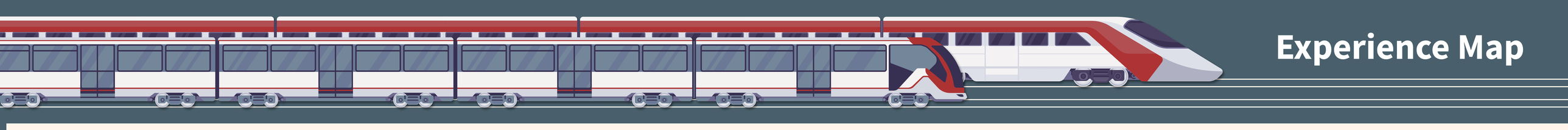


Experience Map

Users

THE EXPLORER
COMMUTER TRAVELER, FREQUENT USER

AGE 32 · OCCUPATION Freelancer · PERSONALITY Curious and messy · ERIK

Frequently uses public and non public means of transport to go to work, mainly the train and metro because he is a commuter traveler, otherwise he would not be able to arrive on time.
To reach his workplace he has to take different means of transport, both urban and extra-urban ones.

THE CREATURE OF HABIT
COMMUTER TRAVELER, NON-FREQUENT USER

AGE 45 · OCCUPATION Employee · PERSONALITY Demanding and thoughtful · AMANDA

Frequently uses public and non public means of transport to go to work, mainly car and bus and more rarely metro and train. In the past she used to take the bike to move around the city, but she stopped because of smog and pollution.

THE GROWLER
NON-COMMUTER TRAVELER, NON-FREQUENT USER

AGE 67 · OCCUPATION Employee · PERSONALITY Tough and sarcastic · THEODORE

Since he retired, Theodore does not travel often, especially by train. He moves mainly within the city by bus and more rarely by metro, but sometimes it happens that he wants to travel through other cities with his wife just for one or two days.

THE ADVENTURER
NON-COMMUTER TRAVELER, FREQUENT USER

AGE 21 · OCCUPATION Student · PERSONALITY Adventurous and energetic · SABRINA

Sabrina goes to her PhD office everyday by foot, as her house is located at a walking distance (indeed, she selected the house based on this criteria). During the week when meeting her friends or family she takes the metro and tram preferably. During the weekend she enjoys traveling to an unplanned city, selecting the destination on her way to the train station.

THE OPTIMIST
NON-COMMUTER TRAVELER, FREQUENT USER

AGE 38 · OCCUPATION Employee · PERSONALITY Sunny and positive · MALEEK

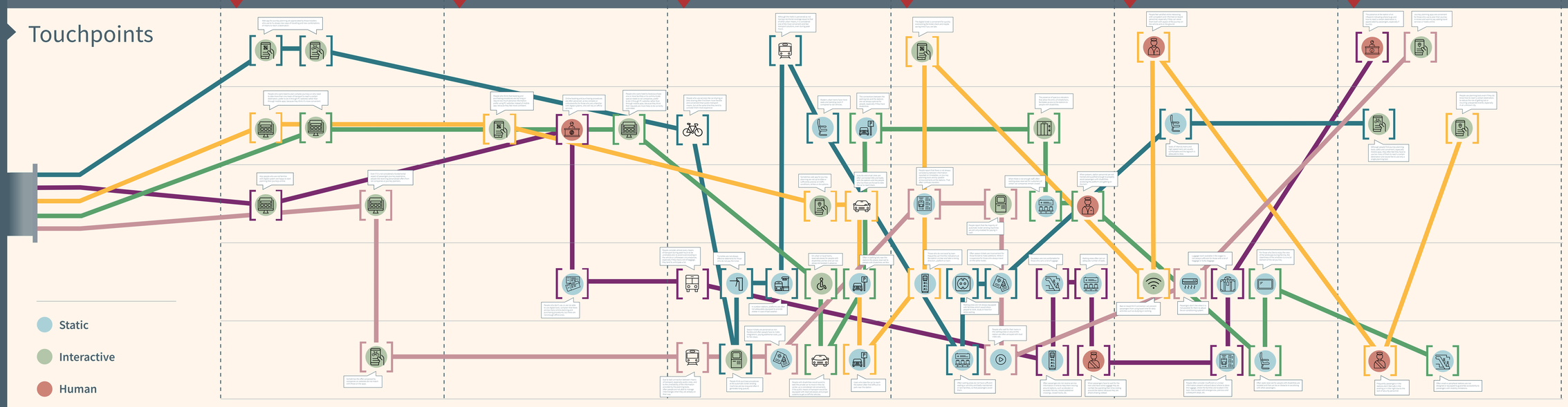
Maleek usually travels by car and by train. Maleek is a person with disability and avoids taking buses in his city because they are not equipped with a wheelchair space, so he uses the car to commute to the office and to run errands, while he uses the train about once a week to visit his family who lives in another city.

Rail Journey Phases

1. Planning the journey
2. Booking/purchasing the ticket
3. Arrive at the departure station
4. Waiting at the departure station
5. Rail journey
6. Arrive at the destination

Rail Journey Phases

Touchpoints



Peak hours

MAIN PROBLEM	RELIABILITY	ORDER AND SECURITY	NEED FOR INFORMATION
• The insufficient vehicles capacity compared to the number of users traveling during peak hours.	• Every means of public transport is perceived as unreliable. • People would like to have more rides guarantee (especially in case of strikes).	• People would like more operators to be involved in customer service, in informing and managing people in order to avoid overcrowding on platforms. • People are worried about waiting at the platform when it is overcrowded due to the perception of security and safety issues (e.g. they are afraid of pickpocketing, they are afraid that someone could faint or fall on the tracks, etc....).	• People would like to receive more reliable in time information from the rail companies (e.g. about causes of delays / disruptions; next trains scheduled; level of overcrowding on the next trains; alternative means to reach specific destinations).

Rail vehicle vs Others

URBAN TRAVEL > Metro/ Tram — Taxi, Car, Bus

	Cost	Traffic	Speed	Reliability	Terriroial coverage	Number of rides	Safety on night times	Maintenance	Obsolete vehicles	Parking need	Crowding	Safety (referred to accidents)	Possibility to socialise
RAIL	✓	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓
OTHERS	Taxi, Car	Taxi, Car, Bus	Taxi, Car	Taxi, Car, Bus	Taxi, Car, Bus	Taxi, Car	Taxi, Car	Taxi, Car, Bus	Taxi, Car, Bus	Car	Bus	Taxi, Bus	Car

EXTRA URBAN TRAVEL > Intercity/ High speed train — Coach, Car, Plane

	Cost	Time	Flexibility	Reliability	Comfort	Eco-friendly	Safety	Accessibility	Infrastructure	Easy-to-check information	Territorial coverage	Noise (onboard)	Luggage limit
RAIL	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✗	✗	✓
OTHERS	Plane, Car	Plane	Plane	Bus	Plane, Bus, Car	Plane, Bus, Car	Plane	Plane	Plane	Bus	Bus, Car, Bus	Plane	Car

✓ Win ✗ Lose

URBAN TRAVEL
In urban travel, rail transport seems to be generally preferred from passengers rather than other transport modalities, because it is considered more reliable, convenient and more competitive on fares. Furthermore, it is considered less crowded. Instead, rail transport seems to lose the comparison with other means of transport on territorial coverage, number of rides available, safety on night time and on vehicles maintenance.

EXTRA-URBAN TRAVEL
In extra-urban travel, rail transport seems to keep its advantages compared to other transport modalities on price and reliability. Furthermore, travelers consider rail journeys more eco-friendly and comfortable, and they tend to attribute them a romantic meaning. Instead, rail transport weaknesses on territorial coverage and number of rides available seems to be confirmed. There have also been emerged other consideration less safety (both referred to the access to the mean of transport and to accidents) and on infrastructure development, on which rail transport seems to be less mature if compared to air transport. However it is appropriate to highlight that for extra-urban travel there seems to be a less clear picture of preference between different means of transport.

Passenger perspectives

EXPERTISE
The transport system seems to be understandable only for experienced users, who learned how to manage it. On the contrary, those who do not fully know how each means of transport behaves and connects to other means, in particular tourist when facing local transport systems, experience unforeseen issues or inconveniences.

VALUE FOR MONEY
In the main, the costs of tickets and season ticket is considered too high compared to the quality of the services offered. However people who enjoy a monthly/year ticket subscription consider it fair enough. Nevertheless passengers would be willing to pay more for the rail services offered, if the overall quality of the travel experience was higher.

ORDINARY TRAIN VS HIGH SPEED TRAIN
Passengers think the overall quality of the journey experience on high speed trains is higher than lower speed trains.

ECO-FRIENDLY VOCATION
Passengers think bicycles and electric or hybrid vehicles would be good travel solutions, but cities infrastructures are still inadequate or insufficient to adopt eco-friendly means of transport.

LIVEABILITY OF THE STATION
People would see the station not only as the place where to take the train, if there were better infrastructural conditions, better maintenance and more services and shops.

CONNECTIONS TO THE STATION
Passengers believe that connections at stations (i.e. metro and tram, but also taxis, buses, cars) are insufficient and inadequate.

INTERCONNECTION
Connections between the different means of urban transport are insufficient and the dialogue between the long distance railway companies and those of the public transport of the cities is inadequate.

COMMUNICATION
Communications from rail companies is considered unreliable, in particular when related to unexpected delays, disruptions and strikes. However, also regular communication is considered misleading (e.g. waiting time in the panels, loudspeaker announcements at the stations).

ACCESSIBILITY
Passengers with disabilities or with reduced mobility report more difficulties with using rail for first mile, waiting at station, as well as boarding/using/leaving the vehicle and the destination station. Accessibility issues also extend to the staff at stations and on trains, who need to be more trained to better welcome and assist passengers with mobility limitations/ impairments.

Needs

Planning the journey
- Planning tools to provide reliable, updated and precise information about times, rides, means of transport, distances etc.
- Planning tools (both digital and non digital) to be more usable.
- More rides available on weekdays, at night and on holidays.
- More reliable in time information from the railway companies in case of delays / breakdowns / disruptions.

Booking/purchasing the ticket
- More facilities and offers for those who frequently travel on high-speed trains.
- Cheaper travel solutions in case of last-minute bookings.
- More equal fares compared to the quality of the services offered.
- Be able to buy any ticket typology through any purchasing modality (e.g. credit card, debit card, cash, on board, online) at a constant price.
- Online booking / purchase procedures to be easier and faster.
- More offline planning and booking/purchasing procedures.

Arrive at the departure station
- Provision of eco-friendly travel solutions to reach the stations.
- More connections to the stations and between stations.
- More and better interconnections between different means of transport.
- Higher rail frequency/capacity, in particular inside the city center, especially during peak hours.
- Improvement of the integration between rail and non rail services.
- Public means of transport to be equipped with proper systems to support people with mobility limitations/impairments get on/off the vehicles.
- More parkings near the stations and more reserved parkings for people with mobility limitations/impairments.

Waiting at the departure station
- More personnel to be present in the stations in order to guarantee order and reliable information provision, especially during peak hours.
- Stations, even the small and peripheral ones, to be designed and provided with infrastructures (e.g. illumination system, shelter against bad weather, ramps, escalators, elevators) to guarantee accessibility to a wide range of people with a wide range of mobility needs.
- Stations, even the small and peripheral ones, to be equipped with facilities and utilities, which would allow to better live the waiting experience (e.g. bars, bathrooms, bookshops, stations to charge the devices (e.g. PC, mobile phones).
- Not being annoyed by video and audio ads.
- Better signalling system to get to the right platforms/connections.
- More trained and qualified station personnel who can properly assist passengers with mobility limitations/impairments accessing the platforms and getting on/off the train.
- Service information at the station to be reliable, in time and coherent between the different channels they are conveyed (e.g. panels, timetables, loudspeakers).

Rail journey
- Wagons to be cleaner and more equipped with utilities.
- More trained and qualified onboard personnel (e.g. ticket inspectors) to be present on the vehicle to guarantee order and to provide travelers with reliable and in time information on the trip (e.g. where to place the luggage, where the facilities are located in the train, how to deal with emergencies, previous and subsequent stops).
- More seats and standing room, especially in the peak hours.
- More and better utilities on the train (e.g. power sockets, wi-fi).
- Provision of on-vehicle systems of ticket validation/check systems.

Arrive at the destination
- Clear information on how to reach certain destinations.
- Better signalling system and clear indications on how to reach the exit or the facilities in unknown stations.
- More station personnel to be present in the stations to guarantee surveillance and security, especially at night time.
- Improvement of the connections to other stations and to airports.
- More personnel to be present in the stations in order to guarantee surveillance and security, especially at night time.

Emerging opportunities and threats

PLANNING/BOOKING/PURCHASING

OPPORTUNITY
- Design usable online and offline planning and purchasing paths, reducing the gap (of accessibility to information and services) between the different segments of the population;
- Provide people with more reliable and update information about the different travel solutions and conditions, making them available in a simple, accessible and aggregated way;
- Support people in creating personalized travel solution that are customized on their individual needs, and not only on time and cost;
- Provide people with all the possibilities (e.g. credit card, debit card, cash, online, offline, onboard) to buy any ticket modality at a constant price;
- Increase the tickets flexibility, making them easy to be integrated with other services both rail and non-rail ones, and balance the relationship between fares and quality of services offered.

THREATS
- ICT/IoT development proceed and with it new tools for journey planning and purchasing are born, but not their usability or even people digital skills. The accessibility gap between sections of population increases;
- The offer of services and their characteristics will diversify more and more, preventing railway companies and suppliers from building an integrated offer and proposing univocal tools for booking and purchasing rail and non-rail services.

PRE-TRAVEL

OPPORTUNITY
- Sensitise users to respect, to not damage and to not dirty common spaces and services (e.g. toilets, waiting areas, platforms) in order to preserve them;
- Provide people with reliable clear and frequent/in time information about the progress of their journey, about where they are and how to reach desired destinations;
- Improve the integration between first/last mile services and the long distance ones, in order to develop better the connections between stations and between stations and airports;
- Provide users with infrastructures, utilities and services so that people can continue their lives and activities in stations and during the journey, rather than interrupting them because of the journey;
- Addressing overcrowding reducing people concentration, in particular on peak hours, by intervening on multiple factors:
  - people (especially non captive travelers) motivation to travel on time slots different from peak hours (e.g. with offers, lower fares on time slots with lower people concentration);
  - increase of the number of rides available and on their frequency;
  - provision of reliable and up-to-date information (e.g. about level of people concentrations on next trains, alternative mobility solutions to reach a certain destination).

THREATS
- Non-travelling time and journeys in interchanges don't improve, harming the whole passenger experience causing stress and discomfort. People start preferring other means of transport to move both for long and short journeys;
- The introduction of new facilities and utilities in the stations proceeds in a disharmonic way, and does not go hand in hand with the renewal of the station infrastructures, confusing passing travelers;
- Bad waiting environment, lack of informational and safety aspects lead people to spend less time in the station and to start perceiving the journey as "moving from station A to station B";
- Peak hours continue to be considered (and faced) as a problem exclusively linked to the lack of trains at certain times compared to the flow of people, instead of being considered as a complex issue that impacts on different levels of the passenger experience, and that leads travelers to use more non-rail transport means, such as MaaS.

TRAVEL/POST-TRAVEL

OPPORTUNITY
- Improve the levels of comfort during journeys by intervening on aspect such as spaciousness, cleanliness and maintenance of the vehicles (e.g. lack of litter bins, seatings with poor legroom, lack of tables to work or eat at., dirty toilets, not adjustable air-conditioning, poor illumination, etc.);
- The quality of the journey with high-speed trains generally considered higher than that with ordinary trains. Therefore, it could be interesting if ordinary train, especially of public transport, would take their cue from the strengths of high-speed trains in order to improve their desirability compared to other modes of transport.

THREATS
- Low-cost coaches and Maas tend to be perceived more and more favorably by travelers and, if it won't be possible to integrate their offers and services within rail transport system, there's the risk they become a risk for the rail sector;
- Whether the rail network won't improve, connecting also wider regions and suburbs, which are poorly served in terms of rail service frequency, the rail sector risks to lose as users people who live in these areas. Often those people are non-frequent rail users who could become potential users of other means of transport if they won't be provided with connections to bigger/central cities.

Credits

SMaRTE D3.2 - EXPERIENCE MAP IN PASSENGER JOURNEYS

FOUNDED BY: This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No: 777627

PROJECT: Shift2Rail, SMARTE

PARTNERS: ergoproject, Moving innovation, UITP Advancing Public Transport

PROJECT COORDINATOR: University of Leeds

INFORMATION SOURCES
Existing rail European documentation
Rail industry stakeholders' workshops
Rail services final users' interviews and focus groups

Copyright © 2017 Smarte-rail Consortium

Designed by