



INCLUSION Project

Deliverable D4.5

Innovation Pilot Lab Flanders:
implementation and results - Final version

Version: 1.0

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Abstract	<p>The focus of the Flanders Pilot Lab is to lower the barriers experienced by job-seeking migrants with low incomes and elderly and disabled people accessing leisure and social activities. The Flanders Pilot Lab consists of two distinct pilots.</p> <p>The first pilot comprised a local collaboration with organisations who guide job seeking migrants towards new job opportunities. This collaboration was named the STEP collaboration. In this pilot a MaaS (Mobility as a Service) solution was provided for job seeking migrants with low incomes. This target group exhibits very low ownership of private cars and experiences significant barriers to using public transport. These barriers can be related to language, costs, and lack of knowledge about public transport possibilities. Through the Olympus Mobility app (as a MaaS solution), Taxistop provided a solution that maps the needs and wishes for a better transport service and makes sustainable and shared transport options more accessible when looking for a job.</p> <p>In the second project, Taxistop has developed another app called Mobitwin. Via this app, elderly and disabled people can get access to real-time transport options to attend social activities. The Mobitwin app allows voluntary drivers to offer this service directly, and allows passengers to plan and book in real time instead of two days in advance through phoning the Less Mobile Stations call center. This provides more convenience for the volunteer drivers and a more responsive service for the members.</p> <p>During the demonstration phase, many unforeseen barriers were experienced by both pilot projects. The anticipated impact was therefore not entirely met. However, a lot of rich insights were gained and the future potential was identified. This report focuses on the lessons learnt during the implementation for presenting new technology-centred solutions to vulnerable target groups.</p>

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1 Introduction

Taxistop is a partner of the European project INCLUSION, which stands for 'towards more accessible and iNCLUSive mObility solutions for European prioritized areas. Funded by the Horizon 2020 programme, the INCLUSION project involved 13 partners from various European countries. The project lasted for 3 years and addressed a number of challenges related to the accessibility of public transport in remote urban/rural areas and neighbourhoods.

INCLUSION expects to:

- understand the main transport challenges in different types of prioritised areas.
- provide an in-depth examination of ten innovative public transport approaches and a wider catalogue of at least forty case studies of accessible, inclusive and equitable transport solutions.
- deliver a set of recommendations and mobility solutions for vulnerable users' communities.

The INCLUSION project fits closely with the new Flemish vision on basic accessibility.¹ The idea behind this vision is to put more focus on travellers reaching their destination and emphasize the importance of multimodality. The key behind this is to create a modal shift by making sustainable and shared transport options more accessible. In addition to that, Taxistop did research and set up two pilots during the demonstration phase on how new technology can have an impact on the accessibility of transport options to make two specific target groups more mobile:

1. The Mobitwin app is a new technology that is based on the already existing service called the Less Mobile Stations (LMS). This is a door to door transport service for elderly and disabled people provided by voluntary drivers. Taxistop provides this service to several cities and municipalities. Every city and municipality have its own way of organizing trips. The Mobitwin app introduces a real-time solution that gives members of the service the opportunity to request trips in real time. In addition, the voluntary drivers get the freedom to enter their availability themselves in the Mobitwin app. Taxistop set up the Mobitwin app pilot in the LMS services of Ghent and Oudenaarde.

2. Taxistop collaborated with a local project called STEP², which puts effort in helping job seeking migrants find their way to the labour market. Taxistop contributed to the partnership by offering the Olympus Mobility app (MaaS application) and providing a budget of € 30 for each test user, which could be used within the app to purchase transport to job locations. This pilot investigated if a MaaS solution can make sustainable transport more accessible when applying for a job, especially with companies being located in difficult to reach areas. In addition, Taxistop wanted to

¹ <https://www.vlaanderen.be/basisbereikbaarheid> (July 30, 2020)

² <http://www.manpowergroup.be/nl/2018/03/27/inclusie-op-de-arbeidsmarkt-het-moet-van-beide-kanten-komen-manpower-groep-intro-web-en-compaan-brengen-hun-expertise-samen-werkzoekenden-en-werkgevers-vinden-elkaar-in-inclusieve-uitzendarbeid/> (July 30, 2020)

test if this MaaS application can create a shift towards more shared mobility by including shared bikes as one of the transport options in the app.

Collaboration with stakeholders was very important in both cases. For the Mobitwin app pilot, the employees of the LMS's were the main partners to introduce the new technology to the members and voluntary drivers. For the Olympus Mobility app pilot, the STEP partners had the important role of identifying potential test users and presenting the app to them. The main aim of the collaboration was to learn more about the transport needs of the target group since the partners have direct contact with and a clear vision of the situation of potential users.

For both of the pilots, it was important to gain as much insight into the mobility needs as possible. This report gives an overview of how the two pilots were rolled out in Flanders, starting from the actions that were taken to prepare the pilot and to create local collaborations, to the actions taken to implement the new technology in real life situations for the target groups. Subsequently, there is also a section on how the data was collected and on the delays and challenges experienced, which provided Taxistop with many lessons learnt for future projects.

2 Recap of the Pilot Lab characteristics

2.1 Brief summary of the objectives of the Pilot Lab

2.1.1 Mobitwin app

General objective

The measure for the Mobitwin app pilot was to deliver an enhanced Mobitwin app to elderly and disabled users. The Mobitwin app is the digital version of the current Less Mobile Station services. At the moment, members can book a trip 2 days in advance by calling the call centre of the LMS. The Mobitwin app is created to close this gap of 2 days and provide a real-time transport service to members. The Mobitwin app also gives the opportunity for voluntary drivers to share their real-time availability.

Specific objectives related to the different actions implemented

Three main objectives were identified in relation to the Mobitwin app measure:

1. The first objective was to introduce the Mobitwin app as a real-time solution to the Less Mobile Stations.
2. A second objective was to improve the access to social and leisure activities for elderly and disabled people.
3. To match more trips with volunteers, more volunteers must be recruited. The third objective was to create more awareness about the LMS service through communication campaigns and via media coverage.

Expectations

At first, the aim was to introduce the app to as many LMS services as possible. However, the pilot changed course during the demonstration phase and eventually focused on two LMS's that were eager to test the app: Ghent and Oudenaarde. By introducing a real-time technology, Taxistop wanted to get more insight into the technology readiness and the mobility needs of elderly and disabled people. Access to urgent rides and the capacity to request rides by themselves can create a feeling of empowerment among these users. In addition to that, with the Mobitwin app, the matching of trip requests and voluntary drivers will happen automatically. This automation may improve trip requests and also decrease the workload of the employees of the call center. However, this can only work if there are enough volunteer drivers and members using the app. The communication campaign is supposed to help the LMS's recruit more voluntary drivers in their cities and municipalities.

2.1.2 Olympus Mobility app

General objective

The general *objective for the measure* was to improve access to job opportunities for migrants through increased awareness and use of mobility solutions by (un)employed migrants (with low incomes).

Specific objectives related to the different actions implemented

There were three sub-objectives from the measure demonstration:

- Engage with the target group and raise awareness of the Olympus app through intermediary support organisations.
- Reach 100 (un)employed migrants with low incomes to use the app
- Show that the app removes barriers in accessing job opportunities faced by migrant job seekers

Expectations

With this pilot lab, we hoped to see the impact of a MaaS solution in improving access to job opportunities for poorly served people. Taxistop aimed at 100 persons downloading and testing the app. The collaboration with the STEP partners is seen as a major role in reaching and presenting the Olympus Mobility app to as many job-seeking migrants as possible. Together with the app, a budget of € 30 was provided to lower the financial barrier for users to use more sustainable and shared transport options. With this budget, it was expected that users would be able to order a limited number of trips which were credited to their account in the app. Depending on what mode of transport test users chose they could make a maximum of 10 trips with the budget. By the end of the demonstration phase, more insights were expected on the current transport behaviours and the mobility needs of the target group as well as the level of knowledge the target group already has about the current sustainable and shared transport options and which factors have an impact on their transport preferences.

2.2 Brief description of the pilot area

The focus of the Flanders Pilot Lab is to reduce territorial accessibility barriers for job seeking migrants and elderly and disabled people who live in rural and urban areas in the region of Flanders. These areas are mostly flat areas with an increasing employment, an increasing population, a mixed and/or improving economy and a very ageing population.



Figure 1- Flanders Region – Mobitwin app
Map source: Google Maps

Area covered: $> 13.000 \text{ km}^2$
Population density: $> 500 \text{ inhab. /km}^2$
Target group: Elderly and disabled people

2.2.1 Site description for testing the Mobitwin app

The rollout of the Mobitwin app pilot took place in rural, peri-urban and urban areas of Flanders. The Less Mobile Stations, provided by Taxisop, are situated throughout several cities and municipalities in Flanders. The focus of the pilot lab lies on the ageing and disabled population that has no access to regular public transport nor to other sustainable and shared transport options. With the Mobitwin app as a real-time solution, barriers concerning distance and time can be reduced and participation in social life can be increased.

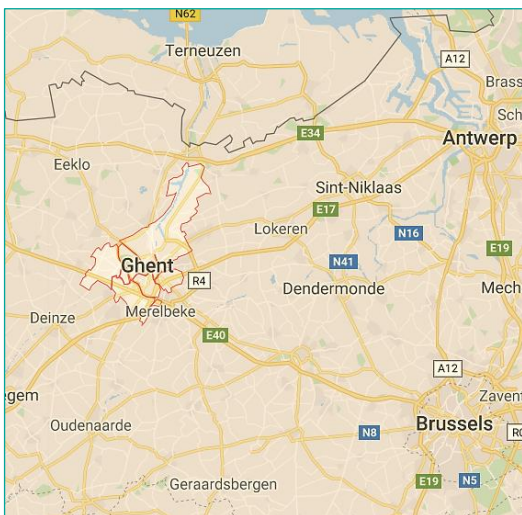


Figure 2- Flanders Ghent Region
Map source: Google Maps

Population: 260.000 inhabitants
Area: 156.18 km^2



Population: 31.000 inhabitants
Area covered: 68.06 km²

Figure 3- Flanders Oudenaarde Region
Map source: Google Maps

For testing the Mobitwin app, Taxistop focused on the city of Ghent and city of Oudenaarde. These cities are mostly urban sites, but also have peri-urban and rural regions where public transport is less present. The city of Ghent has an LMS service where 189 members and 28 voluntary drivers are registered. This gives a total number of 2,262 rides per year, totalling 106,236 km in distance. The city of Oudenaarde also has an LMS service where 160 members and 22 voluntary drivers are registered. This gives a total number of 2,018 rides per year, totalling 41,465 km in distance.

2.2.2 Site description for testing the Olympus Mobility app

The Olympus Mobility app pilot covered the whole area of Flanders. The pilot lab mainly focused on job seeking migrants who live in urban areas but who often need to access job locations in peri-urban and rural areas. The target group experiences transport barriers since most of the job opportunities are located in industrial zones, mostly found in peri-urban and rural areas. These areas often do not offer sufficient public transport or other sustainable and shared transport options. In addition to that, the target group experiences financial barriers when using public transport when looking for a job. The pilot lab was rolled out in collaboration with the STEP partners who guide jobseekers throughout Flanders towards the labour market.



Area covered: > 13.000 km²
Population density: > 500 inhab./km²
Target group: Jobseeking migrants with a low income

Figure 4- Flanders Region – Olympus app – Map Source Google Maps

2.3 Main outcomes of the design phase

2.3.1. Mobitwin app

The Mobitwin app was developed in 2018. Taxistop tested the first version of the app with a blind member of the Less Mobile Station in Ghent. After the first test, feedback was gathered which led to small updates of the app before actually starting the demonstration phase. In addition, manuals³ were created for members, voluntary drivers and employees of the LMSs on how to start up and use the app. A strategy was developed to communicate about the Mobitwin app with the stakeholders. Firstly, the LMSs were contacted about the existence and the function of the app. This happened during study days and member days (informal events where several stakeholders of the LMS service come together). After this, every LMS was contacted by phone and/or email to ask about their interest in testing the app. The LMSs that showed interest in the app were sent surveys to fill in. In this way, the current process of requesting a trip and the amount of requested trips could be brought into the picture. From the results of the surveys for the employees, surveys were also created for members and volunteer drivers. From this, insights could be gained into the current transport behaviours and needs of members and voluntary drivers before the demonstration phase started. Finally, information sessions and trainings were held with members and volunteer drivers of interested LMSs.

The main outcome of the design phase was that a lot of LMSs were hesitant to introduce the app to their voluntary drivers and members. This played a fundamental role in the rollout of the Mobitwin app. Another challenge experienced was that a lot of members (mostly elderly and disabled people) do not have the technological skills to test the Mobitwin app. These challenges were handled through more transparent communication with the LMS's. Instead of testing the app with all of the LMS's, Taxistop decided to focus on two champions that were very interested in testing the app: Ghent and Oudenaarde. It was important to maintain the relationship with the employees of the LMS services, because they have the clearest vision on the members and the voluntary drivers that were qualified enough to test the app.

2.3.1 Olympus Mobility app

The Olympus Mobility app is a commercial app that integrates both public transport and bike sharing. To make the app more accessible for job-seeking migrants, Taxistop worked together with the app providers to create a simplified version for the demonstration phase of the INCLUSION project. In this version, users only had access to public transport services and bikesharing services. Together with the STEP partners, Taxistop provided a budget of € 30 through the app for the test users.

During the design phase, the challenge of language barriers came into the picture. To prevent this possible barrier, different manuals (See annex B3) were created in Dutch and French on how to

³ <https://drive.google.com/drive/folders/1s9ilQArAhGeFOTe3d7lkzZlPwKD24wH6?usp=sharing>

use the Olympus Mobility app. In addition to that, videos were created that show every step of the process of buying a ticket with the app⁴.

Meanwhile, the app was presented to the STEP partners, who shared their feedback and possible concerns with the new technology. The STEP partnership consists of NGOs who already have expertise in guiding jobseekers to new opportunities. They also have a clear vision of the complexity of the transport situation for the target group. This is why it seemed more efficient to let the partners present the app to the target group (job seeking migrants), for which they received training. The last step of the design phase was the development of the surveys. The surveys would be presented by the STEP partners to the target group. As a condition to get access to the Olympus Mobility app, the test users first had to fill in the survey. Unfortunately, the STEP partnership disintegrated just prior to the demonstration phase. This was resolved by starting up a new process of finding new partners and relaunching the communication about the Olympus Mobility app.

The consequences of the challenges endured during the design phase are discussed further in chapter 4.

⁴ <https://www.youtube.com/watch?v=7wmUffotRsl&feature=youtu.be>
<https://www.youtube.com/watch?v=xn60EMTSLfo&feature=youtu.be>

3 Pilot Lab implementation activities, timing and milestones

3.1 Mobitwin app

3.1.1 Actions at mobility service level

- New Service Design

The introduction of the Mobitwin app brought some changes to the current service of the LMSs. The current process of requesting a trip goes like this: elderly and disabled people with a door to door transport demand can sign up for the LMS service for € 10 per year. Once signed up, members can request trips 2 days in advance by calling the call center of the LMS. The employees of the LMS call around to find available drivers in the neighbourhood. When doing this, employees need to keep in mind specific needs of the members (e.g. wheelchair, pets). Once a driver is found, the only cost for the member will be the allowance for the voluntary driver, which is legally fixed⁵.

Looking for a voluntary driver to match the trip with can be a very time-consuming task for the LMS employees. Moreover, the current system does not give the members access to transport in times of emergency (when they need a ride at short notice). This is why the Mobitwin app was created as a real-time solution allowing members to request a trip through the website/app and volunteer drivers to share their availability themselves. In addition to that, Taxistop promoted the app further by changing the name of Less Mobile Stations into Mobitwin in the regions of Brussels and Wallonia. Flanders will follow soon. By doing this, Taxistop wanted to give the current service a younger branding to attract new and younger voluntary drivers.

- Covered area

In order to narrow down to a few LMSs, every LMS in Flanders was contacted to test the Mobitwin app. This resulted in two LMSs that were very eager to test the app during the demonstration phase: Ghent and Oudenaarde.

- Served destinations

The current LMS services are mainly provided for social and leisure activities. With the real-time solution of the Mobitwin app, members had access to transport in more urgent circumstances. The destinations could be situated all over the region of Flanders.

- Payment

An invoice is sent to the members after the ride. The price of the ride is always the legal minimum payment. This fixed price did not change with the introduction of the Mobitwin app.

⁵ <https://www.mobitwin.be/nl/>

- Booking

The Mobitwin app gave the advantage of requesting a trip in real time instead of 2 days in advance by calling the call center. However, the call center was still available in case of a problem and for less urgent rides.

- Inter-modality

The Mobitwin app pilot focused less on inter-modality and emphasized more the accessibility of social and leisure activities. Private cars of the voluntary drivers and the cars provided by the Less Mobile Stations were the main transport options.

3.1.2 ITS specifications

The traveller information system of the Mobitwin app can help the Less Mobile Stations by giving a fast overview of all the trips members and/or voluntary drivers have made. The same system enables the LMSs to keep track of the number of trips, new members and new voluntary drivers. This allows for monitoring of how the app has influenced the accessibility of the LMS's services. And, most importantly, the app also provides the opportunity for members and drivers to plan their own trip (in real time). This makes them more independent and gives them more real-time movement. The Mobitwin app is thus a web-based app software that can be used on IOS/Android devices and through a website. The most important specification is the fact that the app provides an on-demand ride sharing service in real time.

3.1.3 Actors involved, roles and responsibilities

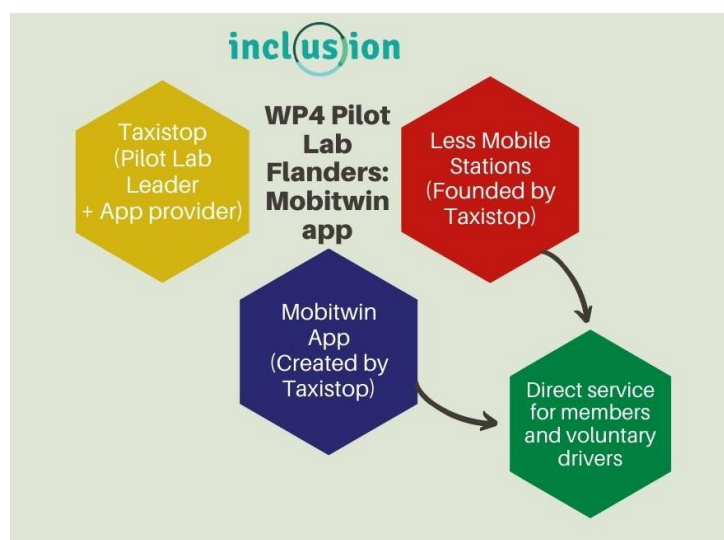


Figure 5- Actors involved - Mobitwin app

- Taxistop is a non-profit organisation, leader of the pilot and founder of the Less Mobile Stations.
- The Less Mobile Stations/Mobitwin is an NGO and service provided by Taxistop. They recruited members and volunteer drivers and provided them with the Mobitwin app.
- Target group: Elderly and disabled people.

3.1.4 Process of requesting a trip

The Mobitwin app is in fact the digital version of the Less Mobile Stations. It has two different versions: one for the volunteer driver and one for the member. This is what the app looks like for the members:

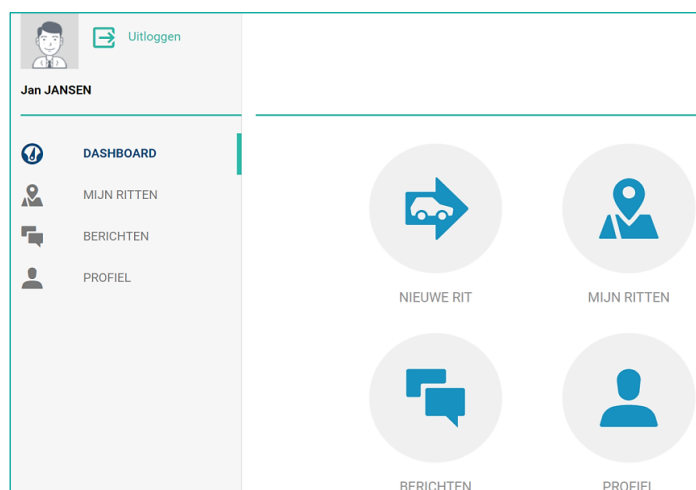


Figure 6- Dashboard Mobitwin app for passengers

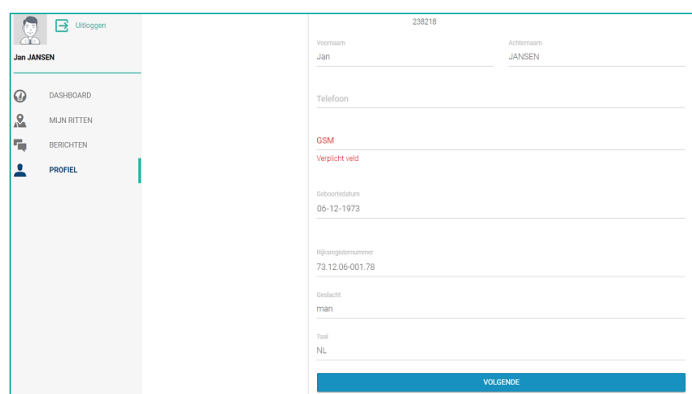


Figure 7- Example profile Mobitwin app for passengers

The app for the members has four functionalities:

- The user can view his/her profile.
- The user can see the history of all the rides.

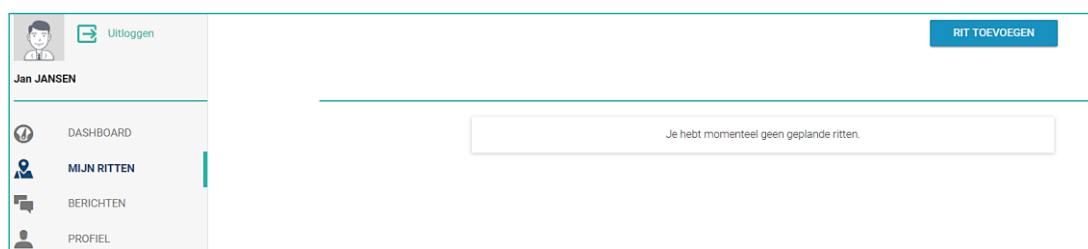


Figure 8- Example history of all rides Mobitwin app for passengers

- The user can see notifications of incoming messages. This is not a chat option, yet users can communicate via phone since a phone number can be filled in. Users and drivers can always rely on the current system by calling the person responsible for the Less Mobile Station to inform about a delay or cancellation.

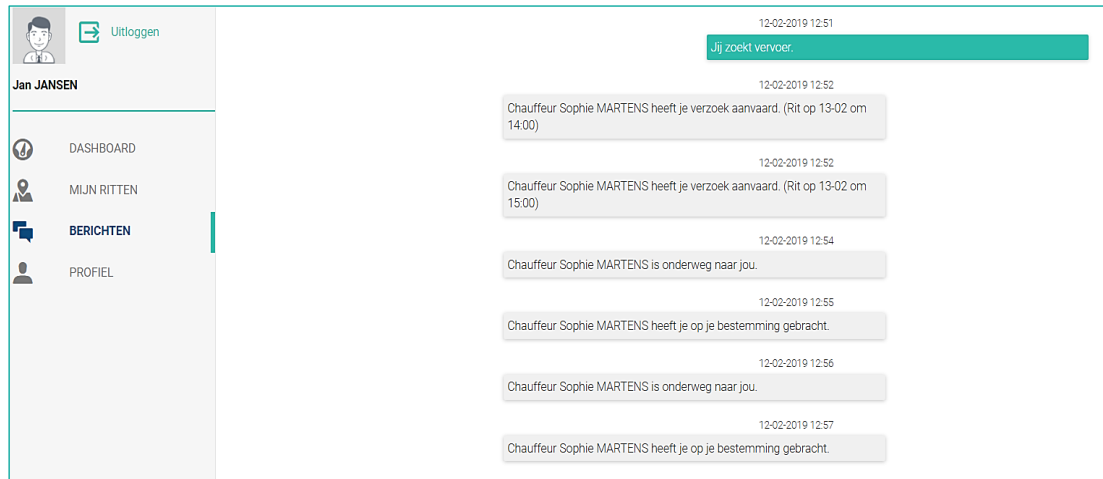


Figure 9- Example notifications Mobitwin app for passengers

- The main functionality is to order a ride.

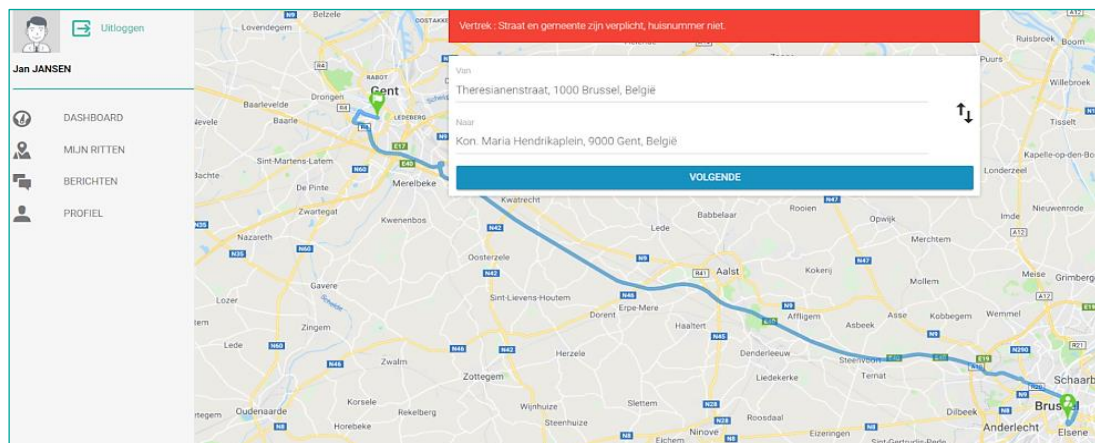


Figure 10- Example 1 ordering a ride Mobitwin app for passengers

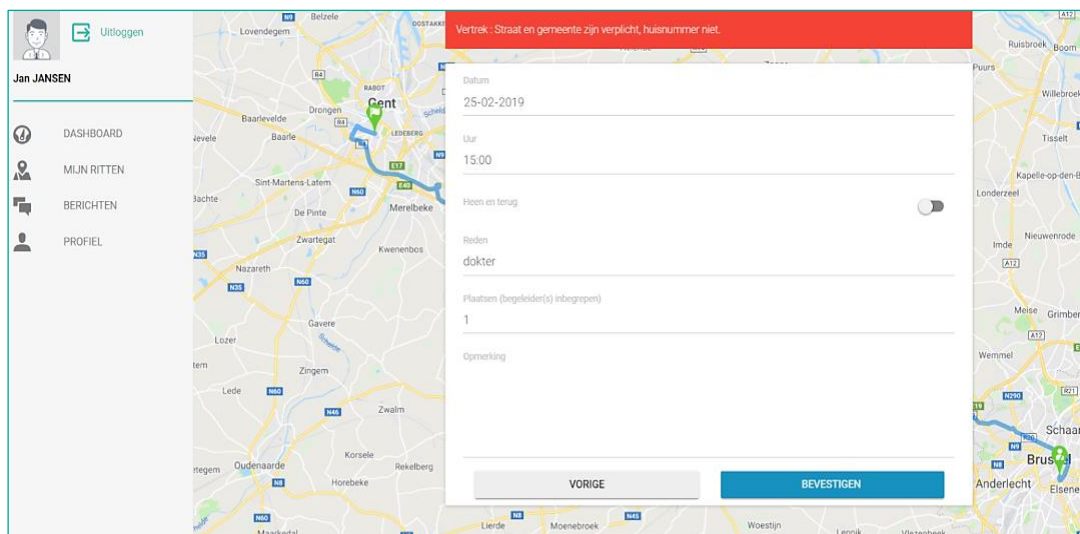


Figure 11- Example 2 ordering a ride Mobitwin app for passengers

This is what the app looks like for the voluntary drivers:

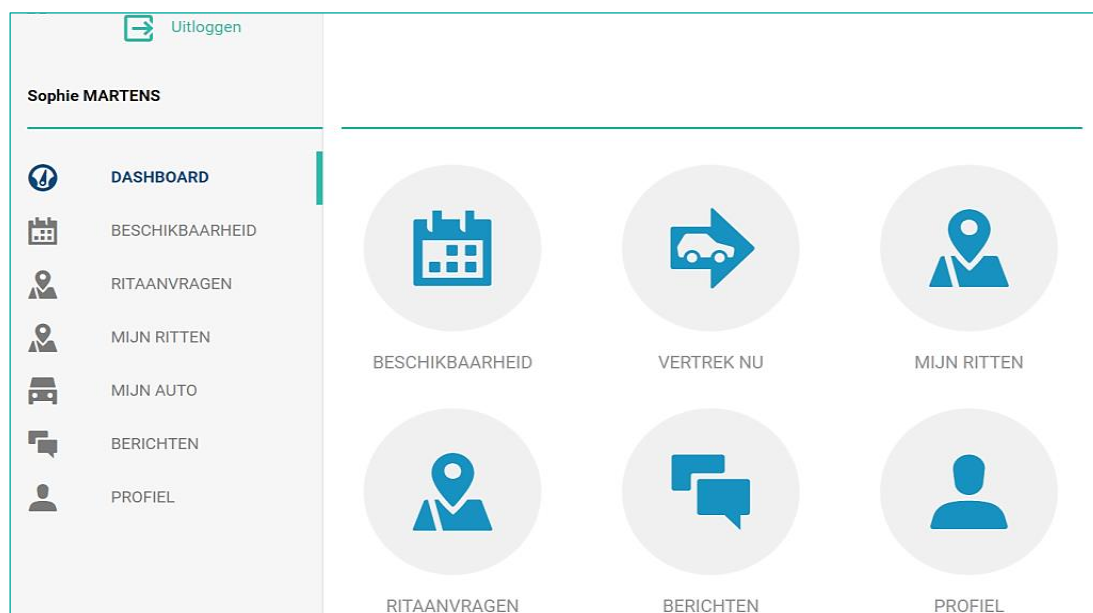


Figure 12- Example dashboard Mobitwin app for volunteer drivers

The options that are added for drivers are 'My Car' ('Mijn auto'), 'Availability' ('Beschikbaarheid') and 'Leave Now' ('Vertrek nu').



Figure 13- Example availability driver Mobitwin app for volunteer drivers

- The voluntary driver selects his/her availability in the app.
- If this is confirmed, the volunteer driver will be visible as an available driver to members. If not, the volunteer driver will not be visible as an available driver and will not be able to accept rides.
- The option 'My Car' shows more information about the owner's car.

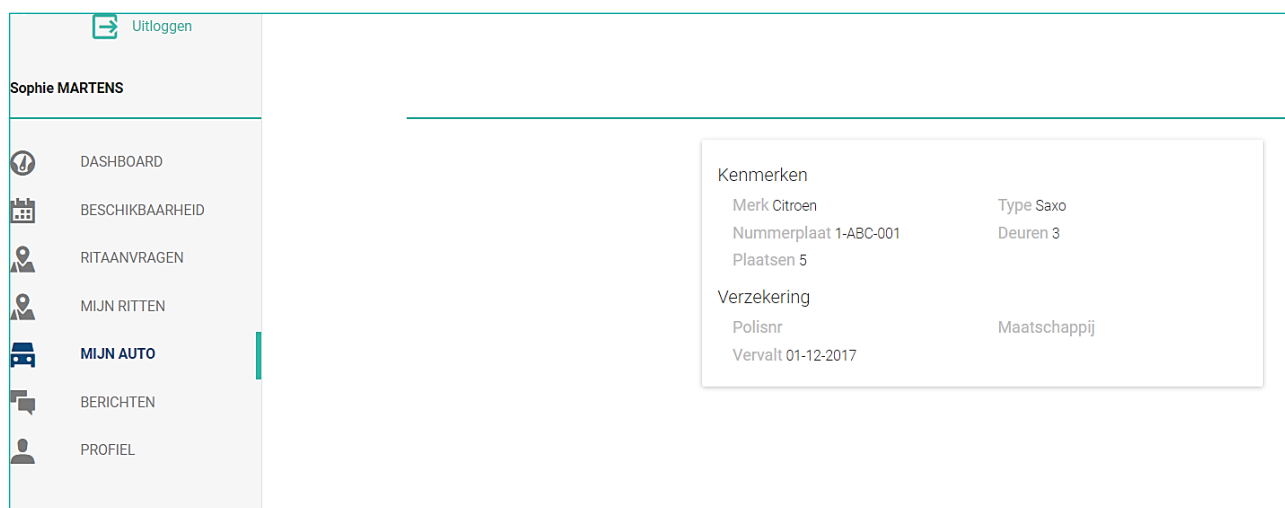


Figure 14- Example 'My Car' Mobitwin app for drivers

- The option 'Leave now' allows the driver to inform the member s/he has started the ride. The member pays a cost between € 0,3 and € 0,35 per km to the driver. The payment is not done through the app, the member receives an invoice afterwards.

3.2 Olympus Mobility app

3.2.1 Actions at mobility service level

Taxistop developed new functionalities/features for the Olympus Mobility app for the INCLUSION project. The app provides a multi-modal journey planner giving information on different transport options. This new version of the app contains information on the project and fewer transport options (only public transport and shared bikes). These were the steps followed:

- o New Service Design

Test users could easily buy a ticket using a pre-loaded budget of € 30 for public transport and bike sharing. In addition to that, the app provides the lowest price to reach the destination. The app was presented to potential test users by the STEP partners. They received training from Taxistop on how to present the app and the necessary steps to give test users access to the app. During the demonstration phase, they identified and approved jobseekers that were qualified to test the app. When approved, test users had to fill in a survey before getting access to the app. Meanwhile, manuals and videos were created to show test users how to start up and use the app.

- o Covered Area

The pilot area for the Olympus Mobility app covered the entire Flanders Region. It focused on migrant jobseekers for whom potential employers are most likely to be located in rural and peri-urban areas.

3.2.2 ITS specifications

The most important specification of the Olympus Mobility app is the fact that it integrates public transport and bike sharing options. Once the potential test user is approved and s/he has filled in the survey, Taxistop can immediately give him/her access to the app through a central managing platform. Taxistop also provided a budget of € 30 that was automatically provided in the app once the test user had access to the app. This budget could then be used to pay for transport options suggested by the app. The procedure of buying tickets is explained in a manual (Dutch/French) and in several "How to" videos (See annexes B3 and B4).

3.2.3 Actors involved, roles and responsibilities

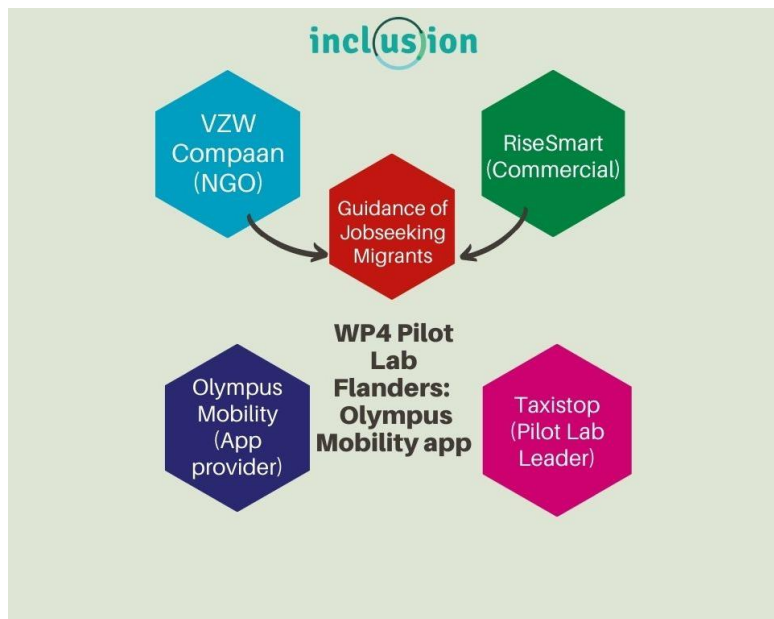


Figure 15- Partners involved in Olympus Mobility app

- Taxistop – a non-profit organisation – is the pilot coordinator. Taxistop provided information sessions about the app and provided access to the Olympus Mobility app and to the € 30 budget to use the app.
- Olympus Mobility is a non-profit organisation that provided the technology.
- Compaan VZW is a non-governmental organisation that helps vulnerable groups find their way to the labour market. They provide training for job applicants and recruited test users. They also provided insights into the transport needs of the target group.
- RiseSmart is an enterprise with the same goals as Compaan VZW. They also promoted and provided the app to the target group.

Side note: The STEP project was a local project led by other actors/partners. Unfortunately, this partnership disintegrated twice during the INCLUSION project. This will be discussed later on in chapter 4.

3.2.4 Process to buy tickets

When test users got access to the app, they would see the screen below (cf. Figure 16). They could immediately buy a ticket ('Bestel je ticket'), look up their favourite or most used transport options ('Mijn favorieten'), or plan their route via the route planner ('Plan je route') that shows the available transport options in the neighbourhood. Finally, they also had the option to get to know more about the INCLUSION project. The full procedure of buying a ticket is explained in videos and manuals (See annex B3 and B4).

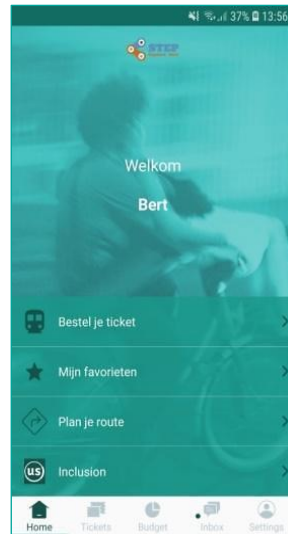


Figure 16- Example dashboard Olympus Mobility app

The following modes of transport are included in the adjusted version of the Olympus Mobility app (cf. Figure 17):

- **NMBS** is the Belgian national railway company. Users can order tickets in the app for single and round trips, or a ticket for 10 single rides.
- **De Lijn** is the regional public transport company in Flanders. Users can order bus and tram tickets for 10 single rides or for single trips (cf. Figure 19).
- **MIVB** is the public transport service in Brussels. To use it, the test users needed a MOBIB card specifically for the area of Brussels. This MOBIB card has extra costs, which is why this option was less appealing for the test users.
- **Blue-bike** is a bike sharing service with stations all over Flanders, mainly located next to a train station. Users have to return the bike to the station after the ride. Test users could pay for a 24-hour voucher to use a Blue-bike (cf. Figure 18).
- **Velo:** Velo is a bike sharing service provided by the City of Antwerp. The Velo stations are located within walking distance from each other (max. 400 m) in an area that includes the city centre and the surrounding districts of Berchem, Borgerhout, Deurne, Hoboken, Merksem and Wilrijk (cf. Figure 18).

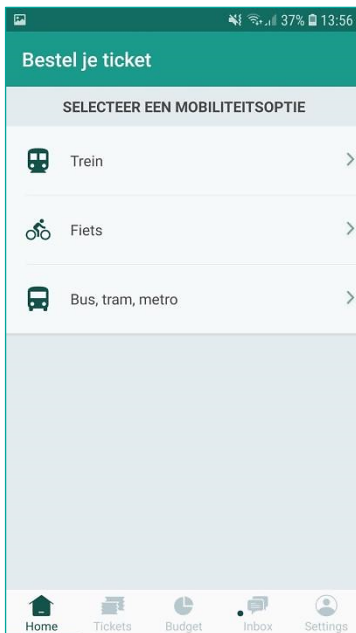


Figure 17- Example modes of transport
Olympus Mobility app

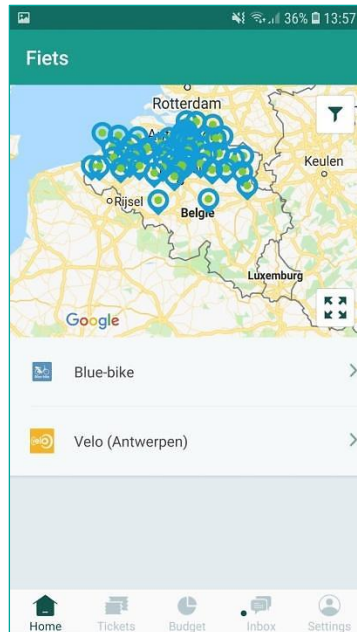


Figure 19- Example Blue-bike services
Olympus Mobility app

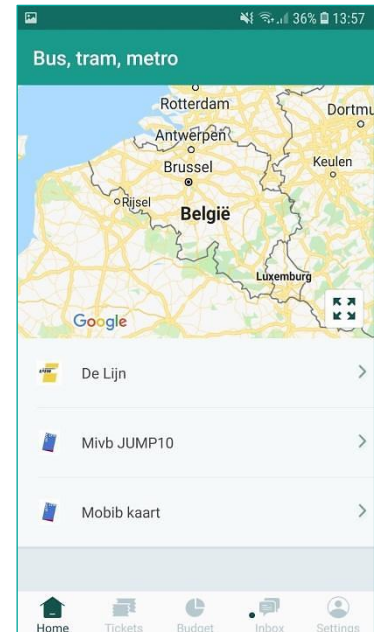


Figure 18- Example De Lijn
Olympus Mobility app

Test users can order a ticket via the app and consult/view their remaining budget:

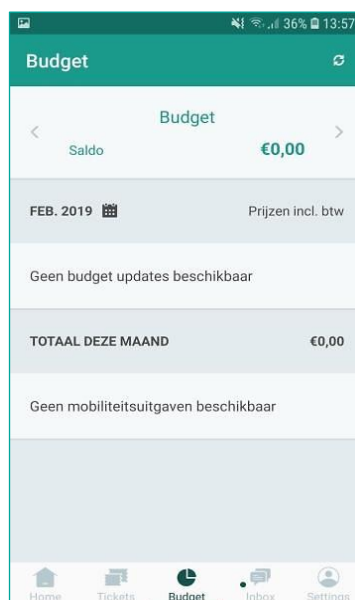


Figure 20- Example budget
Olympus Mobility app

4 Deviations from planning and corrective actions

4.1 Mobitwin app

Deviations were experienced due to two main factors:

- Many elderly people feel hesitant and insecure towards new technology. There was a lot of fear to try out something new. Taxistop dealt with this situation by emphasizing that the LMS employees and the call center would still be available during the demonstration phase.
- Taxistop was very dependent on the LMSs for distributing the surveys. At first, these surveys were sent out online, but soon also offline due to many members not having access to online tools. Some LMSs were also hesitant to spread the survey. This is why the process of collecting before data took longer than expected. Towards the end of the demonstration phase, Taxistop decided to shift the collecting of data from surveys to focus groups and in-depth interviews. Unfortunately, the focus groups could not take place and the planned interviews were cancelled due to the restrictions of COVID-19.

The table below gives an overview of the actions foreseen, due dates planned, and the actual dates and the final actions performed to solve the deviations.

Actions foreseen	Due dates planned vs actual dates	Actions performed
Support test users	Planned: M19-M25 Actual: M24-M2	Information sessions were held with potential users and employees of interested LMSs
Communicating about and receiving feedback on the Mobitwin app from the members and the voluntary drivers of the Less Mobile Stations	Planned: M19-M34 Actual: M19-M28	<ul style="list-style-type: none"> - Put more effort into building personal contact and trust relationships - Organize in-depth interviews (cancelled due to the restrictions of COVID-19)
Get more insight into the mobility needs of members and volunteer drivers of the Less Mobile Stations	Planned: M19 Actual: M25-27	<ul style="list-style-type: none"> - Send out online before surveys to employees of the Less Mobile Stations (98 responses), to members (112 responses) and to volunteer drivers (183 responses) - Send out offline before surveys to members that have no access to the digital tools (40 of the 112 responses were received through offline channels).

Development of the Mobitwin app based on the user need consultation	Planned: M19-M21 Actual: M19-M28	<ul style="list-style-type: none"> - Gather feedback from the Less Mobile Stations, voluntary drivers and members throughout the demonstration phase - Gather feedback from IT employees to decide on the feasibility of the changes needed
Launch a campaign to recruit voluntary drivers for the Less Mobile Stations	Planned: M22 Actual: M22+M27	<ul style="list-style-type: none"> - Launch of news articles in several local newspapers, including an interview with the providers of LMS in Brussels, a volunteer driver and a member⁶. - Change the name of the service from Less Mobile Stations to Mobitwin (only in Wallonia and Brussels for now).
Promoting the Mobitwin app during local events	Planned: M22-34 Actual: M17-M26	<ul style="list-style-type: none"> - Presenting the Mobitwin app during study/member days (informal meetings between Taxistop and the employees, members and volunteer drivers of the LMSs) - Presenting the INCLUSION project and the Flanders pilot lab during the SUMP Conference 2019 (Annex A5) - Presenting the INCLUSION project and the Flanders pilot lab during Hack Belgium 2019 (Annex A5) - Organize a session about INCLUSION during the international symposium Shared Mobility Rocks 2019 (organized by Taxistop and Autodelen.net)
Testing the Mobitwin app at the Less Mobile Stations in Ghent and Oudenaarde	Planned: M21-M34 Actual: M25-M26	We tried to involve other LMSs, but with no results. This is why the pilot was only rolled out with the LMSs in Ghent and Oudenaarde.

Table 1 – Actions foreseen and actions performed for Mobitwin app

⁶ <https://www.bruzz.be/videoreeks/woensdag-26-juni-2019/video-sociale-taxidienst-zoekt-vrijwilligers-met-100-kunnen-we-het>

https://www.nieuwsblad.be/cnt/dmf20190626_04480709

<https://www.dhnet.be/regions/bruxelles/bruxelles-mobilite/mobitwin-un-transport-social-pour-les-bruxellois-limites-dans-leurs-deplacements-5d14a062d8ad5815cb43b7f6>

<https://plus.lesoir.be/237920/article/2019-07-22/la-recherche-de-chauffeurs-prives-pour-les-bruxellois-les-plus-isoles>

4.2 Olympus Mobility app

For the implementation of this pilot, Taxistop was very dependent on the STEP partners since they had the most insights into and personal contact with the target group. During the implementation, a lot of difficulties were experienced, limiting the impacts that could be achieved. For each barrier Taxistop experienced, new incentives and solutions were created. The general lessons learnt will be discussed later in chapter 5.3.2. on.

- **Disintegration of the STEP partnership:** The first collaboration with the original STEP partners disintegrated in the spring of 2019 because of internal issues within the STEP project. As a result, Taxistop had to find new partners who could provide the contact with migrant jobseekers. The search took a lot of time and effort and came to an end in October 2019. This new collaboration also meant starting all over again. Personal meetings and training, which had been held with the employees of the STEP partners about the app, were to no avail. The new partners who had been found by October 2019 started to communicate with potential test users of the app, but it was a challenge to fit the promotion of the app in their workload and to convince people to test the app. After a lot of communication, there was one local champion: an employee of Compaan VZW who was very eager to present the app to potential users. The employee got very engaged and recruited extra users to test the app. Unfortunately, this collaboration had to stop because of the restrictions due to COVID-19.
- Taxistop tried to reach the target group through online surveys to get more insight into their mobility needs; however, there was little response from the target group due to language and/or technological barriers. Focus groups were planned instead, but it was difficult for the target group to attend these group sessions because of late shifts at work and family responsibilities. Finally, Taxistop decided to organize in-depth interviews with users to get feedback on the app and to gain richer insights into their needs. An interview was organized with a user and an employee of one of the STEP partners. No further actions were taken due to the restrictions due to COVID-19.

Actions foreseen	Due dates planned vs actual dates	Actions performed
Support test users	Planned: M19-M34 Actual: M19-M28	<ul style="list-style-type: none"> - We created 3 manuals (Dutch/French) for each transport option that is available in the app (Annex B3) - We visualized the process of buying a ticket for each transport option in several videos - Taxistop worked on building personal contact and a trust relationship with STEP partners and test users

Provide updates to the STEP project leaders	Planned: M19-M34 Actual: M18-M20/M24-M26	<ul style="list-style-type: none"> - Information sessions were held for the STEP partners on how to use and present the app to potential users (Annex B6) - Meetings were organised between Taxistop and the STEP partners to exchange experiences and feedback
Communicate with the partners of the STEP project to increase the usage of app	Planned: M19-M23 Actual: M18-M20/M24-M28	<ul style="list-style-type: none"> - Put more effort into personal contact and building trust relationships - Information sessions were held for the STEP partners on how to use and present the app to potential users - Meetings were organised between Taxistop and the STEP partners to exchange experiences and feedback
Communicate with target group to increase usage of app	Planned: M20-M24 Actual: M25-M28	At first, the communication happened through the STEP partners. The partners were supposed to present the app to potential test users and fill in the survey with them. Unfortunately, this process did not match their workload. Taxistop put more effort into building personal contact and trust relationship with the test users by organising focus groups and in-depth interviews. All the activities were cancelled due to the restrictions of COVID-19
Testing the Olympus Mobility app for jobseekers with a migrant background	Planned: M21-M34 Actual: M25-28	Twenty people downloaded the app, of which 14 used the app. After the low uptake of the app, Taxistop decided to focus on building trust relationships with the partners and present itself as the first spokesperson for the app (instead of the STEP partners)
Making small updates to the app according to feedback of test users	Planned: M25-M30 Actual: M25	<ul style="list-style-type: none"> - Communication with the app provider about the feedback we received during the demonstration phase - One of the main subjects was the importance of discounts provided by the VDAB. The app provider and the VDAB are discussing a potential collaboration

Table 2 – Actions foreseen and actions performed for Olympus Mobility app

5. Main results of the pilots

5.1. Evaluation activities and target indicators

Before the demonstration phase started, concrete objectives and quantified targets were identified for each pilot lab. The aim was to reach these targets during the demonstration phase. This chapter gives an overview of the measures, the process of the evaluation activities and the lessons learnt on how to present a new technology to vulnerable target groups.

5.1.1 Mobitwin app

The measure for the Mobitwin app pilot was to deliver an enhanced real-time solution to elderly and disabled users. The Less Mobile Stations' (LMSs) service is founded by Taxistop to provide door to door transport to less mobile elderly people in Flanders through volunteer drivers. The current process of requesting a trip goes like this: elderly people with a door to door transport demand can sign up for the LMS service for € 10 (per year). Once signed up, members can request trips until 2 days in advance by calling the call centre of the LMS. The employees of the LMS call around to find available drivers in the neighbourhood, also based on other specific needs of the members (e.g. wheelchair, pets). Once a driver is found, the only cost for the member will be the allowance for the driver, which is legally fixed. Additional to this service, Taxistop developed the Mobitwin app, a digital version of the current Less Mobile Stations' service. This app matches trip requests in real time, which means that members can also request trips for urgent calls. This way the members get a more empowering service (they can insert their request themselves in the app) and the drivers get more comfort since they can insert their availability themselves. The Mobitwin app was tested at two Less Mobile Stations (Ghent and Oudenaarde).

Identification objectives and quantified targets before pilot

The Mobitwin app was developed in 2018. By the beginning of 2019, the first version of the app was tested with drivers and members. After the testing, feedback was gathered from the test users, leading to some activities and objectives being identified before actually starting the pilot:

- Improve the real-time capacity of the LMS's service by presenting the Mobitwin app to the target group through workshops.
- Increase the number of requested trips by 2% during/after testing the app. The goal is to reach 3 trip requests per week and 20 test users in total.
- Send out before and after surveys to get more insight into the satisfaction with the app and with the access to social and leisure activities amongst the target group.
- Introduce real-time capacity to reduce the time in advance to book a trip by 50%.
- Start a communication campaign to recruit new volunteer drivers. Increase the amount of new voluntary drivers by 10%.
- The more volunteer drivers recruited, the more there will be an increase in time availability of the volunteer drivers. We aim for an increase in time availability by 10%.

- Increase the proportion of the target group and the demonstration area that is aware of the Less Mobile Stations and the Mobitwin app by 25%.
- Increase the proportion of the target group and the demonstration area that has the capability to use the app by 10%.

After pilot considerations

The Less Mobile Stations have 31.251 members in total, of which 9.475 are men and 21.776 are women. The LMSs in Flanders have 2.952 volunteer drivers, while in Brussels there are 66 and in Wallonia 210. Before surveys were sent out during the design phase. 98 LMSs, 112 members and 183 voluntary drivers gave us new discussion topics for these objectives:

○ Introducing real-time technology through the Mobitwin app



The Less Mobile Stations have a crucial role when it comes to reaching the members and the volunteer drivers. This is why it was important to firstly communicate towards the LMSs and convince them to try out the Mobitwin app. Workshops were held at several LMSs and during study days (informal events where LMSs and Taxistop come together to exchange experiences). After these workshops, before surveys were sent out to LMSs. Two LMSs decided to test the app. Through numerous feedback consultations, several LMSs shared why they were hesitant towards the Mobitwin app:

Figure 21- Picture of a study day held in Mol (Belgium)

Source: Taxistop vzw

- Concerns about the digital skills of the target group: Employees of the LMSs claim that members and voluntary drivers do not feel in touch with the newest technologies. Their concern is that the weaker groups will fall by the wayside, while the main goal of the LMSs is to engage the most poorly served people.
- The volunteer drivers get a minimum fee (legally regulated) for each ride they complete. The LMS employees keep an eye on a fair dispatching of the rides so that every driver gets a fair chance to accept a ride. The concern is that when volunteers can decide their availability themselves through the app, there will be a risk of an unfair dispatching of the rides.
- Currently, every trip request and trip dispatching happens through a phone call and/or email. The social contact is very important for the members to have someone they can rely on and for the voluntary drivers to stay motivated. Working through an app can contain the risk of losing this social contact with members and volunteer drivers.
- The members are very eager to socialize with the voluntary drivers. Often they prefer to be driven by drivers they already know. Right now, the LMS employees protect the privacy of the drivers so that they do not get calls directly from the members. The

Mobitwin app shows some personal information relating to the driver to maintain the flow of a trip. The use of the Mobitwin app reduces the privacy protection of the voluntary drivers.

- o The LMSs use a central platform where they can follow all the rides. Implementing the Mobitwin app in the central system does not seem realistic for the employees to keep up with all the rides. This is mainly due to workload and timing issues: If there is a request through the Mobitwin app that is still not matched to a voluntary driver, an employee must interfere immediately since the request is made for a real-time trip. This means more last-minute efforts from the employee while the current system gives them 2 days to look for a voluntary driver.

These insights show that the hesitant attitude of the LMSs towards the app comes from a feeling of losing contact and control over the service. Employees have a high level of interaction with members and drivers when a request is made. They also have to keep an eye on extra needs of members (e.g. finding a driver with a car that is accessible for people in a wheelchair). These extra requests can often be too complex and too personal to share through an app. An app might not be suited for the members because of the decrease of human interaction. On the other hand, the app has to be considered as an addition to the current service for the urgent rides. Employees



will still be available for less urgent requests or when there is a problem with the app. Even more, 63.9% of the LMSs consider the search for a volunteer driver, to match a trip request with, as the most time-consuming task. A possible route might be to introduce the Mobitwin app as a solution for the employees.

Figure 22- Picture of an employee of the LMS in Leuven after an interview
Source: Taxistop vzw

- o How technology ready are the volunteer drivers and the members?

After getting feedback from the LMSs, before surveys were also sent out to members and volunteers. The surveys contained questions about their current request behaviour, their feeling with technology and their willingness to test the app. Although the app was only rolled out in the LMSs of Ghent and Oudenaarde, the before surveys were sent out to members of several LMSs in Flanders. Unfortunately, the uptake for the before survey was mainly low due to a lot of members not having access to online devices to fill in the survey. This was partially solved by sending out the survey through offline channels.

The results of the before surveys show a fundamental challenge that had an impact on the demonstration phase: only a small amount of the target group has the capability and the desire to use the app (or any other new technology). Insecurity, age and fear of technology were given as the main reasons to not use the app. Furthermore, social contact is considered a very important

aspect by the members. Especially the trust relationship between employees and members seems very delicate. The strength of the LMSs lies in the personal contact with the users and introducing an app may create a feeling of distance between the parties. This creates a very interesting case to think about: how can we create a technology that can connect people more?

Despite the challenges, the Mobitwin app was rolled out in the LMSs in Ghent and Oudenaarde. The Less Mobile Station in Ghent has 189 members and 28 voluntary drivers, while the Less Mobile Station in Oudenaarde has 160 members and 22 voluntary drivers. The Mobitwin app was presented to the volunteer drivers and the members through manuals and workshops held at the LMS centres. The testing started in October 2019 and lasted until January 2020. The app was downloaded by 25 LMS members and voluntary drivers, but only 3 volunteer drivers actually used the app. This suggests that there are different barriers experienced for accepting and downloading the app and actually using it. Logically, there was no response to the after surveys that were sent out in December 2019 because the app was not tested enough to give any (more) feedback based on experience with the app.

After January 2020, the focus of the pilot changed from promoting the testing of the app to gaining more insights on the actual needs and barriers of the users. Why was the app not tested despite the (small) interest and the desire to test it? Unfortunately, several of the in-depth interviews that were planned were cancelled due to the restrictions of COVID-19. So, despite the fact that the technology was introduced but not used, we cannot make definitive conclusions on the reasons for this.

- **Improve trip requests with the Mobitwin app by getting more insight into the experience and feelings of users during current trip requests**

To improve the current trip requests, Taxistop needed more data on the current process of requesting a trip for all parties (employees, members and volunteer drivers). The results of the before surveys show that there is a certain potential for the Mobitwin app to ease the workload of the employees of the service. How? The results of the before surveys show that 21-50 trips are requested weekly (Annex A3). The matching of this amount of trip requests brings along a lot of workload. The current process goes like this for the employees: when a request is made, they look for available volunteer drivers in the central system. These availabilities are entered in the system by employees through the input of voluntary drivers. If a volunteer driver is found there, this volunteer will be called by the employee. If there is no volunteer found, employees need to call around to every possible volunteer to do the trip. This is also the reason why members need to communicate their request at least 2 days in advance. If the matching happens through the app, this can give more room to employees to focus on other tasks, such as recruiting new volunteer drivers.

There is the need for a certain number of users of the app for the previous point to succeed. When a trip is requested through the app, this also appears in the central platform. If there are volunteer drivers available through the app, it will be possible to find a voluntary driver and match

the trip without the intervention of employees. If not, the employees would still have to intervene and look for a voluntary driver. If the proportion of members and volunteer drivers using the app is not in balance, the expected decrease of workload (for the employees) may not materialise and a more stressful work situation might be created for the employees.

This shows the importance of willingness and involvement from every stakeholder to support the new technology. The stakeholders may be more involved in the new technology when the app is presented as a solution for a specific problem and not as a new product to support the current service. This shows that using the right perspective through suitable communication is key.

- Increase in time availability of volunteer drivers and awareness of the LMSs through a communication campaign



A communication campaign was launched to recruit new voluntary drivers. The total number of members and the number of volunteer drivers is very disproportionate and many of the voluntary drivers are also elderly people. This campaign was aimed at the general public. Specifically, at youngsters who are willing to make time to serve as a volunteer driver. Youngsters may be an interesting target group for this because they have more affinity with new technology and are more willing to use a new technology such as the Mobitwin app.

Figure 23- Picture of a potential member and voluntary driver for promotional purposes
Source: Taxistop vzw

This campaign did not meet the expectations, but we received a couple of responses from people willing to volunteer. A follow-up must take place. The campaign was rolled out nationwide, but communication about such a personal service requires also a more personal and local communication. Other actions were also taken to create more awareness around the app: Taxistop mentioned the app during study days, member days and newsletters. These actions created some level of awareness and talk value, but the real challenge is to convert the awareness and the dialogue into engagement.

Despite the fact that the current target group is not technology ready to use a real-time technology, the outcomes above show that the Mobitwin app may have potential when it is communicated as a solution for a specific need. The technology should also be put into perspective in the short and long term. There will be a moment in the future where technology will meet the skills of elderly and disabled people. Until then, trip requests must be improved by presenting the technology to stakeholders with the technological skills and by looking for solutions other than technology. Finding more and younger volunteer drivers is a clear example of these other solutions. The other steps that need to be taken will be discussed in Chapter 5.3 on lessons learnt.

5.1.2 Olympus Mobility app

The measure for the Olympus Mobility app pilot was to develop a MaaS solution tailored to (un)employed people with low incomes who have a migration background. The main goals of this pilot were to introduce this MaaS solution to jobseeking migrants and improve their access to job opportunities. The Olympus Mobility app is an already existing B2B MaaS app that is provided by employers to their employees. For the INCLUSION project Taxistop worked with the Olympus app developers to simplify the interface and introduce some new functionalities/features to allow its use by the target group. In addition to that, a personal mobility budget of € 30 was provided automatically through the app to approved migrant jobseekers. With this budget, jobseeking migrants can look for workplaces that are often located in remote industrial areas. Reaching these locations with public transport can take a long time and often costs more. The budget of € 30 can cover a certain amount of trips (depending on the distance and on what kind of transport mode is used).

Identification objectives and quantified targets before pilot

A simplified version of the app was created during the design phase. Together with the NGOs of STEP the practical factors were determined such as the amount of budget and the communication strategy. Based on the decisions made during the design phase, the following objectives and indicators were elaborated:

- Organise at least 4 information sessions where NGO employees of the STEP partnership receive training about the app
- Reach 100 (un)employed migrants with low incomes to download and use the app
- 3 public transport trips performed per test user to access job opportunities during the test phase
- 2 bikesharing trips per person to access job opportunities during the test phase
- 25% of migrants using the Olympus app who accessed job opportunities
- 20% satisfaction about the access to job opportunities amongst the target group
- 30% more transport information for jobseeking migrants with low incomes
- Reduction by 50% of transport as a barrier to access job opportunities

After pilot considerations

The objectives mentioned above can be spread over 3 overarching expectations. We will discuss these expectations based on the activities and the output of the demonstration phase. The testing of the app could have yielded more results, but Taxistop gained very rich insights into the mobility needs of job-seeking migrants, mostly through feedback consultations with the partners from the STEP project and an in-depth interview.

- Present the Olympus Mobility app to jobseeking migrants through cooperation with STEP partners

The STEP partners had a crucial role in the demonstration phase since they have the richest



insights regarding the mobility needs of the users as well as having regular direct contact with the migrant users in their employment support role. Unfortunately, the STEP partnership disintegrated twice during the demonstration phase. The first disintegration happened during the spring of 2019, with the consequence that all the previous work and the preparations were lost, but there was still a lot of interest in testing the app. During the information sessions, a lot of rich insights and concerns were shared:

Figure 24- Picture of an information session with the employees of one of the STEP partners

Source: Taxistop vzw

- The employees of the STEP partners are counsellors that guide vulnerable groups towards the labour market. They have weekly or monthly appointments with the target group about the next steps to find a job. This means that the STEP partnership employees already have a certain workload, which made it harder for them to combine the Olympus Mobility app with their current tasks.
- The follow-up of the app after the ending of demonstration phase was another concern. The counsellors saw a lot of potential in the app. However, the process of presenting and teaching the target group how to use the app can be very intensive. Moreover, this app can help the users on in the short-term, but there were concerns around the consequences on the longer term.
- Collaboration with the VDAB was presented as a possible solution in the long-term. The VDAB (the public employment service in Flanders) already provides discounts such as train tickets for € 1 for jobseekers. These discounts are very useful and well-known by the target group. However, jobseekers need to wait for 2 weeks before getting access to these discounts. Implementing the discounts of the VDAB in the Olympus Mobility app can add value to the app for jobseeking migrants on an on-going basis.
- Some partners were concerned about whether the app budgets were being used for employment related trips. The app can track which transport options are being used, but it cannot track the purpose of a trip.
- Subsequent to the previous point, some partners proposed to make a shift regarding the purpose of the app. Although 90% of the potential users are dependent on public transport, a lot of jobseeking migrants don't know how public transport works. Instead of letting test users use the app for job related trips, the pilot lab could allow them to use the app and the travel budget to get to know public transport better.

Taxistop had the goal to hold 4 information sessions with the STEP partners on how to use and present the app to the target group. This target was still met during the demonstration phase when STEP 2 was finally formed. This goal was met with a total of 45 employees from several NGOs being trained on how to use the app and how to provide/present it to potential users. Finally, from the second partnership a couple of employees were motivated to present the app to jobseeking migrants. Unfortunately, the new partners were not as engaged as the first ones. Barriers such as the workload of the employees led to less promotion of the app, which led to a lower number of users of the app. This is why only 2 out of 45 trained councillors actually promoted the app to jobseekers. Despite these challenges, Taxistop managed to find a small but steady number of users to test the app.

- Test the Olympus Mobility app with jobseeking migrants and get feedback through surveys and interviews

The demonstration phase of the Olympus Mobility app pilot started in September 2019. One of the objectives was to reach 100 downloads with unemployed users. This indicator was not met. 20 users downloaded the app, from which 14 were people with low or no income and 6 of them migrants. From these 20 downloads, the app was actually used by 8 people, of which 6 were migrants. The before survey got 14 responses, the after survey 4 responses. Just like in the



Mobitwin app pilot, Taxistop changed the perspective throughout the demonstration phase of the Olympus Mobility app. From January 2020 onwards, Taxistop decided to focus on interviews instead of surveys. An interview was held immediately before the COVID-19 pandemic. All the other activities were cancelled due to the restrictions. The following are the main reasons why the app was not used as much as expected:

Figure 25- Picture of interview with users and employee of one of the STEP partners
Source: Taxistop vzw

- The double disintegration of the STEP partnership mentioned before.
- The relationship of the target group with technology:
 - There is diversity in technological skills and financial situation within vulnerable groups that needs to be considered when creating new solutions. This diversity can play an important role when considering new technology.
 - Vulnerable groups often have access to a smartphone (although not everybody), but purchasing mobile data was revealed as another barrier to use new solutions like the Olympus Mobility app.

A lot of feedback was gained through the responses on the surveys, the interview held with a user and a counsellor and the analytics tool of the app (Annex B5). These are the results for the objectives regarding the 3 trips with public transport per person and the 2 trips with shared bikes per person:

- From the analytics tool, we can see that the app was used several times per person. These transactions concerned mostly bus trips (trips of € 1.80) (Annex B5). From the interview we can conclude that there was no “trigger” for the users to experiment with other modes of transport than the bus. In addition to that, the route planner – which allows the users to get an overview of all the transport options in their neighbourhood – was often considered as not clear enough. Finally, the €30 budget definitely was an added value for the users. However, the budget often was not enough to buy tickets for an all-round long trip by train. The budget was mainly used for several bus trips and/or all-round short trips by train.
- The shared-bike option was not used through the app. This can be linked to the fact that the app did not trigger users to experiment with other transport options than the train and the bus. In addition to that, using shared bikes may not be as well-known as other transport options. From the interview we can conclude that there is certain knowledge about shared bikes, but because of the complexity of daily lives of the target group and the fact that the bike is considered to be ‘less flexible’, a shared bike may not be as suitable as public transport or a car. Finally, the reason that shared-bikes are considered as less flexible, may come from the fact that the provided bikes are only located near train stations and are station-based. This could mean that users would still not have a first mile solution for their ride.

Other interesting feedback we received:

Once started up, the app was considered easy to use and to buy tickets. One user mentioned that although the app was very comprehensible for her, she would not recommend it to a newcomer. This user was an empowered woman who has been living in Belgium since more than 15 years. She already had developed her language and technological skills. Even with her affinity with technology, the login process was considered to be too complicated. The councillor agreed on this by adding that the users needed a certain degree of guidance to start up the app. From these experiences, they concluded that the app would be even more complicated for newcomers who would still have to develop the affinity with the language.

- **Show the app removes barriers in accessing job opportunities faced by migrant jobseekers**

The Olympus Mobility app was presented to jobseeking migrants as a tool for making their search for a job easier. The analyses above suggest that, for the target group, there is more to finding a job than just transport for migrants. Their transport need is an element that is part of a larger entirety of complex needs to find a job. The impact of the financial situation on the choice of transport options is dependent on the position of transport on the financial priority list. Often, vulnerable groups give priority to finding a liveable home and paying the bills. People with big debts are often also under a budget supervision, which means that a counsellor decides how much budget can be spent on what on a weekly/monthly basis. Another aspect that can have an impact on their transport choice is the offer of sufficient transport options. The factors that can have a positive impact on their choice for more sustainable transport are:

- Lower costs
- More punctual real-time information
- Better connections in/with rural areas
- Timetables outside of the peak hours
- More transport to business parks during peak hours

Besides the financial barriers and the barriers experienced by a lack of sufficient transport offer, there are also other factors that can have an impact on whether or not jobseeking migrants can find a job faster and easier:

- Location of the interview
- Location of residence
 - 90% of the target group cannot decide where to live because of barriers they experience when looking for a place to live (financial, lingual, cultural).
- Often, vulnerable groups cannot enter the labour market because of the lack of job offers in a certain field.
- Often, vulnerable groups feel uncertainty when it comes to language.
- Getting a job is like entering a new world, which can often lead to fear and hesitation. Vulnerable groups often look for jobs where they already know someone like family and friends.
- People with young children need to consider the balance of work and school hours (especially women). This is why owning a transport mode or having a train/tram/bus stop in the neighbourhood is very important.

From all the users that were given access to the app, most of them met the condition of looking for a job or going to a training or internship. As mentioned before, the VDAB provided discounts for public transport for jobseekers. Test users were often jobseekers that needed a transport budget for urgent appointments, and the tickets provided by the VDAB weren't available yet. This suggests a certain inflexibility of the VDAB and the biggest strength of the Olympus Mobility app: the fact that the budget can be provided within a couple of minutes. These challenges with the VDAB show that there is a great opportunity in bringing the tickets provided by the VDAB and the technology of Olympus Mobility app together.

5.2. Pilot Lab vs INCLUSIVITY goals

5.2.1 Mobitwin app

The Less Mobile Stations already provide a service that is complementary to some of the inclusivity goals (Annex C): an on demand door to door transport service that is affordable and gives access to social and leisure activities for less mobile and elderly people. The Mobitwin app was created to add another dimension to the inclusivity goals and also to broaden the support for other inclusivity goals, and make the current system more efficient. This new technology is provided through info sessions, manuals and personal training. These initiatives are supposed to make the initial adoption of the app more accessible.

In the before surveys, 50% of the users claim to feel safe during a trip thanks to the LMSs. Since the Less Mobile Stations have existed for several decades, a lot of members have already built a trust relationship with the service. In addition to that, the volunteer drivers of the LMSs get training on how to help less mobile members to get in the car. This training gives voluntary drivers more insights into the situation of members. This knowledge about the mobility needs can create a feeling of safety for the members.

However, safety should also be considered from a cultural point of view. Elderly women, and especially women, might not feel comfortable riding with a driver they do not know and vice versa. The Mobitwin app contributes to more safety by showing a list of available drivers and also by giving information about the kind of car the volunteer driver owns. This can play a crucial role in creating more accessibility for members in a wheelchair and also in making members feel comfortable enough to ride with someone they have not met before. However, presenting a new technology within an already existing service can also introduce different safety challenges related to privacy. The results of the before surveys show that there are concerns about the privacy of the volunteer drivers. The Mobitwin app shares some personal information of voluntary drivers with members to make the communication between the parties smoother in planning the trips. This challenge is less likely to appear in the current service because the communication mostly happens through the employees of the LMS.

By integrating a real-time technology in the service, the LMSs can provide a more convenient and empowering service to users who need a trip within 2 days. The app contains a route planner, a list of available volunteer drivers from which the members can choose who they want to ride with, and the possibility for voluntary drivers to share their availability however and whenever they want. These additions decrease the steps that need to be taken to plan a trip and also give members and volunteers more freedom and flexibility to plan trips. On top of that, the employees of the Less Mobile Stations will remain available for arranging the rides that are not urgent and also as a back-up for the app. However, the results of the before surveys show that members do not need urgent rides and do not have the need for new technology. The current service of the LMSs only includes the less urgent rides, while the Mobitwin app only focuses on the urgent trips. This may lead to members not linking their need for urgent rides with the LMS service. In addition to that, there is also the level of digital skills that is required to use the app. A lot of members do not have the skills or the attributes (smartphone, computer) to get access to the app. A significant amount of the members and volunteer drivers do have the digital skills to use the app, but experience more stress and insecurity when they want to use it.

The sort of rides provided through the app and the regular service may be different, but the affordability of the service stays the same in both approaches. The fee for voluntary drivers is legally fixed so it could stay affordable for the members of the LMSs. The app supports this by showing a list of available volunteers in the neighbourhood. The volunteer driver that is located the closest (and that is also the cheapest) is shown in real time at the top of the list. Olympus Mobility app

5.2.2 Olympus Mobility app

The Olympus Mobility app is a MaaS application that makes it possible to buy tickets for several transport modes through one app. The original version is already being used in a B2B context. Taxistop adjusted the original app and created a new version for the pilot lab to complement some of the inclusivity goals.

The first aim of the pilot lab was to make the Olympus Mobility app more accessible and to give the target group better access to the labour market. Another aim was to make other transport options, like using a shared bike, more accessible. Only public transport options such as the train and the bus, and a shared bike option, were included in the adjusted version of the app. The adjustments in the app were done to simplify the usability. To make the Olympus Mobility app more efficient, the providers inserted a route planner with stations and stops in the neighbourhood. When a destination is inserted by the user, the app shows the cheapest route to get there.

Taxistop also worked together with different local partners (STEP) who already have the task to guide job seeking migrants to the labour market. This is where empowerment can have a large impact on the acceptance of the app. Taxistop wants to empower job seeking migrants to participate in society through a job that can be matched to their skills and not to their background or gender. For this to happen, a trust relationship and connection with the target group is a must. The STEP partners were the perfect match for this. The STEP partners already have the connection and the insights into the needs of potential users. They can form a bridge to present a new technology as an efficient solution for the complex (mobility) needs of the target group. However, the double disintegration of the STEP partnership made it harder to reach a larger proportion of job seeking migrants to test the app.

Thanks to the Olympus Mobility app, test users were able to go to last-minute job interviews or to keep a job they already had found. This was especially important when there was a delay on the ticket with discount from the VDAB. The Olympus Mobility app closed this gap by immediately providing a budget of € 30 through the app. This meant that jobseekers had access to several transport options in just a couple of minutes and so were empowered enough to choose their transport preference to reach their destination. The speed of the process gave users time and space to be more flexible. The budget of € 30 was also very interesting for the target group because it made different transport modes affordable in just a couple of minutes.

Convenience is also a very important goal when presenting and testing an app with job seeking migrants. During the demonstration phase, potential users were asked to fill in a survey before they could get access to the app and the € 30 budget. Users often had difficulties with understanding the survey that was only provided in Dutch. In addition to that, the login was considered too complex, while the usability was considered easy and comprehensible. This suggests keeping the app, but also the process to get access to the app as simple as possible.

From the interview with a test user we can conclude that although Blue-bike is only stationed nearby train stations, this does not necessarily close the gap of the first mile. The bike must return to the station before a certain time, which may create a barrier to actually using the

service. This indicates that only the transport options that were already used and well-known before using the app are most likely to be used via the app later on.

In conclusion, we can see that presenting a new technology to vulnerable groups brings along a lot of challenges and may even create new barriers. However, new technology also comes with new opportunities if it is implemented well and is designed to fix specific problems. For both of the pilots we can emphasize the importance of stakeholders/ambassadors who have enough connection with the target group, but who also have the skills to use the new technology. Another important conclusion is the fact that not every solution should be technological. Human interaction and transparent communication may be two triggers that can give vulnerable groups more access to sustainable and shared transport options. Finally, it can be interesting and helpful to map other barriers (other than transport) that have an impact on reaching specific goals (such as finding a job). Important insights and new ideas were gained through the demonstration phase of both of the pilot labs. These lessons learnt and the outcomes will be discussed in the next chapter.

5.3. Lessons learnt

In this chapter, we explore the possible reasons that explain the low uptake of the apps by the target users and highlight lessons learnt for future development/deployment.

5.3.1 Mobitwin app

There are some important lessons to keep in mind when presenting a new technology to elderly and less mobile people. There is definitely potential for the Mobitwin app to make trip requests easier if we look at the future in the long term. We can see from the results of the before surveys that there is already a significant amount of elderly people who wanted to test the app and who have a certain amount of experience with new technology. The future generations will have more experience with new technology than the current generation.

In addition to that, there is clearly a need for a solution for the very time-consuming task of finding volunteer drivers for requested trips. A possible solution in the short term might be to present the Mobitwin app as a tool for the employees of the LMSs to make the search for volunteers less time-consuming. This may work with the condition of having a critical mass of voluntary drivers using the app. The successful matching of trip requests will improve only when there is a significant number of people (both drivers and members) using the app. Requesting a trip through the Mobitwin app will have no further value if there are no volunteer drivers available via the app. For this to happen, more volunteers must be recruited. Since personal contact is very important for the Less Mobile Stations and the target group, it would be more efficient to represent this in the communication to recruit more volunteer drivers. More local and personal communication through stakeholders (such as universities, grocery stores, and sport clubs) would be possibilities in the future.

One of the challenges of the new functions of the Mobitwin app is about the role of the voluntary drivers in the Mobitwin app. Currently, the LMS keeps an eye on the fair dispatching of the rides. This means that every volunteer gets an equal chance for providing a ride. The technology of the

Mobitwin app does not include fair dispatching. This can result in a small number of volunteers taking over all of the rides. Another lesson learnt has to do with the types of trips that can be requested through the LMSs and the Mobitwin app. While the current service was limited to social and leisure trips booked with 2 days notice, the Mobitwin app expanded the types of trips to include more urgent trips (needed within 2 days). Although the Mobitwin app was the digital version of the LMS service, the app didn't trigger the need to use the Mobitwin app for urgent rides. Providing social and leisure trips and more urgent trips in both the LMS service and the Mobitwin app might be a more suitable solution. This might increase the feeling of recognisability with the app.

This feeling of recognisability might also increase the chance of accepting new technology faster. From the results of the before survey, we can conclude that a certain proportion of users do not want to change their habits by learning how to work with new technology. So besides the challenge of digital skills, there is also a challenge of cognitive willingness to try out new things. New technology can be seen as scary or too difficult by the target group and create an effect of "losing social contact". Co-creation might be a helpful tool to present new technologies to vulnerable target groups. It can create a stronger feeling of belonging and ownership. This co-creation process can also put new solutions into perspective and give many rich insights into how the target group will handle real-time technology. Since the mobility world is changing very rapidly with the upswing of new technologies, we should keep in mind that the world of elderly people is changing at a much slower pace and in different ways.

This speed of life can also have an impact on the process of decision making: why do they choose to download the app? Why do they choose to actually use the app? What factors play an important role when accepting a ride and choosing a driver? Situations that are considered as 'normal' or 'easy-going' by the general population are often viewed as complex or scary by the less mobile and elderly target groups. More effort must be put into the process of accepting change, new technology and decision making. This is why more in-depth insights on the mobility needs are necessary. Focus groups can be a good alternative for the surveys, but will only work if the location of the sessions is considered as accessible or convenient for the participants. One-on-one interviews may be the most suitable way to collect data from less mobile and elderly people. Creating a dialogue and building up trust relationships with every stakeholder can have a positive impact on presenting new solutions. This conversation should start as early as possible in the process of creating new solutions.

5.3.2 Olympus Mobility app

When presenting new solutions through partnerships, it is important to work together with partners that can guarantee continuous participation in the project. The STEP collaboration disintegrated twice due to internal issues. However, by the end of the demonstration phase, an employee of one of the partners, Compaan vzw, was eager to engage in the project. This employee stepped up as a major driver to present the app to the target group. The personal contact and the exchange of experiences with the employee led to extra users in a short period of time. From the interview with a user and an employee, we know that job seeking migrants seem to ask the people they know (family, friends) when looking for job opportunities. Family and friends can be seen as ambassadors and can also most likely have an impact on the choice for a

transport option and the relationship with new technology. Working with ambassadors may decrease the feeling of intimidation when introduced to new technology. In every step of the demonstration phase, human interaction should be included. When potential users have the technological ability and the motivation to test a new solution, it could be helpful to be present from the first introduction, to guide them through the process and help them reach their destination.

When collecting data, language can be a very important and delicate barrier for migrants. Surveys may not be accessible for users because of language issues. During the demonstration phase, one of the conditions to get access to the Olympus Mobility app was to fill in a survey. This way Taxistop could measure the impact of the app on the daily transport of the target group. Surveys were considered too complex to fill in by the users themselves, so extra help was needed from the counsellors. Consequently, the surveys also created more workload for the STEP partners. After the attempt with the surveys, holding one-on-one interviews with (potential) test users was considered. By having in-depth conversations, it can be possible to get richer insights and build the trust relationship that is needed to start up the next step (= testing the app). An interview with a user was arranged, which was very successful. This success may be linked to the fact that the counsellor supporting the test user was also present during the interview. Other interviews were cancelled due to the restrictions of COVID-19.

A solution for job seeking migrants may be more than presenting a new technology. Technology should be seen as something extra for more support besides the human interaction and not as a full replacement of it. Often, it can be very useful to start from an already existing and well-known solution. The advantage here is that the target group already has a certain degree of experience and vision on how this solution can be made more accessible and comprehensible. Sometimes comprehensibility can be a solution in itself. For example, having an overview of their right on certain transport discounts can also have a major impact on their daily travel behaviour and accepting new technology such as the Olympus Mobility app. Whatever the solution may be, it is important to start from the skills and the knowledge of the target group. What solutions do they already use? What gaps do they experience with these solutions and how can these be solved based on the principles of INCLUSION?

In this regard, showing empathy for this target group throughout the process is important, recognising that mobility is not their first priority or biggest challenge to overcome when it comes to finding or keeping a job. The mobility world is changing fast, while the world of migrants, trying to build a new life in a new country, is changing much faster. It is important that they get comprehensible real-time information. This can be online and offline. The communication should mainly focus on the feeling of efficiency, ease-of-use, as well as being fast and cheap. It's also important to keep an eye on the worldview of the target group. When sharing transport options is not familiar, this can create challenges when it comes to feeling safe. This shows that the worldview of job seeking migrants might also define how they see and experience job opportunities.

Despite the lower than envisioned uptake and testing of the app, the app was still tested by a small number of jobseekers. From the interview feedback with users we can conclude that the usability of the app is workable but downloading it and the process to login can create barriers if

they are not being kept as simple as possible. New technology should also be available without a smartphone. Although the majority of the target group owns a smartphone, often they do not have access to mobile data, or the app is not compatible with their smartphone.

Extra effort should also be put in co-creation and involving the target group as being a part of something bigger. This target group often feels left out of how decisions process in society. Giving them the chance to participate in a co-design process can be seen as giving them a voice and making them be heard. This can result in more dedication to get to know new technologies and also the willingness to use them.

6. Institutional, regulatory and financial issues

As mentioned in chapter 4 and 5, challenges occurred during both of the pilot labs. In this chapter we will take a closer look at these challenges and why they occurred.

6.1. Mobitwin app

Cooperation among actors

The Less Mobile Stations were an important stakeholder for this pilot lab. Independently of the INCLUSION project, LMSs play a very active role in providing on demand door-to-door transport to less mobile and elderly people. In addition, the LMS service is a very social service where personal contact is very much needed, not only to comfort the members, but also to keep the voluntary drivers involved and motivated. At first sight, the Mobitwin app seemed like a tool that would decrease the social interaction with the members and voluntary drivers. This idea was one of the main reasons why employees of the LMSs were hesitant to introduce the Mobitwin app to their members and voluntary drivers. Taxistop responded to this through open communication about how the app could fill a gap for a certain segment of the service (urgent rides that need to happen within 48h). The employees were also concerned about the possible workload issue that the Mobitwin app would bring along. Introducing the app, convincing the users and teaching them how to use it could increase their pre-existing workload. Therefore, Taxistop decided not to promote the app as a solution to every LMS and continued the process with the LMSs in Oudenaarde and Ghent.

Stakeholder engagement

The challenges regarding the cooperation with the stakeholders also showed up during the data collection process. While the before surveys gathered some responses because of LMSs that were interested in spreading them, the after survey only got 2 responses. In addition, online channels seemed less accessible for vulnerable target groups. Taxistop decided to change the course and organised focus groups and interviews to get more in-depth insights into the satisfaction with the app. Unfortunately, it was difficult to bring the target group together due to a lack of interest or physical disabilities that prevented them from reaching the venue. Some feedback was gathered from the surveys and from several feedback moments with employees, but not enough to make a general conclusion on the impact of the Mobitwin app.

Another issue that already existed before the start of the INCLUSION project was the disproportional balance between the number of members and voluntary drivers. A national media campaign was developed to recruit more (and younger) volunteers. Unfortunately, this campaign did not succeed in attracting more volunteers. Finally, all the activities that were planned to collect more data through offline channels were cancelled due to COVID-19.

User's culture/behaviour

Many elderly people feel anxious and insecure to use new technology, such as the Mobitwin app. On the other hand, the results of the before surveys showed that a certain amount of elderly people was interested in learning how to use the app. This resulted in continuing to promote the app to the same target group but only with two LMSs.

6.2 Olympus Mobility app

Cooperation among actors

The STEP partners formed the bridge between the Olympus Mobility app and the potential users, namely job seeking migrants. The STEP partnership was formed in the beginning of the INCLUSION project as a local collaboration to make the local labour market more inclusive and accessible. Unfortunately, during the demonstration phase the STEP collaboration disintegrated twice. A new partnership was formed after a long search, but this delayed the pilot lab a lot, as mentioned in chapters 4 and 5. Besides the delays, the STEP partners were mostly critical towards the Olympus Mobility app. There was a concern that the app would be too complicated for the target group. However, by the end of the demonstration phase one local partner became very eager and recruited potential users in a very short amount of time. The budget provided with the app was the biggest driver for this. However, the €30 budget only added a value in urgent matters. In less urgent circumstances, the transport discounts provided by the public employment service of Flanders (VDAB) seemed more effective and well-known. This issue created new opportunities for the Olympus Mobility app: a possible collaboration with the VDAB by implementing their transport discounts in the Olympus Mobility app.

Stakeholder engagement

Similar to the Mobitwin app pilot lab, the surveys gathered to little response to make any conclusion on the impact of the Olympus Mobility app. The biggest reason for the low response rate was the low uptake of the app, but also the language barrier experienced by the users when filling in the online survey. Taxistop managed to change the course and organised an interview with a user and an employee to overcome this language barrier and get more in-depth insights. More interviews could have been held, but these were cancelled due to the COVID-19 restrictions. The language barrier also occurred during the testing of the app. The Olympus Mobility app was provided in English, French and Dutch, but users still experienced language barriers to fully understand and manage the app. The councillors were competent to guide the users, but not able to do so because of workload issues. Taxistop was willing to take over the task to guide the users when starting up with the app, but didn't get to develop this task due to the disintegration of the partnership.

User's culture/behaviour

Besides the language barriers, most potential users were very excited to use the app. A lot of test users had a smartphone, but unfortunately no access to mobile data (which was needed when buying a ticket through the app). In addition, the Olympus Mobility app was often not compatible with all devices owned by the user group. Taxistop aimed to overcome this by building one on one relationships with potential users to show them how to use the app more efficiently. In addition, Taxistop suggested Olympus Mobility app providers to collaborate with a telecommunication company to overcome the barrier of mobile data.

7. Assessment

7.1. Benefits of the actions developed and key transferability issues

Both pilots focused on development and delivery of apps that were presented to vulnerable target groups and managed to:

- o Give us important insights and lessons learnt on the process and communication of presenting new solutions to vulnerable target groups.
- o Address the mobility barriers and the meaning of mobility in the daily lives of the target groups.

Although the measures did not fully meet the expected impact, they did yield rich insights as to the achieved results and the future potential:

Mobitwin app

The app was considered to be too complex and too difficult to use by the members of the Less Mobile Stations. From the surveys, we can also conclude that the members do not want big changes in their lives when it comes to new technologies. The results of the volunteer drivers pointed to the same attitude, but also show that there is interest in using the app if some changes are made in terms of privacy and simplicity. The employees mentioned that their biggest challenge is to find voluntary drivers with whom to match the requested trips. This could be a great opportunity to shift the purpose of the app from giving members more responsibility, to giving the employees a tool so they can meet the needs of the members and the volunteer drivers more efficiently.

In conclusion, if we take a look at the transferability to other locations, we can conclude that the LMS services can be provided in any location where there is a demand for door to door transport. Especially, poorly served areas may be the most suitable for this kind of service. Real-time technology such as the Mobitwin app may work in rural and peri-urban areas if there is more local awareness of the service and if enough volunteer drivers and members in the neighbourhood are willing to work with the app. The app may be more transferable if we keep an eye on the needs of the habitants in that area.

Olympus Mobility app

The VDAB is already a well-known public service for jobseekers. They already provide some discounts for public transport, but the process of providing this discount can contain a lot of paperwork, a lot of back and forth travel and not so much flexibility for job seeking migrants. The moments when the Olympus Mobility app was needed the most, was when the discounts of the VDAB were taking too long for the jobseeker to get to the job interview they had the next day. The Olympus Mobility app (and the € 30 budget) was therefore a very flexible option that could meet the urgent mobility needs of jobseekers. If the Olympus Mobility app and the VDAB join forces

and bring the recognisability of the VDAB and the flexibility of the app together, it could definitely create a positive impact on the lives of the users.

In conclusion, the Olympus Mobility app can be transferable to different locations. Migrants experience a hard time finding a job in urban areas. The app could serve as a (last mile) solution for reaching job opportunities in remote areas. The Olympus Mobility app can also give more access to social and leisure activities. The custom route planner shows the cheapest way to reach a destination. When the route planner is combined with the discounts, the app can function as a guide to affordable activities. The challenge of the mobile data can be solved by collaborating with mobile data providers so users can use the app wherever they are. Finally, the time that a migrant has spent in a new country might have an impact on experience, confidence and the feeling of empowerment. From the interview with the user, we can conclude that the Olympus Mobility app might only work for the group of migrants that has already spent some time figuring out the system of a new country, and less for someone who just moved there. There is a lot of diversity within the migrant target groups that needs to be considered when introducing new solutions.

From all of this, we can conclude that there are definitely concrete possibilities for both apps in the near future. The pilots were very helpful for doing the research and putting the pain points more specifically on the map. Both the Mobitwin app pilot and the Olympus Mobility app pilot introduced a new technology to vulnerable groups. The aim was to measure the impact of new technology on the accessibility of sustainable and shared transport options. Both pilot labs did not reach the foreseen amount of test users to be able to draw general conclusions on the impact of new technology. This shows that new technology may not be a sufficient solution for poorly served people. However, the analyses in this report demonstrate that there were some lessons learnt from each pilot lab that are transferable to similar projects in the future.

8. Conclusion

The focus of the Flanders Pilot Lab was to lower the (transport) barriers experienced by job-seeking migrants when looking for a job and those by elderly and disabled people for accessing leisure and social activities. As a digital version of the Less Mobile Station service, the Mobitwin app provided a real-time transport solution to the members (mostly elderly people). Members would be able to request their trips themselves and voluntary drivers would be able to share their availability themselves through the app. The Olympus Mobility app pilot lab was a MaaS (Mobility as a Service) solution that gave real-time access and information on different sustainable (public and shared) transport options to jobseekers. With a budget of €30 (provided by the project), jobseekers had the chance to test the app while planning a trip to a job interview, internship, and education.

A matter that concerned both of the pilot labs was the collaboration with partners. During both pilots, struggles were experienced with stakeholders that were supposed to support the pilot and help reach a significant amount of test users. Although working together created opportunities for Taxisstop and its partners, hesitation, a lack of time and engagement and other internal issues made the partnerships partially disintegrate during the demonstration phase. The main outcome for both pilot labs was focussing on a few champions who were willing to actively support and promote the app. Building personal contact and a trust relationship with some key partners might bring the project further than aiming to reach a large number of partners. This suggests that the solution or the new technology that is presented should not only be beneficial for the target groups, but also for the partners promoting the technology. The outcomes of both pilots show that a decrease of the workload for the partners might be a main motivation to accept a new technological solution.

- **Mobitwin app**

From the results of the before survey it turned out that an important part of the members of the LMS's service does not have the digital skills needed to use the Mobitwin app. New technology only works when it matches the speed of life of the target group. The same results showed, nonetheless, that a significant number of members do have the skills to use new technology, but are not willing to change their current routine of requesting a trip. From this we can conclude that future generations of elderly and disabled people will have more affinity with new technology and will be able to use the Mobitwin app more fluently. Another important conclusion is the fact that the search for volunteers to match the requested trips with is the most time-consuming task for employees of the LMSs. This highlights the potential of the Mobitwin app as a solution for automating this time-consuming task.

During the demonstration phase, occasional feedback consultations were held that revealed why the uptake of the app was so low. The main conclusion is that the personal contact – which the current LMS service has created throughout the years with its members and voluntary drivers – is very important for the success of the service. The Mobitwin app, by reducing this personal contact

and human interaction, could be viewed negatively by many users. Another conclusion is that the type of trip matters. The Mobitwin app provides trips in real time for urgent matters, but the results of the surveys show that members do not necessarily need urgent rides. The feeling of safety seemed more important than the feeling of urgency. This refers back to the conclusion on matching new technology with the speed of life of the target group.

One of the conclusions of the demonstration phase is to wield co-creation as a process to overcome this feeling of loss and to increase the acceptability of the Mobitwin app. Another possible option to ... the Mobitwin app is to decrease the disproportion between the total number of members and the total number of voluntary drivers. The results of the survey show that a significant proportion of the voluntary drivers are willing to use the app. However, the Mobitwin app can only improve trip request matching if there is a critical mass of volunteers using the app. The results of the communication campaign show that, in order to attract new and younger volunteer drivers, communication must be more customized and be propagated by local stakeholders.

Finally, the outcomes of the demonstration phase also show that in-depth interviews are more efficient than surveys or focus groups for the elderly target group. The online surveys had a low response rate because a lot of members do not have access to digital tools. By holding in-depth interviews more information could have been gained about the needs and the barriers experienced by the target group. However, interviews only work if they take place in an environment that is safe for all the stakeholders. The interviews that were planned during the demonstration phase were all cancelled due to the restrictions of COVID-19.

○ Olympus Mobility app

The analytics tool and the interview show that the budget of € 30 often was not enough to increase the amount of trips through the app. However, the process of the demonstration phase shows that when the Olympus Mobility app was used, jobseekers were able to go to last minute job interviews, to educational events or internships, or could keep their current job. This shows that new technology can be very efficient in urgent situations. However, the outcomes also show that there were technological barriers experienced. The lack of mobile data, a complex login process and issues linked to language were the main barriers the target group came across. This suggests that, despite the fact that technology can solve urgent needs, there is still a need for accompaniment and human interaction when using new technology.

One of the most important outcomes of the demonstration phase was the possible collaboration with the VDAB. As mentioned in the lessons learnt, merging the discounts provided by the VDAB and the fast technology of the Olympus Mobility app could not only solve the financial barrier, but might also trigger job seeking migrants to try out alternative modes of transport because the app works with the discounts provided by the VDAB a system they already know (VDAB). The outcomes also show that, just like in the Mobitwin app pilot, matching the technology with the speed of life may solve a lot of transport problems. From user feedback the suggestion emerged to keep the new technology as simple and efficient as possible. This emphasizes the importance of real-time and comprehensible information in the app.

Another important outcome of the demonstration phase was that language presented one of the main barriers to engagement. Interviews with users provided richer insights into the transport needs of the target group than surveys. This shows that barriers are also experienced when collecting data and exchanging experiences. Finally, given the right form of one-on-one or small group engagement, job seeking migrants are willing to contribute to the new emerging solutions. The outcomes of the pilots show that recognizing their capabilities and involving them in a process of co-creation might increase the chance of picking up new technology faster than usual.

The INCLUSION consortium



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For further information please visit www.h2020-inclusion.eu



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Annexes

ANNEX A: Mobitwin app

ANNEX A1: MANUALS MOBITWIN APP

<https://drive.google.com/drive/folders/1s9ilQArAhGeFOTe3d7lkzZlPwKD24wH6?usp=sharing>

ANNEX A2: RESULTS BEFORE SURVEYS

https://drive.google.com/drive/folders/10kVyonj_z7GFB2D9OgSbe8RTtxDUOi8i?usp=sharing

ANNEX A3: IMPORTANT INSIGHTS RESULTS BEFORE SURVEYS

Technological skills volunteers and members

When it comes to the technological skills of members, 33,3% claim to work well with the latest technologies, while 20% prefer keeping their habits instead of trying out new things and 43,8% claim not to be concerned with the newest technologies. Most of the responding members prefer requesting a trip by telephone (53,3%), while a small amount prefer a website or an app (13,3%). If there was an app, the responding members: wouldn't know how to work with it (32,1%), would want to request their trips themselves (28,3%) and would book only rides that are urgent (21,7%). 22,1% of the responding members would test the app, while 57,1% wouldn't test it. The main reasons to not test it were:

- Missing the personal contact
- Fear for the technology
- Don't want to change the habit
- Age
- Health and physical/mental ability
- No ownership of smartphone or computer

If we look at the technological skills of the volunteers, 38,6% claim to work well with the latest technologies, while 31,7% prefer to keep their habits instead of trying out new things and 23,8% are not concerned with the newest technologies. If there was an app: 64,8% would enter their availability themselves, 40,1% would want to see the profile of the member they will be transporting, 21,9% would choose the passenger themselves and 23,1% would only accept urgent rides. 47,5% of the responding volunteers would want to test the app, while 21,3% would not. The reasons to not test the app:

- Too difficult
- Don't want that responsibility. Matching the trips should stay with the LMSs
- No ownership of a smartphone

Process of requesting a trip

If we look at the need for urgent trips, most of the responding members often don't have an urgent need for transport (64,3%), while only 7,1% often need transport within the hour or a day beforehand (14,3%). Subsequently to that, most of the responding members are satisfied with their access to social and leisure activities: 35,7% claim to have more access to activities, 50% claim to feel safe during a trip and 92,9% claim to be sure to reach their destination with the LMS service. This indicates that the need for real-time solutions is very weak, probably because of the satisfaction with the accessibility to social and leisure activities with the current service and the fact that urgent rides are not included (yet) in the transport option.

When we look at how volunteers experience current trip requests, we see that 22,1% make themselves available on a daily basis, while 57,1% are available several times a week. 64,9% claim to be matched to a requested trip several times a week. 5,2% prefer to make themselves available for a trip request through email, while 16% would prefer a website or an app. Through occasional feedback moments, several volunteers shared their concern on their privacy with the app. Right now all the communication prior to the trip happens through the LMS employees. This gives volunteers a certain amount of privacy and distance in the face of members who get too attached to a driver. When a request happens through the app, members and drivers have to share some information (such as a phone number), in case of emergency.

ANNEX A4: EXAMPLE MEDIA/COMMUNICATION CAMPAIGN

<https://www.bruzz.be/videoreeks/woensdag-26-juni-2019/video-sociale-taxidienst-zoekt-vrijwilligers-met-100-kunnen-we-het>

https://www.nieuwsblad.be/cnt/dmf20190626_04480709

<https://www.dhnet.be/regions/bruxelles/bruxelles-mobilite/mobitwin-un-transport-social-pour-les-bruxellois-limites-dans-leurs-deplacements-5d14a062d8ad5815cb43b7f6>

<https://plus.lesoir.be/237920/article/2019-07-22/la-recherche-de-chauffeurs-prives-pour-les-bruxellois-les-plus-isoles>

ANNEX B: OLYMPUS MOBILITY APP

ANNEX B1: TRANSCRIPT INTERVIEW employee Compaan vzw (STEP partner) and user on 05/02/2020

Conversation with employee/counselor of Compaan

Survey was always completed together with user, 50% could not complete it independently

Sometimes the survey was filled in by employee (under supervision of user), because:

- Difficult to translate
- Not comprehensible for users
- Uncertainty (about language skills)
- Open questions: most people are not so fluent / illiterate
- Interview = no better option
- They can tell more if they speak to a person they already know
- A better option would be to track the click behavior of the users via the app or another analytics program

What was the greatest added value of the app from a perspective supervisor?

- Budget for people who are struggling financially
- Financial situation of the target group at Compaan?
- No financial benefits
- Only income (minimum wage): min. 500 - max 1100 euros
- Long-term unemployed people -> minimum 6 months
- Olympus Mobility app was efficient when:
- Intermediate solution when VDAB is late with subscription (2 weeks waiting time to get the subscription in order)
- Problems renewing subscription VDAB + De Lijn (work overload)
- Flexibility: when clients get last minute work or internship, the app came in handy.

Importance of Mental health in target group

- Are the potential users cognitively and socially skilled enough?
- Logical reasoning skills
- Keeping a job is more difficult for them then finding one
- Peripheral problems: family situations, difficult children, no network

App can work for 80% of job seekers> <Difficult for the 20% (with more complex situations, see above)

Challenges for downloading app:

- Different backgrounds. E.g. Chinese client: types in Chinese characters
- The name 'Olympus' is not clear as a mobility app -> Needs to be more explicit
- Use less text -> more smileys and images
- No smartphone> < smartphone, but no mobile data
- Financial reasons
- All their money to their debt mediator
- They get a small budget every month
- There was interest and enthusiasm (gift) -> disappointment when the app wasn't compatible on their

smartphones

Knowledge OV

- Knowledge and experience is okay
- 90% depends on public transport

Relationship to other modes of transport?

- Car (culturally tinted) = very popular with Turkish community! (Status) > < Less popular with Moroccan, Afghan, Iraq
- Bus = very popular in general (most used in the app)
- Bicycle = not popular!
- More general problem
- Learn to cycle
- Little interest
- Linked to feeling of less comfort
- = strongly environmentally related
- Interest of ambassadors in direct environments
- > < Partial bicycle = even more difficult
- Ghent = high unemployment for our target group
- City of Deinze is a better option = more chance to find a job
- This means unemployed people have to travel further -> Use PT more often
- Subscription to shared bike in Deinze is refunded by the city
- € 10 for blue-Bike subscription and then refunded
- City of Eeklo € 1.25 for a shared bike for 1 day
- Carpooling:
- Already done informally
- Arranged mutually
- Cash paid out
- Carpool App?
- Can be possible, but only if there are clear benefits / added value for the person driving
- Maybe not for "our target group"
- Would be helpful to widen their region
- Drivers would not want our target group in their car and vice versa

What factors play a role when looking for a job?

- Distance
- Work hours within school hours
- Language?
- Fear or uncertainty
- Small world view -> Depends on direct environment
- End up with a (less attractive) job through family (or family business)

How do they deal with changes? Innovations?

- Importance of personal contact
- Overcome the threshold together
- The target group need to have a sense of progress
- Does it feel useful?

- Sometimes counselors really have to go with the clients to certain place and guide them through taking the first step
- Once they know/understand it -> they will use it!

Added value Olympus Mobility app?

- Importance of expanding their region (worldview)
- A lot of job opportunities at the port of Ghent
 - Max Mobile = very popular because of this! (provides transport to certain areas in and outside of Ghent like the port of Ghent)
- Fixed routes along companies
- Joint bus rides
- Private > Shared?
- Cambio can work if they get a discount, or to learn how to drive
- > VDAB (financial) intervention?
- The fact that users receive login via email and pin code via SMS makes it complicated
- Both via SMS and email?
- Route planner in the app was not used -> Google Maps is more known and used
- The customer would have indicated the route planner himself
- What about Data security?
- Clients are aware of this

Home - Work – Mobility

Importance of residence?

- 90% have no choice where to live
 - Public housing in the city
- Strongly determined by SVK & OCMW (public housing)

Travel / leisure

"What do you do in your spare time?" - "Nothing, there is no time for that" – Counselor

- Diversity within diversity:
- Stronger target groups (Work more in last place, more time and money to do fun things + support partner)
- Weaker target groups (No partner + no money + more survival mode -> less time for leisure activities)

Conversation test person Olympus Mobility app

Description of the user:

- Experience with smartphone, hairdresser as job, good (Dutch) language skills, very emancipated
- Married off, heavily oppressed, polished, divorced -> many family members lost
- Now: following a hairdresser training, has a partner that works, receives little benefit, 6 months internship, dare to set high standards
- Sha has a subscription for De Lijn (bus operator) via Compaan (VDAB)
- Completed the survey right before the interview

First impression app:

- Logical, easy
- Not too complicated
- Buttons were clear
- Smooth
- Receiving a ticket also goes very smoothly
- No trigger to experiment with other modes of transport though
- 1 fixed route / location
- Already has experience with apps and smartphone

Knowledge logos PT and other transport options

-Car sharing

- Does not participate, but knows it
- More visible since circulation plan in the city of Ghent
- A lot of signs of Car sharing parking spaces
- Cheaper
- Less troublesome
- No extra costs such as insurance
- Many (vulnerable) families live in the center -> LEM makes it more difficult for them
- No money for a new car? Do you have children? -> PT = loss of time with children
- Car sharing as an alternative

"Imagine that you have children and you live in the city of Deinze. You have children that you have to drop off at the nursery and older children to school. Can you imagine how much time you would lose by moving?" – User

Public Transport

- Discount PT (monthly via Compaan)
 - VDAB
- Low benefit (approximately € 500) + premium for internship (approximately € 100)
- Partner receives € 1400 monthly
- Feeling on the discount through VDAB? A lot of paperwork, no clear information
- Often sent from here to there
- Not sure if she is eligible

Blue-Bike (shared-bike)

- Seen on the train station of Dampoort
- One time used: Personal bicycle was broken. There was a repair point at Blue-Bike station
- Importance of situations of change / renewal / emergency

Train

- Very self-evident

STIB (bus operator in Brussels)

- Never used
- Often visits Brussels, but has never needed to use public transport

De Lijn (bus operator Flanders)

- Bus is most often used
- More fun for free time
- The ride takes longer -> Gives rest

- BUT: Many changes!
- Rise in prices!
- Change of planning buses
- **Unclear / incorrectly communicated**
- Habit > <change
- Working on the road (Last longer than communicated)
- Stops disappearing
- More difficult for people who do not have language skills
- Or who have a difficult personal context
- Busier life of user > <mobility is lagging behind
- No correct information on the screens
- App of De Lijn does show correct real-time info
- This means that she will use De Lijn app more

Carpool

- Very unknown
- Not a warm feeling
- Less confidence
- Importance of driver appearance
- Feeling of safety
- Less hesitation if it is someone they know or if there is a public brand behind it
- Example Max Mobiel at the port of Ghent + WEBA carpool parking
- Feels more accessible when it comes from a service -> registered
- App still gives too personal a feeling
- Only good in combination with train / bus
- No first mile last mile solution
- Fixed stops make it less flexible (just like Blue-Bike)
- Donkey = better, but more expensive
- Good for tourists
- Less advantageous for citizens of Ghent

Feeling with apps

- Very strong!
- Uses certain apps from public authorities very often
- **Counselor did not know this either**
- Handy for other clients
- She uses apps for parking
- Google Map s> De Lijn app
- It's me (App to get access to a platform with all the important documents)
- Login: username + password most often used
- Token system fails
- 112 app
- De Lijn app now uses them less
- Especially SMS ticket from De Lijn
- She often forgets the number and never finds it at a stop
- But real-time info on the app convinces her to use it more often

Awareness of the apps:

- Never actively sought, but know they exist
- Feeling:
 - Sometimes annoying all those apps
 - Only uses what she needs e.g. Bank, security photos, De Lijn,
 - Always searching for new apps that can make her life easier

Priorities transport modes (leisure)

- Bus -> Rest, no loss of time
- Tram -> Easier, shorter, stops in useful places
- Bicycle -> personal bicycle (less free time by children)
- Carpooling not so much confidence

Transport mode priorities (work)

1. Tram -> Faster
2. Bus
3. Car -> driver's license yes, please but not always want to take it
 - Her husband has a car
 - Car to transport children
 - Especially in the morning or when it is cold
 - Bus is very busy in the morning
 - Bicycle -> More often for fitness

Priority for money?

- A home! Roof over her head is the first big step and then solve the other issues like finding a job
- Paying invoices
- And then see financially what you can pack
- Health?

What about displacements?

- Children come first!
- Depending on their school, activities...

Work?

- Not really a problem due to relocation, but more due to lack of experience
- "I can work, I can find work. There is always an option."- User

Olympus Mobility app?

- Easier than De Lijn app
- Menu is very clear
- First time usage was with supervisor
- 4G? Sometimes difficult to turn on
- Not because of the app, but because of data provider (Base)

Continue using?

- Yes, motivation to make a trip in free time
- Take the train instead of tram
- In the weekend = cheaper
- Update -> don't change much

- Must remain classic and simple
- Don't make it harder

Would she recommend Olympus to her brother? -> Who is less proficient, more language barriers

- Would need a lot of help, especially from the first time
- Asked a lot of help about apps so far -> Not able to use even with help
- Importance of language!
- More personal guidance> videos, manuals
- Explain in slow motion
- Translate app to Arabic?
- Or let someone guide you in the same language
- English and French would not work either
- Cognitive not so strong

Cooperation VDAB:

- Would be more evident for tickets (not going back and forth)
- Arrange everything at once

- ANNEX B2: INFORMED CONSENT interview with employee and user

https://drive.google.com/drive/folders/1c_TuVC1rMirtZq3r_x2g1gSUCmXiGtA9?usp=sharing

- ANNEX B3: MANUALS OLYMPUS MOBILITY APP

- Dutch

<https://drive.google.com/drive/folders/1ZKJRTigM1Y2yYj7gMfqIwWRonQspUHZ?usp=sharing>

- French

https://drive.google.com/drive/folders/1_3GEuWs7RTZK06TzNvU6kpXgLROSOimL?usp=sharing

- ANNEX B4: 'HOW TO?' VIDEOS

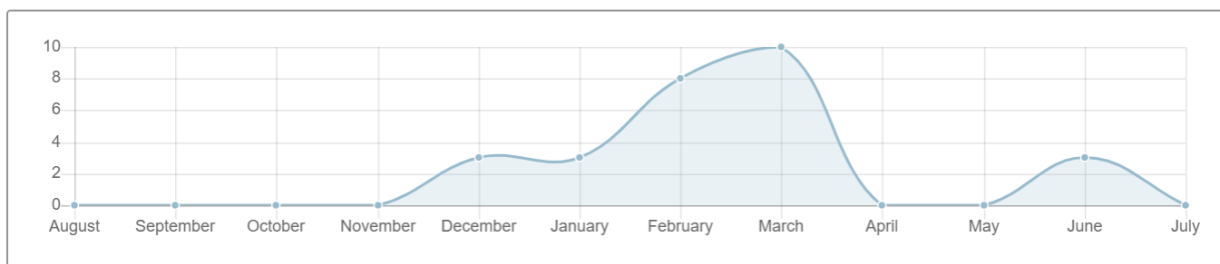
<https://www.youtube.com/watch?v=7wmUffotRsl&feature=youtu.be>

<https://www.youtube.com/watch?v=xn60EMTSLfo&feature=youtu.be>

- ANNEX B5: SCREENSHOTS ANALYTICS TOOL OLUMPUS MOBILITY APP

Transaction test user 1

Evolutie transacties



Uitgaven per mobiliteitsmodus



Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
BUS_TRAM_METRO	De Lijn m-ticket	13/12/2019 06:52:15	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	11/12/2019 06:53:34	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	06/12/2019 06:54:28	-€1.80
NONE	Startbedrag	05/12/2019 09:11:47	€30.00

SOM: €24.60

Previous 1 Next

Uitgaven per mobiliteitsmodus



Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
BUS_TRAM_METRO	De Lijn m-ticket	24/01/2020 11:55:25	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	24/01/2020 09:27:52	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	21/01/2020 08:50:29	-€1.80

SOM: -€5.40

Previous 1 Next

Uitgaven per mobiliteitsmodus



Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
BUS_TRAM_METRO	De Lijn m-ticket	27/02/2020 14:11:17	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	27/02/2020 13:14:36	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	21/02/2020 10:51:07	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	21/02/2020 09:53:18	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	21/02/2020 07:26:36	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	06/02/2020 13:27:38	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	06/02/2020 11:29:16	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	06/02/2020 08:57:26	-€1.80

SOM: -€14.40

Previous 1 Next

Uitgaven per mobiliteitsmodus



Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
BUS_TRAM_METRO	De Lijn 60 min	13/03/2020 11:15:48	€0.00
BUS_TRAM_METRO	De Lijn 60 min	13/03/2020 07:07:27	€0.00
BUS_TRAM_METRO	De Lijn 60 min	12/03/2020 17:04:19	€0.00
BUS_TRAM_METRO	De Lijn 60 min	12/03/2020 08:57:38	€0.00
BUS_TRAM_METRO	De Lijn 60 min	11/03/2020 07:36:28	€0.00
BUS_TRAM_METRO	De Lijn 60 min	09/03/2020 17:10:47	€0.00
BUS_TRAM_METRO	De Lijn m-card10	09/03/2020 13:26:22	-€15.00
BUS_TRAM_METRO	De Lijn m-ticket	09/03/2020 07:05:59	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	04/03/2020 12:10:25	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	04/03/2020 10:06:06	-€1.80
NONE	Budget na het invullen van after survey	08/03/2020 12:20:08	€30.00

SOM: €9.60

Previous 1 Next

Uitgaven per mobiliteitsmodus



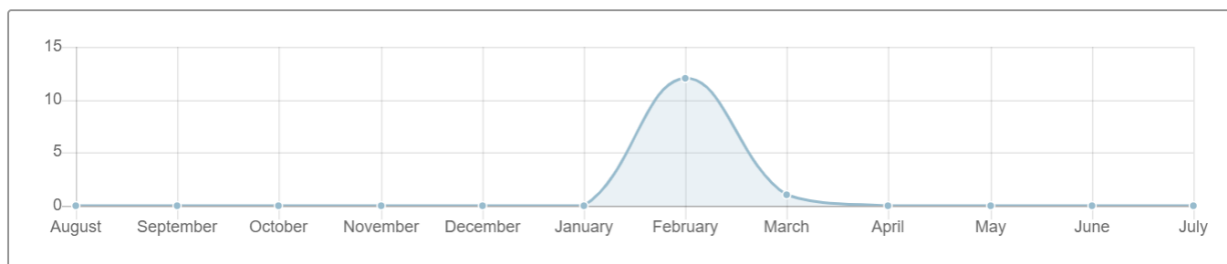
Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
BUS_TRAM_METRO	De Lijn 60 min	05/06/2020 07:08:51	€0.00
BUS_TRAM_METRO	De Lijn 60 min	04/06/2020 16:15:41	€0.00
BUS_TRAM_METRO	De Lijn 60 min	04/06/2020 07:12:22	€0.00

SOM: €0.00

Previous 1 Next

Transaction test users 2

Evolutie transacties



Uitgaven per mobiliteitsmodus



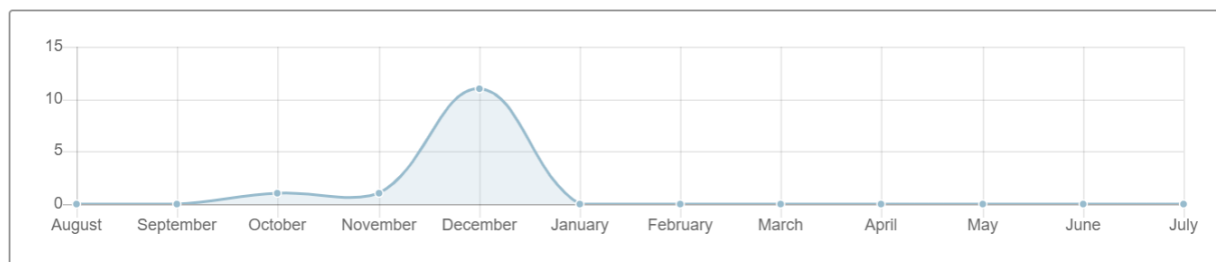
Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
BUS_TRAM_METRO	De Lijn m-ticket	29/02/2020 15:19:34	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	29/02/2020 10:51:41	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	27/02/2020 13:04:15	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	27/02/2020 11:18:45	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	14/02/2020 18:40:38	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	14/02/2020 09:10:14	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	10/02/2020 15:19:39	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	10/02/2020 08:57:25	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	08/02/2020 11:46:33	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	08/02/2020 08:41:52	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	06/02/2020 08:52:58	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	05/02/2020 16:25:07	-€1.80
NONE	Budget na het invullen van tweede vragenlijst	27/02/2020 09:55:25	€30.00

SOM: €8.40

Previous 1 Next

Transaction test users 3

Evolutie transacties



Uitgaven per mobiliteitsmodus

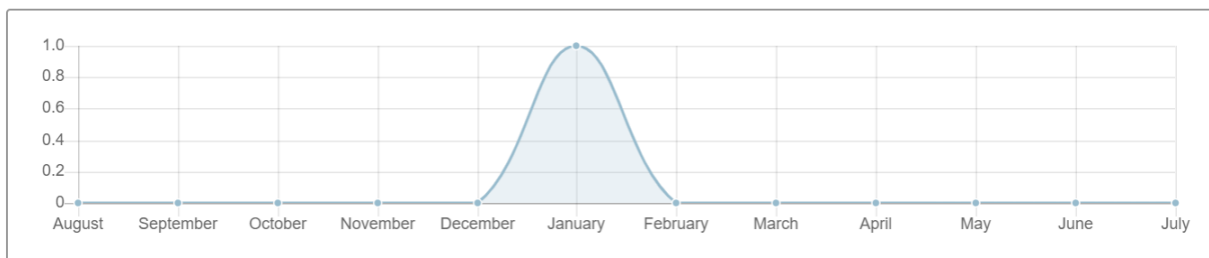


Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
BUS_TRAM_METRO	De Lijn m-ticket	20/12/2019 15:46:53	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	19/12/2019 15:01:13	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	19/12/2019 05:56:28	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	17/12/2019 15:06:21	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	17/12/2019 05:54:14	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	16/12/2019 06:30:07	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	13/12/2019 15:08:28	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	12/12/2019 15:08:51	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	12/12/2019 05:59:30	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	11/12/2019 16:15:40	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket	11/12/2019 15:08:15	-€1.80

SOM: -€19.80

Transaction test user 4

Evolutie transacties



Uitgaven per mobiliteitsmodus



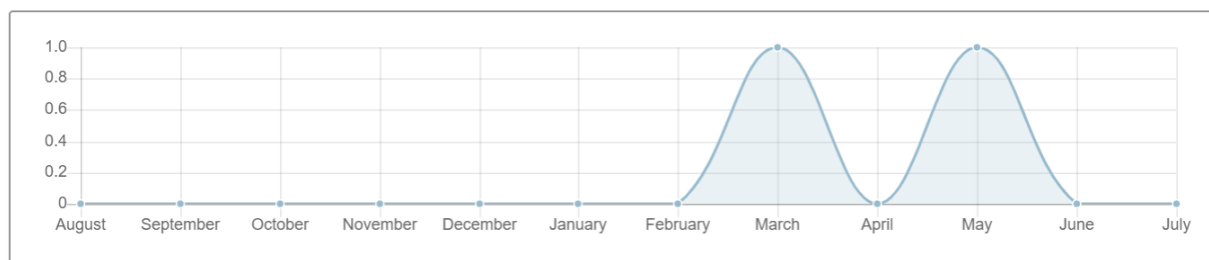
Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
TRAIN	Ordinary Ticket	08/01/2020 06:48:00	-€14.80

SOM: -€14.80

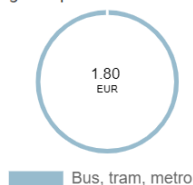
Previous 1 Next

Transaction test user 5

Evolutie transacties



Uitgaven per mobiliteitsmodus

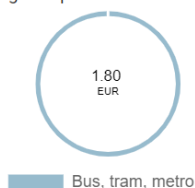


Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
BUS_TRAM_METRO	De Lijn m-ticket	12/03/2020 15:00:44	-€1.80
NONE	Startbedrag	11/03/2020 09:16:42	€30.00

SOM: €28.20

Previous 1 Next

Uitgaven per mobiliteitsmodus



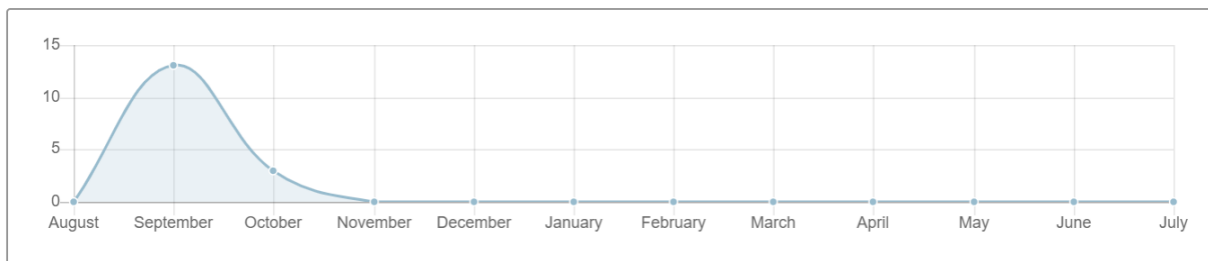
Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
BUS_TRAM_METRO	De Lijn m-ticket	26/05/2020 14:48:28	-€1.80

SOM: -€1.80

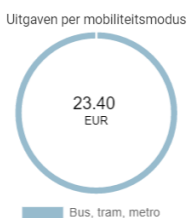
Previous 1 Next

Transaction test user 6

Evolutie transacties



Uitgaven per mobiliteitsmodus



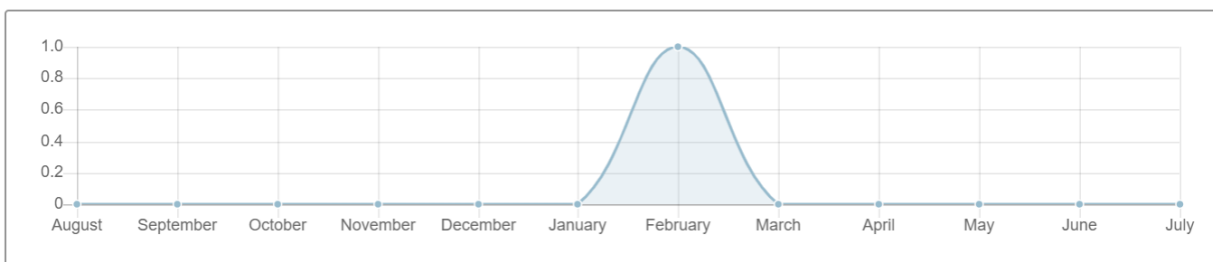
Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
BUS_TRAM_METRO	De Lijn m-ticket 60 min	30/09/2019 17:16:47	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	30/09/2019 07:56:29	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	27/09/2019 14:51:53	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	27/09/2019 13:48:52	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	26/09/2019 16:13:06	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	26/09/2019 14:03:32	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	20/09/2019 12:46:11	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	18/09/2019 11:04:44	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	18/09/2019 09:57:55	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	18/09/2019 08:05:28	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	13/09/2019 15:01:44	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	13/09/2019 13:14:26	-€1.80
BUS_TRAM_METRO	De Lijn m-ticket 60 min	10/09/2019 14:44:51	-€1.80

SOM: -€23.40

Previous 1 Next

Transaction test user 7 (User from the interview)

Evolutie transacties



Uitgaven per mobiliteitsmodus



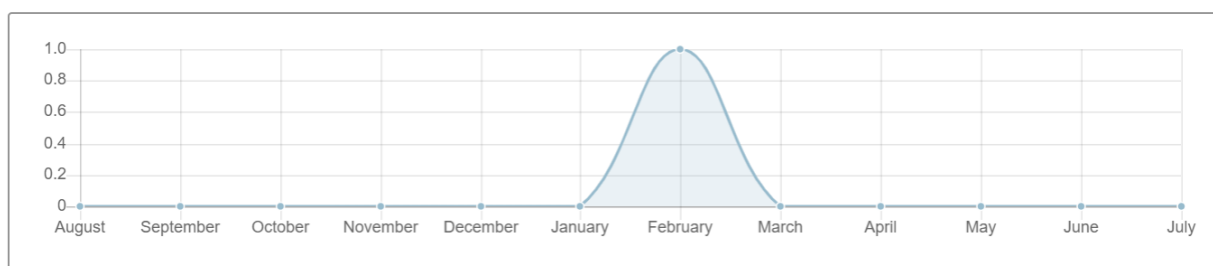
Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
BUS_TRAM_METRO	De Lijn m-ticket	04/02/2020 13:05:33	-€1.80
NONE	Tweede budget na invullen after survey	06/02/2020 09:14:34	€30.00

SOM: €28.20

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Transaction test user 8

Evolutie transacties



Uitgaven per mobiliteitsmodus



Vervoerswijze	Omschrijving	Aangemaakt op	Bedrag
NONE	Startbedrag	12/02/2020 14:23:58	€30.00
TRAIN	Standaardbiljet	25/02/2020 10:01:59	-€18.20

SOM: €11.80

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ANNEX C: INCLUSIVITY GOALS

ACCESSIBLE



The transport network, stations, vehicles and information are barrier-free (physically, sensorially and linguistically). This also includes ticket machines, apps for smartphone accessibility features, simple user-centric access to digital devices, acoustic and visual announcements at stations and aboard vehicles.

AFFORDABLE



Transport services are affordable for all users, in particular vulnerable users, relative to their income and proportional to their other overall cost of living. An inclusive society will have to cover related costs and subsidies, and avoid imposing a major cost factor on any particular user group(s).

CONVENIENT



The time and/or effort required for vulnerable users to reach a transport service (e.g. first and last mile) are minimised so that these users can benefit from the service in their everyday lives. Distance to the nearest service, reliability and adequate information provision about the service (e.g. timetables, route planning) contribute to its convenience.

EFFICIENT



Once vulnerable users are aboard a vehicle, the time and/or effort required to use the service (e.g. longer journey times, changing vehicles multiple times) are minimised so that these users can benefit from the service in their everyday lives. The main factors contributing to efficiency are vehicle routes, network coverage and intermodal connectivity.

EMPOWERING



Mobility solutions that build vulnerable users' capacities to get around confidently in their everyday lives. This idea can manifest in a training course or a scheme of "travel buddies" for certain social groups so that they are enabled to use certain transport options without requiring help by other people. Also technology can play a role here if it creates new degrees of freedom.

EMPATHETIC



Empathy-building initiatives foster awareness and build capacities (e.g. through training) among the transport provider and general public for vulnerable users' needs and increase their readiness to help. Sometimes, mobility options would be more accessible if there were some kind of "helping hand" (literally or metaphorically) to support vulnerable users.

GENDER EQUITABLE



Gender equitable transport systems are designed to treat people of all genders and orientations fairly according to their respective needs, which may require equal treatment or treatment that is different but equivalent². These include mobility solutions that enable women and LGBTQ+ users to have equitable access to transport services that meet their daily needs. Measures that improve and facilitate intermodality, accessibility and safety are primary considerations for gender equity.

SAFE



Mobility services that increase the perceived and actual safety of all vulnerable users by preventing accidents, theft, violence and harassment. Related interventions include hard measures (e.g. lighting, spatial layout, station and vehicle design, signage, emergency buttons, etc.) as well as soft measures such as human surveillance, communication, staff training and public awareness campaigns.