Lieferando

Development of a
scientific writing and service design
in Online food delivery

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Service Design – Principles & Methods
Task B

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1. Introduction

1.1 Global market in figures with competition

Home deliveries of ready meals have boosted exponentially in recent years. This boom is not happening now, it actually began several decades ago but it took off after the development of the web and foodtech. With the popularization of smartphones and mobile internet, access to them has become much simpler, leading to easier use of online orders as well as access to all ordering platforms or directly from restaurants.

Covid has played an essential role in recent years. Lockdown “forced” restaurant customers to eat at home and therefore place orders. Customers either order from their favorite restaurant (if the restaurants have switched to online delivery) or they order from online ordering platforms. During the post-Covid era, customers continued to order online, which for some was a problem to the point that some closed (those who did not modernize).

At European level, the market was worth around 12 million euros in 2018 and could reach nearly 22 million in turnover by 2023.”[1]
The start of home delivery really took off in the United Kingdom in 2017 (Just eat) with a market value of more than 6 million pounds sterling compared to less than 3 in Italy, France or Spain.

The biggest companies are:

- ToYou.
- Uber Eats.
- DoorDash.
- GrubHub.
- Deliveroo.
- **Delivery** Hero.
- Lieferando
- FoodPanda.

[1] https://fr.statista.com/themes/4174/la-livraison-de-plats-a-domicile-en-europe/#topicOverview

- Friday.

In Germany, Lieferando is the most used. For reasons of practicality we will use this platform, it is by far the most used.

With the arrival of Covid in 2019, causing lockdown as well as the Home office, people began to order online more and more to the detriment of restaurants that had not taken the shift to delivery seriously/To go . The market was mainly reserved for chains such as pizzas, burgers and other fast foods. Then, it expanded with platforms bringing together several channels and smaller channels (local or regional). Since Covid, restaurateurs have realized that it was also time for them to think about it

Delivery of ready meals around the world:

- The online food delivery market revenue is expected to reach US$1.20 trillion in 2024.
- It is expected to exhibit a compound annual growth rate (CAGR 2024-2029) of 9.04%, which would translate into an expected market volume of US$ 1.85 trillion by 2029.
- In the grocery delivery market, revenue growth of 20.0% is expected in 2025.
- The grocery delivery market volume is expected to be US$ 0.77 trillion in 2024.
- In global comparison, China is expected to generate the highest revenue, amounting to US$450.50 billion in 2024.
- The average revenue per user (ARPU) in the grocery delivery market is expected to be US$495.50 in 2024.
- In the food delivery market, the number of users is expected to reach 2.5 billion users by 2029.
- User penetration in the food delivery market will be around 26.6% in 2024.
- These figures represent the online food delivery market globally.
- In the global online food delivery market, countries like the United States and China are leading the way with their large consumer base and robust delivery infrastructure.[2]

[2] https://www.statista.com/outlook/emo/online-food-delivery/worldwide

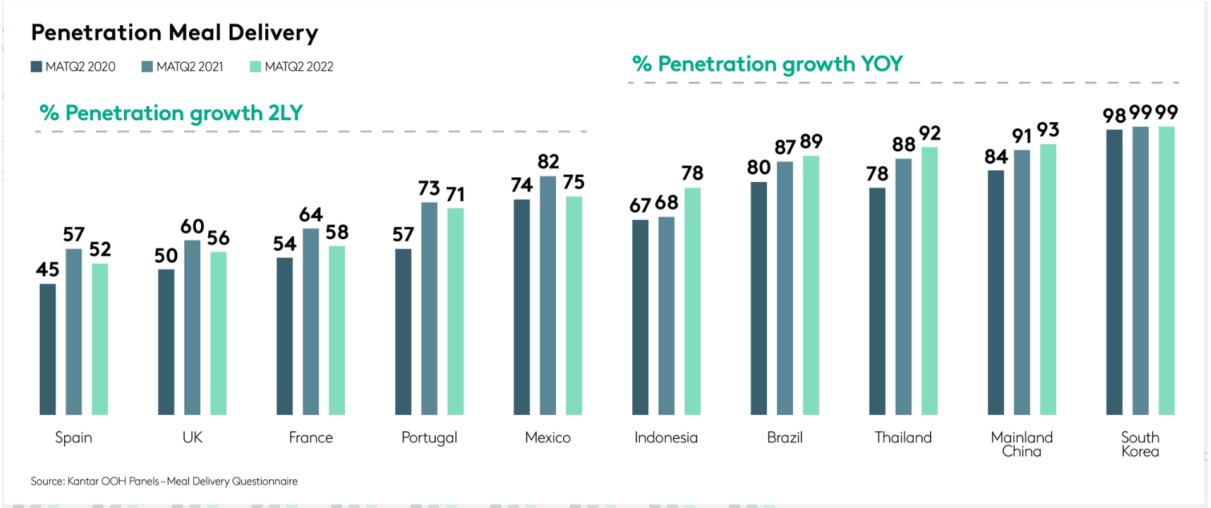
1.2 Current market

1.2.1 What do users want?

- fast delivery
- healthy
- order from anywhere
- place an order in 2 clicks
- say what they want to eat
- A suitable dish
- good taste
- hot

1.2.2 Food deliveries/ready meals in figures

- The number of establishments offering to deliver their dishes increased from 50,800 at the end of 2021 to 56,300 in January 2023 (+10%). Delivery represents 26% of point-of-sale turnover, compared to 33% for takeaway and 41% for on-site consumption.
- How many people order food online? User penetration in the food delivery segment will be 27.4% in 2023 and is expected to reach 33.33% in 2027.
- This means that 2.64 billion people will order meals online by 2027.[3]



[3] https://kantar.turtl.co/story/foodservice-2022-p/page/5/1

- The revenue of the food delivery segment is expected to reach $247.30 billion in 2023. The majority of this revenue will come from China ($151,800.00 million).
- Revenue will continue to increase by 6.72% each year, reaching $450.30 billion in 2027.[4]

1.2.3 delivery trend

customers most often order meals that are easy to transport (pizzas, sushi, burgers, and Asian dishes)
Home delivery has several advantages:
no stress when taking an order
more time to place an order (increase in spending of around 25%)

1.2.4 support (app/web/Tel.)

LTaking orders for ready meals is mainly done by mobile phone. For services like Uber Eats, Deliveroo or DoorDash, orders via mobile applications often represent more than 80% of the total.

We will see the problems/advantages of taking orders, through Smartphone applications and traditional websites.

During this study, we will not take into consideration taking orders by telephone because it is taken very differently.

Due to the majority of use of mobile applications, we will focus on these. Websites are very close to applications, so we will use the printed screens of the phones.

1.2.5 Who places the orders?

31% are regular consumers (at least once a week). Young people (18-24 years old) tend to consume more frequently than older people (65-75 years old). Prepared meals are consumed at lunchtime (66% of respondents) and for 37% at their workplace.

“Today, vegans, vegetarians, and flexitarians set food trends”[5]

[4] https://tryotter.com/fr-fr/blog/secteur/statistiques-livraison-repas-domicile
[5] https://vegconomist.com/market-and-trends/germany-flexitarian-vegan-population/

Une tendance au végétarisme est devenue incontournable “In 2017, Berlin was labelled the vegan capital of the world, boasting over 50 vegan-only restaurants and more than 300 eateries providing vegetarian or vegan options. While Berlin was one of the first cities to embrace veganism, Hamburg, on the other hand, has recently and enthusiastically embraced plant-based diets, and is adapting its culinary scene to provide more options for the vegans (and vegetarians) of the world.”[6]. We can differentiate them between those who do not want to eat meat (for ethical reasons, taste, for environmental reasons or quite simply, by choice). This public represents approximately 7.8 million Germans (7.8% of the German population). There are also those being Vegan (The country’s vegan population has also risen, reaching 1.5 million last year)[7], this represents 1.58 million Germans (2% of the German population).

1.3 Overview of the cart abandonment problem and causes

Possible reasons for cart abandonment:

- **Market saturation** : in recent years, the online ordering market has grown at a breathtaking pace, creating fearless competition for restaurateurs/delivery sites.

- **Access to the command interface** : one of the keys to success is a site that is quick to access, easy to use, where you can find your way around without problems and where access to pages is made easier by a fast-loading site

- **High operational costs**: a very important factor is also the quality of the delivery people. The management of these is very important, they must be numerous enough, but at the same time not generate too many costs, for this it is necessary to have an estimate of customer needs. Of course, these represent the image of the restaurant without really belonging to it... don't forget, they must be fast and of course: friendly.

- **Product quality**: Customers expect to receive their dishes as they should be on the website, with the possible variations desired and of course everything must be hot.

[6] https://www.iamexpat.de/lifestyle/lifestyle-news/germany-sixth-best-country-world-vegans

[7] https://vegconomist.com/market-and-trends/germany-flexitarian-vegan-population/

- **Limited partnerships (in the case of platforms bringing together different restaurants)** : For a distribution platform, it has become necessary to diversify its basket by offering dishes from the most well-known restaurants/chains, but also to diversify into all types of cuisines.

- **Customer Service Issues** : in cases of dissatisfaction it is necessary to have accessible customer service without having to wait too long. This service must be able to handle all the problems and go against the customer so that they come back.

- **Marketing strategy** : Often mastered by the major players in home delivery, it is often not mastered by restaurateurs... It is naturally very important to have a marketing strategy that goes with the image of the restaurant/platform in order to target its products and commercial offers to its customers. Promotions targeted at customers who are likely to return.

- **Changing Consumer Preferences** : It has become essential these days to think about the new ecological/vegetarian/vegan movements of customers. Indeed, a steak chain must also offer vegetarian dishes otherwise it will reduce its customer base.

- **Reliance on third-party services** : Restaurateurs often find themselves “obligated” to opt for a third-party delivery service because it is unthinkable for them to hire a third party for delivery. This third-party service is of course very important because it guarantees its online survival.

- **Economic factors:** A factor here external to delivery is that of the economic aspect of customers. If their wallet is reduced, restaurateurs/production chains must have the possibility of offering alternatives in order to have the widest range of products, also at the financial level.

1.4 Objectives

Our goal here is to reduce order loss by 30%. For this we will analyze the market and define different interviews, analyze the problems as well as the advantages of the different platforms and try to improve the advantages as well as reduce the problems.

It is essential here to define the problems by sections:
Login

Login is strongly recommended when taking orders because it allows the customer to have an overview of their past orders and to be able to recommend their favorite dishes. But on the other side (restaurateur/platform side) it above all helps to build customer loyalty by offering them advantages.

Search filters

Searches for dishes, by filter (types of dishes/prices/options/waiting time/…)
Are there enough dishes on offer, is the menu varied enough? (vegetarian/allergens)

Possible options

It is often possible to opt for options, for:

- vegetarians
- Allergens
- unwanted ingredients
- dietary
- …

Awareness of the total cost

Dishes can often be customized. In most cases, this leads to additional costs (are they sufficiently highlighted? or is it a surprise when paying?)

means of payment

There are a multitude of payment methods, secure, less secure, already registered or not. They encourage payment for deliveries.

delivery time

Delivery must be made within a reasonable time, if the delivery time exceeds this, or if the driver spends too much time then the next order will be made… next time….

1.5 Importance of solving this problem for the company

The problem is very simple, you just need to improve order taking in order to attract customers and reduce the exit rate before order confirmation.

2. Methodology & research

2.1 Design Thinking[8]

The double diamond[9] method is a Design Thinking method from 2004[10][11]
It is a user centered analyse[12] which will analyse all interactions between the user and the application.[13]

For our analysis, we estimated that the double diamond method was the most effective, it will make it possible to analyze a large part of the possibilities and to re-channel them by a strangulation effect in order to re-open (in the second phase) possibilities on other possibilities. This method, often used, allows you to not stay focused on a pre-thought problem, and to then be able to think more generally about the following problems (divergent thinking which leads to convergent thinking)

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[8] Michaela Kauer-Franz & Benjamin Franz. (2022). Usability und User Experience Design (1. Aufl.) Rheinwerk S.95

[9] Sylvie Daumal. (2018). Design d'expérience utilisateur, Principes et méthodes UX (3. Aufl) Eyrolles. S.17

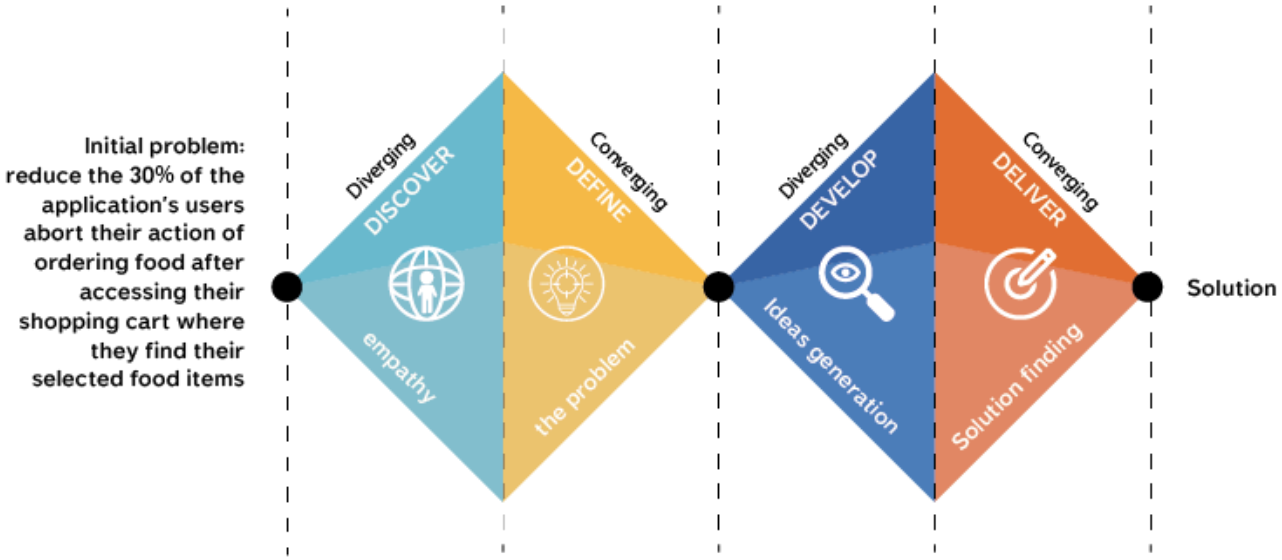
[10] https://personifycorp.com/blog/design-thinking/

[11] https://blog.hubspot.de/service/double-diamond

[12] https://shs.cairn.info/article/PUF_FALZO_2004_01_0451

[13] Michaela Kauer-Franz & Benjamin Franz. (2022). Usability und User Experience Design (1. Aufl.) Rheinwerk S.44 & S.113

Here is the diagram of the double diamond that we will follow in the steps of our analysis. This method, which comes from Product Design and others, is ideal for analyzing problems.



Here are the steps to follow during the double diamond method:

First diamond:

- Discovery

  Aim:

  This phase encourages maximum open thinking in order to broaden the user's understanding when using the application, through their emotions, feelings and understanding. It is necessary to put yourself in the user's shoes and understand them. A very important point in this part is to break away from preconceived ideas/prejudices and analyze the problem in order to define its sources.

  to achieve:

  - Expand user understanding when using the app
  - Analyze your emotions, understanding and feelings
  - Review all steps when taking an order

  Goals:

  - explore the problem and challenge to solve
  - Put yourself in the user's shoes
  - Analyze each step of the order journey
  - Note the strong points and the hook points

- Identify what the user feels at each step

- Definition

  Aim:

  Summarize the information received during the discovery phase and group it into categories to facilitate future work. Here, the opening of the user analysis closes in order to keep only what is useful to us for the next phase

  to achieve:

  - Analysis of collected data
    - Grouping information by theme
    - Identifying recurring friction points

  - Creation of personas
    - Development of typical user profiles based on the collected data
    - Defining their specific needs, frustrations and goals

  - Problem formulation
    - Writing clear and concise problem statements
    - Focus on the most critical aspects contributing to cart abandonment

  - Prioritization of issues
    - Evaluating the impact of each issue on cart abandonment rate
    - Selection of the most urgent problems to solve

  - Definition of objectives
    - Establishing Measurable Goals for Reducing Cart Abandonment Rate
    - Alignment of objectives with user needs and business objectives

Second diamond:

Develop

- **Objective:**

  This first phase of the second diamond will take the problems that were revealed at the end of the game of the first diamond and find a solution to their resolution.

- **to achieve:**
    - Ideation
        - Organizing brainstorming sessions with the development team, UX designers and customer service representatives
        - Use of brainstorming techniques to generate as many innovative ideas as possible
    - Prototyping
        - Creation of low fidelity prototypes (wireframes) for new features
        - Development of interactive prototypes to test user interface improvements
    - Service planning
        - Identifying critical touchpoints in the user journey
        - Defining the resources needed to implement improvements

Deliver

This part is the “finalization” of the double diamond, where ideas are tested, brought to life and realized.

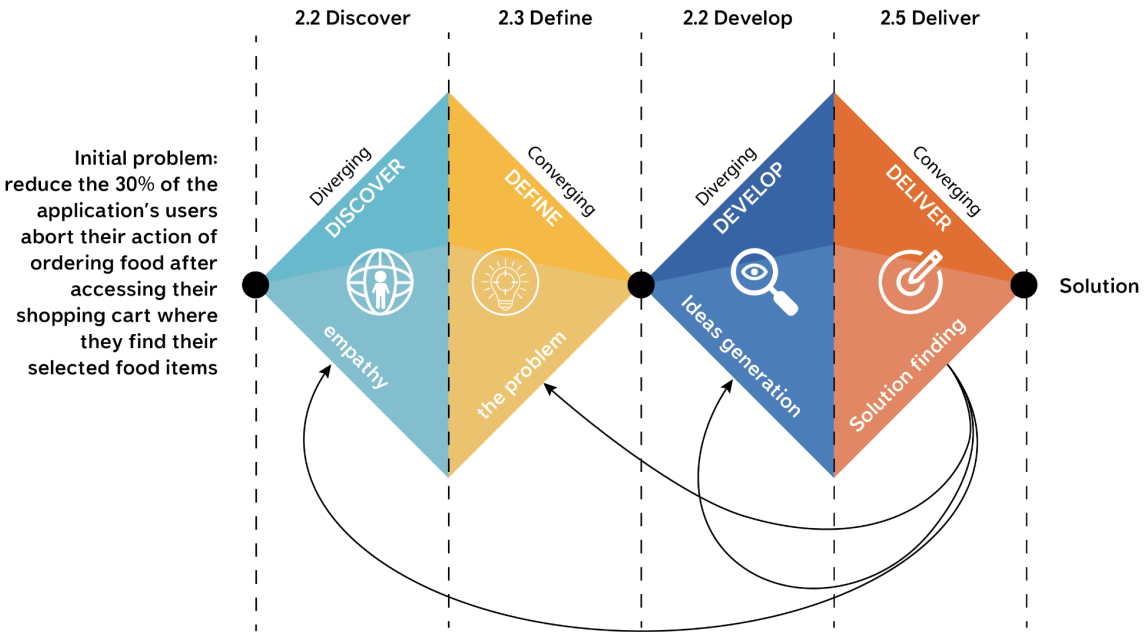
Usability testing

- Conducting tests with a group of representative users
- Evaluating the ease of use of new features
- Collecting qualitative feedback on improved user experience

Tests A/B

- Comparison of different versions of the interface or features
- Measuring the impact on the cart abandonment rate
- Selection of the most efficient options based on concrete data
- Implementation roadmap
- Detailed planning for the deployment of improvements
- Definition of key milestones and deadlines
- Assignment of responsibilities to different teams

The analysis of the double diamond having been carried out (from the discovery stage to delivery) will most certainly be taken up in the second phase of work to rectify inappropriate choices. The errors may be in one of the 4 previous steps, a step back will then be necessary.



2.2 Discovery

2.2.1 User customer Journey mapping

Our Analysis will include different parts which will follow the user during their search

2.2.1.1 Phases

The customer will, before taking his order, go through several phases which will make him place an order:

Decision making

- action(s): arrives home tired
- thought(s): "I don't want to cook, I'm too tired"
- emotion(s): fatigue, weariness

search for the dish

- action(s): access to the site and search for offers
- thought(s): "what can I eat tonight and I don't have to wait too long"
- emotion(s): hope, mouth watering

decision

- action(s): comparisons (Restaurant type/price)
- thought(s): "Which offer could be the best"?

- emotion(s): Hesitation

purchase

- action(s): order placed
- thought(s): “There, finally, I hope I can eat soon”
- emotion(s): mouth watering,

waiting for the dish

- action(s): checking the order on emails and preparing dinner
- thought(s): “I hope I don’t have to wait too long”
- emotion(s): satisfaction and impatience

use

- action(s): receiving the dish
- thought(s): “it’s delicious, good selection and delivery was quick!”
- emotion(s): Satisfaction, contentment

thanks

- action(s): rating of the restaurant owner and delivery person in the application
- thought(s): “I will write a good comment
- emotion(s): appreciation

appreciation

- action(s): saving the restaurant to favorites
- thought(s): “I will definitely recommend here next time”
- emotion(s): Loyalty, general satisfaction

2.2.1.2 Touch points

Touch points represent links with the control interface
They represent the links between the application and the customer in the context of taking a meal order.

Awareness

- social media advertising
- recommendations
- search on the internet

relevance of the application

- download
- start page offers
- search functions

selection

- sub pages (restaurants/chains)
- menu visibility
- choice filtering methods

Order

- adding dishes to cart
- choice of options
- summary

Payment

- payment page
- payment choice
- order confirmation

Waiting

- check Email
- Status update

Reception

- door opening & receiving
- unpacking
- verification

Follow up

- comment on the dish and delivery
- Contact customer service in the event of a problem

2.2.1.3 Customer journey mapping phases

Awareness

- emotion: impatience, laziness, fatigue
- experience: little desire to cook, prefers to relax

relevance of the application

- emotion: what possibilities do I have? use
- experience: the application can offer me good ideas

selection

- emotion: embarrassment of choice, long
- experience: comparisons and final choice

Order

- emotion: hope of the right choice, satisfaction
- experience: checking that everything is ok

Payment

- emotion: suspicion, is the price as supposed
- experience: will the payment go as agreed and not have any problems?

Waiting

- emotion: impatience and preparation so as not to eat cold
- experience: order delivery tracking

Reception

- emotion: excitement, eagerness to eat
- experience: delivery control

Follow up

- emotion: satisfaction or frustration
- experience: satisfied or give the restaurant/delivery person another chance

2.2.1.4 Identification of Problems and possibilities and their improvements

1. Pain points

Long and complex ordering process

- Too many steps to finalize an order
- Unintuitive user interface, too many links between parts

Lack of transparency on costs

- Additional fees not clearly displayed
- Order cost surprises (good or bad)

Limited payment options

- Lack of popular or unsavory payment methods
- Complicated payment process

Uncertain delivery times

- Imprecise delivery estimates
- Lack of real-time tracking

Product quality problems

- Difference between presentation and product received (due to transport?)
- Food temperature problems upon arrival

2. Opportunities for improvement

Simplifying the ordering process

- Reduction in the number of steps
- More intuitive user interface
- be able to revisit your orders quickly and modify them
- take an order/search in voice mode

Improved cost transparency

- Clear display of all costs from the start (by icon information or…)

- Detailed summary before payment

Diversification of payment options

- Integration of popular payment methods (Apple Pay, Google Pay)
- Secure storage of payment information

Delivery system optimization

- Improved delivery time estimates
- Implementation of a real-time tracking system
- choice of transport (if possible)

Increased customization

- Options to personalize dishes
- Recommendations based on order history
- pop-up offering such options (depending on the user's previous choices)

Customer loyalty

- Rewards program
- Special offers for regular customers

Improved customer service

- Easy to use feedback system
- Responsive and efficient customer support
- customer service assigned to the customer (in the same language?)

2.2.1.5 Mapping of touchpoints when contacting the meal delivery application

Awareness

- discovery of the application by colleagues and friends
- online ads (banner)
- tests
- lives in an area where delivery works

application relevance

- installation
- home page
- account creation
- filter options
- discovery of restaurants

selection

- access to restaurants
- menus and offers
- offers offered
- possibilities for customizing order taking (Vegetarian/Allergies, etc.)
- Reviews from other customers

Order

- simplification of order taking
- visualization of the order
- simple optics of the application
- order customization

Payment

- different payment options
- legibility
- simple to understand invoice

Waiting

- wait estimated in advance before sending the order
- live tracking
- additional possible option
- possibility of a deferral?

Reception

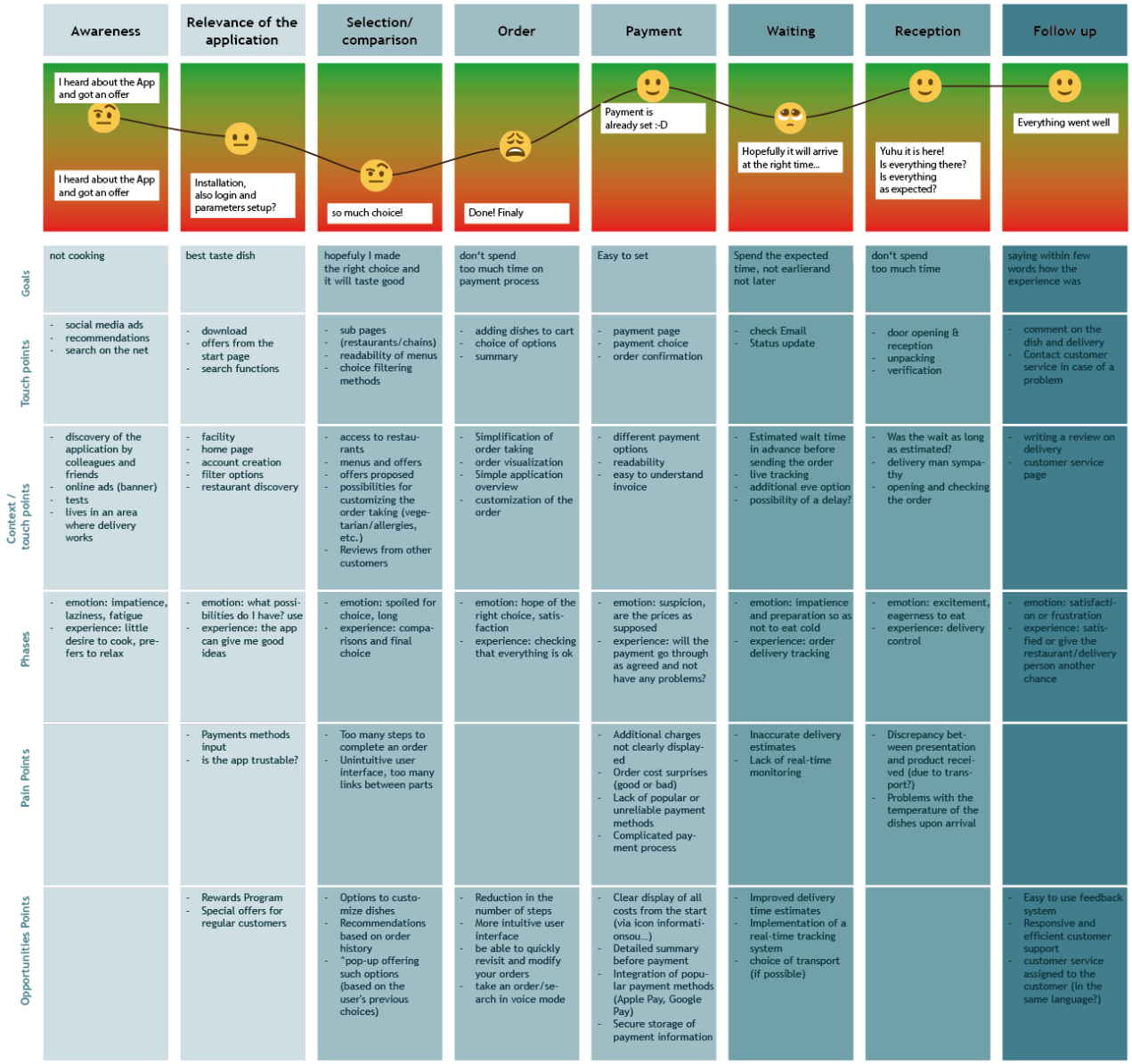
- Was the wait as long as estimated?
- sympathy of the delivery man
- opening and checking the order

Follow up

- writing a comment on the delivery
- customer service page

2.2.1.6 User Journey mapping

Here is the User Journey mapping covering everything that was seen during the previous points



2.2.2 Contextual investigation

Having completed our User Journey Mapping, we still need to carry out a series of interviews to determine the problems and strengths that users encounter during the order-taking process.

Firstly, we will carry out a quantitative interview, with which we will see what types of users use online ordering. Then it will be necessary to carry out a qualitative interview which will fit more into the process

We will carry out a survey on a sample of 4 participants who often use their phones and have a critical opinion to place orders. The setting of the investigation will be either at their work or at home.

Our investigation is mainly based on the Lieferando site (the current reference site in Germany). It should be noted that the main “competitors” abroad often have an application very similar to Lieferando, which of course have different options to offer to customers.

Quantitative interview:

01. What is your profession

11 answers

- Doctor
- Chief Technology Officer
- Industrial designer
- Product Owner Online Whiteboard
- Sales Administrator
- Nurse
- Director of industrial design
- Financial security manager
- Director
- Web Developer
- Product Manager

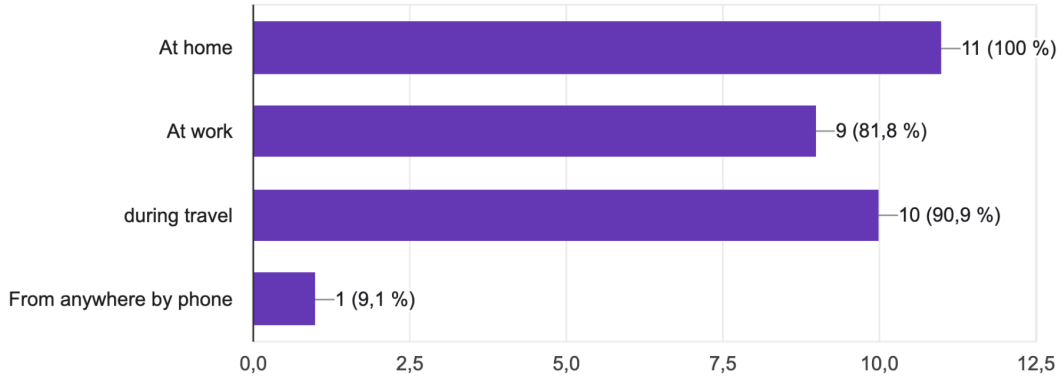
02. Where do you live?

11 answers

- Munich
- Ebersberg, Germany
- Rosenheim
- South Harz OT Roßla

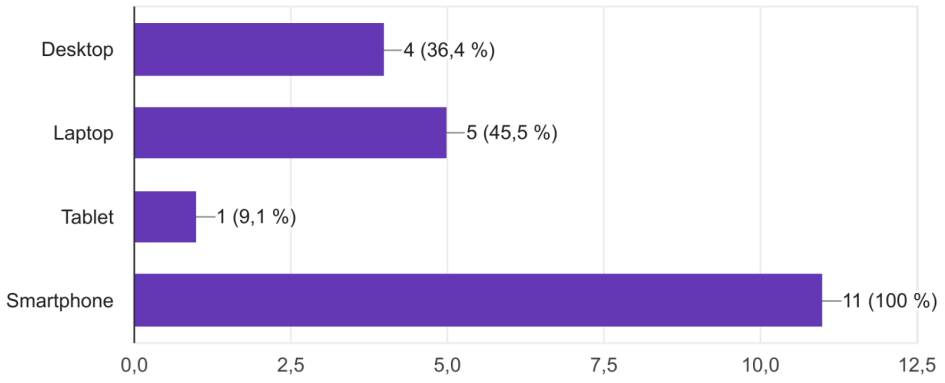
03. How do you access the Internet?

11 Antworten



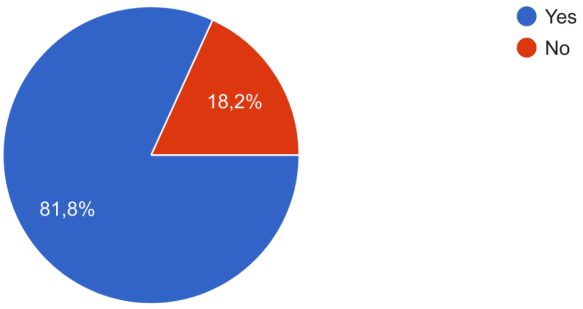
04. What do you mostly use?

11 Antworten



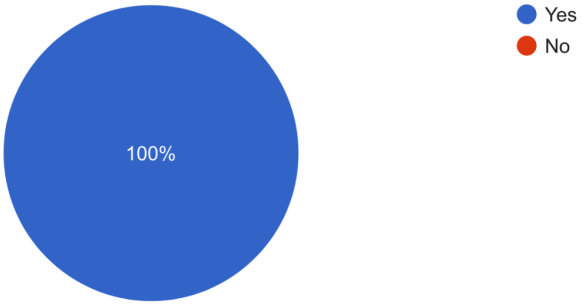
05. Do you have broadband access?

11 Antworten



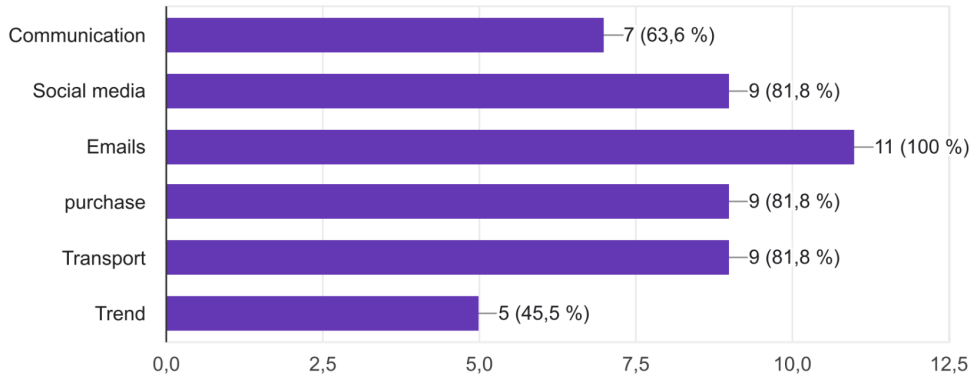
06. Do you use websites/apps on your laptop/smartphone?

11 Antworten



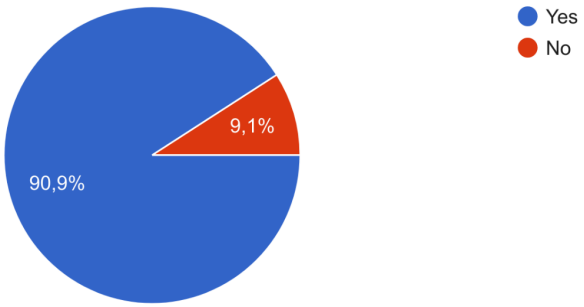
07. What type of website/app do you use?

11 Antworten



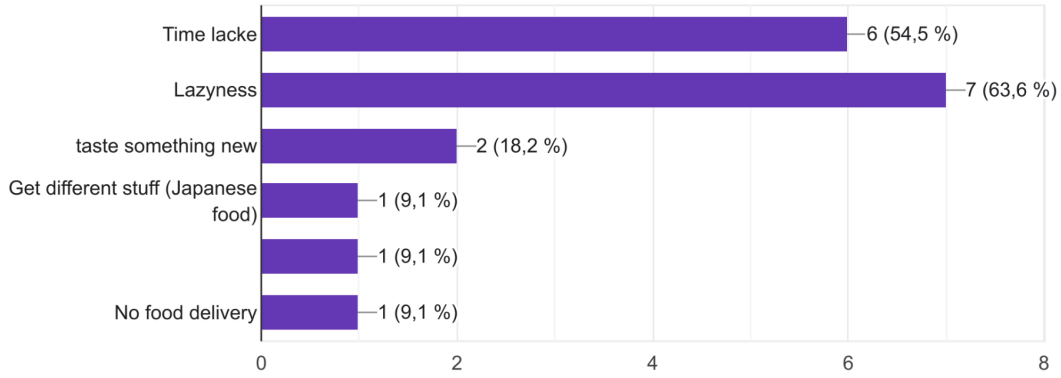
08. Do you use food delivery?

11 Antworten



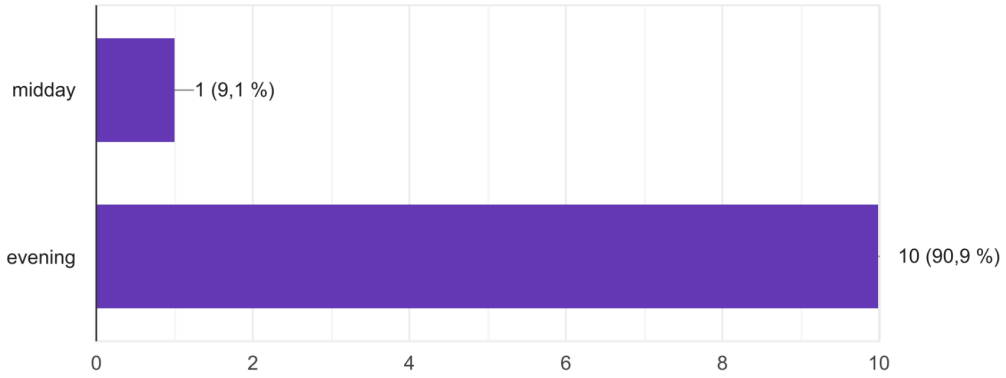
09. Why do you use food delivery?

11 Antworten



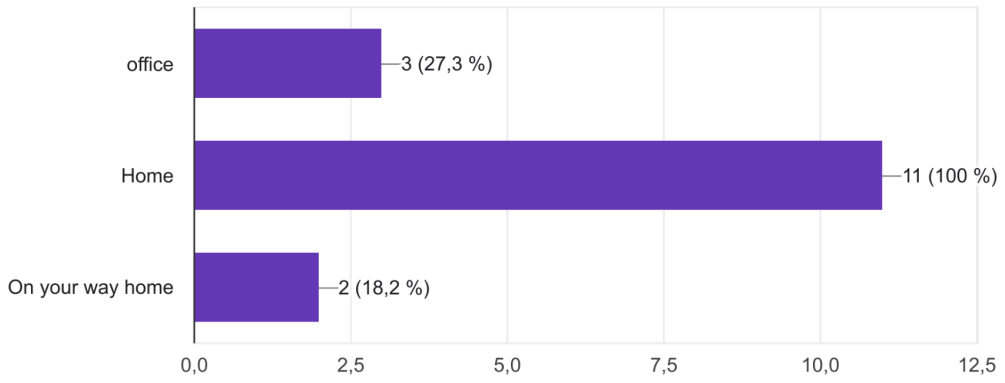
10. When do you use food delivery?

11 Antworten



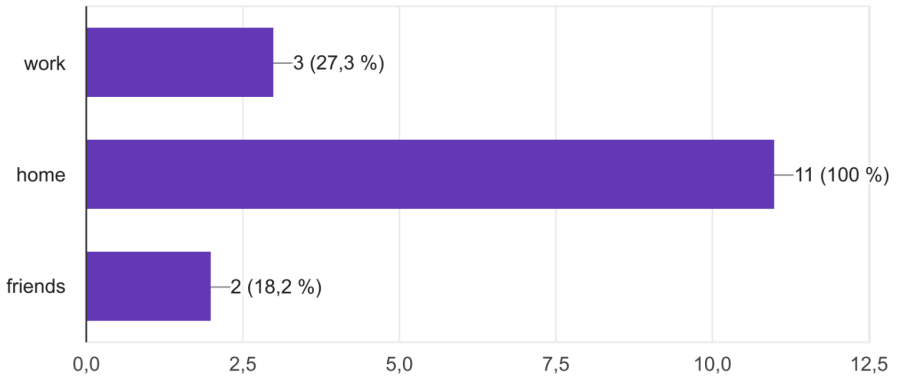
11. When you decide to order, where are you?

11 Antworten



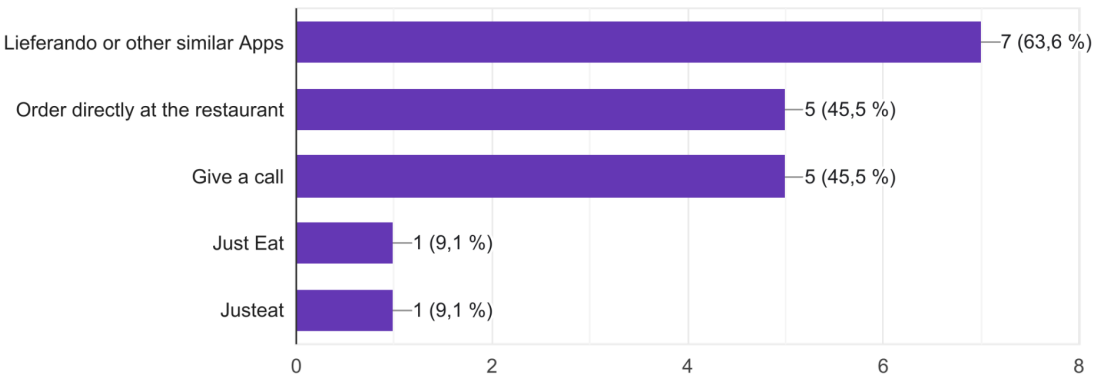
12. Where do you use food delivery?

11 Antworten



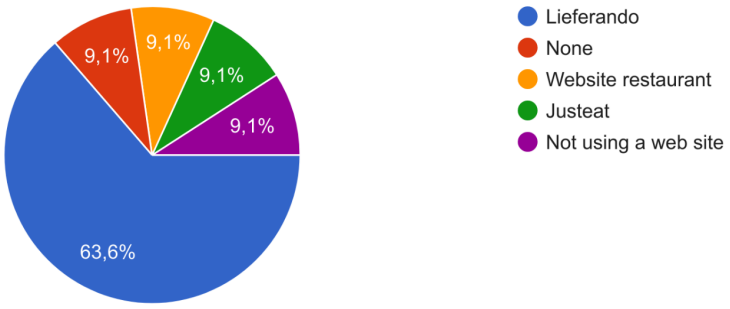
13. From where do you mostly order your meals?

11 Antworten



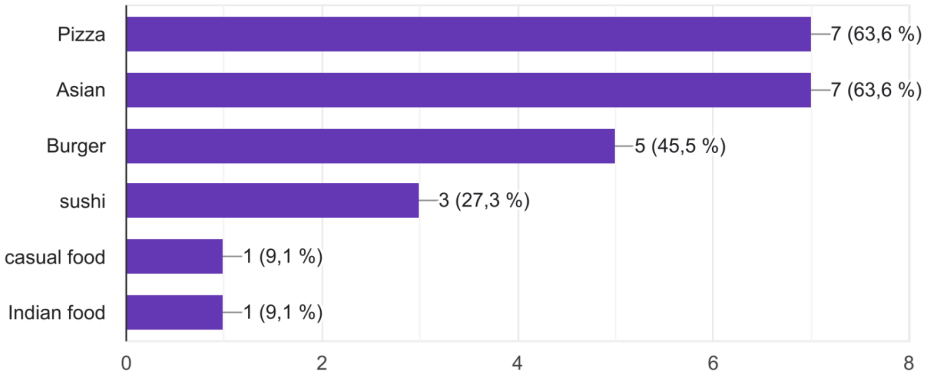
14. Do you have any favorite websites/apps to order?

11 Antworten



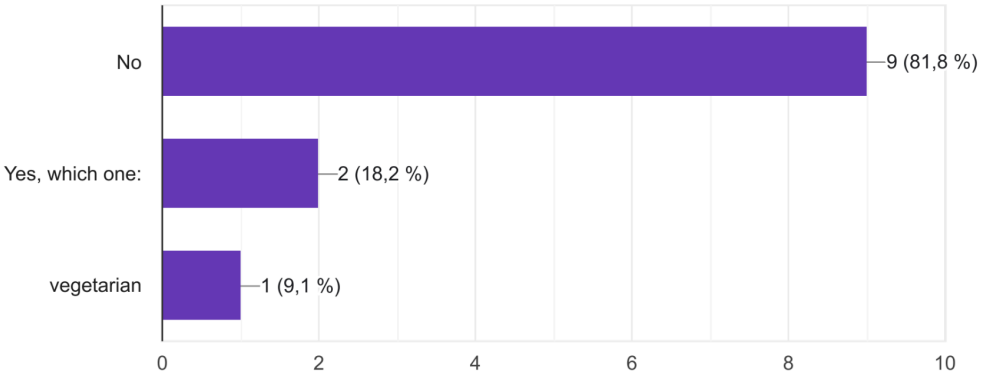
15. What do you order?

11 Antworten



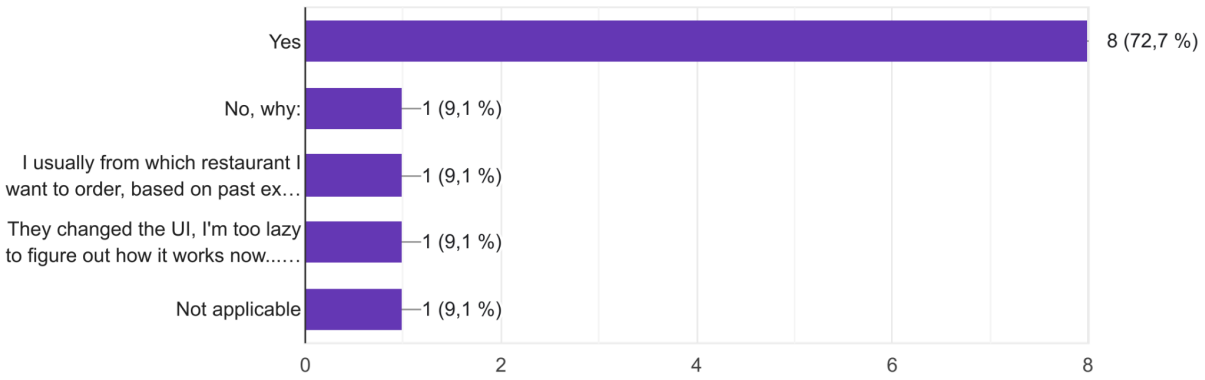
16. Have you entered any option like vegetarian/ allergen?

11 Antworten



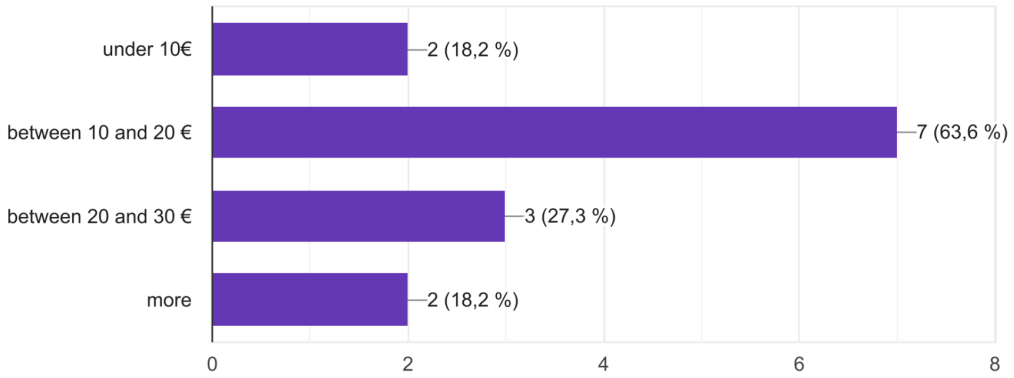
17. Was it easy to use the filters to find quick your restaurant ?

11 Antworten



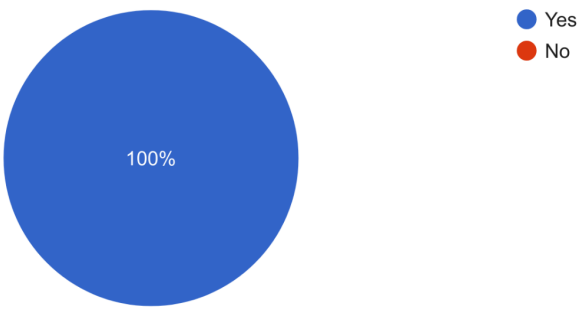
18. How much money do you spend per order? (Per person)

11 Antworten



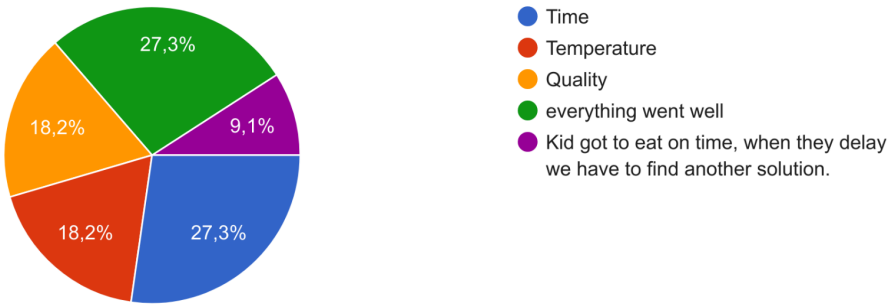
19. Was the price indicated correctly?

11 Antworten



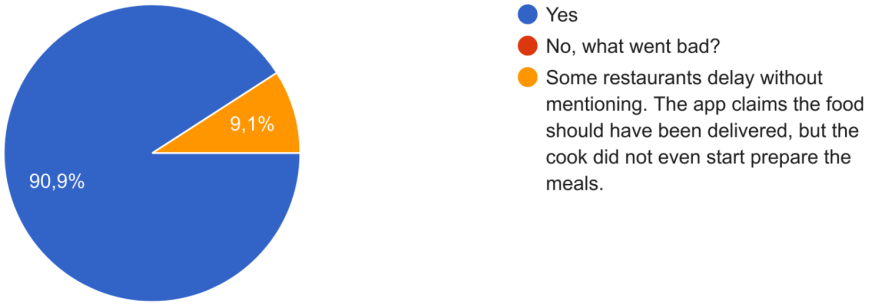
20. Did you have any concerns regarding delivery?

11 Antworten



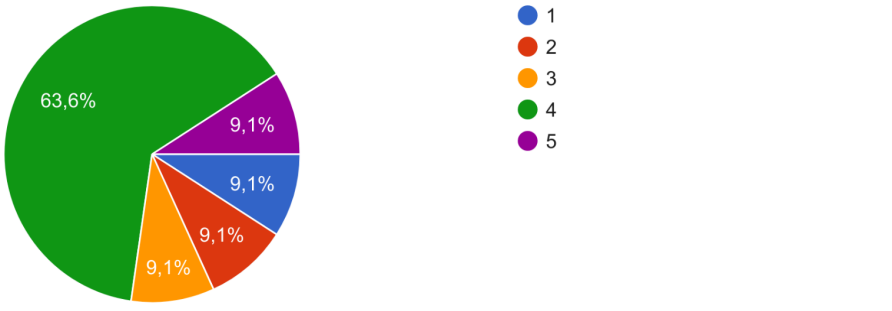
21. Did everything went well (the whole process)?

11 Antworten



22. How did you experience the overall ordering experience (from starter to meal)? (1: bad, 5:good)

11 Antworten



23. Would you have any recommendation to Lieferando to change any function to improve the App?

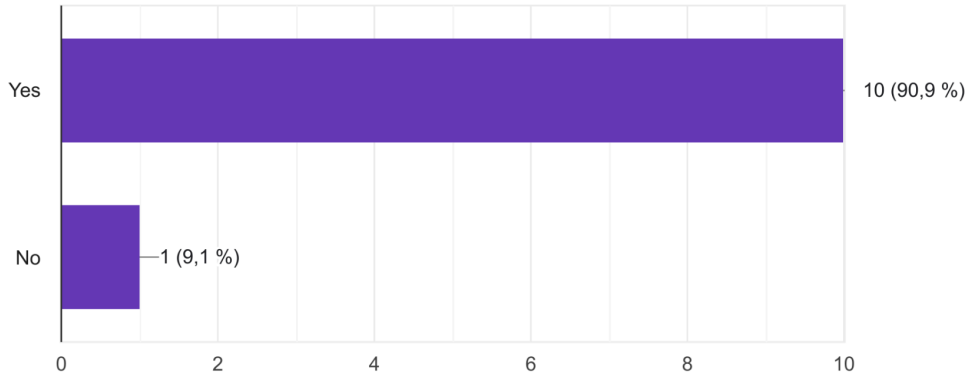
11 answers

- No

- Not applicable
- Simplify visually the homepage, give recommendations based on favorite food and past orders
- Hire people like Flo to do fantastic pictures of the meals. Make the people want to try new things. Show the interior of the restaurant, or tell us the story of the owner... Make us want to know more, bring excitement and magic. The service feels like a commodity, but the restaurants on the platform are much more than that.
- Give the option to remove certain components of a meal (e.g. Pizza without mushrooms), show with a marking which meals are vegetarian at the overview screen

24. Would you order from the same restaurant/app again?

11 Antworten



Qualitative Interview:

Order Acceptance/User Analytics

For testing purposes, we assume the following:

- You are at work or on your way home or already at home
- You think about what you are going to eat in the evening
- You are considering placing an order
- You place an order
- You receive your dish

What we expect from you

- Visit the Lieferando app
- Consult the offers
- Place an order with at least one allergen-free option or dish with desired flavors.
- Pay using the payment method of your choice
- Comment on the waiting time for your meal

Homepage:

01. What do you see on this page?

IP1: address above, then, Delivery/collection then search it with filters then the Icons with different offers nearby and finally the local partners

IP2: the offers, then the restaurant type icons

IP3: a lot of information, difficult to determine the order of priority, too many types of products (candies, cleaning products, links to stores such as Rewe). Application too complicated for users unaccustomed to ordering hot dishes.

IP4: old school, too much junk food, too much color, big advertising, too much mediocre quality

02. What are you looking for?

IP1: first category Ex: pizza, above are the filters (Pizza Icons)

IP2: Pizza

IP3: in the search bar, then by review

IP4: search by Italian (everything is the same, difficult choice) no verified photo (like Mac Do)

03. How do you search for a dish?

IP1: Entered after pizza, then search for broccoli in the search box, then choose what goes with it

IP2: I look for the restaurant I know then look for the pizza I have in mind

IP3: by type of dish (for example) Main dish

IP4: not necessarily information on allergens, delivery time can be readjusted by the restaurant owner, minimum basket, not important (information not well enough indicated) Realistic indication of delivery time

Results page

04. Describe what you see here

IP1: there is a pizzeria, Conditions, Free delivery, Reviews, the most popular pizza

IP2: (targeted search)

IP3: List of dishes. unfortunately, no possibility of removing a food or seeing the allergens, only from the next page

IP4: Many dishes but poor art to sort them

05. Does the interface play a role, the photos? The criticism?

IP1: Manufacturer: whatever

IP2: photos are always the same for the pizzas anyway, so no surprises

IP3:

- In Asian restaurants, it is not always easy to know what you are eating because the dishes are not explained sufficiently
- limit the number of clicks
- Lieferando tries to favor restaurateurs giving maximum information on the dishes in order to reduce lost orders
- home page more placative and simple
- offer a dessert/menu/drink via pop up
- search for dishes by channel (A.I.)

IP4: reviews are a determining factor in finalizing the order. The photos, for their part, it depends, there are all types of photos: generated/from photographers/amateurs/no photos. Often the customer is disappointed with what he receives (in the majority of cases, he knows that this is not reality). Mac Donald indicated that his photos are edited, why not have Lieferando certification?

06. [When a dish is selected] How do I find more information about allergens/options?

IP1:none, just size and extras, No replacement possible (could be easier over the phone) just write a note

IP2: no product information (harm for children)

IP3: difficult to find, could be indicated earlier in the search (could play a role in loss of order (too many clicks)

IP4: There is a problem with allergens, they are put last in the process of choosing dishes. As for the ingredients to add, the prices are often disproportionate (basil on a pizza, €2). Another problem is that one can add but there is no option to remove one. Maybe there could be an option to change foods?

2.2.3 Safari Service (or integration)

The safari service will allow us to immerse ourselves in the application and go even further after having analyzed the interactions with our interviewees and their experiences.

For this part, we will start from the moment we open the application, the earlier part does not really interest us because it is not linked to the problem of the 30% of orders that do not go through.

Here are some strengths, weaknesses and opportunities for improvement.

2.2.3.1 Strong points

global

- It is very easy to go back to the application (to the time of ordering) without losing your order.
- Application with very interesting category Icons

order taking

- sorting by type of restaurant
- Filters (make it easier to choose)
- The minimum amount is always activated, which allows you to immediately know the amount to reach
- The restaurant overview page is very clear and the essential information is well indicated.

basket

- Display of the delivery schedule as well as the possibility of defining the arrival time of the order. In addition, a trace of the delivery person is sent
- There are no hidden costs or surprises at the end of ordering

- Group order
- Order from several restaurants at once
- Minimum delivery time display
- Display between delivery and pick-up

payment

- Possibility of paying a tip directly when paying for the order

orders placed

- possibility of finding an old order and readapting it
- Thanks to the customer account, it is very easy to pay with pre-recorded payments, but also to find an old order and know what was ordered

2.2.3.2 Pain points

- no possibility of filtering by vegetarian or vegan dish and having an overall overview of the offers in the surrounding restaurants.
- no information on allergens (information at the end)
- no food replacement possible
- Restaurant search by map like on Booking/Airbnb
- Group order, as possible for a single restaurant
- No information on the location of the delivery person
- no Push-up info/Whatsapp
- the order is not always followed by Lieferando
- no daily specials/offers
- no possibility of putting a rating in your orders placed for yourself (a sort of categorization of orders placed and therefore having low visibility on orders placed.
- possibility of seeing on a map where I am ordering and possibly picking up my dish myself and saying hello to the restaurant owner.
- the choice of delivery, out of respect for the environment (carbon footprint), by car, scooter, bicycle or even scooter?
- Home page poorly designed for beginners/people not familiar with mobile internet and order taking
- too many offers unrelated to hot dishes (for example, detergent products)
- no suggestions to the customer (e.g.: dish of the day from the favorite restaurant)
- no possibility to search by budget
- lots of choice (too much)

- the home page should be adaptable to customer needs and choices (personalization)
- no consideration of the time of purchase (between midday: quick and inexpensive, evening: more time but not too much either and the weekend: good and can be more expensive)
- lack of use of artificial intelligence
- The app has an array of restaurants selling huge junk food. This does not highlight a sign of quality from Lieferando. Perhaps it would be wise to add a new category: health

2.2.3.3 improvement opportunities

- There are more and more pro-animal movements and their conditions of life and death, so it is becoming more and more essential to drive the trend towards this sector. In this case, in the Lieferando application, there is only a rating of vegetarian or vegan dishes. A category should be added for these customers who now represent around 10% of the market in Germany (8% vegetarians and 1.83% vegans). In addition to these, we must also add those with various intolerances, such as the most common: Lactose, gluten, etc.).
- voice order taking by AI can greatly reduce order taking

- Another option that could also be added is where customers could replace one food with another (without replacing onion with truffle for example)

- There is also a part missing, my favorites, where do I usually order, what are the current offers from the restaurants I usually order from? or even the section, where do customers with the same tastes as me order? The dishes of the month (of course all this in the deliverable area, if possible without adding delivery costs.
- encourage partners to enter more information about their dishes, like with a fee reduction system.
- restructure the home page by simplifying it.
- search by voice command.
- open a part like “Ebay classifieds”, with other partners who would then take care of everything themselves, except for taking orders for dishes which is done as on Lieferando.
- There is a complete lack of a proactive spirit towards the user of the application which could perhaps be resolved by understanding the needs of the customer in relation to the offers and therefore filtering.

2.3 Define

2.3.1 Affinity diagram

The affinity diagram (derived from the safari immersion) is divided into different parts which will allow us to work on how to improve the finalization of orders.

1. Interface
2. quality of filtering
3. I. A. personnalisation
4. payment
5. delivery
6. after order
7. Others

https://miro.com/app/board/uXjVLVftg9Y=/

2.3.2 Creating problem statements

The problem to be resolved is the loss of earnings for home delivery companies due to unsuccessful deliveries. Through our research and analysis methodology through our User Journey Mapping, Survey, safari service, we were able to observe that there were problems when taking orders. These problems turned out to be quite different from what we thought we read in Lieferando user reviews. Few users have a negative opinion on order taking, it is more focused on delivery (50% of users), customer service (40% of users), order errors (30% of users) and additional costs (20% of users).[14]

Our analysis, which is more professional, in-depth and comprehensive, has identified other problems that users may not have been aware of.

To create an application that meets these needs, we will see the following main points and propose solutions to 3 main parts that we have categorized (Interface, Quality of filtering and personalization/A.I.:

- clarify the interface, make it simpler
- provide a customizable interface based on tastes and offer appropriate offers
- view local restaurants
- optimize searches for dishes other than classic (vegetarian/Vegan, allergens)
- bring a search by budget
- Offer affordable restaurants for lunch

In addition to this, we could deal with problems indirectly linked to shopping cart abandonment but as part of our study, we are not going to study them because they are outside the scope (delivery as well as everything that happens afterwards).

2.3.3 Personas

1. Léa, 28 years old

Profession: Freelance graphic designer

Situation: Single, living in a shared apartment

[14] https://apps.apple.com/fr/app/lieferando-de/id419724490

Habits: Often orders at lunchtime during work

Preferences: Varied cuisine, vegetarian

2. Danilo, 42 years old

Profession: High school teacher

Situation: Married, two children

Habits: Order for the whole family on the weekend

Preferences: Family meals, willing to spend more on the weekend

3. Gaul, 35 years

Profession: Nurse

Situation: Divorced, one child

Habits: Order during his night shifts

Preferences: fresh, fast and safe delivery and if possible not too expensive

4. Julian, 22 years old

Profession: Computer science student

Situation: in casual relationship, lives alone

Habits: Often orders pizza with friends in the evening

Preferences: Fast food, student promotions

5. Nathalie, 55 years old

Profession: Business executive

Situation: Married, adult children

Habits: Occasionally order for couples dinners

Preferences: Gourmet cuisine, upscale restaurants

2.4 expand

2.4.1 Ideation workshops

Our Creative thinking (in part 2.2 discover) allowed us, through a rigorous and in-depth methodology, in which we put ourselves in the user's place and also carried out interviews with different types of site users/ Home food delivery app, to have a problematic search.

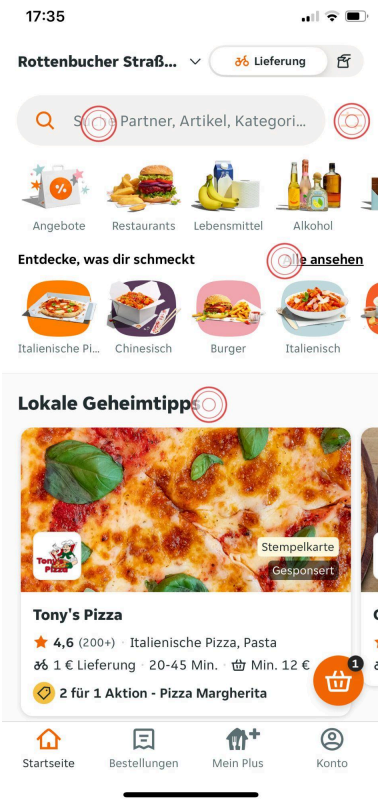
We assumed from the beginning that we had a vague idea of the problem, which came up often: hidden costs and the surprise of the final cost at the end of the process. The Deliveroo app reviews also showed us problems but other than related to the cart abandonment problem. Following our study, we were able to see that the problems lay elsewhere.

Our interviewees showed us different interface problems, choice problems, an interface not adapted to customer needs, favoring local restaurants.

Problem 1: Unfriendly interface

Indeed, the application has a lot of filtering options and offers a large choice of restaurants, which is very good in itself, but not necessarily for the user who finds themselves faced with a huge choice.

Here are the filtering options offered to us on the homepage (as seen threw the red circles, there are a lot of way to choose a restaurant or a meal, what can be very confusing):



Lieferando offers us 5 ways to search for a restaurant (not counting offers other than dishes to be delivered), which is interesting for a customer who has often used the application but not necessarily for the occasional customer.

It would be interesting to be able to simplify this home page into categories but also offer the possibility of filtering directly using a filter page (which could be saved in the user's favorites).

Lieferando, like many of its competitors, has a classic website offering the same filter system. This system is in no way optimized like Amazon, Google, which work with a personalized interface.

Problem 2: provide a customizable interface based on tastes and offer appropriate offers

Each user has their own tastes, preferences and habits. It would be a definite advantage that Lieferando proposes:

- favorite restaurants (rated with one star by the user)
- suggestions based on your habits
- Restaurants in which the customer has already placed orders

- Close to the customer's home
- depending on the time or daily special/offer

This approach can save several clicks and time for the person searching for a restaurant and above all helps reduce the amount of information that does not interest them.

Problem 3: View local restaurants

When a Lieferando user is looking for a dish, he can also decide to go get it himself, or pass by the restaurant after a dog walk/outing, or from any place, etc.... To this, he can-be interesting to have an overall view of the surrounding restaurants.

Problem 4: optimize searches for dishes other than classic (vegetarian/Vegan, allergens)

The search for vegetarian dishes is very poorly displayed (we remember that 10% of customers are vegetarians). It is of course useless to display restaurants that do not have vegetarian dishes. An idea would perhaps be to do a global search in the delivery circle close to the home by vegetarian dish and then see all the vegetarian dishes and thus be able to choose your dish among all those that do not have meat.

This search method can be advantageous in the case where at least 2 people (at least one of whom does not eat meat) are looking for a restaurant to have delivered. A vegetarian person will generally tend to take orders from a restaurant with meat-free dishes.

In addition to the vegetarian problem on the application, there is no mention of vegan dishes and even less taking into account any allergies/intolerances.

Problem 5: Search by budget

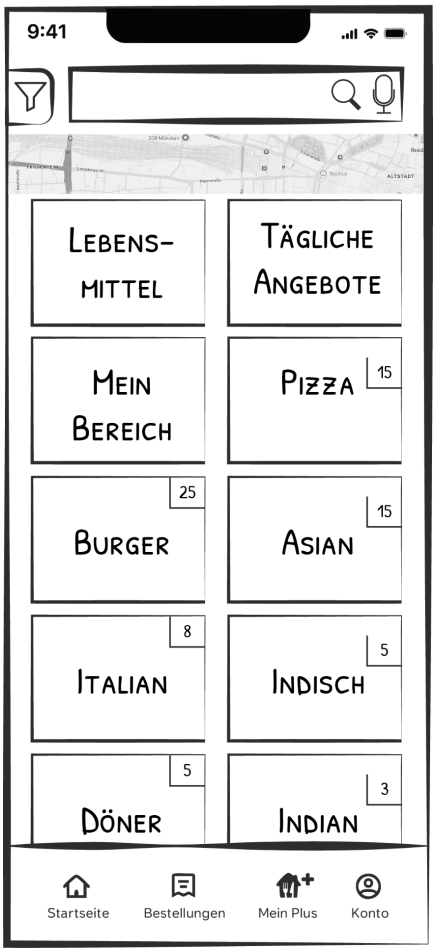
Each user has a different budget (depending on their means, the time of day). It would be interesting to be able to sort this way too. A customer will spend less at lunchtime than during a weekend with the family, for example.

Problem 6: Offer inexpensive restaurants for lunch

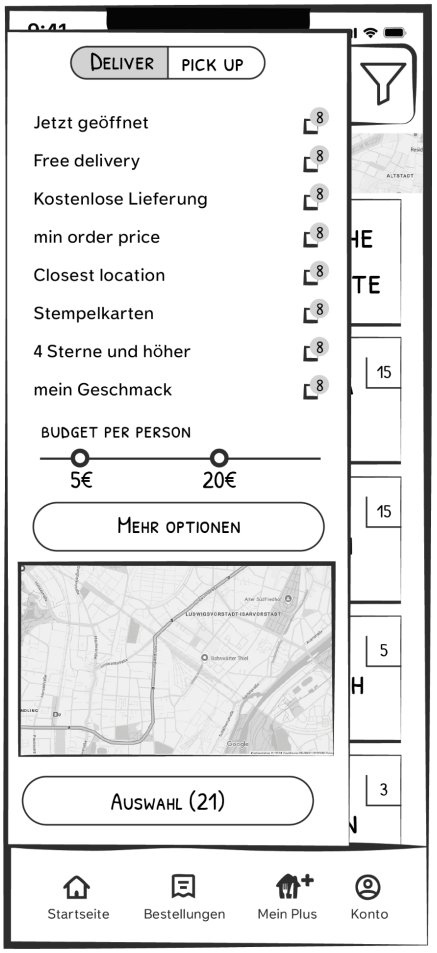
All restaurants have their daily specials/offers. These deals could be offered at lunchtime, they are generally cheaper and are usually ready faster than other dishes.

2.4.2 Prototyping

Home page



Filter Options



2.4.3 Service planning

We first planned the services with the aim of developing solutions to reduce the shopping cart abandonment rate. We have several points to develop (points seen above).

- clarify the interface, make it simpler
- provide an interface that can be personalized according to tastes and offer appropriate offers
- view local restaurants
- optimize searches for dishes other than classic (vegetarian/Vegan, allergens)
- bring a search by budget
- Offer affordable restaurants for lunch

For our study, we will develop a plan to allow each step of research/creation of the order to facilitate use.

2.4.3.1 Definition and objective of the study

We started by defining the service blueprint for our study which is shown below:

Blueprint

- **Opening the Lieferando application**
  - What the client does: opens the application
  - What the customer sees: personalized home page
  - What happens in Backend: User preferences are taken into account and loaded

- **Restaurant search and selection**
  - What the customer does: look in their preferences/last orders
  - What the customer sees: the filter options listed together and also a list of their restaurants with occasional reviews
  - What's happening in the backend: The restaurant algorithm shows the user's own preferences

- **Research and selection of the dish**
  - What the customer does: looks for a dish with marking then without and chooses it
  - What the customer sees: looks at the dishes already marked with a recommendation icon (by themselves) but also by other users
  - What happens in the Backend: dishes that are more likely to be selected are highlighted

- **Check cart**
  - What the customer does: opens the cart
  - What the customer sees: the dishes ordered
  - What happens in the Backend: the dish is registered as well as the ingredients plus/minus/notes as well as the final price including delivery and when your order will arrive
- **Payment**

    - What the customer does: chooses their already pre-recorded payment method and confirms the order
    - What the customer sees: a list of payment methods offered
    - What happens in the Backend: Verification of the transaction

- Confirmation of order dispatch
    - What the customer does: receives confirmation of the transaction
    - What the customer sees: Order status
    - What's happening in the Backend: Lieferando coordinates the order with the restaurateur and by extension his delivery person who will then have to coordinate the cooking of the dish with the predetermined time and displayed in the delivery time margin entered in the application

- **Receiving the dish**
    - What the customer does: receives the order, checks
    - What the customer sees: confirmation that their dish has arrived
    - What happens in the Backend: the delivery person confirms receipt in the system. The restaurateur is paid by Lieferando

- **Opinion on the order and dish**
    - What the client does: opens the application and between an opinion
    - What the customer sees: the review entry page (stars and text fields)
    - What happens in the Backend: Analysis of user reviews and updates the reviews and ranking of the restaurateur on Lieferando but also in the customer account

This Blueprint of the service demonstrates the improvements brought by a personalized interface, which avoids spending unnecessary time looking for a restaurant and therefore resulting in an order and therefore reducing shopping cart abandonment by 30%.

Touchpoint mapping

- **Discovery of the application and installation**
    - discovered by friends/seen in the street/pubs
    - installation and entry of account data

- **First use of the application**
  - visit the home page
  - visualization of search and filter options

- **restaurant and dish selection**
  - restaurant viewing
  - viewing restaurant offers

- **shopping cart and payment**
  - check cart and send
  - receiving a shipment confirmation and status notification

- **Delivery**
  - contact with the delivery person
  - reception you plat

- **order evaluation and dish**
  - entry of a rating and possibly a comment
  - In the event of a major problem: contact customer service

These contact points are very important to take into account during the analysis in order to reduce the 30% shopping cart abandonment rate.

Definition of roles and responsibilities: Clear assignment of tasks to each stakeholder

From our previous analysis we can define 3 groups of responsibility:

- Development, technical and design group
  This group will be dedicated to the creation of a Wireframe as well as an interface (UX/UI group) including the new functionalities of the application. These new functions will have to be implemented in the application by the developers. Good intercommunication between these groups should strengthen the application and improve its use. It will surely be necessary to call on AI

developers. Since I. A. is a new field, for Lieferando it will be necessary to expand the team of programmers.

- Marketing and Customer Service Group
  The improved application, it will then be necessary to announce the advantages of the new functions on different platforms (banner)/on the application/Email/Push notifications App Store, Google Play Store… It is also necessary to provide customer service/notices which will be implemented, listen to users and check that it is well accepted.

- Management and Coordination Group
  The functions to be implemented will be studied by a cost analysis and time contribution. This group will define priorities, estimate the time to spend but above all have the role of group manager and ensure that communication goes well.

2.4.3.2 Planning stages

Analysis of the current state of the service
It is necessary to analyze the current application and highlight the problems by quantifying them and giving them an evaluation (this will make it possible to quantify the added value to the new functions)

Integration of new features and improvements
New features will be managed and integrated into the application in a predefined order.

It is important to have beforehand quantified the work to be provided and plan the technical/Marketing team in order to have adequate know-how

All these steps will be integrated into a calendar with the required team, at what time in order to have the human resources at the right time and especially their availability.

2.4.3.3 Key Considerations

- It is important that changes made on the app must also be changed on the website as well as the mobile website. All these changes must also follow Lieferando's C.I. These changes must also not be too different in use, this could cause users to lose their bearings.

- When changes are made to the application, it is very important that customer service is informed and trained so that they can answer users' questions as professionally as possible.

- Before launching the application update, it is very important to launch a communication campaign on the changes Lieferando is making to its Application and to know how and where to provide the information.

2.4.3.4 Change management

The policy must be applied for application changes.
It may be useful for the user to be informed about the new features through a video that shows and explains the advantages of the new filter options, here, above all, taking into consideration the user's favorites and habits .

Lieferando must also create a popularization campaign for its App, for example on sites with a large audience such as Social Networks/Google/TV advertisements... It must highlight the advantages of filtering and intelligent search

2.4.3.5 Tracking Metrics

Lieferando very likely has ways of tracking users on the application (70% of users use the application) or even the desktop. It is therefore of course very important to keep these figures in order to keep the tracking links after the Update and therefore to be able to analyze the changes (or not) of the KPIs.

This information is collected by services such as Google Analytics, Matomo, AT Internet or even Adobe Analytics. All these companies have very powerful tools to obtain all possible information on user behavior.

2.4.3.6 Link with the following steps

The analysis provides previous steps allowing us to launch the prototyping phase of the application and rigorously test with for example A/B Test. These tests will allow us to adjust the developments made to the application. Based on these results thanks to users

2.5 Deliver

2.5.1 Usability testing

The usability test is a crucial step in the analysis carried out, it will define whether the methodology has been carried out correctly. If the problems have been resolved and if the user is satisfied and especially if he sends his order in a shorter time. For this test, you need to take as varied a sample of users as possible.

2.5.2 Tests A/B

To carry out the tests, it is necessary to compare the tests given before the analysis and compare them with the measurements taken after the user tests. Metrics are very important for example: time spent per game (login, restaurant selection, dish selection, options, payment and order confirmation). User satisfaction is also very important

Here are the metrics to track:

- Conversion rate
- Cart abandonment rate
- Time spent on the app

- Average basket value

This testing period is essential because it will determine the quality of analysis and confirm the results. It may also be that the problem is not addressed well enough. In this case, a step back is necessary to the part of the analysis where the problem was not recognized well enough.
After this analysis, we will obtain recommendations that will refer to previous stages of the “Double Diamond”

2.5.3 Implementation roadmap

The implementation roadmap is the plan that will detail the process of implementing the improvements that have been made to the application.

Here are the steps to follow:

- Detailed preparation and planning
- Development and testing of new features
- Gradual deployment and adjustments
- Evaluation and continuous optimization

This roadmap must be defined temporarily and a plan must be applied. As said previously, it is necessary to call on qualified labor to carry out the changes (IT, Analysts, interviews, etc.). This labor has a price and therefore a budget must be allocated.

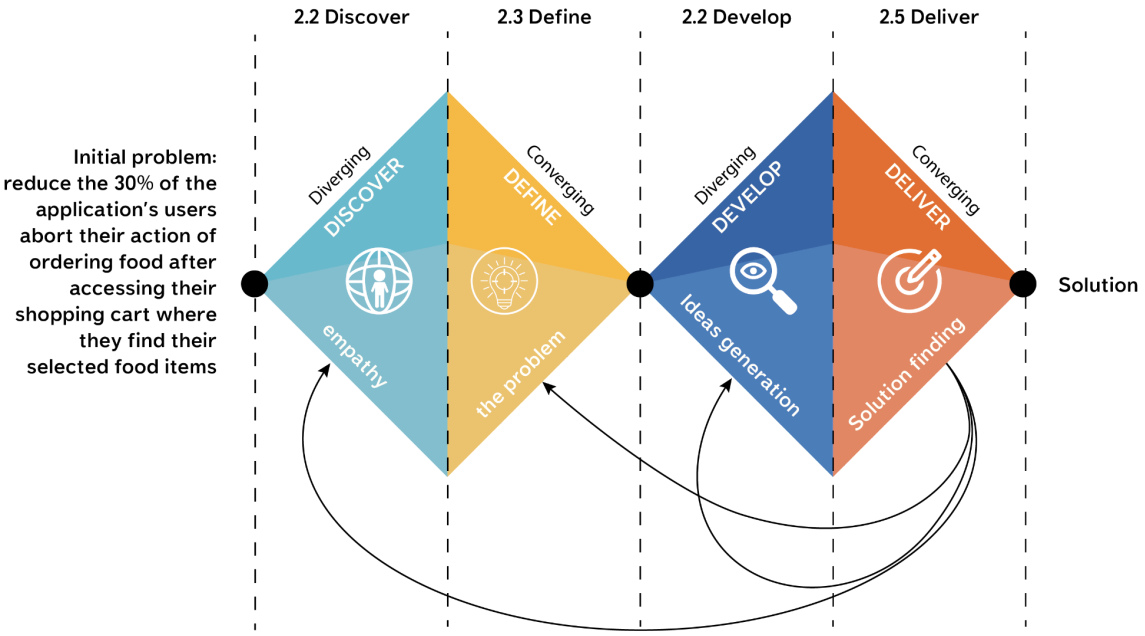
Before starting the implementation, you must list the tasks to be accomplished for each phase, as well as define the KPIs according to the desired results.

Link to video showing the work done for Lieferando:
https://drive.google.com/drive/folders/1M6VcZapBmtvHfLCh2_5gbWzFzhrLlN-a

3. Analysis of current user experience

To analyze the user experience we will repeat the previous process carried out in point: 2. Methodology & research

Depending on the problems that have not yet been properly solved, it will be necessary to repeat part of the analysis (see diagram below). This work will have to be repeated until the problem of 30% of unsuccessful orders is resolved.



3. Conclusion

3.1Summary of recommendations

Observation: our analysis of the loss of 30% orders revealed an interface that was too complicated to use and not very visual. The system has been reworked to reduce the choice if necessary in a simple and intuitive way. Lieferando's application also and above all revealed a lack of understanding on the part of the user when making their choice. The integration of preferences by an AI is essential these days.

3.2 Expected benefits for the company

We estimate with this analysis that Lieferando will obtain an improvement in its turnover, improve its profitability and be able to retain its customers even more and avoid a new company taking over the market.
With customization of the interface by users, they will have a more targeted choice offered to save time spent on the application. A search by micro will also make it easier to find restaurants/dishes, a map for searching by proximity

3.3 Prospects for continuous improvement

The analysis of the reasons for the 30% shopping cart abandonment rate carried out and the resolution of the problems will lower this rate. However, it is also certain that monitoring of metrics remains necessary in order to control developments. It is also essential to check the evolution and improve the services provided.

User feedback is desirable as well as competitive monitoring. The UX/UI team must stay to continue moving forward and offer other future functions. The delivery/sales field is a constantly evolving field, where users have constantly changing needs.

4. References

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