/ week

Male age 32
1 yrs experience work everyday

Male age 32
1 yrs experience work everyday

Deliverymen Interview

Key Insights



Some deliverymen have other skills like serving the table(being a waitress before), playing the violin.etc



Deliverymen are very money-driven. At the same time, their current salary = commission * order numbers - punishment. There are seldom tips.



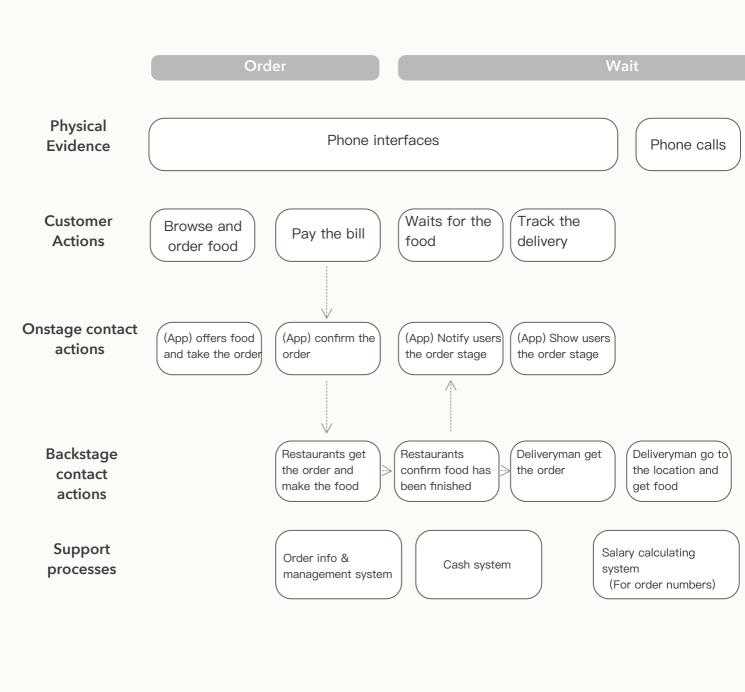
The salary punishment is from the rating system on the customer side, the deliveryman's service is under certain quality control.

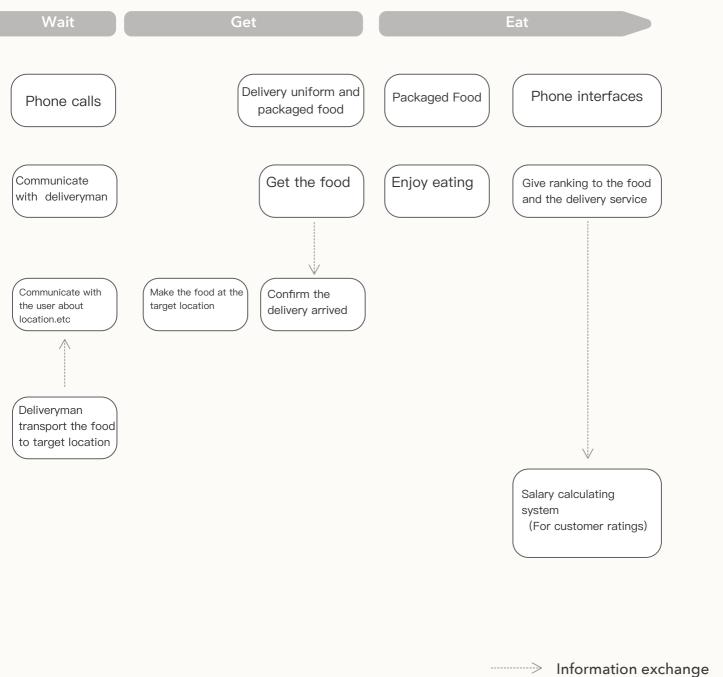


As service providers, they are always not well educated, and currently, they not have structured training for delivery service.

Information exchange

Eleme's service system



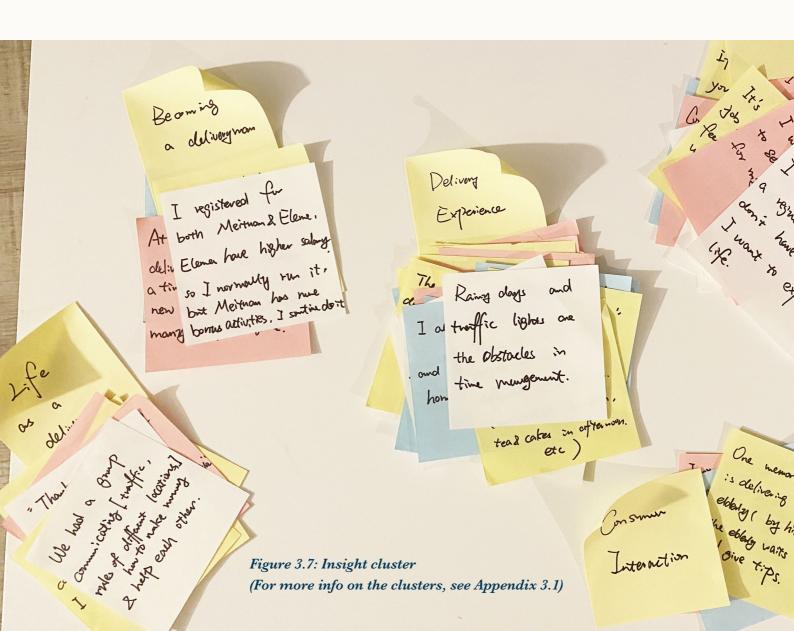


Conclusion

There are standard and customized services on the market, while standard focus on quantity and customization focuses on quality. The customized service is one solution for a better experience. However, implementing customized services in Eleme's system remains a challenge.

Eleme now has a very standardized service, which is supported by a user app, deliveryman app, and restaurant app. Behind lies the ordering management system, cash system, salary calculating system. etc.

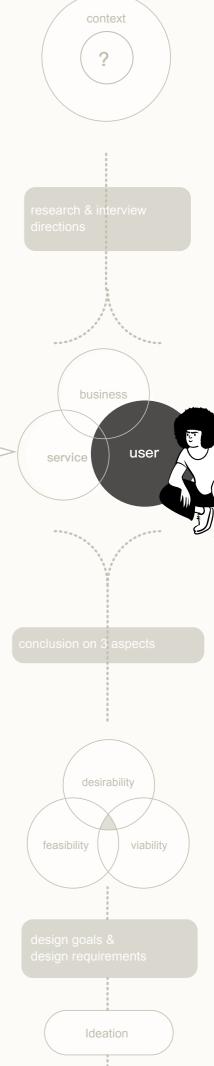
Deliverymen are money-driven, their salary now depends on order numbers and punishment of bad feedbacks, also it is not common for tips. At the same time, deliverymen are always low educated, but some of them have certain skills (like serving) that could help with eating experience.





USER RESEARCH

To answer the question "How can delivery (company) provide services that enhance food& eating experience? ", This chapter interviews 7 users to understand the user context. This chapter concludes with four personas and their user goals.



User Interview Setup

To emphasize users and get to know the scenarios for eating, I did in-depth interviews with users.

There are 4 requirements when I do the interview:

- 1) The interviewee should age 18-31
- 2) The interviewee should have used Eleme's service in developed cities

These requirements are summarized

- 3) Balanced male-to-female ratio in total
- 4) Diversity in living conditions is preferred (eg. working, studying, holiday, with parents, with partners, living alone...)

based on the research and project goals:
1) From the report by Eleme (2020),
people ageing 18-31 are the main users
eating delivery food. Besides, young
people are always the early adopters of
innovation. Therefore, people in this age
group are the most ideal group for my
interview. 2) Context research shows that
the first step of Eleme's innovation should
take place in developed cities. 3) & 4) are
based on the research goal to get an

overall picture of the user experience.

The main research question for this interview is "How do users perceive the interaction in delivery service?". The purpose of this study is to understand the context from a user's perspective, and contribute to my understanding of personas, scenarios& Journey maps, what is the motivation and pain points currently from the user's perspective.

The interview is divided into three parts: scenario, experience, and perceptions. It takes around one hour.

Figure 4.1: Interview Template picture

Checklist for start - Sign an informed consent - Audio-record the interview - Take a picture Introductory script Wei, student at TUD, Graduation Interview purpose: Get to know the context of receiving delivery food from Eleme The interviewee is selected as the user with Eleme Assure anonymity and confidentiality, explain the interviewee that he/she may withdraw from the interview at any point (and make sure that the informed consent form is signed) Explain that there are no right or wrong answers, you're interested in his/her opinions and personal experiences Explain that he/she is free to interrupt at any time Ask permission to record Reminder: Do not mention anything about what you expect to find ent at TUD. Graduation Theme 1: Scenario of using (from the order of places - time - people) - Looking(memorizing) the delivery orders, where is your destinatio - Could you rank these destinations in a frequency order? - When do these orders happen? - Who are you ordering or eating with in each scene? - Could you describe these context of different scenes? Follow-up auestions Theme 2: Delivery experience Interview questions: - In the ordering stage, Have you face any problems/ What will be an ideal experience?(choosing In the ordering stage, trave you doe any problems/ What will be an ideal experience?(waiting, knowing the location, calling, greeting, dressing, going to the door) In the eating stage, especially when you open the package, Have you face any problems/ What will be an ideal experience?(soup splitting, hard to open) Do you have any memorable delivery food experiences that you can recall? It could be either good or Theme 3: Perception and the outcome Interview questions - Imagine there is a magic about delivery food, that means you can imagine the service out from your imagination, and embed this service to your life. What will your favorable experience be' - And explain why your wish goes like that? Follow-up questions: - Do you have any other comments on the delivery service topic? Checklist for closure (possibly) Giving a brief concluding summary (possibly) Checking with the interviewee whether you missed important topics If necessary, diffusing the tension that has built up during the interviewe Informing the interviewee | will blur the face and make it anonymous Thanking the interviewee List of generic probes (optional) Alonal couple) party, lazy in cooking (residential area) Work meal (office buildings)

The whole process, including full template, interview photos and note clusters can be shown in Appendix 4.1

Schools (universities)

User Interview

"When hosting home parties, I would choose a restaurant, inviting all friends to order online. I only need to check out and pick up food"

"I order delivery food for my kid when she goes to school without meal"

"I always order on my way home at the subway" "During lockdown, I ordered delivery food to celebrate anniversary with my girlfriend"



Female	Male	Female	Male	Male	Female	Female
age 22	age 25	age 25	age 25	age 27	age 20	age 30
Student	Student	Internships	Office Worker	Office Worker	Student	Housewife
3 times/week	2 times/ week	nearly everyday	3 times/week	5 times/week	nearly everyday	2 times/ week

Figure 4.2: Illustration of interviewees

Personas

Based on the user interviews and the literature on delivery food experiencers, four personas are created for further design. Those user types are differentiated based on the motivation for ordering food, and each of them has very different eating scenarios.



Convenience Pursuer

People who want to make their life easier by delivery food



Ritual Seeker

People who seek for a certain fine eating experience



Cyber Noob

People whose delivery food are ordered by others because of their inability



Activity Organizer

People who order delivery food to make up their party

For each persona, journeys are made to better empathize and get to know the scenario of the eating experience.

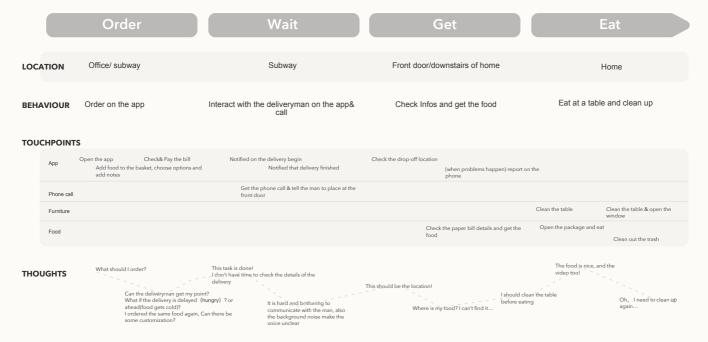
Convenience Pursuer

People who want to make their life easier by delivery food



Bill is 21 yrs, he is a busy office worker with KPI and mortgage burden, he lives alone and often orders dinners on weekdays and lunch+dinner on weekends. Bill doesn't like cooking and he prefers to stay at home.

This journey is a typical weekday dinner order. Bill ordered the food on the subway home, and tell the delivery man to leave the food downstairs. He can eat the food as soon as possible(does not need to wait while hungry), and doesn't need to interact much with the man(answer the ring. etc).



Conclusion

- Convenience pursuer want a decent quality of food but does not have much time to compare and choose.
- Convenience pursuers always order and eats delivery food in their gap time during daily routine.

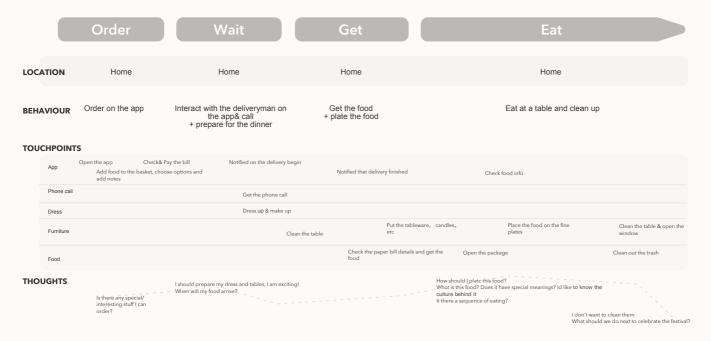
Ritual Seeker

People who seek for a certain fine eating experience



Amy is 23 yrs, She wants a quality life. She always eats out at festivals, This time during covid, when Amy could not eat out, she ordered fine delivery food and dress up for the sense of ritual.

Besides, Amy thinks fine dining could be a present sent to her loved ones, so she will also appreciate it as a gift for her friends or families. She would dress up and decorate the home for this dinner.



Conclusion

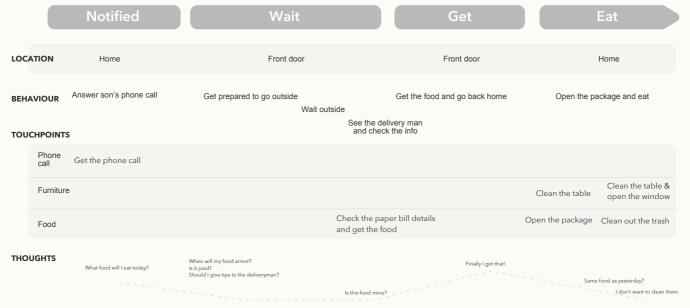
- Ritual Seeker would prepare himself for the meal; and would have other activities after the meal
- Ritual Seeker cares about social, aesthetics and intellectual aspects of the dining experience

Cyber Noob

People whose delivery food are ordered by others because of their inability



George is 63 yrs. He lives alone cause his son works in another city. He can take care of himself but can not cook well, nor can he use his phone well. Therefore, his son orders delivery food for him every day. But George does not have direct contact with the deliveryman, so he always gets prepared and waits outside, or phones his son for the delivery. Besides, his son also asked the housekeeper of this flat to take care of George when he faces problems with his meal.



Conclusion

- Cyber noob can take care of himself, but always need help from others with the delivery meal.
- That help is from other stakeholders (orderer, eater, helper of the noob, deliveryman), making up the complex context and poor communication.

Activity Organizer

People who order delivery food to make up their party



Joy is 28yrs old. She loves home parties because she can feel the privacy and freedom while having fun with friends. However, she does not like cooking, so she ordered delivery food for groups. Her wish is that the food could arrive at the right amount and time, and tastes not bad so that it will not ruin her party plan.



Conclusion

- The end goal for the activity organizer is to run a successful activity
- To run the activity, the organizer needs to get appropriate food, plan the game and clean the room.etc

Conclusion

Though people in real life have mixed motivations, the user interview showed that there are four typical user types and scenarios. Their need is explained in the details below:



Convenience Pursuer

need a way to make eating efficient

so that he can get food effortlessly to

make his busy life easier



Ritual Seeker

need a way to be taken care thoroughly

so that he can have a good social or

cultural experience



Cyber Noob

need a way to get the food easily

so that he can also enjoy the delivery

service



Activity Organizer

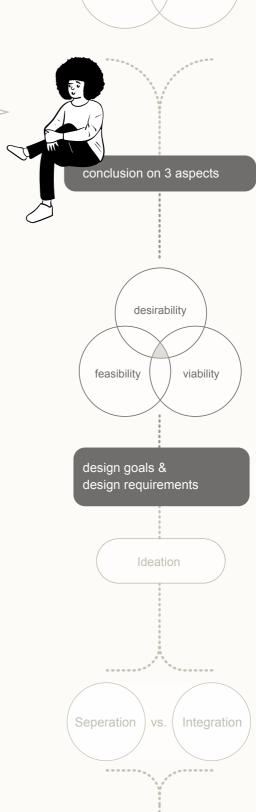
need a way to take the food part easy

so that he can run the activity smoothly

business service user

DEFINE THE DESIGN

Based on the conclusion of former research, this chapter aims to define the design goal and requirements by analyzing the statement and reframing the goal.



Initial Problem statement

HMW help Eleme innovate in customer experience to differentiate himself in the market and make money?

- How can 4 different types of users have a satisfactory experience?
- As a service provider, How can we drive, teach and manage deliverymen to offer a better experience?
- How can Eleme innovate in the mid-to-high-end market with an optimised service, to stand out in the OFD competition?

Reframe the problem

Based on the existing personas and journeys, design (sub)problems for each persona are restated after analysing "Why-How" laddering(See Appendix 5.1). The aim of this restatement is to have a specific, optimistic, ambitious, relevant and simple guideline for developing further solutions, and Why-How structure can help define the right challenge from both an abstract level and specific perspective.



🔏 Ritual Seeker

How might we help 'ritual seeker' have a satisfying experience?



How might we help 'ritual seeker' have a satisfying social & cultural experience?

social: positive interactions between eaters (behavioural dimension) eg. talking, sharing the food

cultural: cognitive thoughts about the food (intellectual dimension)



Activity Organizer

How might we help 'activity organiser' run the event smoothly?



How could we use food delivery to reduce the workload of an activity organizer?

workload: all the steps to organise a party



Convenience Pursuer

How might we help 'convenience pursuer' eat effortlessly?



How can we help 'convenience pursuer' eat effortlessly with high efficiency, while not compromising on food?

high efficiency: effortless on ordering and address finding& on time

not compromising: decent quality



Cyber Noob

How might we help every stakeholder on board for Cyber Noob?



How to support 'cyber noob' to be assisted by all the helpers in the scenario effortlessly?

all the helpers: include the orderer, the deliveryman and the assistant

Final problem statement

HMW help Eleme innovate service in different customer experiences to differentiate itself in the market and make money?

- How might we help 'ritual seeker' have a satisfying social & cultural experience?
- How could we use food delivery to reduce the workload of an activity organizer?
- How can we help 'convenience pursuer' eat effortlessly with high efficiency, while not compromising on food?
- How to support 'cyber noob' to be assisted by all the helpers in the scenario effortlessly?
- How can we embed those experience solutions in the delivery system?

(Experience Side)

- As a service provider, How can we drive, teach and manage deliverymen to offer a better experience?

(Deliveryman Side)

- How can Eleme use the smallest budget in the current system to innovate and get the most foreseeable profit?

(Company Side)

Design Requirements

A design solution model needs to cover the three aspects of desirability, feasibility, and viability. This model is originated from IDEO (Admin, 2017), following the model can help design interventions to solve problems and support long-term implementation. Therefore, I use this model as the framework for my design requirements.

Desirability

- Fit in user's functional or hedonistic needs in their scenarios
- Enhance the experience aspects for all groups of users
- Increase deliveryman's professional competitiveness and happiness in the long run

Viability

- Gain long-term financial or brand value for Eleme
- Estimated ROI (return on investment) can persuade managers to adopt the innovation plan

Feasibility

- Fit in Eleme's tech support functions if the output is needed
- Feasible in implementation and adaption from the company side.
- Deliverymen can understand, learn from and apply the design output.

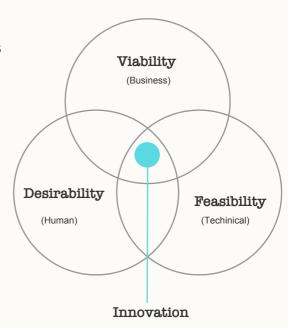
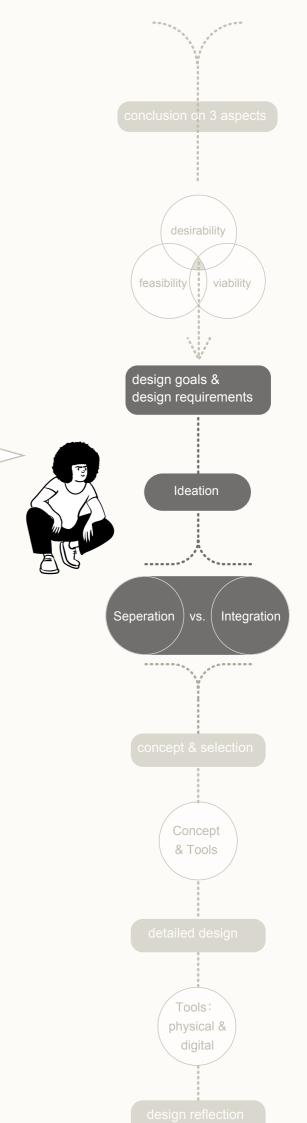


Figure 5.1: Design model from IDEO

DEVELOP THE SOLUTION

By the final problem statement, This chapter goes through the ideation and comparison process, to develop the solution.



Ideation Process

Set up

The ideation is led by the project owner, inviting other three participants who all have a design background to join. The reason for this set-up is because interactions between designers can help innovate more ideas and the educational background also make the design more reliable.

Step 1: Brainstorm

The brainstorming session is organized based on the four persona problem statements in "Reframe the problem". The reason to choose those statements separately is that more specific problems can direct the innovation frame, so that the solutions could better solve the target user's specific problems. During this session, participants created, evaluated, voted and discussed the ideas together.

Step 2: Selection Matrix

To further evaluate post-it ideas and lies ground for potential concepts, a matrix is used to evaluate the ideas. This matrix, as the right graph shows, uses the axis of "impact" and "effort". This is because the concept should meet the needs of feasibility and viability, and also be potential for the company to make profits. After clustering the ideas into this matrix, the ones in the "high impact - low effort" area are chosen.

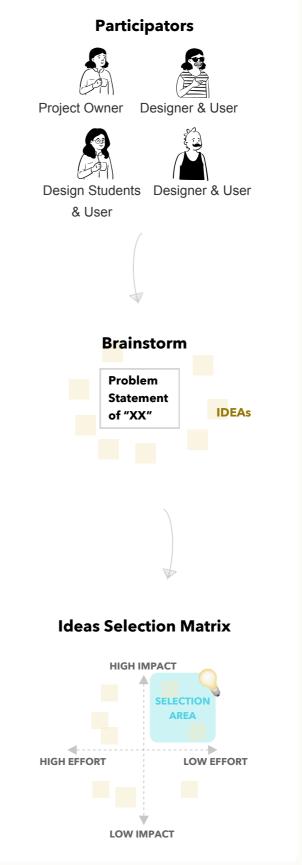


Figure 6.1: Graph of ideation process

Ideas & Select

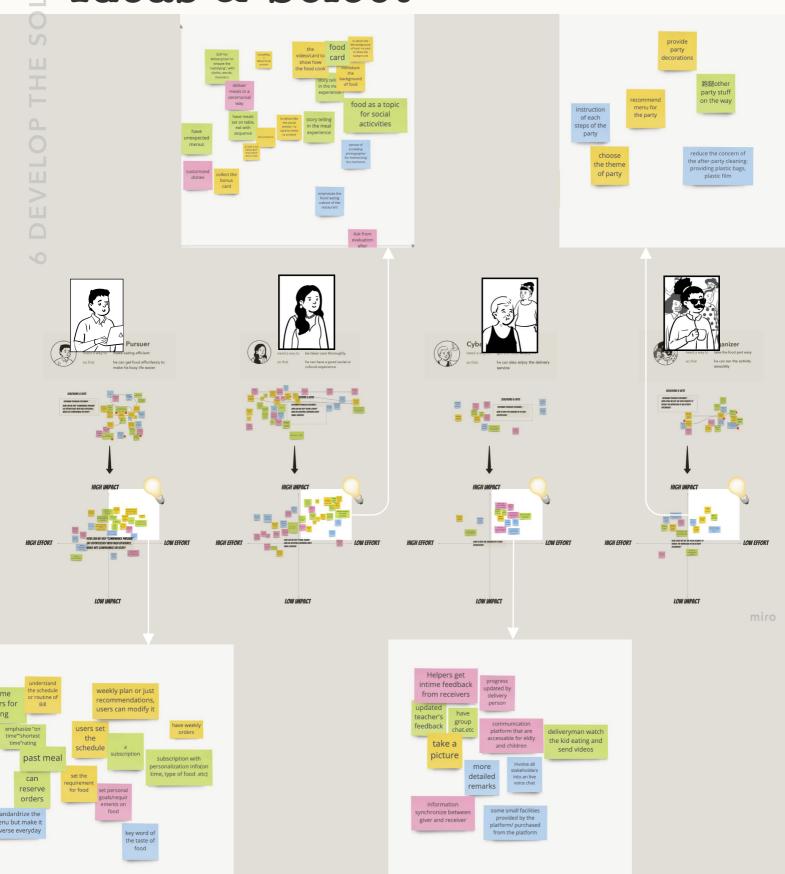


Figure 6.2: ideation session & post-its selection

Direction: Separated solution

Based on the "Low effort- High effective" post-its, solution concepts are developed. In Appendix 6.1, sketches during this process are shown. Those solutions aim to provide target personas with advanced experience according to their needs and pain points.

One direction to go with this concept is to offer solutions separately. This means after deciding the persona hierarchy, key Personas would have customized solutions, while less important personas would be neglected. This means the design could not include all user groups.

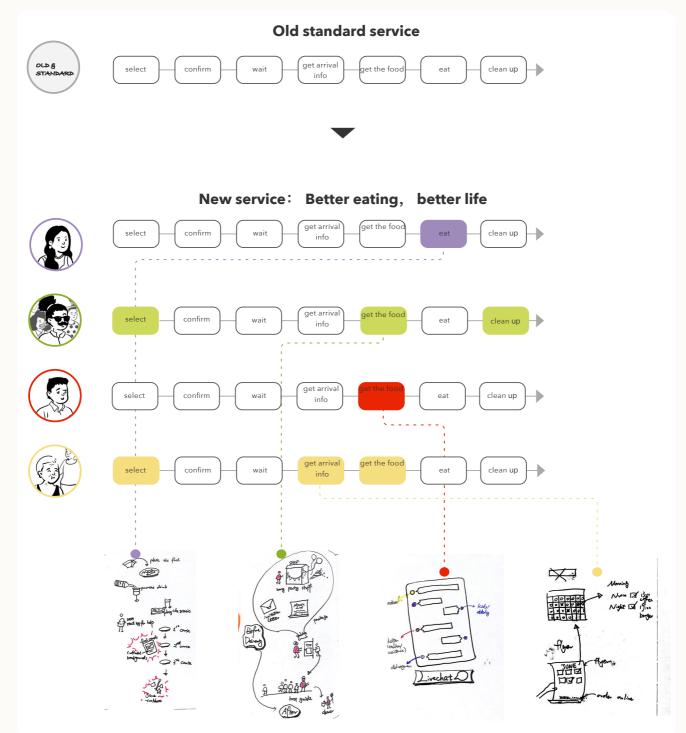


Figure 6.3: Graph explaining separated direction

Direction: Integrated solution

Another direction is to integrate solutions by means of tools. Those tools are another means to help solve experience problems. However, in this direction, each Persona does not have a fully customized routine. Instead, they share the same toolkits but have different ways of utilizing them.

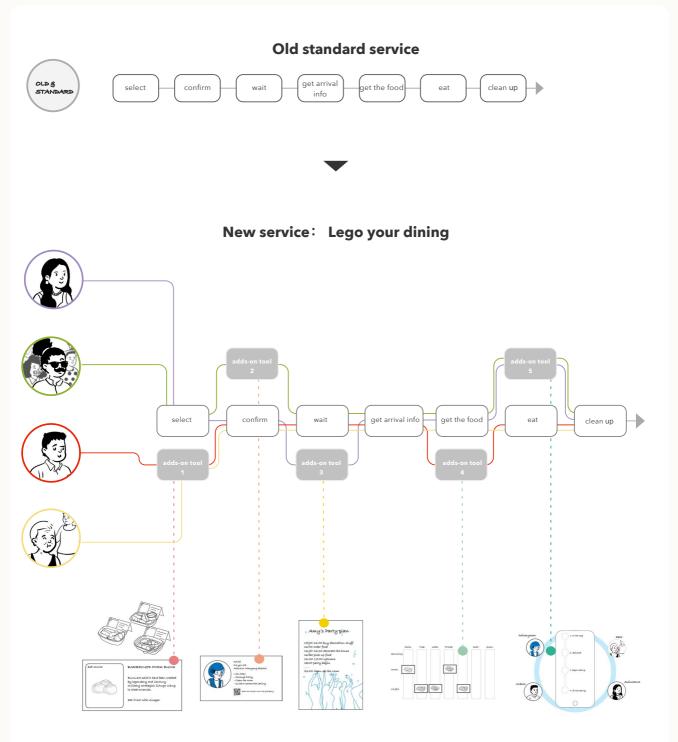


Figure 6.4: Graph explaining integrated direction

Separation vs. Integration

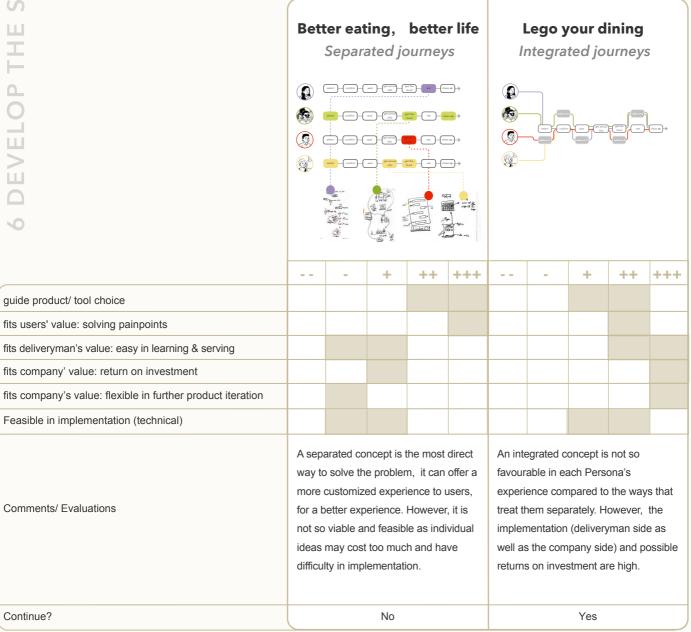


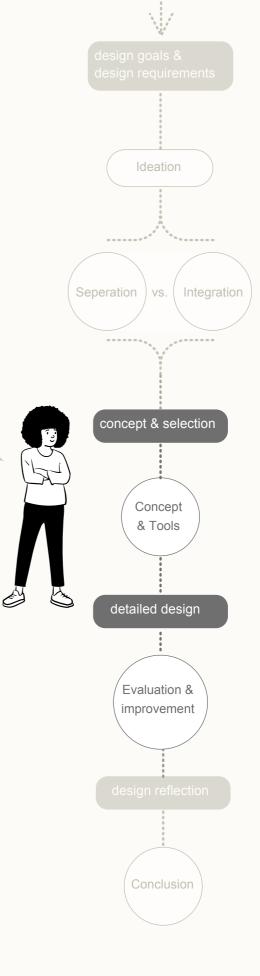
Figure 6.5: Comparison of two directions

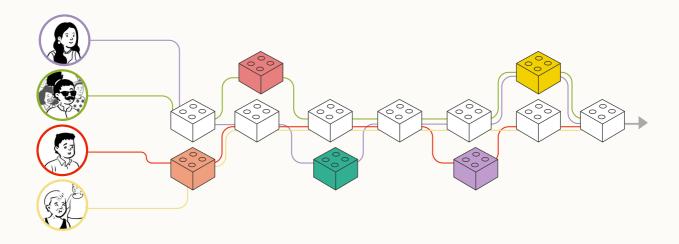
Two directions: 'Better eating, better life'(seperated experience soluions) and 'Lego my dining' (integrated exprience solutions) are compared for further concept development. I used the framework in "design requirements" set before and make the criteria specific for evaluation. The result is shown in the above figure.

From the Analysis, we can conclude that there will always be a sacrifice between a more advanced(customized) experience and its easy implementation. The aim of this project is to have the design embedded in the current delivery system with a satisfactory dining experience and high efficiency, not fantasy eating events. Therefore, the concept 'Lego my dining' is chosen.

DELIVER THE DESIGN

This chapter will introduce the design by detailing the concept and the use of the tools. An evaluation of this design would also be conducted. Based on the evaluation, there will also be design improvements.





LEGO MY DINING

"Lego my dining" is a concept that believes experience pieces can be modular, like legos, and different combinations of these modules can create the ideal experience between customization and standardization. The concept includes five tools but the toolkit has a significant potential to grow, iterate and implement.

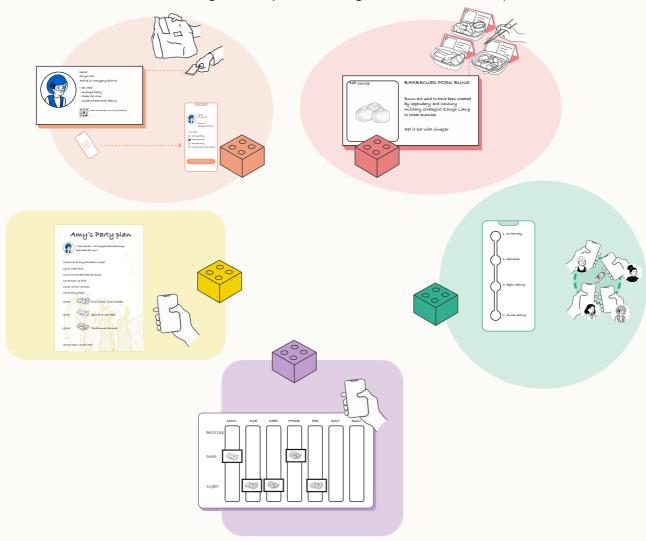


Figure 7.1: Concept

Using the tool

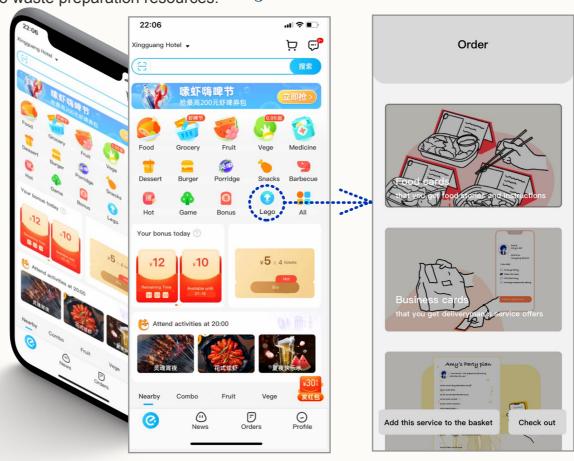
In the concept "Lego my dining", each modular "lego" is the metaphor of a tool. The final design deliverable, tools, combines physical and digital means. The physical means include cards and posters, while digital deliverables are a set of user interfaces on both the consumer side and the deliveryman side.

The way to use these tools is by ordering through the App. On the consumer side, As Chapter 2 introduced, people always use food delivery services via the app Eleme. Hence, the beginning point of using the tool is on the App. On the homepage, there is an icon, that serves as the entrance of the added service. The reason to use an icon is that an innovation program like "Lego my dining" should not influence the app layout much at the beginning to waste preparation resources.

Clicking on the icon, users are guided to a page where all the tools are listed. People can order the tools, add those tools to the basket and check it out together with the meal.

On the next page, each tool would be introduced.

Figure 7.2: Access to use the tool



Food cards

Tools_ Consumer side

Food cards are physical cards that explain the stories behind the course. It aims at advancing social and cultural experiences. Users can get to know the cultural background of the food and that knowledge could trigger social interactions among the eaters.



Possible users:

Ritual Seeker &

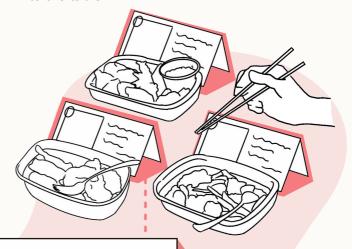


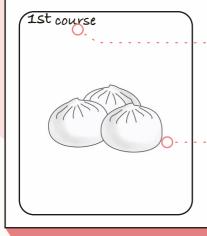
Party Organizer

while eating Phase:

How:

After ordering this tool, consumers will get physical cards that are attached to the delivery dish boxes. On the cards, there are introductions about the course and tips to eat. Cards can be placed next to the dishes. With this tool, people can know the background of the food and possibly brings discussion topics to the table.





BARBECUED PORK BUNSO-

Buns are said to have been created by legendary 3rd Century military strategist Zhuge Liang to cheat enemies.

Eat it hot with vinegar () --

Food Name

- Eating Sequence

Food history

· · Food Picture

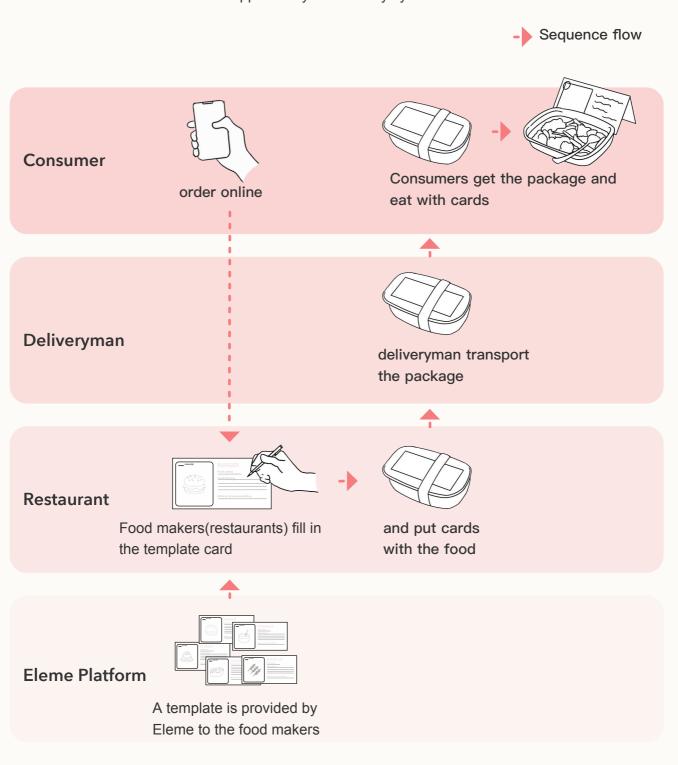
· · Eating instructions

Figure 7.3: Tool- Food cards

Food cards

Tools_System side

This chart shows how this tool is supported by the delivery system.



Business card+ platform

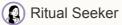
Tools_ Consumer side

The business card is a physical card for the user that showcases the deliveryman's basic info and contact details. Its aim is to link users with deliverymen for more service opportunities. As every deliveryman needs to upload what extra service he can offer, the App could therefore be the platform for those added services.

Scenario:



Potential users:





Rarty Organizer

Phase: pre-order; while leaving the house

How:

While getting the food package, consumers would get a business card that presents a brief intro about the deliveryman and a QR code. If the user got interested in the extra service this deliveryman can offer, scanning the code can see the detailed page and make an order.



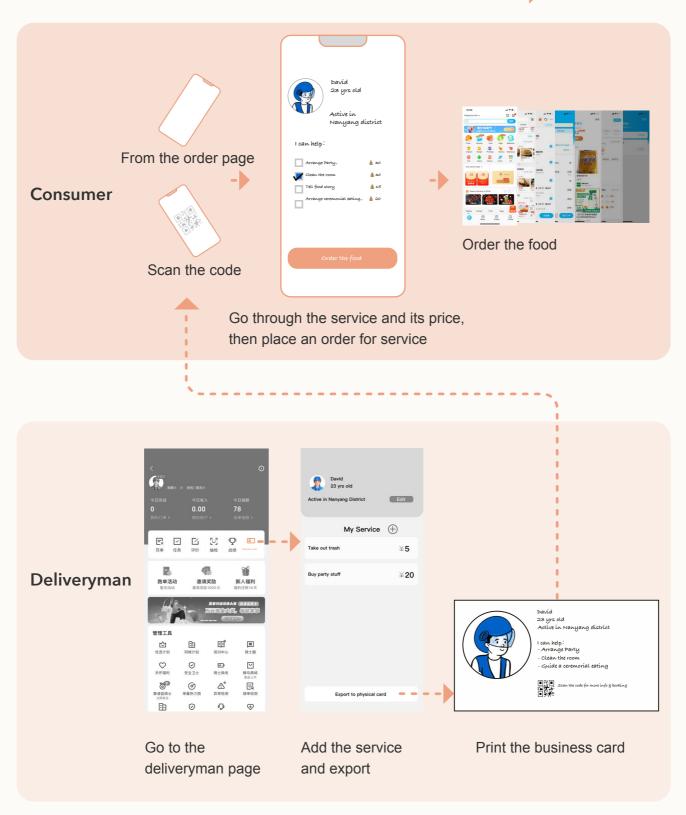
Figure 7.4: Tool-Business card & Platform

Business card

Tools_System side

This chart shows how this tool is supported by the delivery system.

Sequence flow



Activity plan

Tools_ Consumer side

The activity plan is assistance for users. It aims to help users organize a satisfying dining experience effortlessly. The user would input some basic info before ordering and the app can tell you how to organize the event.

Scenario:



Potential users:



Phase: before ordering

How:

By filling in a template for the activity (info like theme/festival, time, place, number of people. etc) on the app, the system can propose an activity plan, which can also be shared and exported for print.



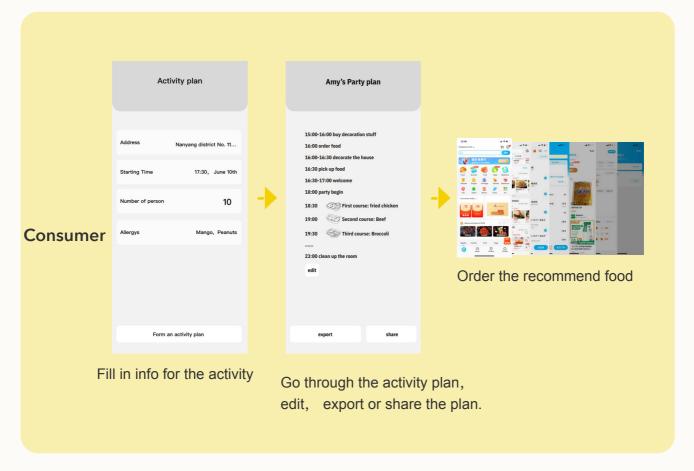
Figure 7.5: Tool- Preparation menu

Activity plan

Tools_System side

This chart shows how this tool is supported by the delivery system.



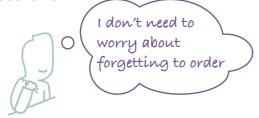


Subscription

Tools_ Consumer side

A subscription is a set of pre-order services that help arrange a week (or month)'s meal with suggestions. It aims to simplify the repeat ordering actions and help manage daily nutrition. Users can plan and preoder meals according to the calendar with diet suggestions.

Scenario:



Potential users:



Convenience Pursuer &

Cyber Noob



Phase: while ordering the food

How:

Users can pre-order and have meal subscriptions weekly or monthly. Consumers need to choose the location, time and food in advance. The food choice is under nutrition suggestions that ensure the meal quality. There are also reminders before each planned order for users to confirm.

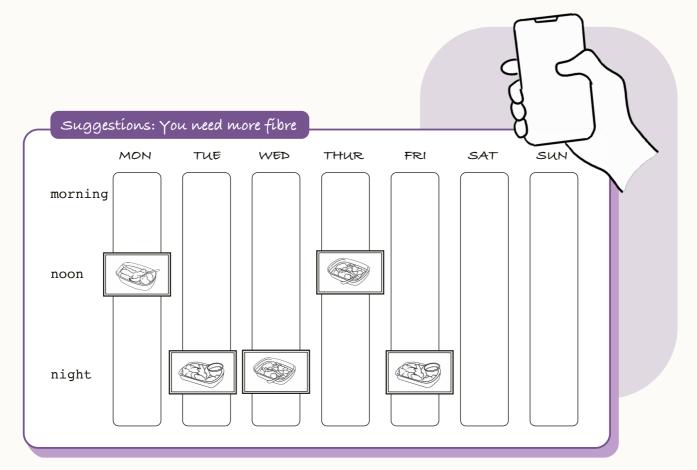


Figure 7.6: Tool-Subscription

Subscription

Tools_System side

This chart shows how this tool is supported by the delivery system.

 Sequence flow Order, pay & confirm the food Consumer Select date and time Get the food Confirm the order Get the order and Deliveryman deliver Store the data Send confirmation **Eleme Platform** Send orders to the on the cloud when appointment deliveryman in the time is approaching scheduled time

Tracking pal

Tools_ Consumer side

Tracking pal is a digital service with the function of sharing the order status. This tool aims at sharing the order status with others by simple links so that other people, more than the orderer, can know the status of food for pick up.

Scenario:



Potential users:

Convenience Pursuer &

Cyber Noob

Party Organizer

Phase: waiting

How:

On the tracking page, the orderer can share the tracking info with the eater, assistant or other people so that the updates on the food can be known effortlessly to other stakeholders.

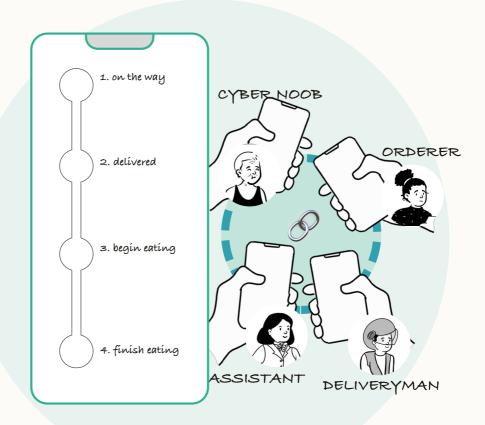


Figure 7.7: Tool- Tracking pal

Tracking pal

Tools_System side

This chart shows how this tool is supported by the delivery system.

Sequence flow Tracking pal Consumer - Orderer Order, pay & confirm Track & Share the order links via what's app, airdrop.etc Other people (Noob/assistant in Cyber noob scenario; Pick up the food Helpers to hold the part in Activity organizer scenario; Roommates/colleagues in Convenience pursuer scenario) Get real-time updates about the food, be able to communicate with the deliveryman & noticed when it

Consumers

To have an overall analysis of the design and evaluation, the final test is divided into three parts: testing with the consumer, deliveryman and Eleme colleague. While consumer testing aims at evaluating desirability, testing with deliverymen could get to know the service feasibility and interviewing colleagues can evaluate the design from the business aspect.

The goal of user testing is to evaluate whether the tool can promote the target user experience and have some useful insights for further iteration. The research auestion is:

To what extent does the tool benefit the user experience of different types of users?

As testing a single tool one by one can not make a whole journey map, this evaluation is tested by different user needs. In other words, this test will differentiate user needs and personas, to test whether the experience with those needs are enhanced.

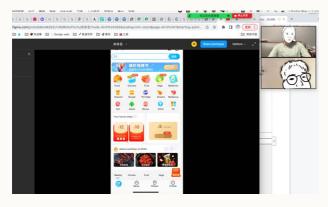


Figure 7.8: Evaluating with users

The participants:

20-35 yrs old, Eleme users

The material:

The prototype; The evaluation form

The set-up:

The test was one-to-one meetings (3 face to face, 2 via zoom). Firstly, the participants would have a short introduction and would be asked about their past scenarios of using the delivery service(10 minutes), PO would conclude what type of personas they are. Based on the persona, participants would get the task and perform the task using the prototype. There are different tasks for each persona:



Convenience pursuer: pre-order the whole week's meal



Ritual seeker: arrange an at-home anniversary



Cyber noob: order the food for the elderly/children



Activity organizer: arrange an at-home anniversary

This evaluation aims at 2-4 samples per persona, and PO would observe and take notes of the whole process (each task takes around 10 minutes to finish) . After doing the task, the participants were interviewed about their experience of doing the task, and PO would ask questions based on the form on Appendix 7.1.

Consumers

From participants' past experience and needs in ordering delivery food, PO collected 11 examples for the four personas(4 examples for convenience pursuer, 3 examples for ritual seeker, 2 examples for cyber noob, 2 examples for activity organizer). When doing the task, the use of the tools are documented, like Figure 7.9 shows.

From this chart of usage, we can see that each persona will use different tools, and each tool will be used by different people groups.

Meanwhile, though in the same persona, different examples have different usage of the tools, for example, 2 "activity organizer" uses different combinations of the tools: [food cards+ activity plan] and [business card+ activity plan].

This proves that with those tools, each participant's eating journey and experience is quite different, the design has already broken the "standardization".

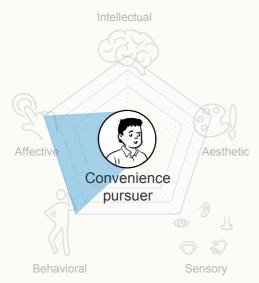
	Convenience pursuer	Ritual seeker	Cyber noob	Activity organizer
	4 examples	3 examples	2 examples	2 examples
food cards		3		1
business card + platform	2	2		1
activity plan		3		2
subscription	4		1	
tracking pal			2	

Figure 7.9: Usage of the tools for every persona

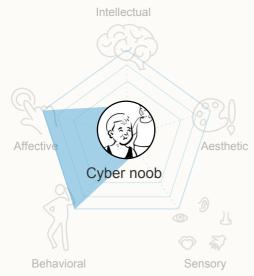
Consumers

Based on the literature on dimensions in food experience in Chapter 1, as well as the evaluation answers in part 3 of Appendix 7.1, I formed the evaluation graph on the experience like Figure 7.10 shows.

From this graph, we can see that the use of the tools enhanced the experience of all personas from different aspects.



the tools evoke relief emotion, and Convenience pursuer don't need to order all the time



the tools evoke relief emotion for all the stakeholders involved, and Cyber noob could have an easier way of eating delivery food.



The info on food cards not only gives users intellectual benefits but also evokes conversations between eaters, thus bringing happy emotions. The design of the cards also influences aesthetics and sensory aspects.



Compared to the ritual seeker, organizers also enjoy the benefits of behavioural convenience.

Consumers

Conclusion

- The tool could benefit the experience of all user groups (convenience pursuer, ritual seeker, cyber noob and activity organizer) from different aspects and solve their problem
- the tool works as modules in this experience enhancement. One tool is used for different types of needs, while different users have different ways of using the tools. Activity plan and service platforms are always used in combination in testing.
- At first, most participants shows confusion about the tool. After PO's introduction, most of them can understand and use the tool smoothly.
- The tool "tracking pal" could be embedded into more devices (for the use for the elderly and children "noob"), like children's calling watches (the most popular communication tool for children in China)

Quotes

There are different ways of using the tools:

"When the food has special meanings between me & my friend, or in special scenarios like a farewell, I want to write the food cards on my own."

"Activity plan is nice, it could be combined with the business card service, that booking a deliveryman for the activity"

"I would like a search function (for the extra service page) so that I can order the service based on my needs."

Some tools (service platform) has potential for growth:

"I would like to have my 'own' deliveryman (by business card function), who knows my target location (so that I will not be distributed by the way-finding calls"

Some tools do not mean much:

"for tracking pal, The share function could not really solve the needs, because teachers (assistance) have too many children to take care, and my children uses watch not phones to contact (to avoid phone addiction)"

Minor differentiation in scenarios influence the functionality of the tool:

"Using a subscription does not save my time, as I am busy but do have time for ordering.

Also, this (ordering at a certain time) has become part of my daily life"

"I think a subscription could really solve my problem because I forget food issue all the time"

Deliveryman

The goal of testing with the deliveryman is to evaluate the feasibility of the deliveryman: whether they are capable to understand and willing to use this tool.

The material:

The prototype; The evaluation form for deliveryman(Appendix 7.2)

The set-up:

The test was one-to-one meetings(face to face). Firstly, the participants would have a short introduction about the test and its aim, then had a glance at the prototypes. After that, Stories of how to serve the consumer with the tools would be told (according to the service blueprint). After around 20 minutes of explaining the service, the participants would be interviewed under the guidance of the evaluation form. Participants were asked to answer the questions listed on the form and provide further explanations, which lasts around 15 minutes (be recorded). PO would take the notes, analyze and sort the information later on.

I interviewed 3 deliverymen, and all of them understand all the tools. While they do not very much believe the design could come into real life, they are willing to use the tool as it does not require much effort to make more money. But they are worried about the time management for extra service, as being late for other orders will make their salary decrease.

Quotes

"extra service is a good idea, some of my colleagues know the piano and other things. It can change job competitiveness if you serve well. But it needs education, you can begin with young deliverymen (who are more energetic and money-driven)"

"When I see restaurants making the meal in rush hour, they are always very busy, so'food cards' need to be planed ahead by restaurants"

"I don't know what extra service I can offer (to clients)"

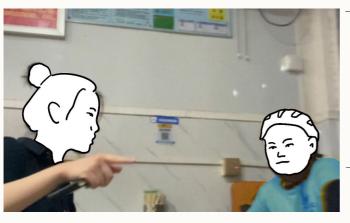


Figure 7.11: Evaluating with deliveryman

Conclusion -

- Deliverymen can understand the tool and are happy & willing to use it if they are paid.
- Deliverymen have no idea what extra service they could offer that will meet user needs.

Eleme's colleague

The goal of testing with Eleme's colleague is to receive feedback from other aspects, especially the business part.

The material:

The storyboard(Appendix 7.3); The prototype;

The set-up:

The test was a one-to-one meeting(via zoom), and is quite informal compared to the other two evaluations. This is because unstructured talks could bring about discussions in design so that PO could have more feedback. Firstly, the participants would have a short introduction to the project. After that, with the help of a typical storyboard(Appendix 7.3), The participants will get to know the background of the project and its use scenario. Later on, the tool kits, as well as the service blueprint, are introduced to help participants get to know the project from a systematic level. In the end, Reviews and feedbacks would be collected with the help of the evaluation form.

Because of my limited approach with Eleme colleagues, I only interviewed 1person, who is working as an experience designer on Eleme. Though he takes charge of the app from the restaurant side, he knows the business context and could give PO more realistic feedback.

By introducing the design and the system, **the** main takeaway is:

- for "Food cards", the design could consider the card's after-life more.
- for "Business cards", the computer ordersending system needs time to process, so users could only book in advance.
- the "Activity plan" and "subscription" has potential business value.
- It is feasible to embed those tools in the system, the ROI looks positive.

Evaluation Conclusion

- The design overall can run smoothly on the consumer, deliveryman and company sides, there is no severe problem in conducting the design.
- For the desirability, the design can help enhance different user groups' experiences to a different extent, the different use of the tools can influence this optimization degree. Secondly, the toolkit is viable as two out of five tools have great business potential, but not all the tools can bring financial value to the company. Regarding the feasibility, all deliverymen respond that they can deliver the designed service while recommending starting the innovation from young colleagues.

Design Improvements

Feedback

r ccapaci

Food card

 Having too many physical cards can be a waste and does not have much meaning

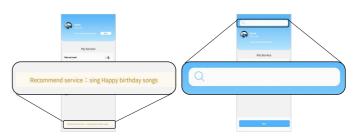
Improvement



Collect the bonus for its after-life and business consideration

Business card + platform

- Users could not directly order the target service he want
- The deliveryman do not know what extra service he could sell



Have some guides in uploading the service for deliveryman

Add a "search" function for consumers

Activity plan

There are more things that could add to this tool, to make it more convenient.



Could be combined with the deliveryman's preorder, and could have themes

Tracking pal

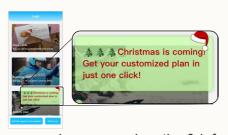
 The children do not have phones, they only have a communication watch



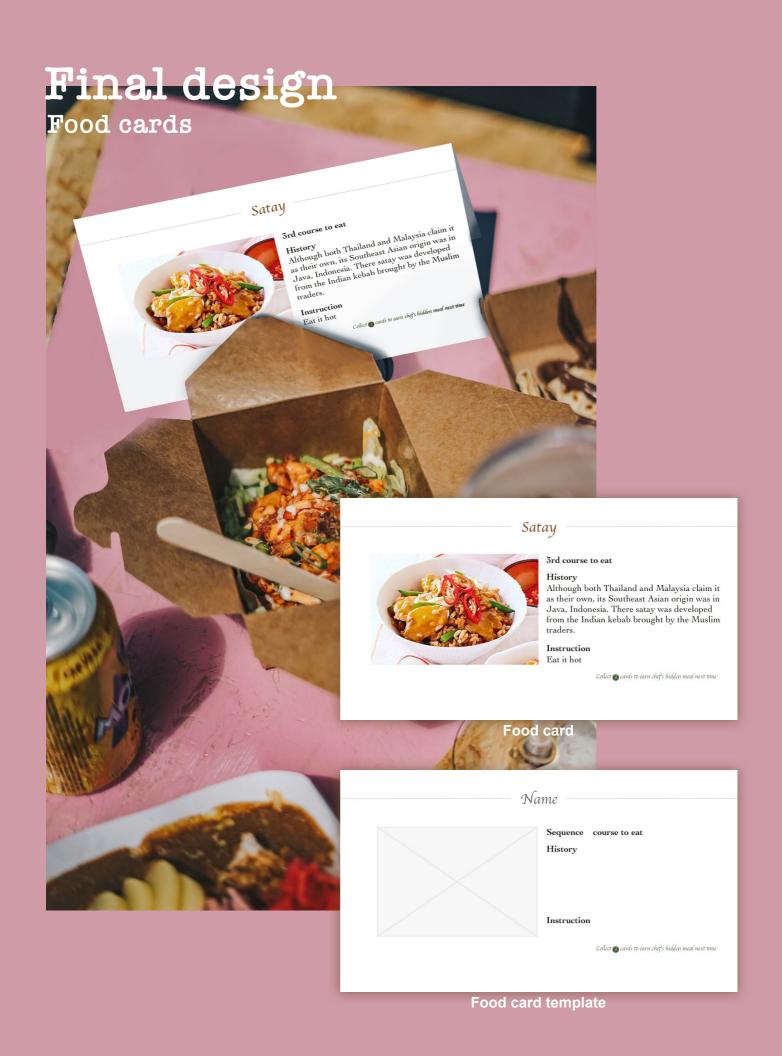
Embed more devices, especially device for children and the elderly.

Access page for tools

 It is a bit hard to understand the tools at first when looking at the tools page

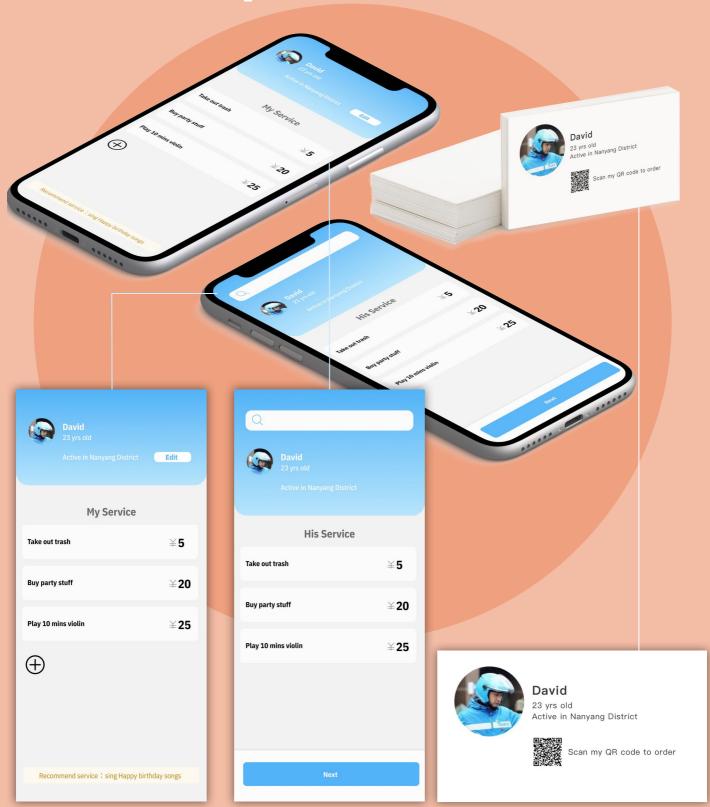


There needs more explanation& info



Final design

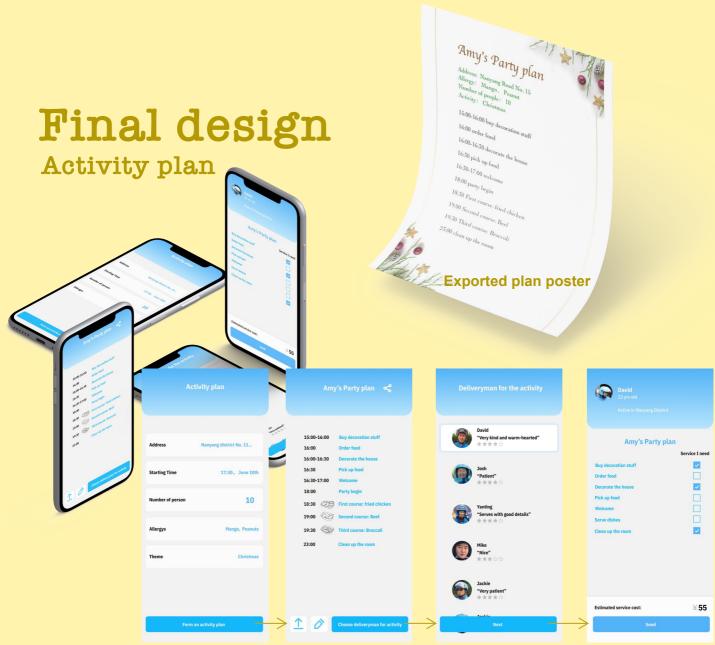
Business card + platform



Interface on the deliveryman side

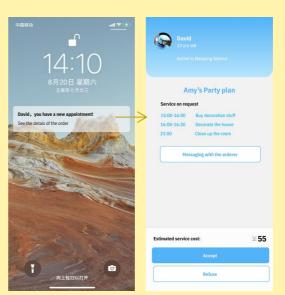
Interface on the consumer side

Business card



Interfaces on the consumer side





Interfaces on the deliveryman side

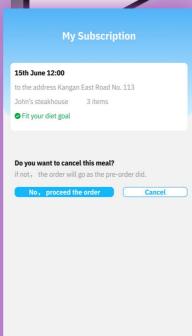
Final design

Subscription









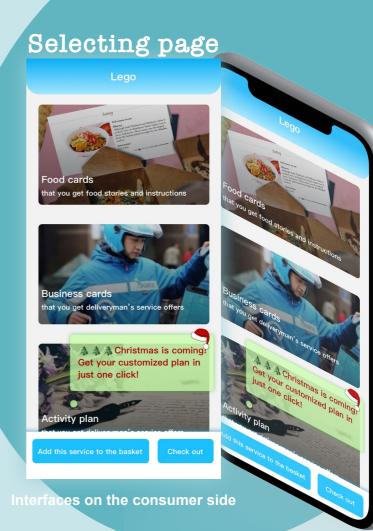




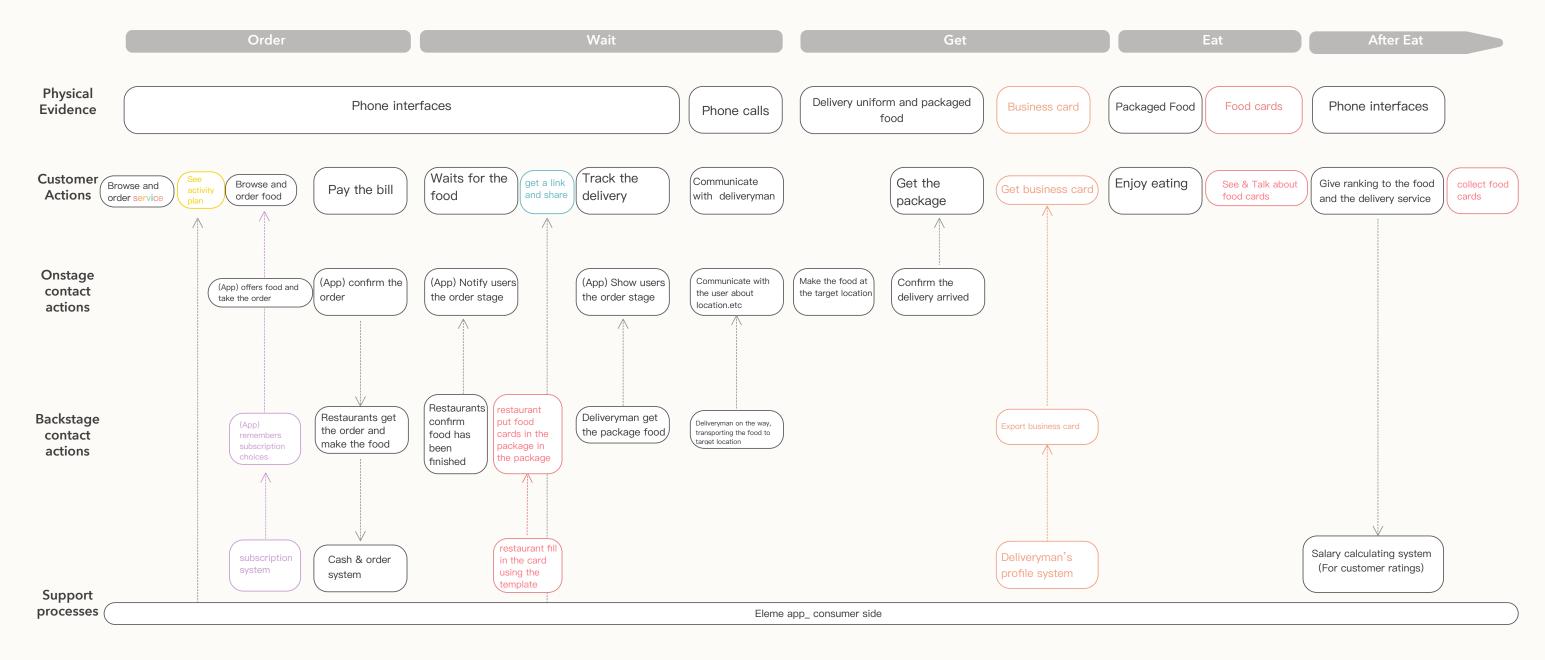


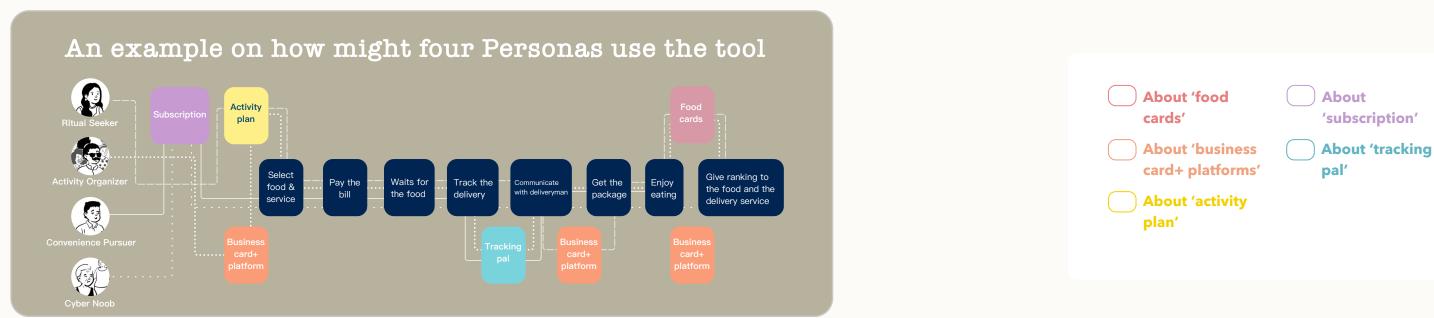
Interfaces on the consumer side

Final design



Service Blueprint





Design Implementation

REACH

ACT

ENGAGE

Horizon 1

Horizon 1

Horizon 1

Goal

Awareness & Preparation

Attraction & Collection

Expansion & Iteration

Let users know the existence of "Lego"

Let users use "Lego" to see its value

Let old users retain at "Lego" while attract more new users

Prepare apps, delivery & restaurant resources

Collect & Analyze usage data

Use the analysis and other feedbacks to iterate the tools

Activity

- Advertise"Lego" on Eleme homepage, billboards, social media, etc.
- Program the product front-end and back-end
- Select and educate the deliveryman
- Let restaurants know & get the food card template
- Hold promotion activities for "Lego" (free trial, bonus, coupon.etc)
- Collect data such as customer feedback
- Give vouchers for the next order
- Hold activities like refer to the friends and get cash back
- Iterate the product based on the collected data

Resource

- Financial resource
- Deliveryman resources
- Ads resources
- Financial resource
- Financial resource

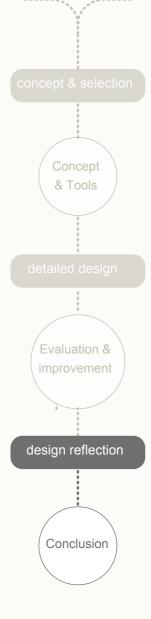
Partnership

- Ads Company
- Restaurants
- Media company
- Independent Influencers
- Education reource for deliveryman
- data analysis company
- User satisfaction survey company
- data analysis company
- User satisfaction survey company

CONCLUSION & RECOMMENDATION

This chapter will conclude the design and showcase some reflections





Conclusion

Looking back at this project, after the literature study, I did interviews and analysis on service, users and company, getting to know the context and insights for the project. I also gained four personas to describe the scenarios of eating delivery food at this stage. Then I framed and iterated on the design goal and requirements. With the information above, I ideated, compared and chose the design direction and concept. At the design stage, I went in the direction of "integrated" solutions, aiming at modular tools for design. The name " Lego my dining" is given to describe the legolike modules that could be blocks to build up user experience. Five tools, either digital or physical, are selected from the ideation stage and are deepened. After that, I evaluated the consumer, deliveryman and Eleme employee to test desirability, viability and feasibility. With adaptions and a plan to embed this design, It is time to conclude this project.

Firstly, regarding the research question: "How can delivery (company) provide services that enhance food& eating experience?"

This question is disassembled into three parts: users(experience), service and company. For users& experience, there is a framework on experience aspects, delivery meals and their consumer typology. Together with the insights gained from user interviews, this question is answered by four personas. For the service part, I analyzed standard service as well as customized service, leading to the comparison of those two. The service research could analyze possible means for experience enhancement. For the company, Eleme, the business model, market and competitor are studied to see the value and the viability of the solution.

Conclusion

Regarding the problem of the design:

"How might we help Eleme innovate service in different customer experiences to differentiate itself in the market and make money?" I developed solutions and selected promising ones to meet the feasibility, viability and desirability of the design.

In the end, for the design requirements, As Figure 8.1 shows, the green part below represents my remark on meeting the requirement. One requirement unsure is that due to the project length and resources, I could not really get feedback from Eleme's managers about the adoption of the innovation plan.

Desirability

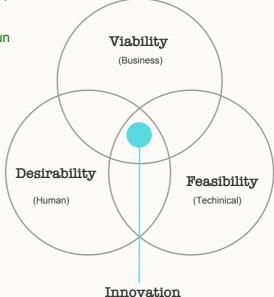
- Fit in user's functional or hedonistic needs in their scenarios
- Enhance the experience aspects for all groups of users
- Increase deliveryman's professional competitiveness and happiness in the long run

Viability

- Gain long-term financial or brand value for Eleme
- Estimated ROI (return on investment) can persuade managers to adopt the innovation plan

Feasibility

- Fit in Eleme's tech support functions if the output is needed
- Feasible in implementation and adaption from the company side.
- Deliverymen can understand, learn from and apply the design output.



The colour green represent this requirement is achieved in the evaluation

Figure 8.1: Meeting the design requirement

Limitation

There is some limitation in this project.

Firstly, The number of participants is small due to the time limit and lack of more company resources. The total number of participants is below 25 (including deliverymen, consumers, and supervisors). For a research project that focuses on qualitative data, I didn't find many problems. However, for quantitative studies that aim at statistics rather than insights, I need much more participants for this popular app.

Secondly, these tools currently only work in Chinese urban areas, which is very limited. This project lies in the Chinese context where delivery food has become a new normal for life, so there are many life scenarios in eating delivery food. For example, one interviewee said ordering a whole week's delivery meal is a common phenomenon on working days. Hence, the design of the "subscription" tool is promising to be functional in this context. However, if the eating context is changed into an area where delivery is much less common, the tool "subscription" can be meaningless. The generalization of this toolkit needs adaption, based on the different eating contexts of other countries.



Reflection

This project is my first attempt to try service design, and overall, I think I achieved the learning goal of trying service design and diving into the scenarios. Service design involves not only the experience but other stakeholders in the design. In this project, I kept this in mind throughout the whole journey from problem finding to the design solution. The scenarios are researched based on the interviews and ethnological literature, and the analysis of those materials contributes to the four personas that guide the design.

However, I also faced some problems, like combining the literature insights and interview conclusions in the middle stage, and could not brainstorm many solutions.

I think the tools in the end have theoretically solved the problems although there are no actual tests done for evaluation because of the time limit and unavailability of the company. I am personally satisfied with this result because I have achieved my ambition and had a great time designing with food experience. Last but not least, I want to deliver my sincere appreciation to Rick Schifferstein and Pinar Cankurtaran, who supervised me academically and mentally through this long journey. With this help, I become more confident in the design and less fear of writing.



Reference

Admin, I. U. (2017). How to Prototype a New Business. IDEO U. https://www.ideou.com/blogs/inspiration/how-to-prototype-a-new-business

Annual report of Alibaba in 2020. (2020, August). Alibaba group.

Annual report of Alibaba in 2022. (2022, August). Alibaba group.

Das, J. (2018). Consumer perception towards "online food ordering and delivery services": an empirical study. Journal of Management (JOM), 5(5), 155-163.

Ding, Y., & Keh, H. T. (2016). A reexamination of service standardization versus customization from the consumer's perspective. Journal of Services Marketing.

Edwards, J. S. A. (2000). Food service/catering restaurant and institutional perspectives of the meal. Dimensions of the meal. The science, culture, business and art of eating, 223-44.

Kim, H. S. (2006). Using hedonic and utilitarian shopping motivations to profile inner city consumers. Journal of Shopping Center Research, 13(1), 57-79.

Marquis, M. (2005). Exploring convenience orientation as a food motivation for college students living in residence halls. International journal of consumer studies, 29(1), 55-63.

Nejati, M., & Moghaddam, P. P. (2013). The effect of hedonic and utilitarian values on satisfaction and behavioural intentions for dining in fast-casual restaurants in Iran. British Food Journal.

Novita, D., Husna, N., Azwari, A., Gunawan, A., Trianti, D., & Bella, C. (2020). Behavioural Intention Toward Online Food Delivery (OFD) Services (the study of consumer behaviour during pandemic Covid-19). Jurnal Manajemen Dan Bisnis (Performa), 17(1), 52-59.

Qiu, J. L. (2022). Humanizing the posthuman: Digital labour, food delivery, and openings for the new human during the pandemic. International Journal of Cultural Studies, 13678779211066608.

Schifferstein, H. N. (2020). Designing eating and drinking experiences. Handbook of Eating and Drinking: Interdisciplinary Perspectives, 1529-1555.

Sipa, M. (2017). Innovation as a key factors of small business competition. European Journal of Sustainable Development, 6(1), 344-344.

Statista. 2022. Online food delivery in China | Statista. [online] Available at: https://www.statista.com/study/82521/ online-food-delivery-in-china/> [Accessed 21 August 2022].

Van Boeijen, A., Daalhuizen, J., & Zijlstra, J. (2020). Delft Design Guide: Perspectives, models, approaches, methods. BIS Publishers.

Zhang, Y., Deng, X., & Wang, M. (2021). Analysis of Food Delivery Market in China: A Case Study of Meituan.

Zhao, X., Lin, W., Cen, S., Zhu, H., Duan, M., Li, W., & Zhu, S. (2021). The online-to-offline (O2O) food delivery industry and its recent development in China. European Journal of Clinical Nutrition, 75(2), 232-237.

Project brief-Final





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	Zhu	Your master programme (only select the options that apply to you):
initials	W given name Wei	IDE master(s): IPD DfI SPD
student number		
street & no.		
zipcode & city		
country		
phone		
email		

SUPERVISORY TEAM **

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

** chair	Richard	
** mentor	Pi	
2 nd mentor		
	organisation:	
	city:	country:
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.

IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30

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Project brief

Procedural Checks - IDE Master Graduation	TU Delft
APPROVAL PROJECT BRIEF	
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Revised Project Brief (Final)

TUDelft

Personal Project Brief - IDE Master Graduation

Designing a toolbox for food delivery

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

01 - 03 - 2022

04 - 07 - 2022

end date

INTRODUCTION **

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...

Eating delivery food has been an increasingly important food scenario that involves multiple stakeholders, as the OFD (Online Food Delivery) is boosting(Wang et al., 2021). According to a survey by Statista (2022), revenue in the OFD industry is expected to grow 9.9% annually from 2019 to 2023, with market size of US\$53.786 billion. In this increasing industry, there are multiple stakeholders such as restaurants(from start-ups to giants), platforms(like Uber eats, Eleme) and users. A business model among these stakeholders is shown in Figure 1. While restaurants and platforms want to make continuous profits, users want the target food and service.

There are problems and opportunities in this market. The first problem is market homogeneity, referring not only to the price but also to market position and delivery service and so on (Wang et al, 2021). This trend makes customers hard to choose among options, while platforms and restaurants can not differentiate themselves. At the same time, Consumer's choices rely not only on the food itself but the overall experience around it(Mort and Rose, 2004). Considering the problem of homogeneity, an advanced delivery service could be an opportunity to influence customers' choices and help platforms/restaurants gain a competitive advantage in this market.

To help restaurants or platforms stand out from the fierce competition, and in the meantime contribute to a better consumer experience, this project aims to advance delivery service by service tools for deliverymen and consumers. By using this toolbox, a platform could offer customized service to users in a business-viable way. This approach will dive into a set of typical eating scenarios, such as weekend orders for singles, dating orders for couples, and working lunch orders for groups. By defining each scenario, the role of delivery food will be identified, then I will set the design space for the service and integrate multiple design solutions into a toolbox& framework.

This project is a research project but uses a Chinese food delivery company represented by Eleme as the project party. The reason why I choose this company for context in the research is that China owns the largest market in this industry, so it offers a more complex context in stakeholder involvement and eating scenarios to help scope down my project in the beginning. As this is a research project, the design output aims to be generalized.

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IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30

Page 3 of 7

Initials & Name <u>W</u>

Zhu

Student number 5025885

Project brief

TUDelft

Personal Project Brief - IDE Master Graduation

introduction (continued): space for images

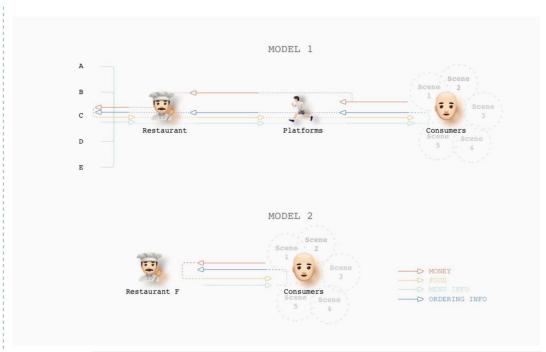


image / figure 1: Business model of the delivery food

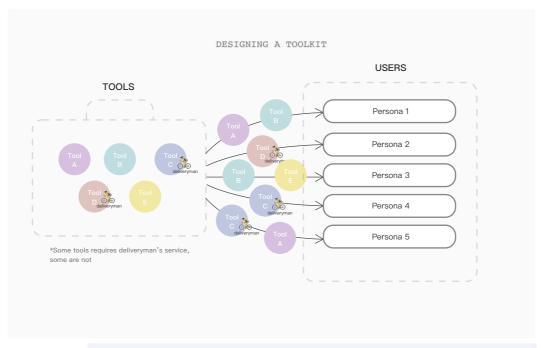


image / figure 2: ___Target Design output in the business model

Page 4 of 7

W Zhu 5025885

Designing a framework with a toolbox for food delivery

Project brief

TuDelft

Personal Project Brief - IDE Master Graduation

PROBLEM DEFINITION **

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 3C EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

The problem this project wants to solve is mixed, consisting of three aspects: service limitation, business challenges and low salary. Firstly, the simple food transferring service nowadays can not supply user experience well, especially in some memorable scenarios like a festival celebration. Secondly, Eleme can not get many advantages in the competitive and homogenized market, there is little differentiation among platforms. Thirdly, the deliveryman in this system does not have a stable and decent reward.

The solution for this combined problem is a service toolbox for delivery providers (deliverymen) and the users (consumers) . The guided use of this toolbox can imagine the future eating experience and fit into the business model. The key issue in this project is defining and designing for future delivery scenarios.

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 am going to create a toolbox for service providers(deliverymen) & receivers (consumers) that help continuously advance users' eating experience. This solution will be based on each type of eating scenario and can fit into the business model smoothly.

The users for the design solution are providers(deliverymen) & receivers (consumers). Currently, most delivery service only focuses on moving the food from place A to B, with the goal of "getting the food on time". This fixed goal is one of the lying reasons for the proposed mixed problem. I am proposing a solution that looks into the eating experience. This experience depends not only on the providers (deliveryman) but also on receivers (consumers), so both groups are the user groups for the final design deliverable.

As a graduation project, I will deliver a set of tools in this solution space. With the final aim to enhance the eating experience, the tool could be either digital or physical. The requirements for this tool are meeting desirability, feasibility and viability, so other aspects like the business part will also be considered.

IDE TU Delft - E8	SA Depar	tment /// Graduation project brief & study overviev	v /// 2018-01 v30		Page 5 of 7
Initials & Name	W	Zhu	Student number	5025885	
Title of Project	Design	ing a framework with a toolbox for food de	liverv		

Project brief

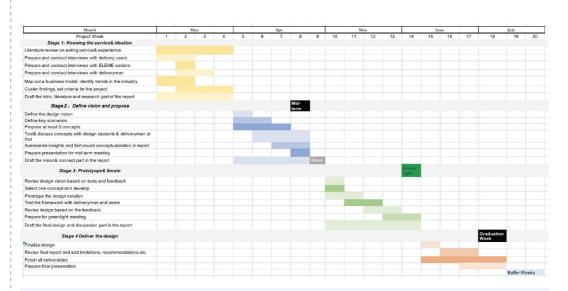
TUDelft

Personal Project Brief - IDE Master Graduation

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.





Expect one elective course that I may take in Q3 to get all ECs, I plan the full semester with a week's holiday to finish this graduation project.

There are four stages in this project. The first stage is knowing the context and ideate, I will do a literature study on related key topics like "what influence eating experience of delivery food", interview stakeholders(users, platforms, deliverymen) to gain experience and business insights and moderate the business model. I will also set up assessment criteria for my project as the guideline for the whole project. The next phase is to define the design vision and propose, I will use the insights from the first stage and brainstorm concepts, discuss the concepts with design students and teachers, also gain feedback from deliverymen and platforms. The third stage is prototype and iterate. The conclusion in the last phase will be used to determine the chosen design concept and I will develop this idea further. The approach for this development is testing with deliverymen and users. This test will also lie in the criteria I formulated in the first stage. The final phase is delivering the design, where I will finalize the design and add details like more text explanation for the framework, and wrap up the report with discussions, limitations and recommendations. In the end, I will finish all deliverables and make the presentation.

I also planned a two-week buffer zone for the schedule. Ideally, I will finish this project at the end of June. Based on my past experience doing design projects, I am confident in finishing them on time.

IDE TU Delft - E&	SA Department /// Graduation project brief & study overview	/// 2018-01 v30	Page 6 of 7
Initials & Name	W Zhu	Student number 5025885	
Title of Project	Designing a framework with a toolbox for food del	very	

Project brief

TUDelft

Personal Project Brief - IDE Master Graduation

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.

My motivation comes from my experience in my internship, as well as my design ambition on eating scenarios and design for values.

During my internship in Shanghai China, when the main working lunch choice is the delivery of food, I noticed I am facing the problem of choice anxiety on the delivery of food. In the Chinese market, there are so many options and choosing it blindly will lead to an unpleasant eating experience. As a consumer, I feel there is a need to optimise this experience.

The first ambition is using the tool of "scenario", which may combine with persona or other related design means. A user scenario in this case is an important tool that describes people's lives mixing online and offline activities. With technology development, lifestyle is shaping into a method that combines virtual and physical experience. In this circumstance, focusing on the scenario is of significant importance because it combines both activities in people's lives. Although "scenario" is a basic tool that we designers use all the time, I find it difficult to say that I can use it very well in the design process. I define the excellent master of this tool as contributing to the value of the final design outcome in various ways. In this graduation project, I want to make full use of this tool to create the most fruitful design outcome.

Another ambition for this project is to explore the eating experience for life. Although food and eating is a broad topic that involves social, cultural, and biological topics, the eating experience is the thing that connects most closely to our daily lives. It can cure stress or bond people due to different scenarios of eating. I believe food has such power that it can "make my day" for dozens of people. Therefore, I want to explore the magic in that and make the design more valuable to increase people's happiness.

Thirdly, I want to attempt of trying service design. Service design is an approach more than user experience, it considers multiple stakeholders and could have create more value than focusing only on the experience. I have not used this method before and I am quite curious about trying this approach.

FINAL COMMENTS

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

Reference: Mort, G. S., & Rose, T. (2004). The effect of product type on value linkages in the means - end chain: implications for theory and method. Journal of Consumer Behaviour: An International Research Re 221-234.	view, 3(3),
Statista. 2022. Online food delivery in China Statista. [online] Available at: https://www.statista.com/study/82521/online-food-delivery-in-china/ [Accessed 21 August 2022].	
Wang, J., Shen, X., Huang, X., & Liu, Y. (2021). Influencing Factors of the Continuous Usage Intention of Consumers of Online Food Delivery Platform Based on an Information System Success Model. Psychology, 3267.	Frontiers in
DE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30 Pag	e 7 of 7

Initials & Name	W Zhu	Student number 5025885
Title of Project	Designing a framework with a toolbox for food deli	very

Project brief-Approved but needs modification



TUDelft

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



family name	Zhu 5555	Your master programme (only select the options that apply to you):
initials	W given name Wei	IDE master(s): IPD DfI SPD
student number	5025885	2 nd non-IDE master:
street & no.		individual programme: (give date of approval)
zipcode & city	Delft	honours programme: Honours Programme Master
country	Netherland	specialisation / annotation: Medisign
phone		Tech. in Sustainable Design
email		Entrepeneurship

SUPERVISORY TEAM **

** chair	Rick Schifferstein	dept. / section:	HCD/ DA
** mentor	Pinar Cankurtaran	dept. / section:	DOS/ MCR
2 nd mentor			
	organisation:		
	city:	country:	
(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.

Project brief-Approved but needs modification

Procedural Checks - IDE Master Graduation	TU Delft
APPROVAL PROJECT BRIEF To be filled in by the chair of the supervisory team.	
chair Rick Schifferstein date 01 - 03 - 2022	Rick Schiff Schiff Schiff Schiff Schiff Schiff Schiff Schiff Schiff Schifferstein - 10 Date: 2022.03.01 16:06:43 +01'000'
CHECK STUDY PROGRESS To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after The study progress will be checked for a 2nd time just before the green light meeting.	approval of the project brief by the Chair.
Master electives no. of EC accumulated in total: 21 EC	all 1st year master courses passed
Of which, taking the conditional requirements to account, can be part of the exam programme 21 EC List of electives obtained before the third	missing 1st year master courses are:
semester without approval of the BoE	
name <u>C. van der Bunt</u> date <u>07 - 03 - 2022</u>	C. van Digitally signed by C. van der Bunt Date: 2022,03.07 signature Bunt 15:33:24 +01'00'
FORMAL APPROVAL GRADUATION PROJECT To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory tear Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.	n and study the parts of the brief marked **.
the student (taking into account, if described, the	PPROVED NOT APPROVED
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? Temark: The Board of Education of E	xaminers has difficulty in fully all of this project; words like ox' seem to be mixed up. Also the lish might hamper understanding insen will contact the chair to explain comments
name Monique von Morgen date 15 - 03 - 2022	signature
IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-0	1 v30 Page 2 of 7
	1 v30 Page 2 umber 5025885

Project brief-Approved but needs modification

TuDelft

Personal Project Brief - IDE Master Graduation

Designing a framework with a toolbox for food delivery

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

01 - 03 - 2022

04 - 07 - 2022

end date

Eating delivery food has been an increasingly important eating scenario with multiple stakeholders, as the OFD (Online Food Delivery) is boosting(Wang et al., 2021). According to a survey by Statista, revenue in the OFD industry is expected to grow 9.9% annually from 2019 to 2023, with a market size of US\$53.786 billion. In this increasing industry, there are multiple stakeholders such as restaurants(from start-ups to giants), platforms(like Uber eats, Eleme) and users. A businesses model among these stakeholders is shown in Figure 1. While restaurants and platforms want to make continous profits, users want the target food and service.

There are problems and opportunities in this market. It faces the challenge of homogeneity, referring not only to the price but also market position, customer quality, delivery service and so on(Wang et al, 2021). This trend makes customers hard to choose among options, while small restaurants struggle to make profits. At the same time, Consumer's choice relies not only on the food itself but the overall experience around it(Mort and Rose, 2004). When in a serious homogeneity, an advanced delivery service could be the opportunity that determines customers' choice and help platforms/restaurants gain a competitive advantage in this market.

To help a restaurant or platforms stand out in the fierce competition, and in the meantime contribute to a better customer experience of consumers, this project aims to advance delivery service by a service framework and toolbox. By using this toolbox, a deliveryman could offer customized service to users in a business viable way. This approach will dive into a set of typical eating scenarios, such as weekend orders for singles, dating orders for couples, working lunch orders for groups. By defining each scenario, the role of delivery food will be determined, then I will set the design space for the service and synthesize multiple design solutions into a toolbox& framework.

This project is a research project but use the example of Eleme, a Chinese delivery platform giant. The reason why I choose this company for context in the research is that China owns the largest market in this industry, so it offers a more complex context in stakeholder involvement and eating scenarios to help scope down my project in the beginning. As this is a research project, the design output aims to be universal, and I will address this aspect in the report discussion.

space available for images / figures on next page

IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30

Page 3 of 7

Initials & Name W

Zhu

5555

Student number 5025885

Title of Project Designing a framework with a toolbox for food delivery

Project brief-Approved but needs modification



Personal Project Brief - IDE Master Graduation

introduction (continued): space for images

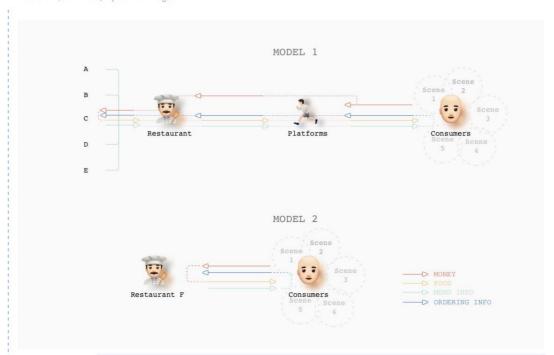


image / figure 1: Business model of the delivery food



image / figure 2: ___Target Design output in the business model

IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30 Page 4 of 7

Initials & Name W Zhu 5555 Student number 5025885

Title of Project Designing a framework with a toolbox for food delivery

Project brief-Approved but needs modification



Personal Project Brief - IDE Master Graduation

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 FC I= 20 full time weeks or 100 working days) and clearly indicate what issueds) should be addressed in this project

The problem this project want to solve is optimizing the food delivery service for an advanced eating experience, and making this deliverable fit into the OFD business model.

Service optimization is a topic of great potential. On the consumer side, the eating experience of delivery food has not been designed and guided, most of the delivery service is only about the movement of food from restaurants to customers. On the business side, OFD is a homogenized market, where lies the opportunity for service optimization. For a delivery platform or restaurant, standing out in the service can not only contribute to user experience but also brand loyalty, leading to a more competitive position to make profits.

However, optimizing this experience has costs, it requires investments in labour and products. Therefore, another constraint is to make the design fit into the current business model to help restaurants or platforms make profits.

The solution for this combined problem is a service framework and a toolbox for delivery providers (deliveryman). The guided use of this toolbox can imagine the future eating experience and fit into the business model. The key issue in this project is defining and designing for future delivery scenarios, which drives the creation of the service framework and toolbox.

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 Apporation, make sure the assignment reflects this/these.

I am going to create a framework with a toolbox for service providers(deliverymen) that help continuously advance consumers' eating experience. This solution will be based on each type of eating scenario and can fit into the business model smoothly.

The service provider(deliverymen) is the one who influences the service experience most but currently only offers the physical movement (from restaurant to the target destination). At the same time, there are neither standard education nor tools/methods teaching deliverymen how to offer an advanced service for customers efficiently. This brings to a solution that focuses on guiding deliverymen.

As a graduation project, I will deliver a framework and a toolbox in this solution space. The user is the deliverymen(service provider) but this design also considers other key stakeholders like platforms and restaurants. The deliverymen will use this framwork&toolbox to understand and run advanced delivery services for the users.

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Initials & Name	W	Zhu		5555	Student number	5025885	
Title of Project	Design	ing a framev	vork with a toolbox	for food deliver	У		

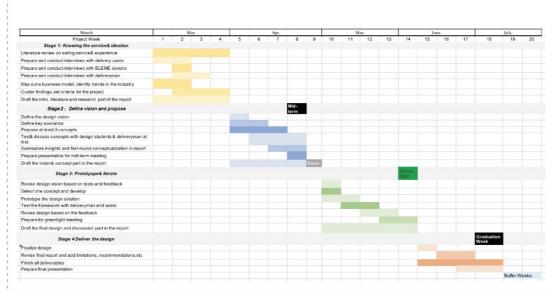
Project brief-Approved but needs modification

TUDelft

Personal Project Brief - IDE Master Graduation

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 1 - 3 - 2022 4 - 7 - 2022 end date



Expect one elective course that I may take in Q3 to get all ECs, I plan the full semester with a week's holiday to finish this graduation project.

There are four stages in this project. The first stage is knowing the context and ideate, I will do a literature study on related key topics like "what influence eating experience of delivery food", interview stakeholders(users, platforms, deliverymen) to gain experience and business insights and moderate the business model. I will also set up assessment criteria for my project as the guideline for the whole project. The next phase is to define the design vision and propose, I will use the insights from the first stage and brainstorm concepts, discuss the concepts with design students and teachers, also gain feedback from deliverymen and platforms. The third stage is prototype and iterate. The conclusion in the last phase will be used to determine the chosen design concept and I will develop this idea further. The approach for this development is testing with deliverymen and users. This test will also lie in the criteria I formulated in the first stage. The final phase is delivering the design, where I will finalize the design and add details like more text explanation for the framework, and wrap up the report with discussions, limitations and recommendations. In the end, I will finish all deliverables and make the presentation.

I also planned a two-week buffer zone for the schedule. Ideally, I will finish this project at the end of June. Based on my past experience doing design projects, I am confident in finishing them on time.

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Initials & Name	W Zhu	5555	Student number 5025885	
Title of Project	Designing a framework with a toolbox f	or food delivery		

Project brief-Approved but needs modification

TUDelft

Personal Project Brief - IDE Master Graduation

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.

My motivation comes from my experience in my internship, as well as my design ambition on eating scenarios and design for values.

In my internship in Shanghai China, when the main working lunch choice is the delivery food, I noticed I am facing the problem of choice anxiety on the delivery of food. In the Chinese market, there are so many options and choosing it blindly will lead to an unpleasant eating experience. As a consumer, I feel there is a need to optimise this experience.

The first ambition is using the tool of "scenario", which may combine with persona or other related design means. A user scenario in this case is an important tool that describes people's lives mixing online and offline activities. With the technology development, lifestyle is shaping to a method that combines virtual and physical experience. In this circumstance, focusing on the scenario is of significant importance because it combines both activities into people's living. Although "scenario" is a basic tool that we designers use all the time, I find it difficult to say that I can use it very well in the design process. I define the excellent master of this tool as contributing to the value of the final design outcome in various ways. In this graduation project, I want to make full use of this tool to create the most fruitful design outcome.

Another ambition for this project is to explore the eating experience for life. Although food and eating is a broad topic that involves social, cultural, biological topics, the eating experience is the thing that connects most closely to our daily lives. It can cure stress or bond people due to different scenarios of eating. I believe food has such power that it can "make my day" for dozens of people. Therefore, I want to explore the magic in that and make the design more valuable to increase people's happiness.

Thirdly, I want to experience toolbox design for greater value. I always fancy designing modules because this concept is balancing mass-production and customization, which evokes great design value by fitting into different contexts. This brings to my ambition for toolbox design. By defining the tool and the way to use them, I can see the potential implementation of the design output. What attracts me more is the expanding implementation, which I imagine is fitting into more possible scenarios and I will extend this part in my report discussion.

FINAL COMMENTS

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

Reference: Wang, J., Shen, X., Huang, X., & Liu, Y. (2021). Influencing Factors of the Continuous Usage Intention of Consumers of Online Food Delivery Platform Based on an Information System Success Model. Frontiers in Psychology, 3267.

Hsiao, W. C. (2020). The Brand and Growth Strategies of Online Food Delivery in Taiwan.

IDE TU Delft - E8	&SA Depai	rtment /// Grad	luation project brief & study overview	/// 2018-01 v30		Page 7 of 7
Initials & Name	W	Zhu	5555	Student number	5025885	
Title of Project	Designi	ng a framewo	ork with a toolbox for food delivery	§		

Deliveryman Interview Template

INTERVIEW GUIDE TEMPLATE Designing a framework with a toolbox for delivery food

Main research question:

How do deliveryman give the service in the overall system?

The purpose of this study is to understand the context from deliveryman's perspective, , what is the context, procedure and pain points currently, in order to make service blueprint.

Checklist for start

- Sign an informed consent
- Audio-record the interview
- Take a picture

Introductory script

- Wei, student at TUD, Graduation
- Interview purpose: Get to know the context, process and perception in offering delivery service
- Assure anonymity and confidentiality, explain the interviewee that he/she may withdraw from the interview at any point (and make sure that the informed consent form is signed)
- Explain that there are no right or wrong answers, you're interested in his/her opinions and personal experiences
- Explain that he/she is free to interrupt at any time
- Ask permission to record
- . Reminder: Do not mention anything about what you expect to find

Theme 1: Context of delivery

Interview questions:

- Where the delivery range is?(residence, school, work...), citywide?
- How are you recruited?
- how is the coaching process? Is it long/short?
- What is the standard service? in the coaching?
- When& How often is the delivery?
- What vehicle do you use and why?
- FREQUENCY AND EXPERIENCE, CITY, motivation

Follow-up questions:			

Deliveryman Interview Template

Theme 2:
Delivery process:getting, on the road, handling
Interview questions:
- How do you begin THE PROCESS
 In the food getting stage, Have you face any problems/ What will be an ideal experience?(waiting, packaging, on board)
- In the transportation stage, Have you face any problems/ What will be an ideal experience?(traffic
burden, consumer waiting and calling on the road)
 In the food handling stage, Have you face any problems/ What will be an ideal experience?(wrong places, find the road, no one picking up, waiting, interaction with the consumer)

Follow-up questions:

- How end

- Do you have any memorable delivery service experiences that you can recall? It could be either good or bad
- Why is this experience memorable to you?

Deliveryman Interview Template

<u> heme 3:</u>	
	 - 41

Perception and motivation on the task/job/service

Interview questions:

- Do you like offering delivery service? How do you feel about this task/job $(good \ and \ bad \ aspects \ about offering this service, with the user & the delivery system)$?
- What type of person do you recommend doing delivery service? What quality do you think it is fit?

Follow-up questions:

- What is your definition of a good delivery service?
- Imagine you can have certain magic to offer delivery service, you can ask the fairy to do whatever you like, what will be your wish?

Deliveryman Interview Template

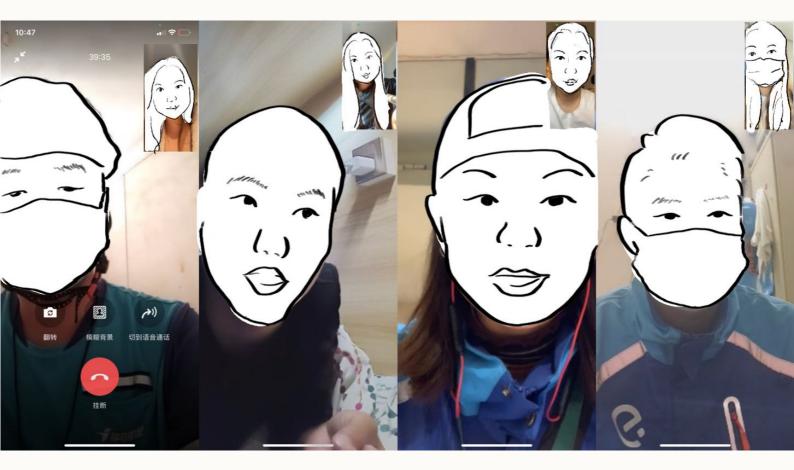
Checklist for closure

- (possibly) Giving a brief concluding summary
- (possibly) Checking with the interviewee whether you missed important topics
- If necessary, diffusing the tension that has built up during the interview
- Informing the interviewee I will blur the face and make it anonymous
- Thanking the interviewee

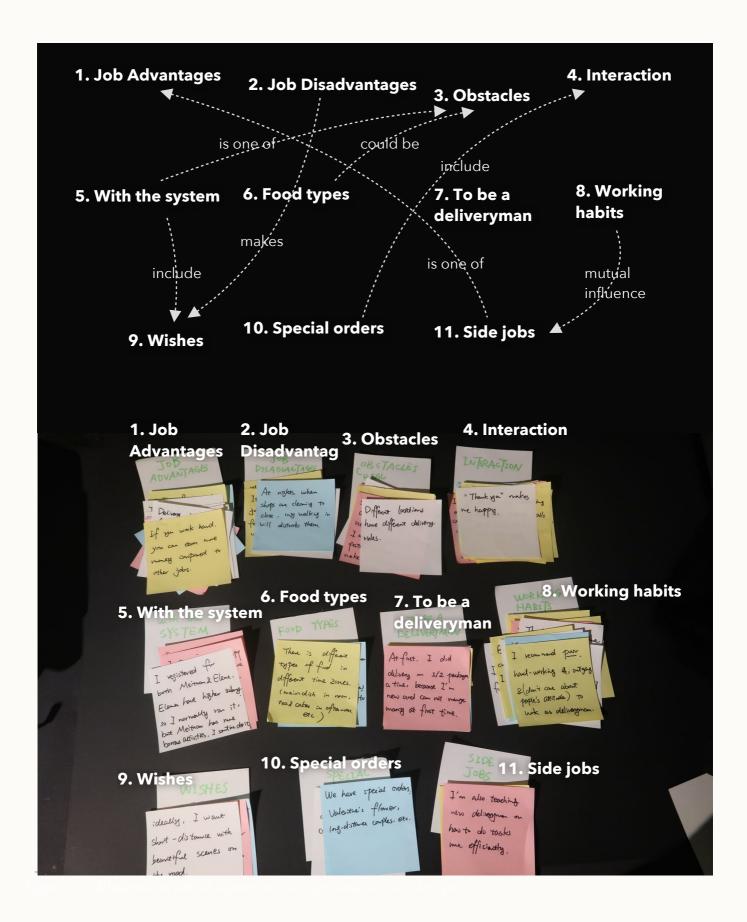
List of generic probes (optional)

- Alone/ couple/ party, lazy in cooking (residential area)
- Work meal (office buildings)
- Schools (universities)

Deliveryman Interview



Deliveryman Interview



Deliveryman Interview

1. Job Advantages



2. Job Disadvantages



3. Obstacles



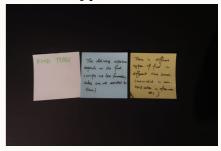
4. Interaction



5. With the system



6. Food types



7. To be a deliveryman



8. Working habits



9. Wishes



10. Special orders



11. Side jobs



User Interview Template

INTERVIEW GUIDE TEMPLATE Designing a framework with a toolbox for delivery food

Main research question:

How do users perceive the interaction in delivery service?

The purpose of this study is to understand the context from a user's perspective, and contribute to my understanding for personas, scenarios& Journey maps, what is the motivation and pain points currently from user's perspective.

Checklist for start

- Sign an informed consent
- Audio-record the interview
- Take a picture

Introductory script

- Wei, student at TUD, Graduation
- Interview purpose: Get to know the context of receiving delivery food from Eleme
- The interviewee is selected as the user with Eleme
- Assure anonymity and confidentiality, explain the interviewee that he/she may withdraw from the interview at any point (and make sure that the informed consent form is signed)
- Explain that there are no right or wrong answers, you're interested in his/her opinions and personal experiences
- Explain that he/she is free to interrupt at any time
- · Ask permission to record
- Reminder: Do not mention anything about what you expect to find

Theme 1:

Scenario of using

(from the order of places - time - people)

Interview questions:

- Looking(memorizing) the delivery orders, where is your destination?
- Could you rank these destinations in a frequency order?
- When do these orders happen?
- Who are you ordering or eating with in each scene?
- Could you describe these context of different scenes?

Follow-up questions:	
1	

User Interview Template

<u> heme 2:</u>	
Delivery experience	;
nterview questions:	
In the ordering stag paying)	e, Have you face any problems/ What will be an ideal experience?(choosing,
In the food getting s	stage, Have you face any problems/ What will be an ideal experience?(waiting, , calling, greeting, dressing, going to the door)
In the eating stage,	especially when you open the package, Have you face any problems/ What will be
in ideal expellence?	(soup splitting, hard to open)
vvny is this experie	nce memorable to you?

User Interview Template

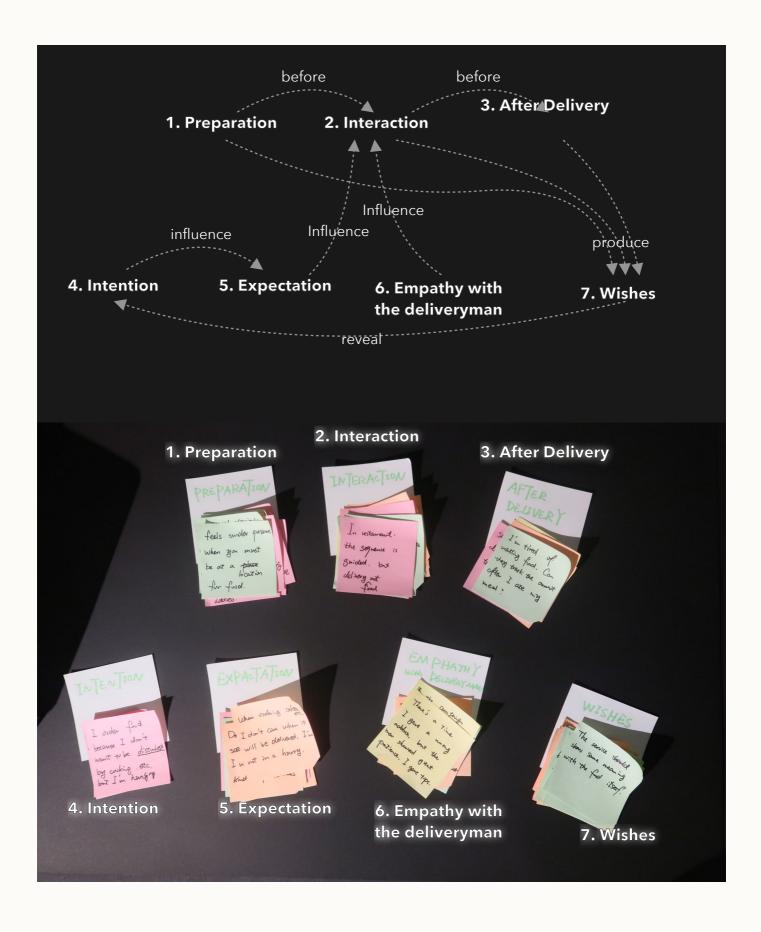
	ion and the outcome
Imagi nagina	w questions: ne there is a magic about delivery food, that means you can imagine the service out from your ation, and embed this service to your life. What will your favorable experience be? splain why your wish goes like that?
	up questions: u have any other comments on the delivery service topic?
	ist for closure
•	(possibly) Giving a brief concluding summary (possibly) Checking with the interviewee whether you missed important topics If necessary, diffusing the tension that has built up during the interview
•	(possibly) Giving a brief concluding summary (possibly) Checking with the interviewee whether you missed important topics
_ist of	(possibly) Giving a brief concluding summary (possibly) Checking with the interviewee whether you missed important topics If necessary, diffusing the tension that has built up during the interview Informing the interviewee I will blur the face and make it anonymous

Appendix 4.1 User Interview Pictures (Parts)





User Interview Clusters



User Interview Clusters

1. Preparation





5. Expectation



7. Preparation



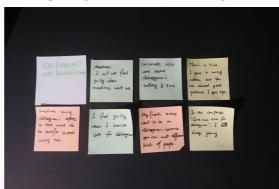
2. Interaction



4. Intention

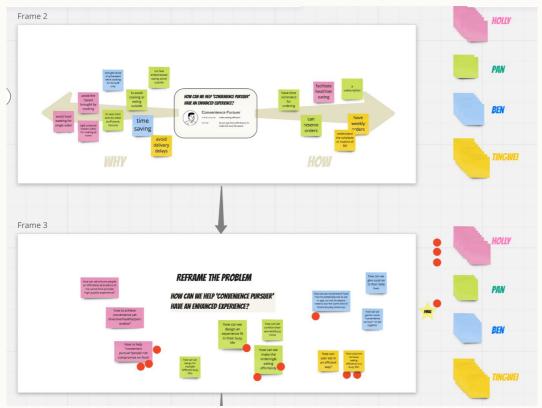


6. Empathy with the deliveryman

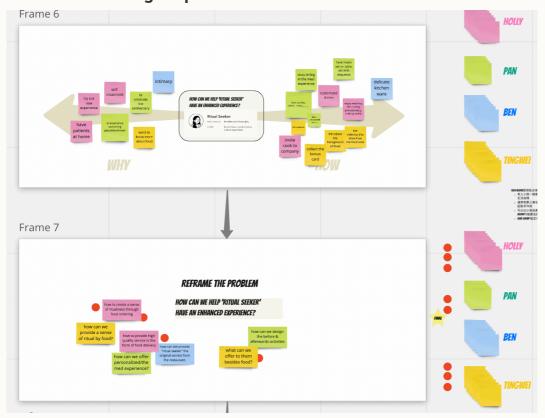


Problem Reframing

Process of reframing the problem for 'Convenience Pursuer'

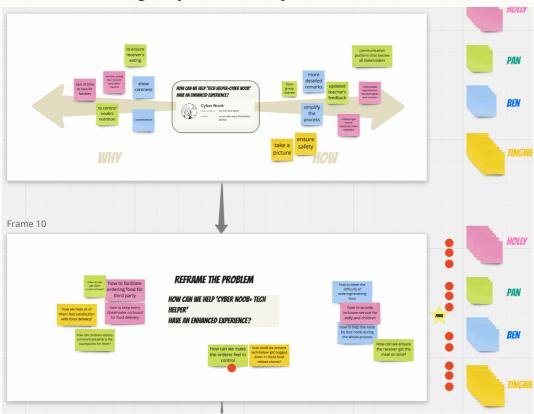


Process of reframing the problem for 'Ritual Seeker'

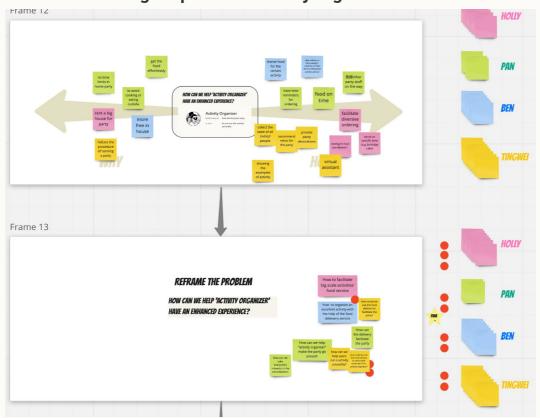


Problem Reframing

Process of reframing the problem for 'Cyber Noob'

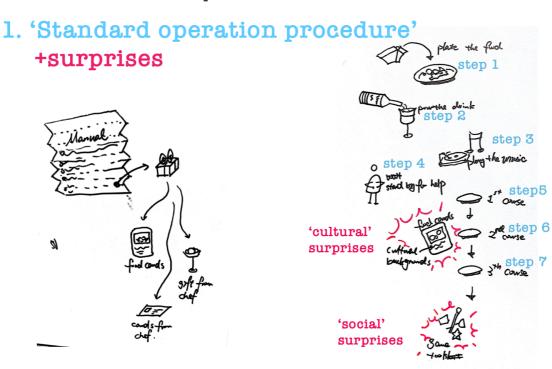


Process of reframing the problem for 'Party Organizer'



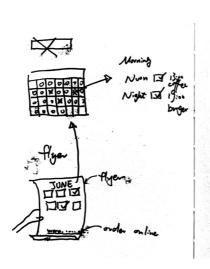
Concepts(Seperated)

Concepts - Ritual Seeker

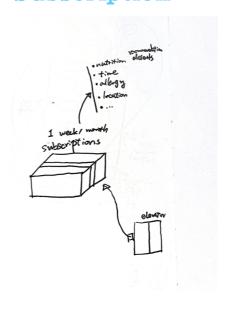


Concepts - Convenience Pursuer

1. 'Schedule'



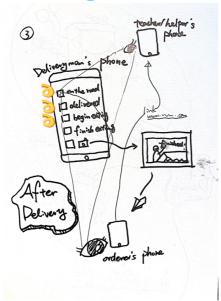
2. 'Subscription'



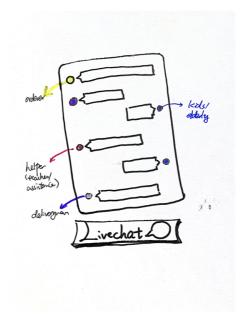
Concepts(Seperated)

Concepts - Cyber Noob

1. 'Deliveryman as the guard'



2. 'Live chat'



Concepts - Party Organizer



Consumer Evaluation Guide

Evaluation Guide- Consumer side

Main evaluation question:

To what extent do the tool benefit the user experience of different types of persona?

The purpose of this evaluation is to understand whether consumer's eating experience of delivery food is promoted by the toolkit, this include the aspects of 1) sensory 2)aesthetic 3)affective 4)intellectual 5) behavioral dimension.(Schifferstein, 2020)

Checklist for start

- Sign an informed consent
- Audio-record the interview
- Take a picture
- The prototype
- This evaluation form

The task guide; - The storyboard;

Introductory script

- · Wei, student at TUD, Graduation
- Assure anonymity and confidentiality, explain the participant that he/she may withdraw from the interview at any point (and make sure that the informed consent form is signed)
- Explain that there are no right or wrong answers, you're interested in his/her opinions and personal experiences
- Explain that he/she is free to interrupt at any time
- · Ask permission to record
- · Reminder: Do not mention anything about what you expect to find

Part 1:	
Type of ordering delivery food	
Questions:	
- How often do you order delivery food?	
- What, When & Where do you order?	
- Do you have any other conditions of eating delivery food?	
20 year mane any enter community of caming demonstration	
Conclusion:	
□Convenience pursuer	
□Ritual seeker	
□Cyber Noob/ Tech helper	
□Activity Organizer	
□None of above	

Consumer Evaluation Guide

<u>Part 2:</u> Tasks	
	ks include the process from ordering to finish eating, by using the digital prototype and th
	nnation (by PO) of the later process
70	
⊐Conveni ⊐Ritual sa	ence pursuer: pre-order the whole week's meal eeker: arrange an at-home anniversary
□Cvber n	pob: order the food for the elderly/children
	organizer: arrange an at-home anniversary
	d observe the process, take notes when participants seems to feel confused and slowed
down)	
Part <u>3:</u>	

Consumer Evaluation Guide

Questions:

- Do you understand the use of the tools?
- Do you encounter any problem while using it?
- Do you think this toolkit helps you eat better?
- Are you willing to use this tool?
- Can you describe your feeling while using it?
- Do you have any recommendations for the design and why?

Experience quality questions:

- 1) Sensory: Do you feel any difference in your sensory experience (ear, smell, touch...) by using this tool?
- 2) Aesthetic: Do you like the visuals of the App/tools?
- 3) Affective: Do you think this tool help you solve problems in your life?
- 4) Intellectual: Do you get more knowledge or more understanding by this tool?
- 5) behavioral dimension: I see you behave... & Why/ Would you behave differently by using this tool?

Follow-up questions:

-	What is v	your	definition	of a	good	food	eating	service	?

Checklist for closure

- (possibly) Giving a brief concluding summary
- Informing the interviewee I will blur the face and make it anonymous
- Thanking the interviewee

Deliveryman Evaluation Guide

Evaluation Guide- Deliveryman side

Main evaluation question:

whether they are capable to understand and willing to use this tool?

The purpose of this evaluation is to understand whether a normal deliveryman can understand and use the tool, so that approve the tool is feasible on the deliveryman side.

Checklist for start

- Sign an informed consent
- Audio-record the interview
- Take a picture
- The prototype
- This evaluation form

The task guide; - The storyboard;

Introductory script

- Wei, student at TUD, Graduation
- Assure anonymity and confidentiality, explain the participant that he/she may withdraw from the interview at any point (and make sure that the informed consent form is signed)
- Explain that there are no right or wrong answers, you're interested in his/her opinions and personal experiences
- · Explain that he/she is free to interrupt at any time
- Ask permission to record
- Reminder: Do not mention anything about what you expect to find

Part 1:

Deliveryman background

Questions:

- How long have been a deliveryman?
- What did you do before being a deliveryman?

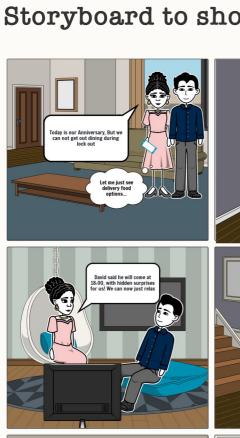
Deliveryman Evaluation Guide

<u>Part 2:</u>
Tools, explanation & stories Introduce each tool using the graphs, then explain how to offer the service. Focus on the tool business can
and activity plan (because these two set the highest standard for the service). - food cards: take the card with the food
- 100d cards: take the card with the 100d - business cards: upload, price and export the extra service
- activity plan: accept, discuss and conduct the plan
- subscription: / - tracking pal: /
(record and observe the process, take notes when participants seems to feel confused and slowed
<u>down)</u>
Part 3:
Evaluation of the tools
Questions:

Deliveryman Evaluation Guide

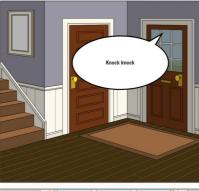
- Are	ou understand the service of the tools? ou think you would encounter any problem while offering it? you willing to embed this tool in your service(when you are get paid)?
· Do y	ou have any recommendations for the design and why?
Follov	<i>y-up questions:</i> t is your definition of a good food eating service?
· vviia	t is your definition of a good food eating service?
Chaal	uliet for all annua
	klist for closure
•	(possibly) Giving a brief concluding summary
	informing the interviewee I will plur the face and make it anonymous
•	Informing the interviewee I will blur the face and make it anonymous Thanking the interviewee
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Storyboard to show the design











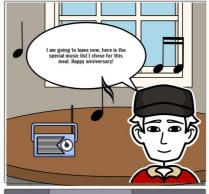


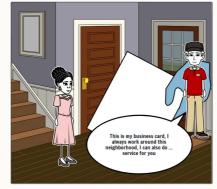
















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