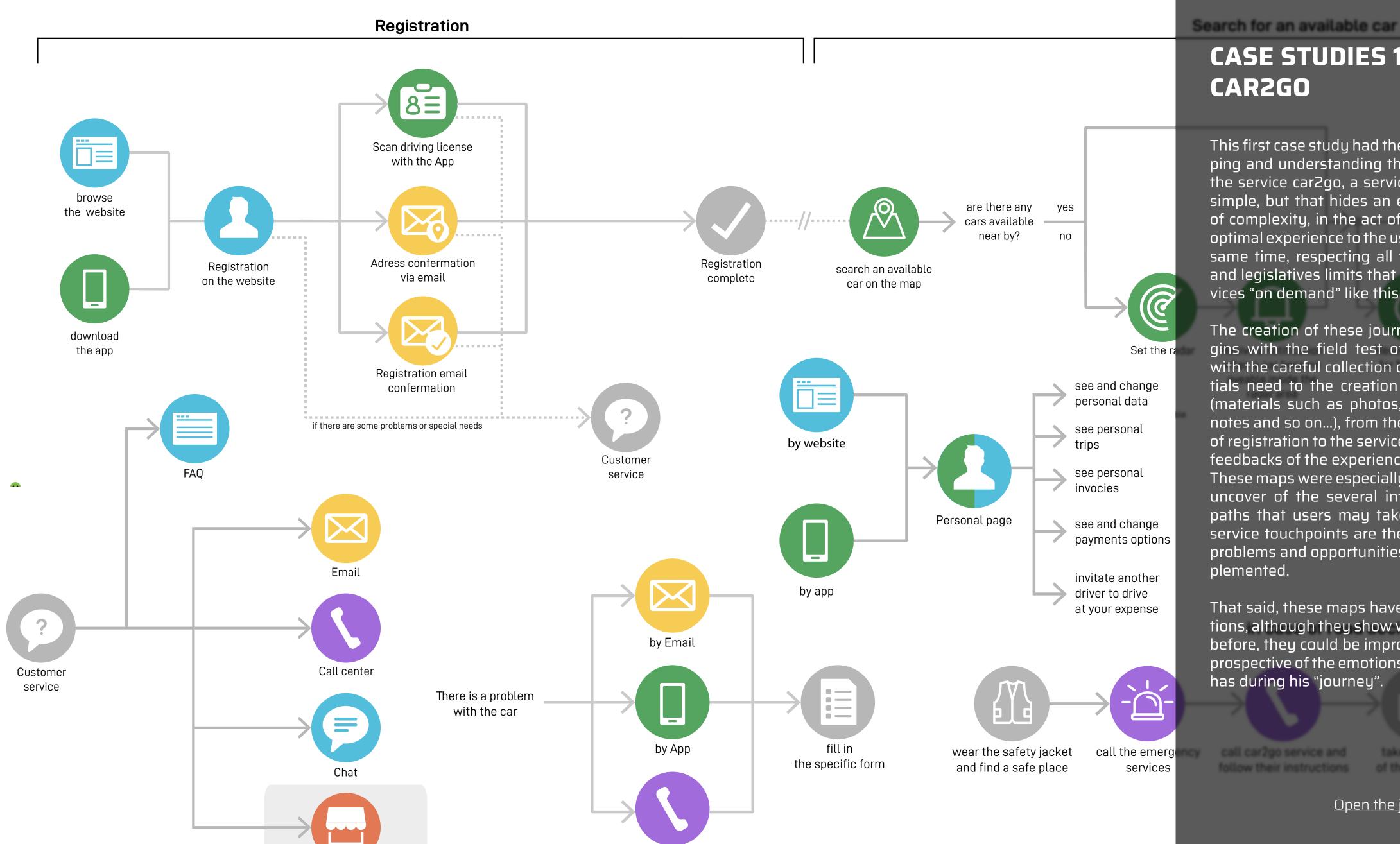
# UX Design Journal a brief journey inside the analysis and mapping of the complexity of innovative transportation services, through the experiences of the users. Master of Science degree in Digital and Interaction Design Course **UX-DESIGN** | Pillan Margherita, Varisco Laura. A.Y. 2018/19 | Picardi Andrea (915471).

## User journey



### **CASE STUDIES 1:** CAR2GO

This first case study had the task of mapping and understanding the specifics of the service car2go, a service apparently simple, but that hides an elevated level of complexity, in the act of providing an optimal experience to the user, and at the same time, respecting all the economic and legislatives limits that a renting services "on demand" like this as.

The creation of these journey maps begins with the field test of the service, with the careful collection of all the martials need to the creation of the maps (materials such as photos, videos, filed notes and so on...), from the initial phase of registration to the services, to the final feedbacks of the experience.

These maps were especially useful in the uncover of the several interaction and paths that users may take, how many service touchpoints are there, and what problems and opportunities could be implemented.

That said, these maps have some limitations, although they show what was said before, they could be improved from the prospective of the emotions that the user has during his "journey".

call car2go service and

follow their instructions

of the accident

This second kind of maps, produced inside the team, was particularly useful in the understanding of how the service is delivered, how was created, and how much complexity hide behind its interfaces, especially in the number of stakeholders involved.

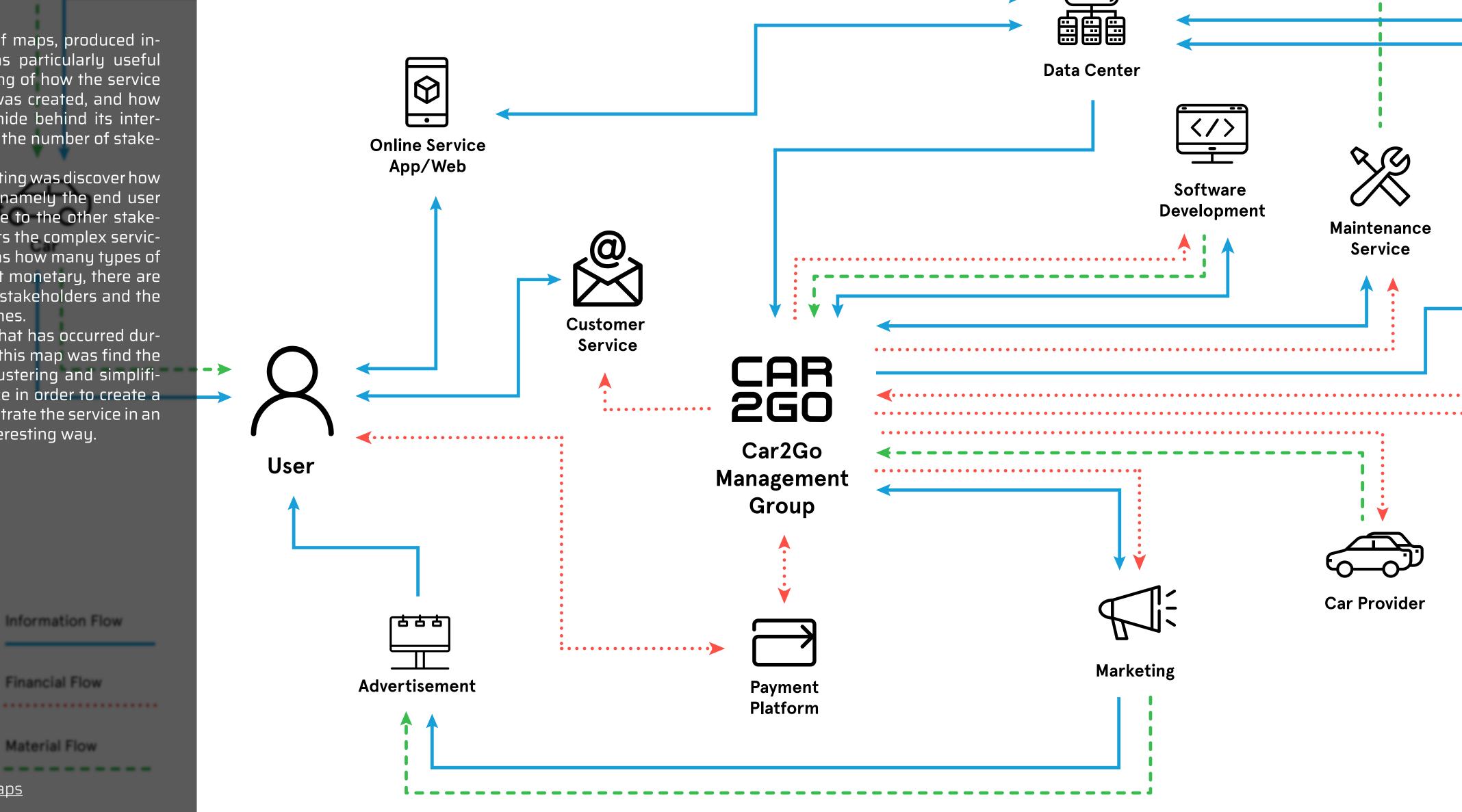
Particularly interesting was discover how less access users (namely the end user of the service) have to the other stakeholder that supports the complex services behind, as well as how many types of exchanges, not just monetary, there are between the main stakeholders and the second and third ones.

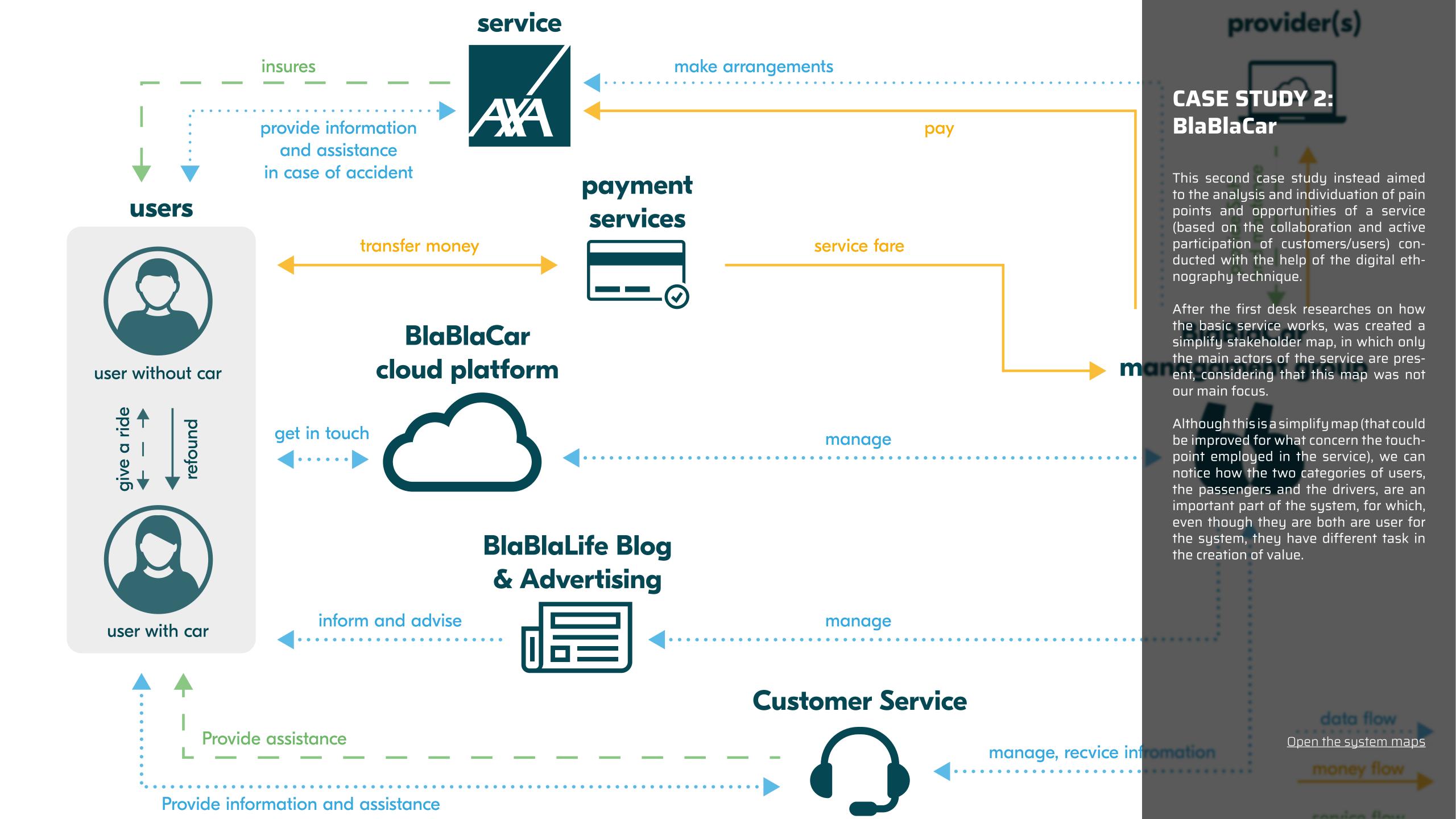
A major difficulty that has occurred during the creation of this map was find the right balance of clustering and simplification of the service in order to create a map that could illustrate the service in an compelling and interesting way.

Information Flow

Financial Flow

Material Flow





Afterwards we have conducted an extensive research on the main social media (on which the service was present, both officially and not), from this research We have extract a considerable amount of data (manly comments and opinions) that we have later categorized and clustered in order to get the main feelings that users have towards the service, both positive and negative.

This was not an easy task, given the amount of data extrapolate, and the diversity between the users.

This research however was really useful in the creation of the carts and maps that helped us framed the problems and complexities of this service.

Not only on € 24 of booking I get only € 20.50 refunded, but I can not even give negative feedback to the driver!

Among other things, the suggested rate for the driver has significantly decreased while diesel and tolls are pretty sure that they have not become cheaper.

All very nice but as a long-time user, I find that the amount of money that Blabla takes is now really too much.

The Rimini -Forlì section for example. The blablacar average price is about 7 euros, but the ticket of the regional train of Trenitalia costs about about 5.50 / 6 euros.

Not only the passes now cost as much as a bus trip but they do not give any warranty, as opposed to what is stated on the official website of blablacar.

A few weeks ago, looking for a ride for my son, I noticed the "leavening" of prices!

Annoy
Angry
Disappointment

I would like to get some informations because I can't understand. I've written many reviews about drivers which gave me a ride, but I didn't received any feedback from them. So how can I level up if I wrote review but I didn't receive any feedbacks?

For example: the system should release the payment for the driver only after he give a feedback. Doing this, it become mandatory.

I don't understand how it's possible to increment my trust in the community if the feedbacks are not mandatory. After several month I don't receive feedback about my trip. In my opinion you should revise your feedback system, because it penalize the new users.



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Annoy
Frustration
Disagreement

I contacted two different drivers for the ride Modena-Milano and both refused me without a real explanation. I think that the blablacar idea is great, but I'm a man and also if i offer guarantees I remain a stranger for other people.

You can trust the drivers? Have they to meet certain requirements in order to give a ride?

Hello, has anyone used blablacar? Can I trust it?

When I'm a passenger I would like to know who I'm riding with



Fear Confusion Mistrust

See digital ethnography results

**AXA INSURANCE** 

I had a negative experience with AXA insurance. On December 8th, I take a ride from Bari to Rome because I have a flight in the afternoon. I get on my way and after 15 minutes in the car the wheel explodes. All safe, but the car is not equipped with a spare tire because it is powered by natural gas. We call the AXA service provided by blablacar because they "guarantee your arrival at your destination". They can't help us and tire dealers and shops are closed for the holidays. We are in the middle of a road. Luckily it happened a short distance from where I live, so relatives and friends can help us and finally we find a very expensive wheel. After 3 hours of delay we can start again. At the end I arrived late to the airport and I lost my flight to New

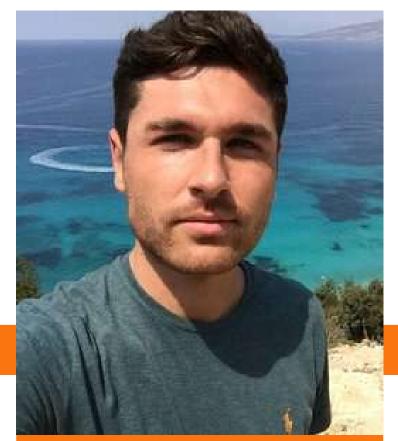


# Mental model map

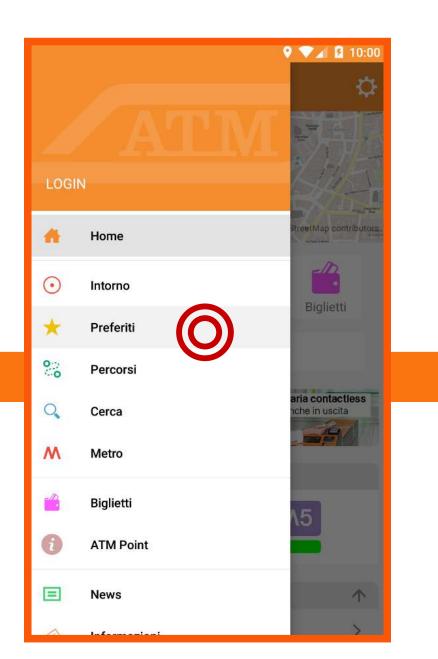
Decide to move					It's funnier travel with someone else  Sharing a object (like reaching a common place) is a way to relationate with the other people and understand that				sible mental model map of the service users. In this map there are hold and class fy all the possible behavior and thought that users may have on the service.  We choose to focus our map only on the utilization of the service (as opposed to a larger version that could also include other possible fields) as the result of outdigital ethnography, that covering main ly the service use, has allows us to retrie manly this type of data.  In the creation of this map we also trie to incorporate a chronological sequentially, that usually lack from this kind of maps.  After the creation of the "towers" and the service use the service use the service use the sequentially and the service use the service us			assi- ights  In the ed to clude four hain- etriev  tried uen- nd of
	Visit an event (Festival, exhibition)					up/destination point is flexible  There are no strikes or delays problem (it's more reliable)	reach a destination (especially in case of festival/exhibitions)  Talking with someone is a good way to fill the time in a long trip	everybody are the same (have the same problemms, fears)  It's a solution more ecological than others	Download the app	mental spaces, wo vidualization of a	e proceeded to the line of the	indi- that
Go to university	Go to a concert  Visit a new city		Visit friends	Move to pickup something	it allows to share the costs of a trip	It allows to reach a place quickly than other transportation service/means	in longer trip it's better (less frightening) travel with someone else	It a better way to dev <mark>elop bonds</mark> (relations) between people	Register to the service  Ask more	towers we were	ot (or lack of) of these ble to found possible vice improvement.	sible :
Go to work	Visit ag <mark>ain a</mark> city	Move house	Visit rel <mark>atives</mark>	Go to the Airport / Rail Rail Station	It's more cheap than use other transportation service/means	It allows to reach places with poor public transport coverage	in case of problems/dangers is far better travel with someone else	Sense of community centered around the service	information about the Service, Figure out how the service works	plataform	on the different users on the plataform	
Business trip	Leisure trip	Move house	Visit people	Other	Economic Reasons	Convenience Reasons	Personal Reasons	Ideological Reasons	First approach the platform	Searching stage	Comparing stage	
the advertiser some event, also under the holiday season they inform about some relevant things. they also inform of upcoming strikes					The service structure itself support this				Registration service on the application			
					Blablacar choose the right import of the trip				Website			
									mobile application			
Driver action/thoughts  Passenger action/thoughts									Terms and condition Open the mental model map			
	l action of BlaBlaC	Car							Frequently Asked C	stions (F.A.Q.)		

From this research we have extract a pos-

**Organization** Ride **Post-ride** During-ride **Decision** Pre-ride **Ending-ride** First conntact between users Payment phase Feedback phase Passenger pass buying Afterwards we have created an experience map, in which the knowlodage excrated from the mental model map was linked with the possible actions that users may take in the utilization of the sernstantly book vice. Comunicate From this map we were able to trace the additional info major problems that afflicted the service if needed -> Chat via message Check the other and their possible improvements, Then Help/ recive help Experience Leave the passenger Give feedback Decide if confirm Payment method user feedback -**End the trip** pick up point to load luggage at his destination the trip together to other users the ride selected and rateings with the comparison of the mental mod-Talk via phone el map which from these were the most important for the users. wait until the payment arrive Happiness if the driver is active and are engaged with the passenger(s) **Opportunity Opportunity** Relief and happiness if some passenger with inpleasure if the ride ends and driver and Pleasant feeling rememberi Relief if somebody with the right the right feedbacks is found anger were engaged in discussion feedback is/are found uncomfortable feeling of open the own wallet near stranger inusal hours and then the system "expires" the Stress of traveling and giving the change Possible regret and anger if the passenger find radical Anger if the feedback from the message before it can be answered other user is negative and isn't true Anxiety if the driver has to decline the ride after Stress if there are some he/she had already confermated by phone troubles with luggages o Stress if the driver receive a call by some other with the meeting point Disappointment and anger if there are users in unusual hours (especially by night) Happiness if the passenger is active and is engaged with the driver if someone confirm unpleasure if the ride ends and driver and passanger were engaged in discussion uncomfortable feeling of open Stress if there are some the own wallet near stranger troubles with luggages Possible regret and anger if the passenger find radical Stress of traveling and giving the change Anxiety if the user has to different viewpoints in the other passengers' opinions Anger if the feedback from the Frustration if the proposal of a ride is rejected by the driver Stress and fustrati can't travel due to this prob e passenger Pre-ride time **Payment** Post-ride time ne call by a possible passenger becouse they need to talk and give an answar to a stranger Some users had issues with the luggage/seat position Some users found very unpleasant traveling companions. Some users had problems giving the change. Some users had recurrent problems with the payment Open the experience map e) in a small time span. This can be very difficult for some drivers, that prefer to chat with the and other problems. this problems were caused by system and had to contact via facebook the custumer some misunderstandings between the drider and the one number. Also if this call occur in unusual hours (like by the night) could be very stressful service. Some users have received false or incomplete es the passenger message "expire" before the driver had the chance to answer it (this happen passenger in the concordation phase. feedbacks offen when two users have different time to One solution is to give the driver the possit to be contacted only by chat, without sharing his/her telephone number before the ride Provide (and signal) a better and faster cunstomer service Remind the users to clarify about some recurrent issues Provide a more description based profile, in this way the users Remind the users about the cost of the ride and can have more detailed information about the other (like a call center or a chat based one) like the luggage size and the seat position. about the possibility to bring the right amount of e user can be contacted, and remind the possibile user to contact the driver only in that hours. Provide a more specific feedback feature for this issues passenger/driver,in order to choose the better trip companion for Another solution is to give the driver the pobility to set a time span in which the possibile passenger can not send message to the driver. their needs. Provide a more guidated and comprehensive re this time span is started. feedback to cope with these issues.



# Filippo Angeloni





In this short case study our primary goal was the creation of a specific "use case", derived from the first-person test on filed, of the mobile application of the public transportation company of Milan (ATM).

After the creation of a plausible proto-persona, our research moved to the possible action that this person would take inside the application in order to navigate and retrieve the information that he needed, and what other support features the app offers.

this use case that even an action, that at first slight seem simple, in fact conceals a considerable complexity, and with the addition of a structure of the application not so clean, it creates an interesting information overload when the user is in a hurry (such as in our use case), it creates

a big critical issue of the ATM application.

We have found through the creation of

In the case of troubles on

the line, there is not a way t

quick search alternative wa

to reach the destination, bu is necessary to search then

See the complete use cases document

# **Actions**

**SCENARIO C** 

He is a computer engineer at Vodafone Milano and he is a daily commuter who use the service every day.

He has an annual subscription and and already know where to go and how to reach his destination.

He uses the app only to get real time information about the service.

Today he is at the tram stop of piazza Adelaide di Savoia and he need to go back home to make dinner because he has invited his friends that evening.

He opens the application to check the waiting time of the line at that stop through the favorite page in the burger menu.

Doing so he finds out that tram n.33 has some issue and the entire line is out of order. thus he need another mean transportation.



Preferiti

33 - Monumentale M5

Even if there are sostitutive means of transportation activated by ATM to overcon the inconvenience, they are show in the page.

# **Painpoints**



## CASE STUDY 4: Ideation of innovative services

This case study was based on the creation of innovative services that would create value for the end users (both responding to their needs and in the creation of meaningful experiences) about the public transportation. Moreover, this service had to be based on the personalization of the service through the digital collection of users' information.

After a intial session of brainstorming, it seemed interesting investigate how we could give more value to the public transportation system from a social interaction point of view.

Once we set the goal, we immediately started thinking at possible implementations of the services, and after a lot of discussion we have come to the creation of a creative brief, in which we have outlined the main guidelines of our service: the creation of a mobile application, where the train commuters of a specific train, who wound not spend all the travel time alone, could interacted between them, creating a community in the long run. This app had to be supported by the train company, that with this app would improve the service quality for the commuters, and doing so, collect qualitative data on the service perception.

After the initial definition of the aim of the service, we proceeded to create two proto-personas, based on our direct experiences with the reference service (the railway company Trenord).

We have delineated for the two personas, beyond the basic biographical information, a brief description of the profile with the why they would use the service. we have also added other information to improve the context (such as personality, economic situation and lifestyle) and finally with the pain points that they found in the current service.

To these we have also added a storyboard to better illustrate their situation.

#### **PERSONALITY**

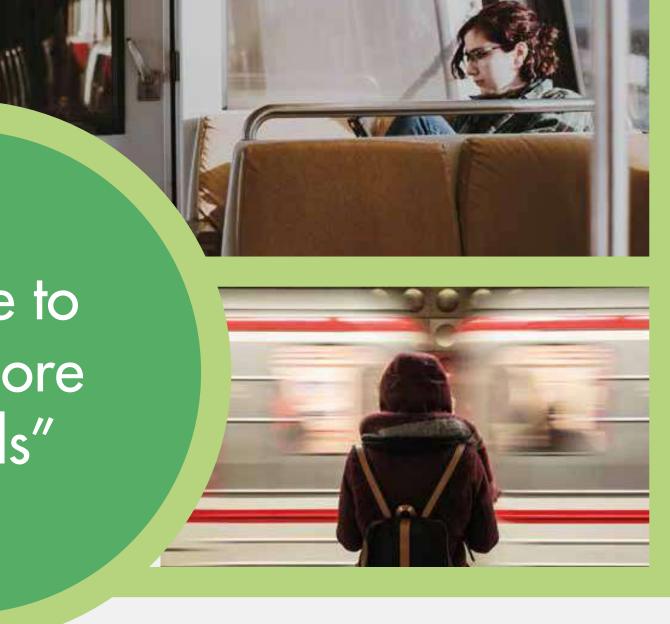
Rich Pool

#### PAIN POINTS

Open the complete Personas document

- Needs to be always on time
- Does not like not having control
- Does not like to waste time



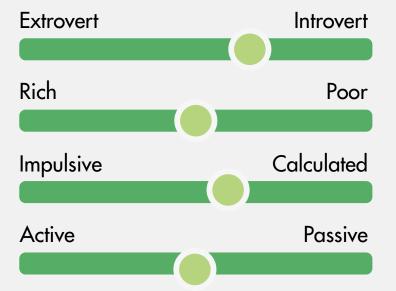




## GIULIA BIANCHI, 27

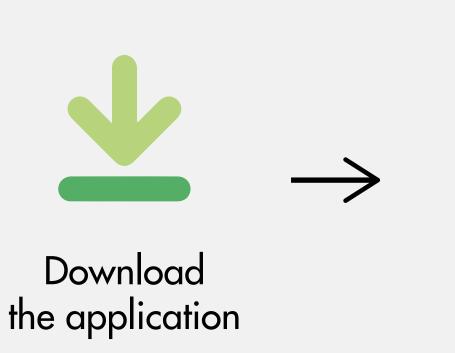
Giulia is an Italian girl and lives near Milan. She has to take the train every day to reach the university and spend almost two hours a day on it. Since the train's environment is noisy and crowded she find it difficult to listen to music or read a book so is usually bored; she would like to have someone to talk to but she's to shy to start a conversation with a stranger face to face.

#### PERSONALITY



#### PAIN POINTS

- Commute every day for two hour
- Feels lonely or bored when alone
- She is shy with new people
- Lives far from family

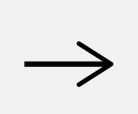




Registration with

personal info





Users can use

Users select their preferences and interests

the application









A feedback is asked about the condition of the train service

A feedback is asked about the other user

User is on the train and open the app

The chat is closed automaticaly after the users get off the

train



Advanced searching settings



Select a person from the chat historry

Is someone with the right conditions avviable?



when somebody is found the app notify it



The application open a chat between users



They can use the radar feature meet each other

Later, we defined the structure that application should have, and what functions were supported by the service. To this we have create a "user journey" like map, with all possible paths that the user could take in the application usage.

We have spent a considerable amount of the service ideation time in this stage. Being the application capable of supporting a multitude of interactions and functions that could be beneficial to its goal.

After the analysis of all the pro and cons of every proposal, we have come to the definition of an "features tree" that satisfy every component of the team and respected all the limits and objectives defined in the creative brief.

Open the complete user journey map

Finally, We conducted an analysis regarding the topic of the privacy and the data that we could obtain from the application, and the results of this one was very interesting. Being this app based on the customization of the users experience archived by the data collection of the users preferences, we realized that even from the first contact with the app, we were able to derivate a series of data about the user, and then with the cross-comparison between these data, and the data collected during the utilization of the app, we could get a lot of personal information about the users.

Afterwards, we defined what stakeholder could access this information, for what purpose and what "impacts" and meanings the utilization of this data could have for the end users, making us thinking about the ethics, legality and meaning that the data mining practice (now days vastly used in the industry) have on the individual and, for extension, for the whole society where these services operate and co-exist.

**Smartphone Application** Matching System Feedback stage Registration Stage Base use of the app **DETECTET** LOGGED **ACCESSES RELATIONSHIP ACTIVITIES** PHYSICAL **BIOGRAPHICAL EXPRESSION** Daily movements With who they Where they are on Users interestes Perception of users of the train compan interact and preference the train possible behavior, Possible situations Possible political or hidden motivation Possible hints on that are not part of etical view of the user how to improve they daly routine (unconcius) the service

See the complete privacy analysis report

