UX DESIGN

portfolio of works

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While working on the five assignment of this course, I discovered how diverse the applications of maps and diagrams can be. Complex systems and ideas necessitate to be translated into a concrete visualization to be communicated, and by doing that, I found out how readability is paramount.

I also notice a sort of a pattern in the purpose of each map, therefore I decided to group them into four categories, that despite providing a general distinction, helped me to form an idea about UX goals and activities.

journeys
clusters
structures
solutions

journeys

User actions, feelings and attitudes on a timeline.

REGISTRATION PROCESS

Touchpoints

APP STORE | WEB | CUSTOMER SERVICE

GOOD FIRST IMPACT

The app is popular and has a fairly good rating. This creates **good expectations of quality** in the user.

EFFICENT LICENSE VALIDATION

The submission of the driver license, along with a face snapshot is an **easy** and **efficent** process. It's done directly in-app thanks to the front and back camera of modern smartphones.

Download the app from the store → Register to the service → Login and set your PIN → Verify driver license and Give proof of residence → Ready to drive

DESKTOP WEBSITE ISSUES

The registration process in desktop web browser is blocked before the "add payment method" page. It's also impossible to save payment methods later in the profile page. The user is **forced** to use a mobile browser. This can cause **disappointment** and **frustration** and may stop the user from completing the registration process.

OPPORTUNITY: Improve the **reliability** of the website, which is a crucial part of the experience.

CUSTOMER SERVICE REQUIRED

Users need to manually give proof of residence upon contacting Customer Service (mail, voice call, chat, validation shop) which is **frustrating** and can take a **considerable amount of time**.

OPPORTUNITY: A more on-the-go registration experience like the driver license validation requires **less effort** and it's **faster** to complete.

BEFORE DRIVING

Touchpoints

CAR | APP

Find your position on the map and choose an area of interest → Vehicle is found → select a vehicle and check the amount of fuel → Start the rental → Unlock the car with personal PIN and the 3-digit code on the windshield → CAR UNLOCKED Rental starts

Vehicle is not found → Place a radar and wait for available cars in the area → Reserve the car for 20 min → Find the car by blinking lights

INSIDE THE CAR

Touchpoints

CAR | APP

CAR FEATURES

The car offers nice optional features that can **enhance the experience** by making it **more comfortable and enjoyable.**

POP-UP MESSAGE: Rate the cleanliness of interiors → Take the keys inside the glovebox

OPTIONAL: Recharge phone | Set GPS navigation | Connect phone to bluetooth stereo

→ DRIVE → Destination is reached → Select "End trip" on the app → Put the keys back inside the glovebox → Get out and wait for the car to lock

AUTOMATIC TRANSMISSION

Controlling the automatic gear lever can be a **daunting** and **stressful** task for those who never used one. Neither the app nor labels inside the car provide basic informations on how to use it.

OPPORTUNITY: Adding a **simple label** with basic instructions can greatly decrease the stress level while starting the trip.

AFTER THE RENTAL

Touchpoints

APP

POP-UP MESSAGE: Rate the experience and/or give feedback → Check the summary of the trip and the amount of credit spent

CUSTOMER JOURNEY

This map, made through personal experience, aims at making visible each of the steps that constitutes the main service experience, while highlighting some positive aspects as well as problematic steps that can interrupt the natural flow of the journey.

In this assignment I wanted to highlight the channels employed in each stage, since carsharing services are strongly cross-channel by its nature. This way the user experience can also help understand how and where the experience develops. Along with the descriptive sequence of actions, a separate second reading level describes the highs and lows of the user feelings. Those are then taken as a starting point to elaborate some opportunities for the service. This approach forced me to think of possible experience improvements by selecting and filtering the feelings I had in every stage of the process.

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Experience Map

GROUP 16
Azzolin Nicolò
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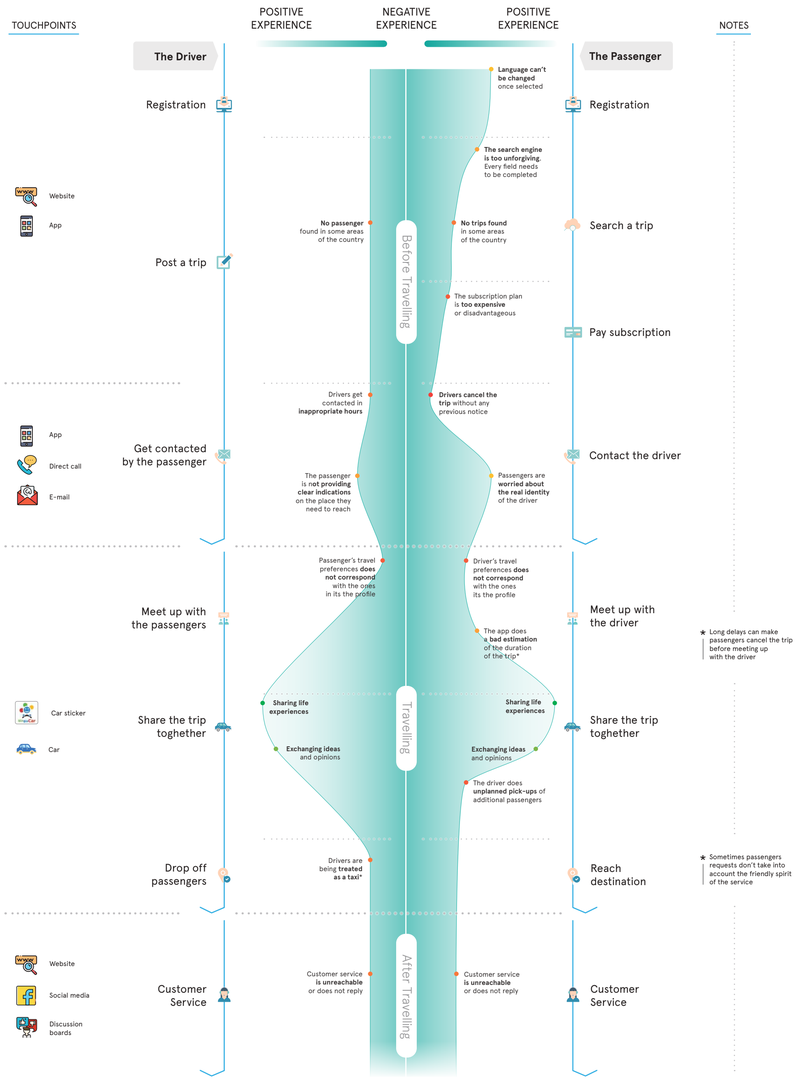
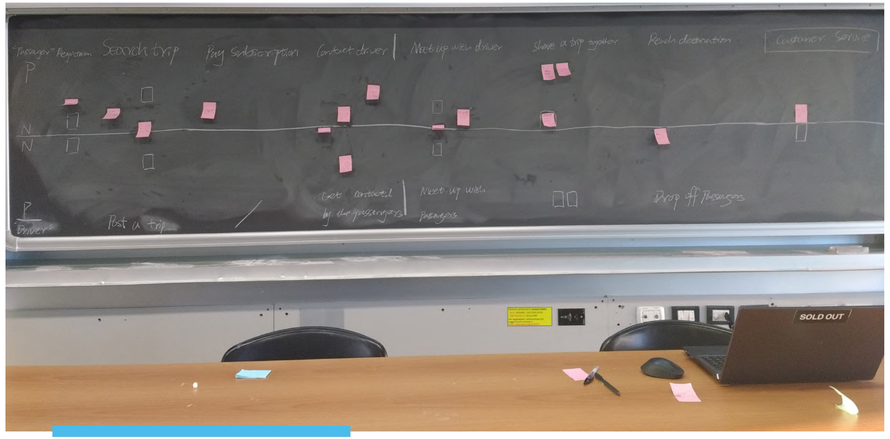
Zhao Junpeng





The co-creation of this map started from extracting the core meaning from similar comments and writing the resulting sentence on a post-it. The placement on the X axis is relative to which part of the experience the comment is about, while the double Y axis (starting from the center line and growing on the opposite directions) represent how positive or negative the feelings of the users were. By connecting each post-it with a line, we created a first draft of the dramatic arcs.

BlaBlaCar experience map is based on the results generated by the digital ethnography, which have been selected and put in a timeline to represent the user experience through data gathered by real users of the service.

In terms of structure the two types of roles (the driver and the passenger) will inevitably share the experience in some parts. For this reason their two timelines have been put in a multi-track vertical map to create a visual comparison between the two. Considering the diversity of the gathered feelings, each comment has been put on a gradient that goes from positive (towards the sides) to negative (towards the center). From this map it can be noted how in some services the user experience needs to be considered as a part of a relationship with other stakeholders or other users.

Due to the double gradient to compare the two user experiences, the map can be hard to read at a first look. Emphasizing the red-yellow-green colors to codify the pleasantness of the experience would have helped the readability.

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Scenario 1: Newcomer

"I need to get somewhere in Milan but I'm not familiar with the local transportation services"

"I need to buy urban tickets"

"I need to know the general timings of the trip"

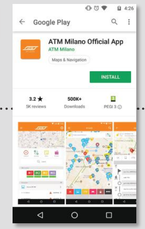
MOTIVATIONS

→ People living outside Milan need to get somewhere there. They are not familiar with metro/tram routes
→ Get familiar with the application

NEEDS

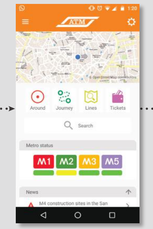
→ Know the complete integrated route for bus/metro/tram
→ Get a ticket without many efforts

ACTIONS

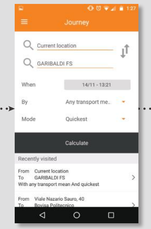


Download the app on Google Play / App Store

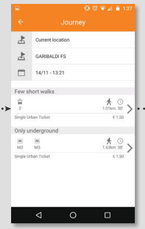
Open the application



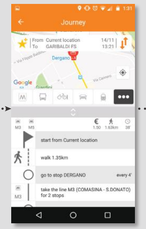
Choose "Journey"



Input the journey informations and select "Calculate"



Think and select which way I prefer



Check general trip

Get a ticket from underground shop

Check the next station or direction on the app

Get to the platform

Get in Tram 2

Check the next station

Arrive to the desired destination and get off

REAL INFO

Current Location, GARIBALDI FS, 12:00 AM, Any transport mean, Quickest Mode

Tram 2

PAINPOINTS AND BUGS

Blank screen

Lack of separated time for walking and taking transport means

Journey informations can't be modified directly from this screen.

Too many informations on screen

Map is hard to read with split screen

DESIGN HINTS

Specify general elapsed time along with walking time

Make starting point, destination, time and date editable if the user tap on them. The search results will be updated automatically.

Push the box overlaying the map to the top bar. Make the map filter buttons slightly smaller.

ATM
AZIENDA TRASPORTI MILANESI S.p.A.

The journey maps made for this assignment, differently from the others, focus around explaining different use scenarios of the ATM mobile app.

For every scenario we summarized attitudes and goals of specific clusters of users by making them speak through quotes. The resulting journey has been derived from personal experience as well as critical thinking. The navigation through the screens has been a linear sequence of actions, so we decided to put it on a timeline and use multiple lanes to highlight the actual informations inserted by the user along with pain points and the related design hints about the application experience. We added some non-application related actions to the timeline to give a better context to the whole experience.

A possible way to improve this map is to highlight in what points of the interface the interaction of the user takes place such as what button gets pushed and what kind of gesture is used.

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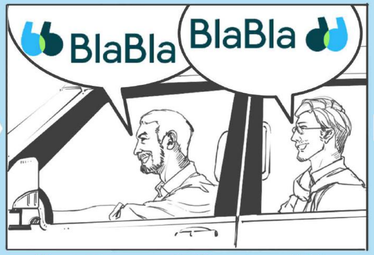
Story Board

illustrations by Zhao Junpeng

GENERAL PROCESS

Looking for the same way car/Passenger

Go to the agreed location



Chatting and Sharing life experiences

End the journey and even become friends

PROBLEMATIC EXPERIENCE

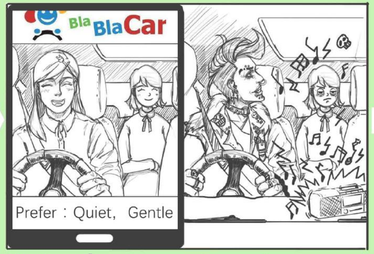
Language can’ t be changed once selected

Drivers get contacted in inappropriate hours

Passengers are worried about the real identity of the driver

The passenger is not providing clear indications on the place they need to reach

No trips found in some areas of the country



Driver’ s travel preferences does not correspond with the ones its the profile

The driver does unplanned pick-ups of additional passengers

Customer service is unreachable or does not reply

This type of map presents different experiences through illustrative storytelling.

Considering the powerful visualization capabilities of storyboarding we thought that presenting just the general “smooth” sequence of action would have been too limiting. Two other scenarios of problematic experiences have been added by synthesizing the most relevant bad experiences obtained with the digital ethnography. This allows a general overview of the potential feelings of the user while maintaining the sequence of the experience. This storyboard can be seen, among the BlaBlaCar collection of maps, as a clear communicative artifact that can wrap up all the ways the multitude of users have approached the service, while also bringing together the subjective experiences to a readable level for anyone.

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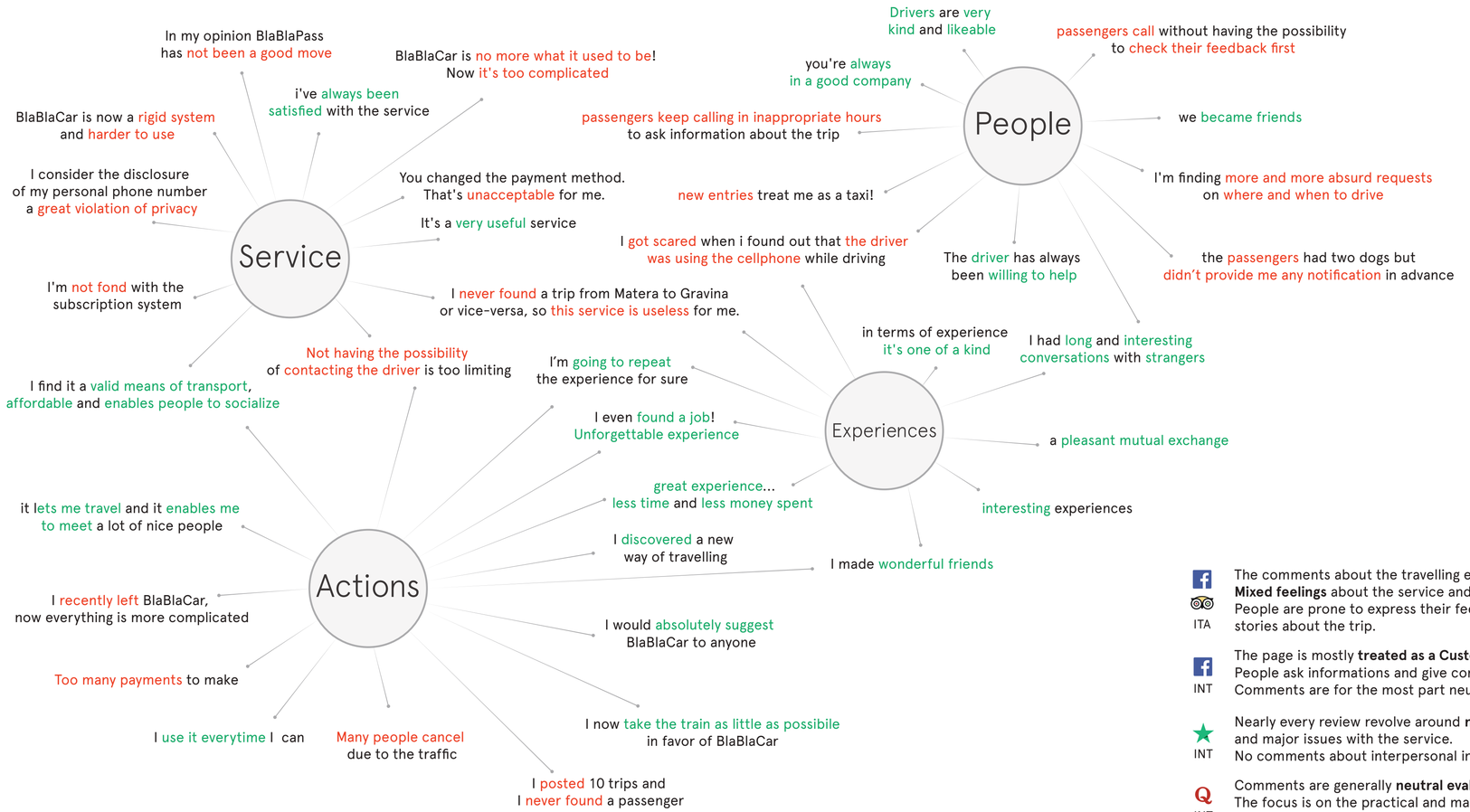
clusters

Dividing, grouping, categorizing users and its informations.

Ethnographic Research Summary

SOURCES
- Italian Facebook Page
- International Facebook Page
- TripAdvisor Italian Forums
- Trustpilot Reviews
- Quora Forums



ITA
The comments about the travelling experience are **mostly positive**.
Mixed feelings about the service and their new payment policies.
People are prone to express their feelings, opinions and sometimes stories about the trip.

INT
The page is mostly **treated as a Customer Service touchpoint.**
People ask informations and give complaints.
Comments are for the most part neutral or negative.

INT
Nearly every review revolve around **negative experiences**.
and major issues with the service.
No comments about interpersonal interactions during the trip.

INT
Comments are generally **neutral evaluations** or **negative experiences**.
The focus is on the practical and material aspects
with no particular mention to interpersonal interactions.

To be able to make use of all the comments and opinions found on social media platforms and review websites we had to first have a clear idea of what the purpose and the topic of the words that the user decided to express. In addition to the sentences network, the map provides a short description for each website chosen for the research to give an additional point of view on the relation between the places where the data has been gathered and the data itself. For this type of map a non-sequential representation has been necessary for a better view of the whole research.

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Personas

Age 45
Occupation Market Manager
Status Married
Location Milano
Home Paris

Time-conscious
Environmentalist
Sense of social responsibility

Needs

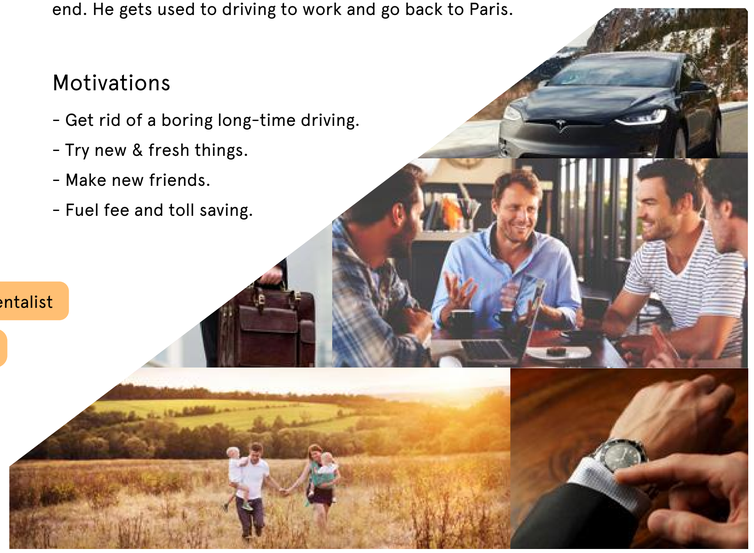
- Easy to communicate
- Privacy protection
- Reliable informations
- Be respected

Bruno

Bruno has a happy and cozy family in Paris. Even though he works and lives in Milan, but he always go back home at week-end. He gets used to driving to work and go back to Paris.

Motivations

- Get rid of a boring long-time driving.
- Try new & fresh things.
- Make new friends.
- Fuel fee and toll saving.



Emilio

Emilio often goes travelling in European countries when he has not any lectures. He always saves money in his daily life in order to go to various countries.

Motivations

- Save travel transport fee.
- Get rid of the need to book public transportation.
- Make new friends.
- Experience a unique travel style.

Time-conscious
Money-conscious

Needs

- Convenience
- Punctuality
- Timely assisting
- Responsible service
- Safety and reliability
- A mutual exchange

Age 35
Occupation Junior high school teacher
Status Single
Location Milano

Considering the high reliance on users for this service to work, identifying archetypal clusters of users is a relevant way to complete the broad view of the service by having a clear idea of what the main actors (drivers and passengers) are, but also taking them as a reference for possible improvements.

After checking the digital ethnography results we decided to define two personas whose main traits reflect the experience and travel-oriented attitudes of some young adult users and the habitual convenience of middle-aged users. We found useful to provide pictures for a quick understanding of the activities and attitudes of each persona, while the brief description is used to introduce a context and give a clearer interpretation of the other informations presented.

This deliverable could have been improved in many ways, from a better graphical hierarchy to adding quotes to give an exemplification of the needs and behaviors. Differentiating a bit more the age between the two personas could have made the distinction even clearer.

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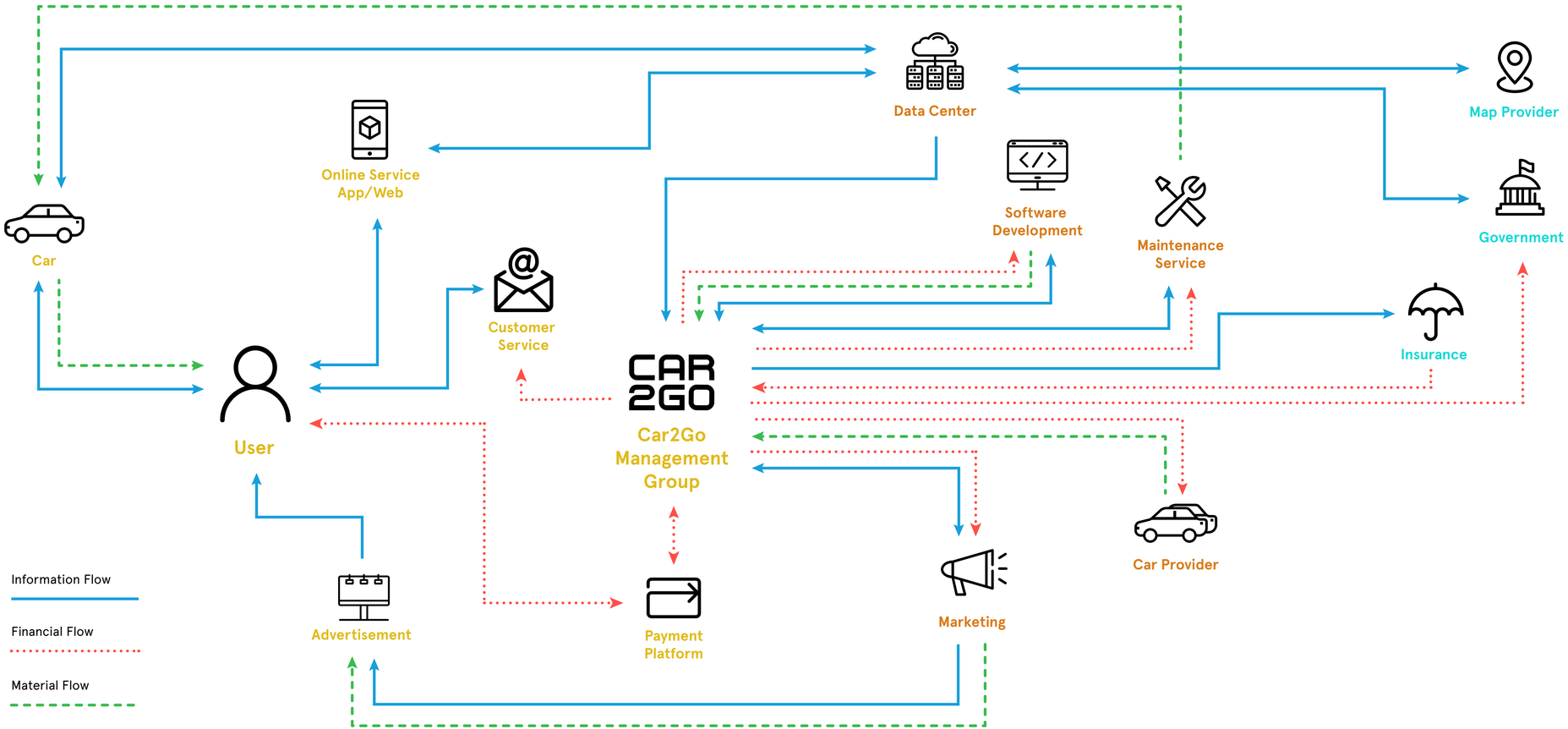
structures

Service as a dynamic set of actors, components or informations
in mutual connection to generate a value for the user.



Main stakeholders | **Secondary stakeholders** | **Tertiary stakeholders**

CAR 2GO

SYSTEM MAP

SOME EXTRA NOTES

GOVERNMENT
1. Issuing number plates for the vehicles in the services
2. Verifing user credentials (i.e. driver license, ID etc.)
3. Providing free parking area for Car2Go vehicles.

CAR PROVIDER → Car2Go
1. Daimler AG is providing both Smart (Smart fortwo and Smart forfour) and Mercedes-Benz vehicles for Car2Go service.

MAP PROVIDERS → DATA CENTER
1. Based on differnt mobile operation systems, multiple companies (i.e. Google and Apple) provide map services used in the Car2Go application.

EXTRA HARDWARE MANUFACTURERS INVLOVED
1. Providing the windshield pin device for displaying the pin required to unlock the car
2. Providng the key-holder in front of the front passenger seat.

ONLINE SERVICES
1. Application: Register, verify, reserve, travel, review, pay, etc
2. Website: Register, verify, Q&A, browse promotion.

PAYMENT PLATFORM
1. Credit card i.e. MasterCard and Visa, issued by banks

USER ← APP STORES → ONLINE SERVICES
1. Users access, rate and review Car2Go application via app stores as part of Google and Apple's services

CUSTOMER SERVICE
1. MAIL: Ask questions about car2go, need help, give feedback
2. CHAT: Ask questions about car2go, need help, give feedback
3. CALL CENTER: Ask questions about car2go, need help, give feedback
4. Car2Go Shops: Register for an account, validate account information, and look for answers for user's own questions in person

This system map focuses on the exchange network of three different values between the main nodes that constitute Car2Go service.

Considering the number of stakeholders involved, defining a hierarchy in the structure let us highlight the ones that are closer to the customers and can produce the most effect on them. Even though the connections have been presented clearly, we decided to add some notes to further explain the relationship between some stakeholders in the system. This type of map is merely descriptive but can also be seen as a reference for possible improvements in the connections between the stakeholders and to test the effects that structural changes can have on the value flow.

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phileas

BUSINESS MODEL CANVAS

KEY PARTNERS

- Spotify
- Podcast providers
- Audiobooks providers
- Local (public) transportations
- App developers
- Google (maps)
- Android (voice assistant)
- Apple (Siri)

KEY ACTIVITIES

- App development
- Create up-to-date logistic public transportation network
- Promotion of the app through partners

KEY RESOURCES

- Local public transportation
- Internet/GPS connection
- Office space, people, developers

VALUE PROPOSITIONS

- Give users the **required information** when traveling with public transport, **without actively using his smartphone**
- The **self-learning app** instructs and **advices users** about their weekly journey on time
- Increase the travelling **experience** by making it more pleasant and productive through **audio voice guidance** and other audio output
- Allow people to **discover**: the app suggests new audiobooks/ music based on their taste, travel time (duration and time of the day) and **surrounded users** of the app in the same transportation.

CUSTOMER RELATIONSHIPS

- Application (personal voice guidance/advice)
- Online (website) customer service
- Traveler communities

CHANNELS

- Application
- Spotify/audiobooks
- Social Media
- Advertisements
- Public speaking

CUSTOMER SEGMENTS

- People traveling on a daily or weekly basis using public transport (in and around cities)

COST STRUCTURE

- Non-variable costs:

  Development of application:
  - Back-end development (network)
  - Front-end development (UI, audio)
  - UX-Design (service, UI, voice)

  Advertising
  Customer Service

- Variable costs:

  Application updates
  Application error maintenance

REVENUE STREAMS

- Partnership Spotify (membership)
- Advertisements of other companies in application
- Pro version membership?

Although not required for the assignment, we felt we had all the elements to produce a broader and "zoomed out" view of the service to help us visualize and communicate the entire structure and the possible conflicts between the service modules. Moreover, building the Business Model Canvas has been an opportunity to think about the Cost Structure and the Revenue Streams, thus completing the design of the service with a business feasibility point of view.

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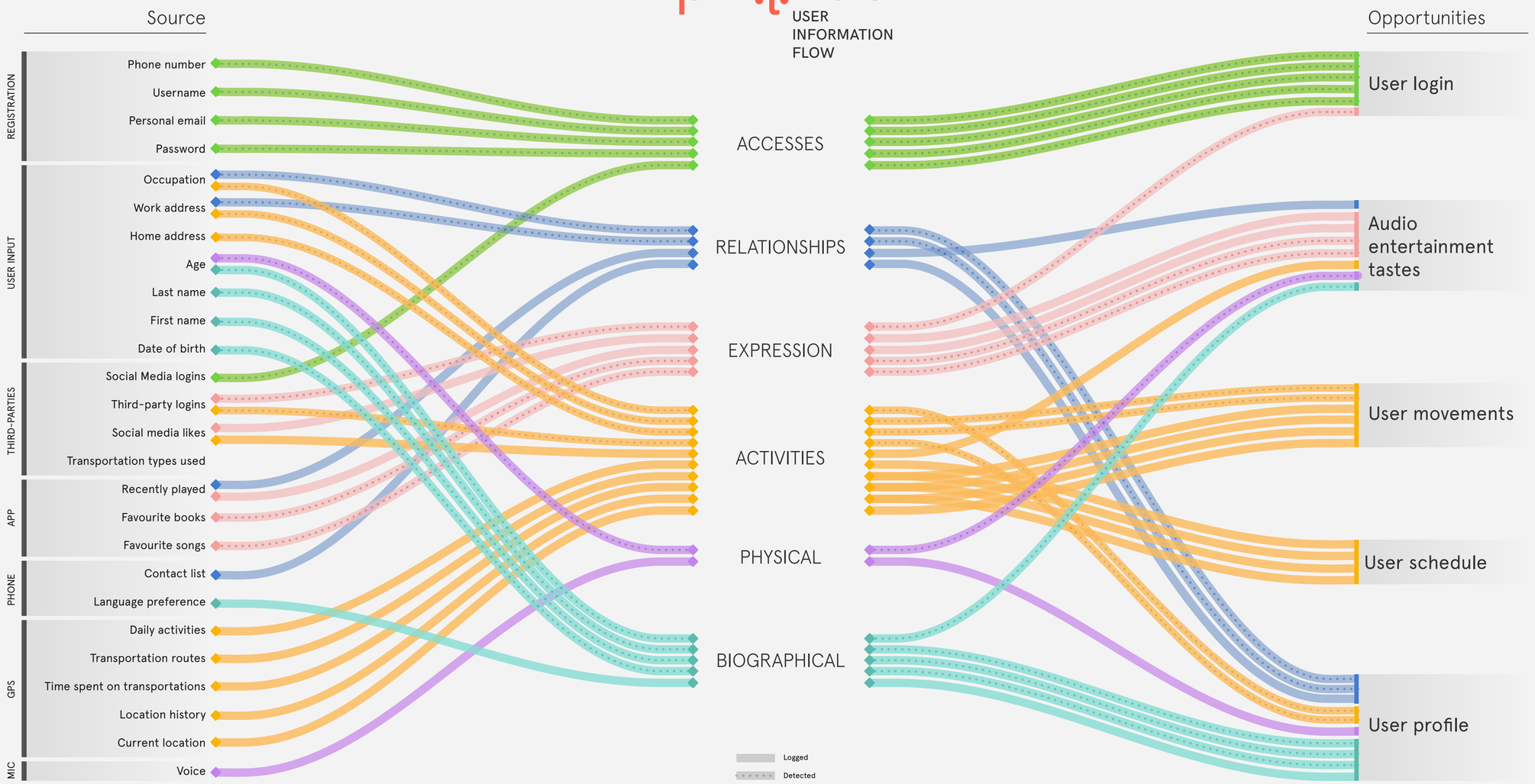
phileas

USER INFORMATION FLOW



Considering the amount of data needed for the service to work, picturing and connecting the informations gathered from the device, as well making them converge into common purposes helped us visualizing how data can be used, while on a second reading level define what and how many of these informations are gathered automatically by the application algorithm.

I decided to develop this map horizontally since it helped me organize the space better, especially for the textual information despite not having the tidiest visual connections.

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solutions

Problems, opportunities and design propositions to align user perceived values to those offered by the service.

phileas

EXPLORATION OF CONSEQUENCES

CRITICAL THEME: automation of actions and services through the use of data (procedures, tasks, efforts, time)

Impact layer	Issue	Details	Key-Points
Self-perception	Altered cognitive load on decision making processes	Suggest musics, podcasts, audiobooks to you (you don't make the decision), it tells you when you have to get out of the public transportations (you don't have to remember it).	The user relies on the algorithm decisions rather than its own.
	Unawareness of automated decision making and procedures	The user is excluded from the decision-making process made by the algorithms. (why the application chose that particular song for me?)	The user is not aware of how the service is programming the schedule and suggesting audio products.
Actions	Optimized daily activities due to access to information	Life experiences can't only be reduced to a constant optimization process. It leaves no space to spontaneous actions.	Too many constraints given to the user.
Interpersonal relationship	Alteration of interaction and relationships between people	The user isn't encouraged to interact with people surrounding it.	User can isolate itself from the surrounding environment in public transportation by listening to audio contents with headphones.

The research of solutions starts at acknowledging the possible issues. Since managing personal user data can potentially have a high impact on user behaviors, we identified some critical topics of our own design by questioning the automatic management of user informations and the ready-made solutions offered by the application.

Phileas has been designed as a personal assistant, thus it became obvious to us to think how "present" and proactive the algorithm could have been designed. This map has been used to pick the suitable issues and consequently extracting details and sentences to link them to the specific problems of the service. We then started from the formulated key-points to discover new possible solutions.

Since the density of informations displayed is manageable, we could have improved this map by integrating the brainstormed solutions to each row, rather than creating a separate document.

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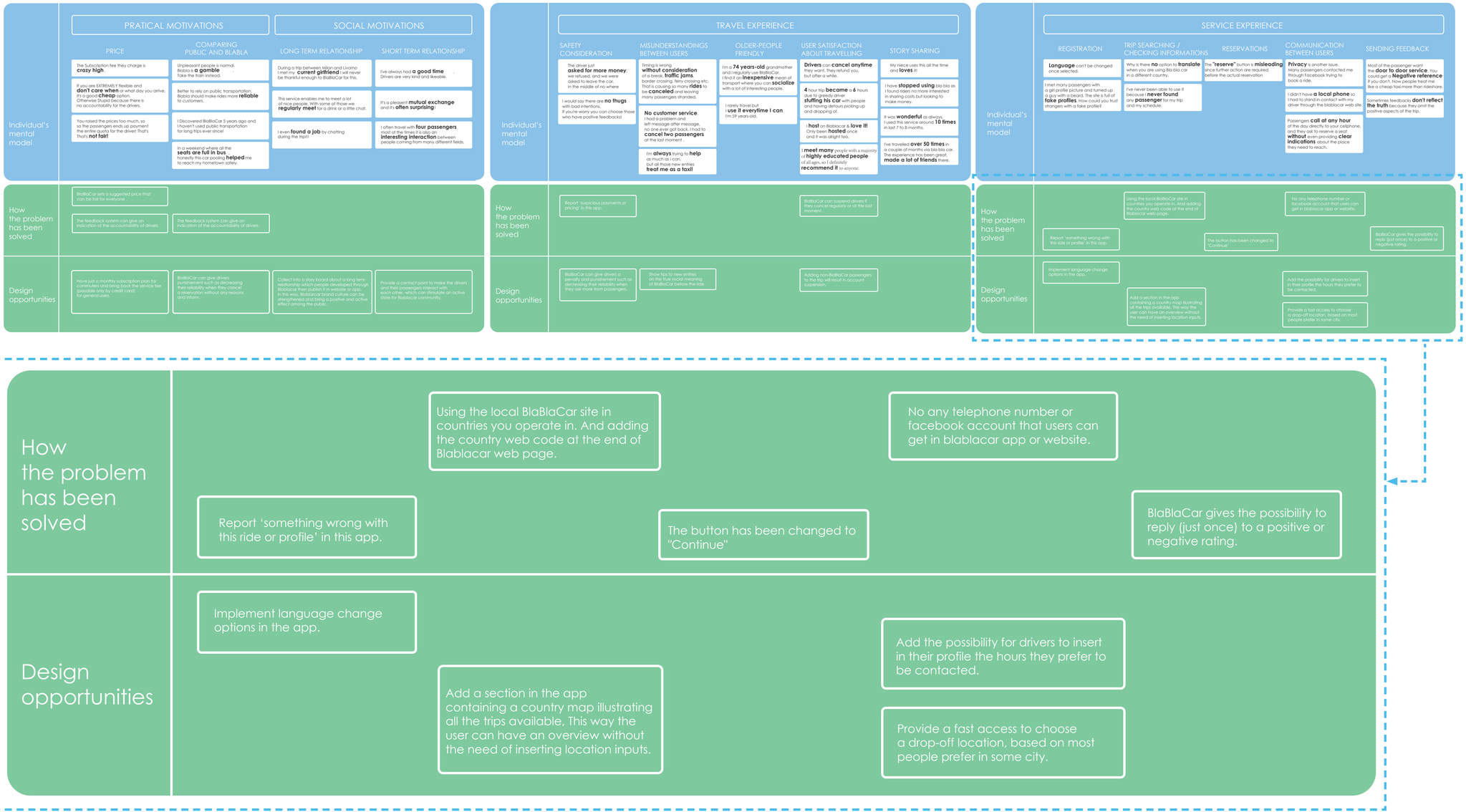

The mental model diagram shows the result of the digital ethnography grouping positive and negative attitudes by motivations and type of experience.

The bottom part of the diagram is dedicated to show whether or not the service supports these behaviors and attitudes. If not, some design opportunities have been proposed to fix the user-service (behavior-support) misalignment. This type of map has been meaningful during the definition of the service support since it forced us to think how the service can already provide solutions to user complaints or attitudes, and thus prevented us to jump directly and incautiously into to exploring new opportunities.

This map could have been improved by defining some clusters of users and marking the comments in the diagram. This could have had added an additional reading level to the results. In terms of visual design, making the boxes gravitate from the center to the side to have a better association through the diagram top and bottom sections.

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Possible Improvements

HOW TO IMPROVE THE SERVICE

The **biggest painpoint** of Blablacar users is that they **can't get any timely help** from Blablacar customer service. We found Blablacar is lacking enough **loyalty** among users. In this case **user stories** of long term relationships can be **gathered and organized into a storyboard** accessible from the website or app. This way Blablacar can better advertise their service through the experience of their users.

Another solution that can be provided is a contact point to make the drivers and their passengers **interact** more often with each other, even after the travel. This way the service can improve **short term relationships** while stimulating an active participation to the Blablacar community.

To define a chance of improvement for BlaBlaCar we first started defining the most important landmarks that contribute to define the service, especially regarding the experience of the users and the main tools used by service.

It can be noted how many of the attributes defined concern social activities and relationships, which are clearly the main strength of the service offering. Starting with these words we then brainstormed to find the central focus of BlaBlaCar. Once defined, taking into consideration all the maps produced for this service, the solution proposal had naturally emerged from the discussion.

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