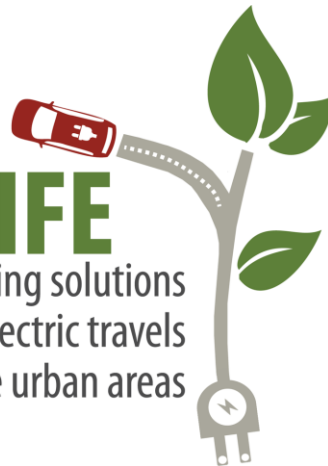


I-SharE LIFE

Innovative sharing solutions
for full electric travels
in small and medium size urban areas



This project has received funding from European Union's
Life Programme under Grant Agreement
N° LIFE 17 ENV/IT/000212 I-SharE LIFE

USER CENTERED DESIGN

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Poliedra – Politecnico di Milano*



FIRST DISSEMINATION EVENT

10TH DECEMBER 2020

Webinar link — meet.google.com/pbg-uboj-mbs



Introduction

I-SharE LIFE Project

Innovative electric car sharing service models that optimize the use of cars at different times of use for different types of users (commuters, citizens, public and private companies)

Methodology

User Research and Co-Design

Focusing on the **user experience** makes it possible to improve the electric car-sharing service for different types of users

User - centered design

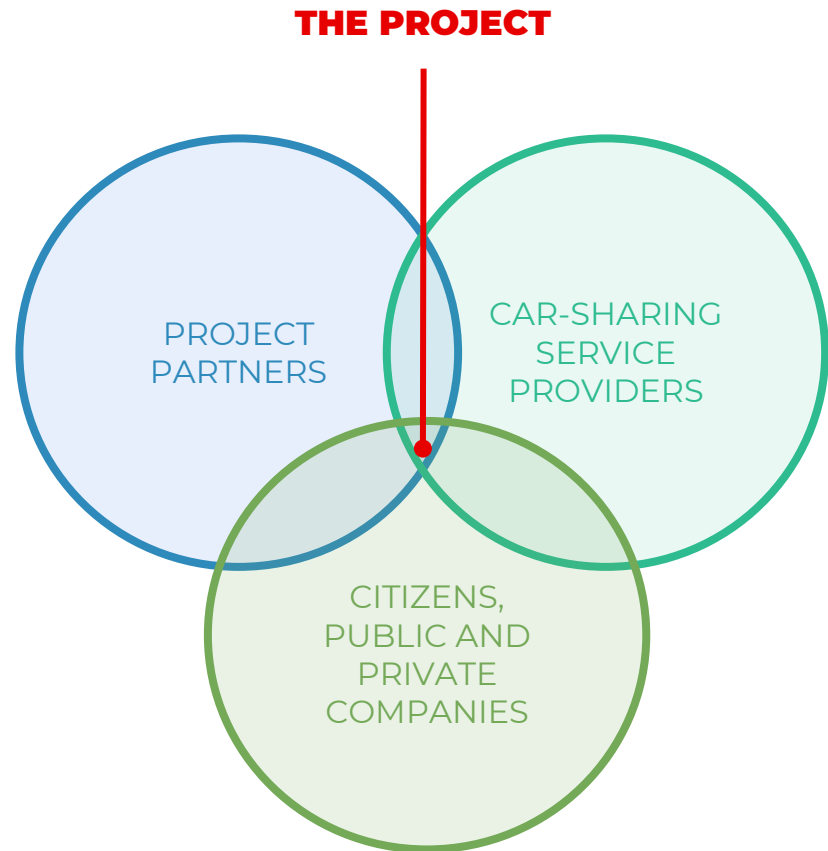
It is a design of a product or service that **focuses on the user**, taking into account his/her needs, objectives and opinions.

<https://usabilitygeek.com/user-centered-design-introduction/>

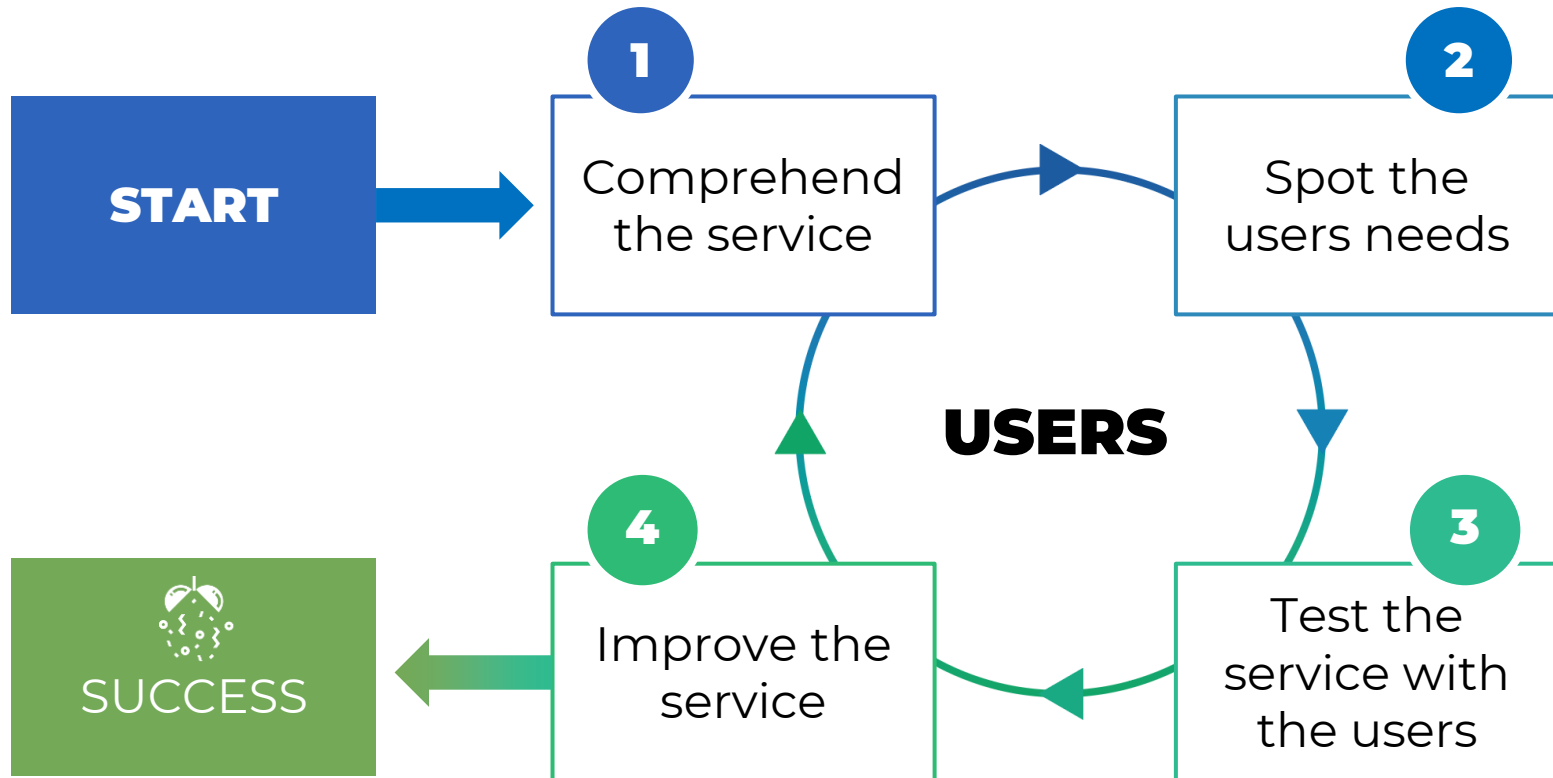


How to be user - centered

To improve the service, it is necessary to take into account **all users and entities** involved in the design, implementation, promotion, etc. of the service

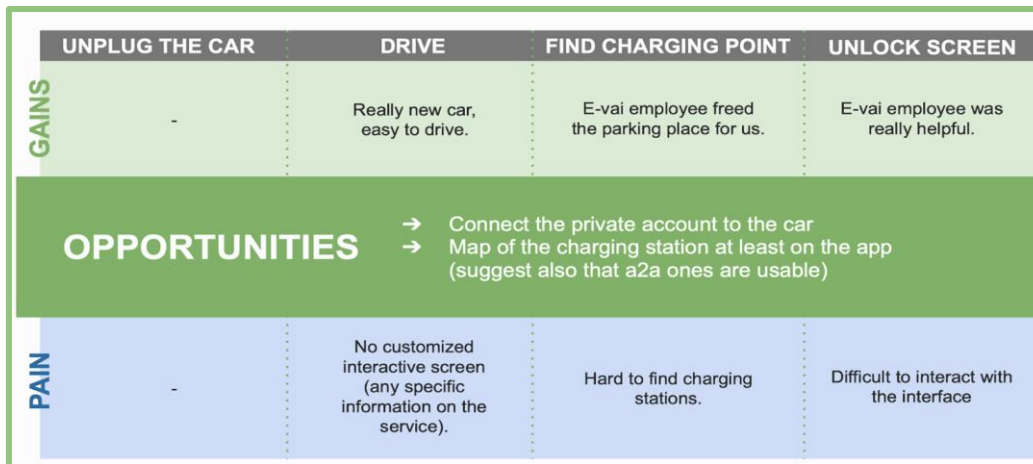
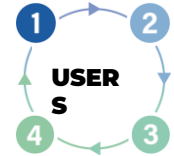


The approach



Understanding the service

Comprehend the service



Preliminary Customer Journey

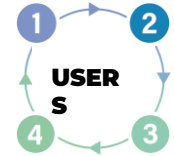
Subdivision and analysis of each single step



Identification of the strengths and weaknesses

The users needs

Spot the users needs

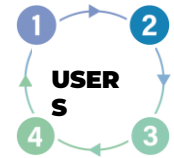


Poliedra designed various **participatory activities** with all the project partners in order to identify the specific **service users and their needs** for each specific project service model.



The Beta Users profiles

Spot the users needs



What is innovative?

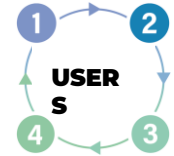
The innovation of the project consists in testing solutions for sharing **electric vehicles in small and medium-sized urban areas** where demand is lower, providing cars that are used by different types of users in different time windows.

The five service models:

	Model 1	Model 2	Model 3	Model 4	Model 5
WHERE	Busto Arsizio	Bollate	Bergamo	Como	Osijek
USERS	<ul style="list-style-type: none"> → Companies → Commuters 	<ul style="list-style-type: none"> → Companies → Commuters 	<ul style="list-style-type: none"> → Municipality → Citizens 	<ul style="list-style-type: none"> → Hotels → Tourists 	<ul style="list-style-type: none"> → Municipality → Citizens → Commuters

Selection test and feedback

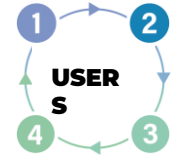
Spot the users needs



- The 5 I-SharE service models are tested on the demonstration sites by some Beta Users, users selected through the **Recruitment Screener** in order to test the service for two weeks
- Beta Users tested the service several times, providing their opinion by filling out **diaries** and participating in **interviews** especially regarding touchpoints (app, website, etc ...)
- Their observations were used to **re-design** and improve the service

Some of the feedback

Spot the users needs



I had never driven an electric car and was **pleasantly impressed**. I really like the low environmental impact.

Several people have asked me **where to rent the car**.

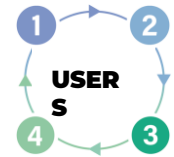
The registration phase was **quite complex**.

With the right increase of charging stations, the **service can really be successful**.

Although there were difficulties during the test, I'm sure **people will be very interested in the service**

The first results

Test the service with the users



The results obtained by diaries and interviews with Beta Users have contributed to define the “**Personas**”, archetypes of possible service users.

They represent specific types of users on which the user centered **co-design** of the service is based.

ACTIVE STUDENT

Stay hungry, stay foolish

1. NAME: Luke
2. AGE: 25
3. PROFESSION: Student
4. UNIVERSITY: Technical engineering University of Bergamo
5. STATUS: Single
6. RESIDENCE: Bergamo
7. KIDS: No
8. INCOMES: Full-time job as baseball teacher

9. Four adjectives about you:
1. Dynamic 2. Impatient 3. Positive 4. Curious

10. Habits and passions:
Everyday I go to the university, in the evenings and weekends I stay with my friends and family. I love playing basketball and go for hikes.

11. Representative objects:
[Image of a bicycle]

12. DAILY COMMUTES:
In the morning I usually go to the university or at the library for studying with my bike
If I bring my bike from home I eat at the uni if I need to use the bike in the evening

13. Technology capabilities:
[Progress bar]

14. Frequently used means of transport:
Bus, train and my bike

15. Reasons of choosing this means of transport:
Comodity, possibility of saving money and easiness in using them

16. Expertise in using car sharing services:
[Progress bar]

THOUGHTFUL STUDENT

Do unto others as you would have others do unto you

1. NAME: Chiara
2. AGE: 25
3. PROFESSION: Master Student
4. UNIVERSITY: Bergamo
5. STATUS: In a relationship
6. RESIDENCE: Bergamo
7. KIDS: No
8. INCOMES: Part-time job for the boyfriend

9. Four adjectives about you:
1. Calm 2. Reflective 3. Altruistic 4. Shy

10. Habits and passions:
Everyday I go to the university, in the evenings and weekends I stay mainly with my boyfriend and friends. I love helping others and read.

11. Representative objects:
[Image of a bicycle]

12. DAILY COMMUTES:
In the morning I go to university with my moped, unless it is raining, in that case I go by foot
During lunch I spend time in the library with my classmates

13. Technology capabilities:
[Progress bar]

14. Frequently used means of transport:
Bus, moped

15. Reasons of choosing this means of transport:
Comodity, Ready to use

16. Expertise in using car sharing services:
[Progress bar]

MUNICIPALITY EMPLOYEE

Through the difficulties we reach the stars

1. NAME: Lucia
2. AGE: 40
3. PROFESSION: Employee
4. WORK PLACE: Bergamo
5. STATUS: Married
6. RESIDENCE: Bergamo
7. KIDS: Yes, two with the husband
8. INCOMES: Medium salary

9. Four adjectives about you:
1. Mild 2. Altruistic 3. Dynamic 4. Open-minded

10. Habits and passions:
I have a full time job at the municipality of Bergamo. In my free time I love to spend time with my kids and family, going for trips in the weekends.

11. Representative objects:
[Image of a car]

12. DAILY COMMUTES:
Before going to work I bring my kids at school and then I'll go to work
If I go with my kids at school and then I'll go to work I do the grocery on the way

13. Technology capabilities:
[Progress bar]

14. Frequently used means of transport:
Car and bicycle

15. Reasons of choosing this means of transport:
Mostly car for safe time, if I'm not in a rush I prefer to use the bike

16. Expertise in using car sharing services:
[Progress bar]

CITY ASSESSOR

Let's work together for a better future

1. NAME: Luca
2. AGE: 40
3. PROFESSION: City Assessor for the Environment
4. FOUR ADJECTIVES ABOUT YOU:
1. Proactive 2. Demanding 3. Organized 4. Rational

5. Company typology:
Municipality Medium city size

6. Municipality size:
Medium size municipality Heterogeneous municipality with different specialities

7. Openness to change:
[Progress bar]

8. Level of sustainable practices included in the company behaviour:
[Progress bar]

9. Company communication channels towards employees:
Internal mails, intranet, newsletter

10. Employees work trips distance:
98% of employees Do trips > 25 km per day
2% of employees Do trips < 25 km per day

11. Fleet composition (in the demo site):
Total Number of vehicles in the fleet: 207
Electric vehicles in the fleet: 5

12. The motivation to adopt the service:
To keep up with the times and be an innovative city

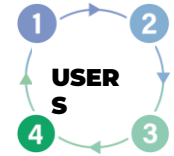
13. Positive aspects in adopting the service:
Give a new possibility to the city and the municipality employees

14. Negative aspects in adopting the service:
Not so many spots for charging the car and fixed timetables for the use of the car

TEMPLATE BUSINESS PERSONAS - CITY ASSESSOR

The co-design activities

Improve the service



What is co-design?

It is a practice where **users become an active part** of the design process.

Considered "**experts**" thanks to **their experience**, they return different opinions that can be integrated into the design and innovation of the service.



Co-design activities



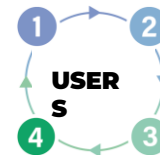
- In all **co-design activities** participated both **Beta Users and Stakeholders** for which demo sites involved
- **Specific themes** were dealt in each co-design workshop according to the different demo sites and what was needed there.

In particular:

- Touchpoints (App, website...) (in Bergamo demo site)
- Company employees training (Busto A. and Bollate demo sites)
- Communication and advertising of the service in the Como Lake area
- App improvements and charging stations possible location in the City of Osijek

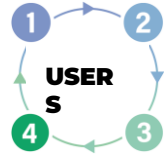
Co-design activities

Improve the service



Continuous feedback process

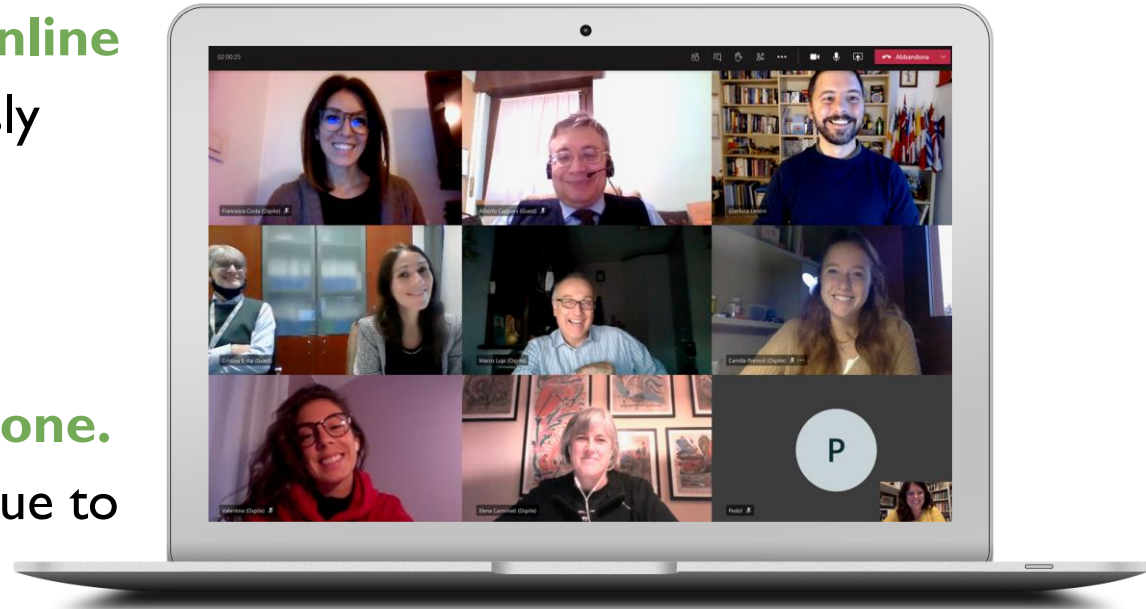
Improve the service



After one year from the testing phase, all Beta Users involved **were invited to some online workshops** to continuously improve the service

In Italy and Croatia **more workshops have been done.**

- Beta Users that continue to use the service
- Beta Users that stop to use the service



Online workshops feedback (IT)

Improve the service



A lot of BUs **stopped using the service** due to **COVID** situation, since they started to work from home

Increase the advertising of the service on social networks especially to attract a young audience

Insert some news of the service on the App homepage

The **new rate** proposed by E-Vai is considered **convenient** if the user does not have a car

Make partnership with **Satispay** (is a new payment system that allows you to send money to friends and pay in stores from your smartphone)

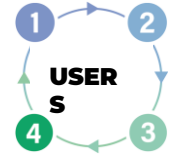
Add a map on the App that shows the cars available and their location

The new App is more intuitive, clear and with better graphics

Create **favourable rates for students** or shared rides

Online workshops feedback (HR)

Improve the service



Increase the different types of advertising

identified by BUs:
- The **radio channel, social media and promotion** for students

Increase the different types of advertising

identified by BUs:
- The **radio channel and leaflet** for pensioners

Insert a **MAP** on the App of the **charging station**

Obligated people to use the mask and gloves in the vehicle

Increase the different types of advertising

identified by BUs:
- **The mailing list and TV commercials** for private and public companies' employees

A lot of BUs express **fear of delays** due to vehicle unavailability, **fear of low battery** in the vehicle and **fear of unavailability of parking places** dedicated for e-car sharing vehicles.

Insert a **Map** on the App of the location where **collect and return the vehicles**

Put in the vehicle **the disinfectant and a digital thermometer**

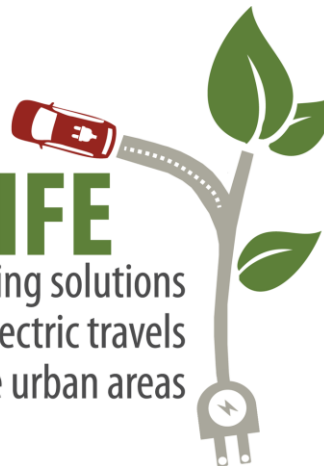
Considerations

- User - Centered Design approach may take longer than a traditional one, but **it can bring greater advantages**, helping the identification of opportunities to improve the service
- This methodology permits to market a service that effectively responds to the **needs of different users**. The collaboration with different partners and users has allowed a mutual enrichment in favor of the final result, facilitating the dialogue between people that usually do not communicate
- Through the Beta testing and the workshop sessions **the service resulted feasible and flexible** according to the city and territory



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THANK YOU FOR YOUR KIND ATTENTION!

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