T3.3 Digital Pillar Experiments

SmartHubs Research Project - Jelten Baguet

mpact ▽

Context

T3.3 Digital Pillar Experiment

Digital Pillars at Mobility Hubs

Digital Pillars at Mobility Hubs

For digital natives only?

Tested in SmartHubs by Mpact

Task 3.3: Experiments will be set up to test possible digital information tools (e.g., physical-digital information boards) with users and especially vulnerable-to-exclusion citizens and give recommendations on the user-centric design of such systems.

Objectives of the Experiment

- Is pillar needed/useful at a hub?

- What should be shown on pillar / which functions should the pillar have?

- Who profits from this technology?

→ User-centric design, improved UX

The scientific team
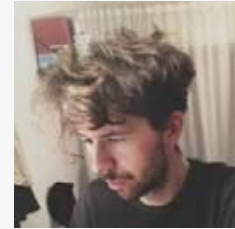
Prof. I. Keseru,
VUB

Prof. K. Geurs,
UT

J. Baguet, PM,
Mpact

Drs. J. Pappers,
VUB

Dr. K. Münzel,
UT

E. De Moor,
IT specialist,
Mpact

Drs. L. Martinez,
VUB

MSc. A. Lombardo,
AND

Setup of the Experiment

T3.3 Digital Pillar Experiment

Testing Locations

Cureghem, Anderlecht. Testing took place indoors at MAKS and outdoors at Place Conseil, Sept.-Oct. 2022

Zuidplein, Rotterdam. Testing will take place inside the new RET-shop, 30.11 →12.12

The SmartHubs Digital Pillar

→ Same software as Hoppin, but:

- adapted to local context (STIB, Villo!, RET,...)
- multilingual

The experiment

1. **Assignments**

2. **Survey via pillar**

3. **On-paper survey**

Part 1

- 7 Assignments, observations
  - Look up when the next tram to Marius Renard will depart
  - Look up how to rent a Villo-bike
  - Look up the walking time to Gare du Midi
  - …

- Adapted to specific context
  - Different destinations / operators in Brussels and Rotterdam
  - Different languages (FR, NL, EN in Brussels, NL in Rotterdam)

Part 1

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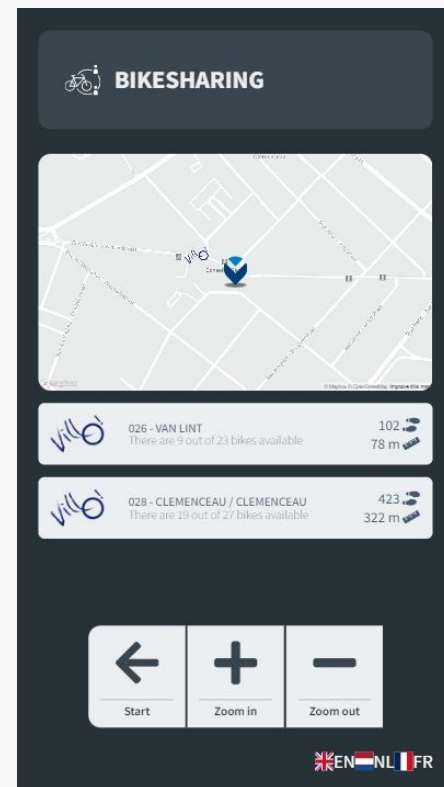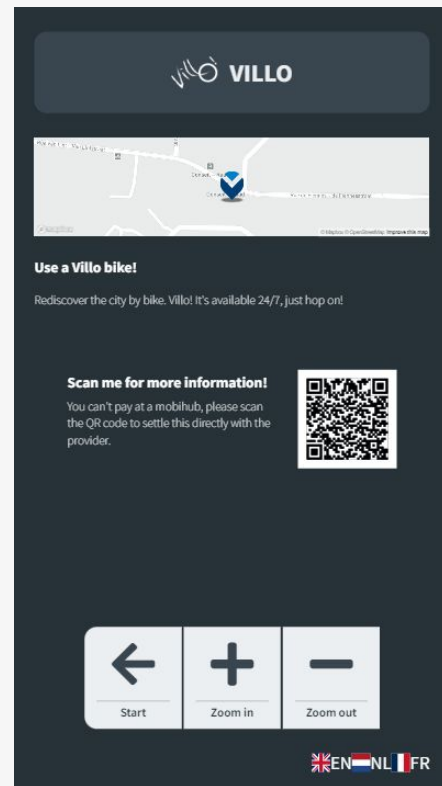 - Look up when the next tram to Marius Renard will depart
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Part 2

- Satisfaction Survey on Pillar
    - How useful do you find this pillar?
    - How easy did you find it to look up information?
    - How likely is it that you would use this pillar if you saw it in the streets?
    - Which functions of the pillar do you find most useful?

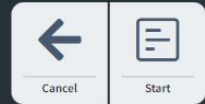- Add-on developed specifically for SmartHubs
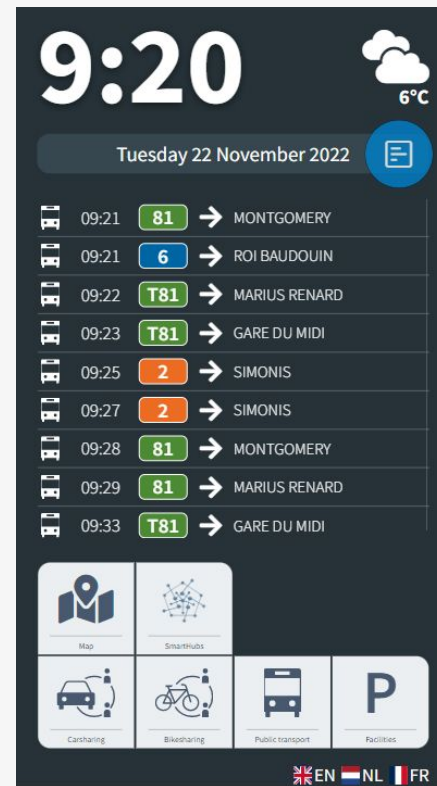
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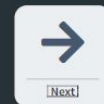
Start survey ?

← Cancel | Start

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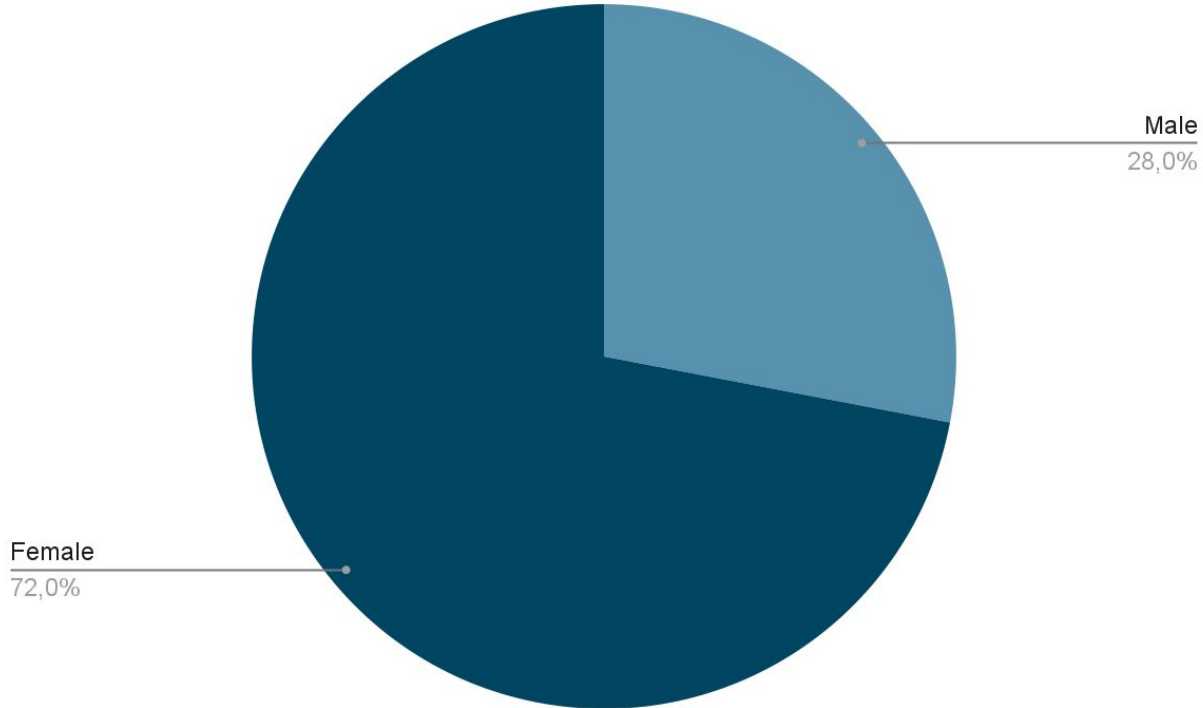
Part 3

- Survey on paper
    - Pillar: difficulties, improvements
    - Digital skills
    - Transport habits
    - Demographics

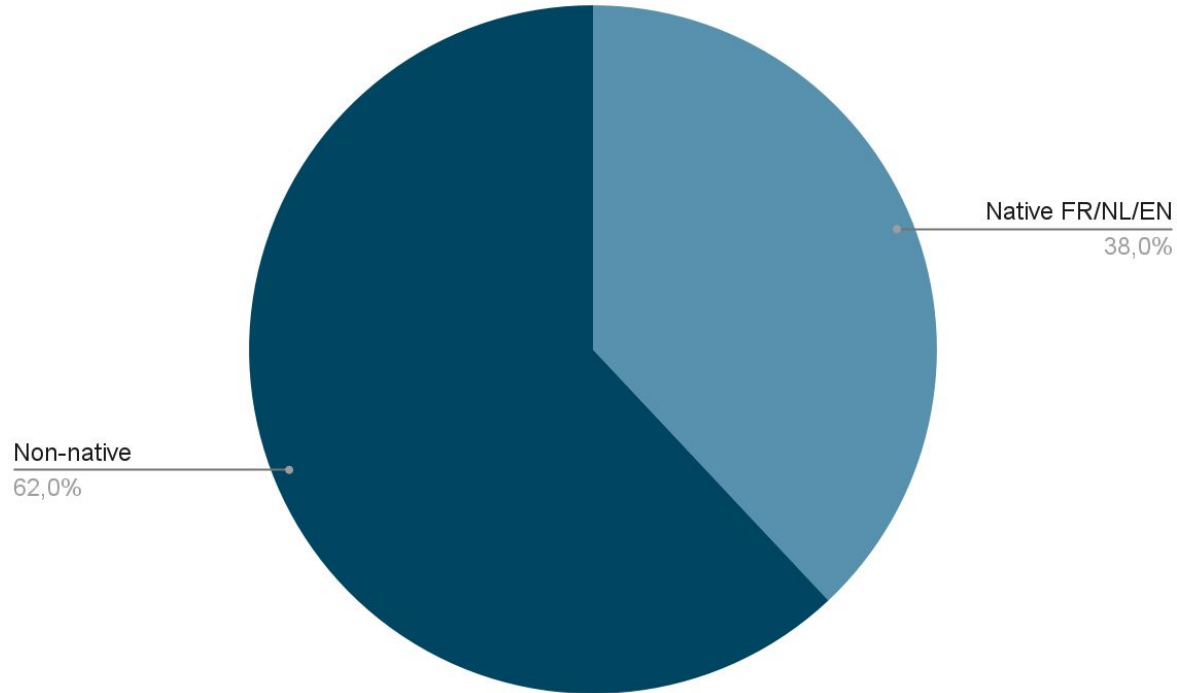- Overall length of experiment = 10 to 15 min.

Demographics - Anderlecht data

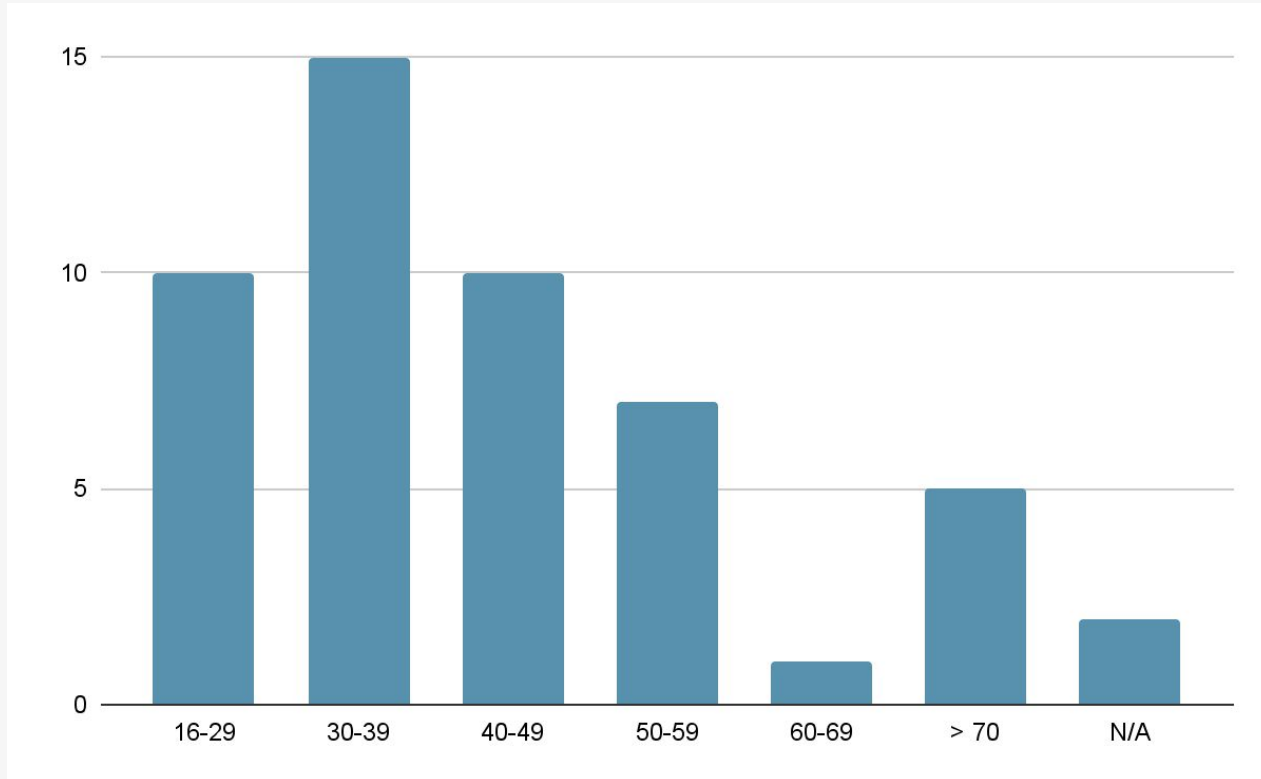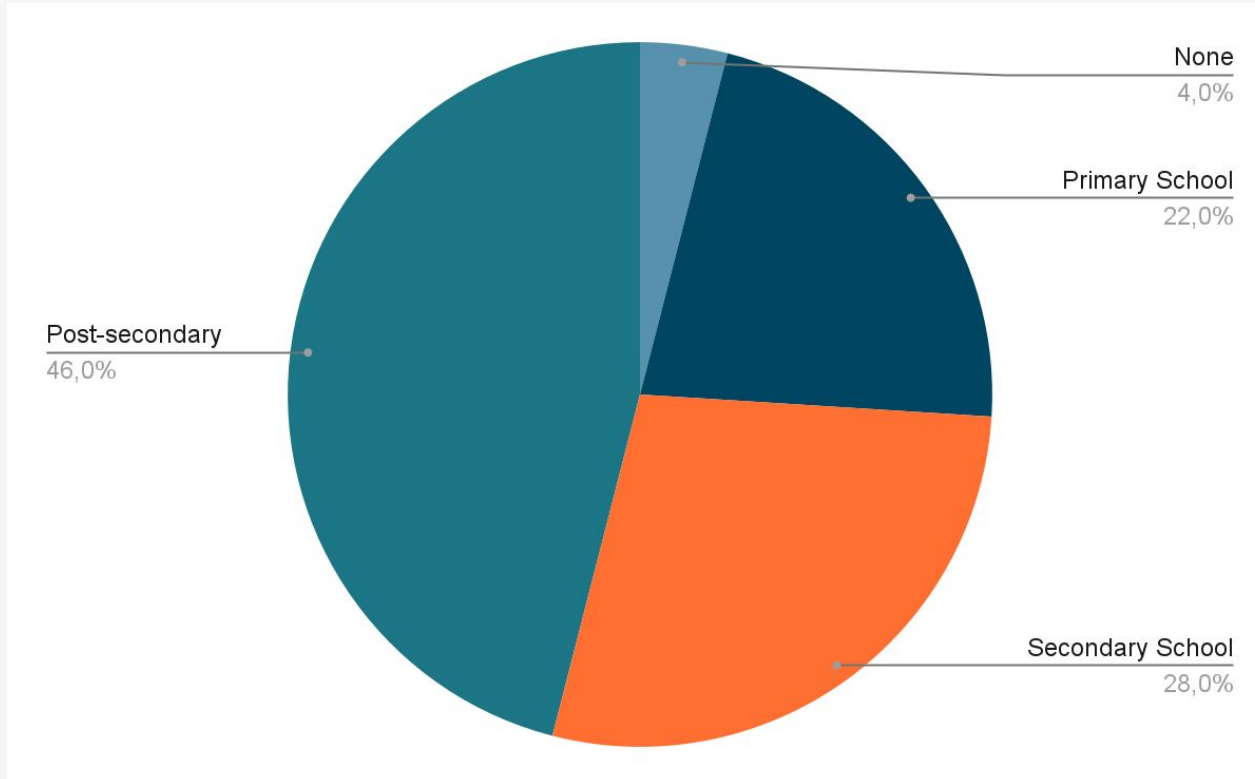T3.3 Digital Pillar Experiment

Gender (N = 50)

Native Language (N = 50)

Age (N = 50)

Highest Level of Education (N = 50)

Do you have a Smartphone (N = 50)
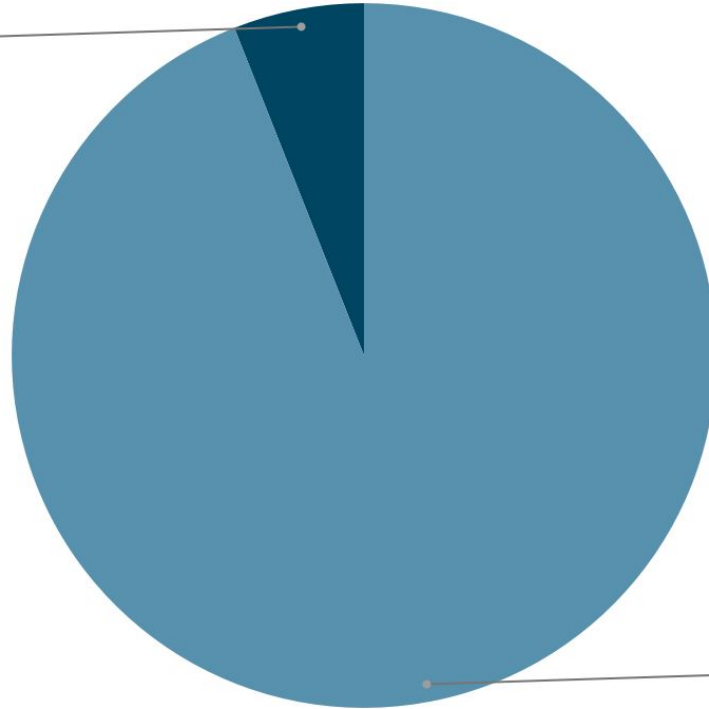
Means of transportation used
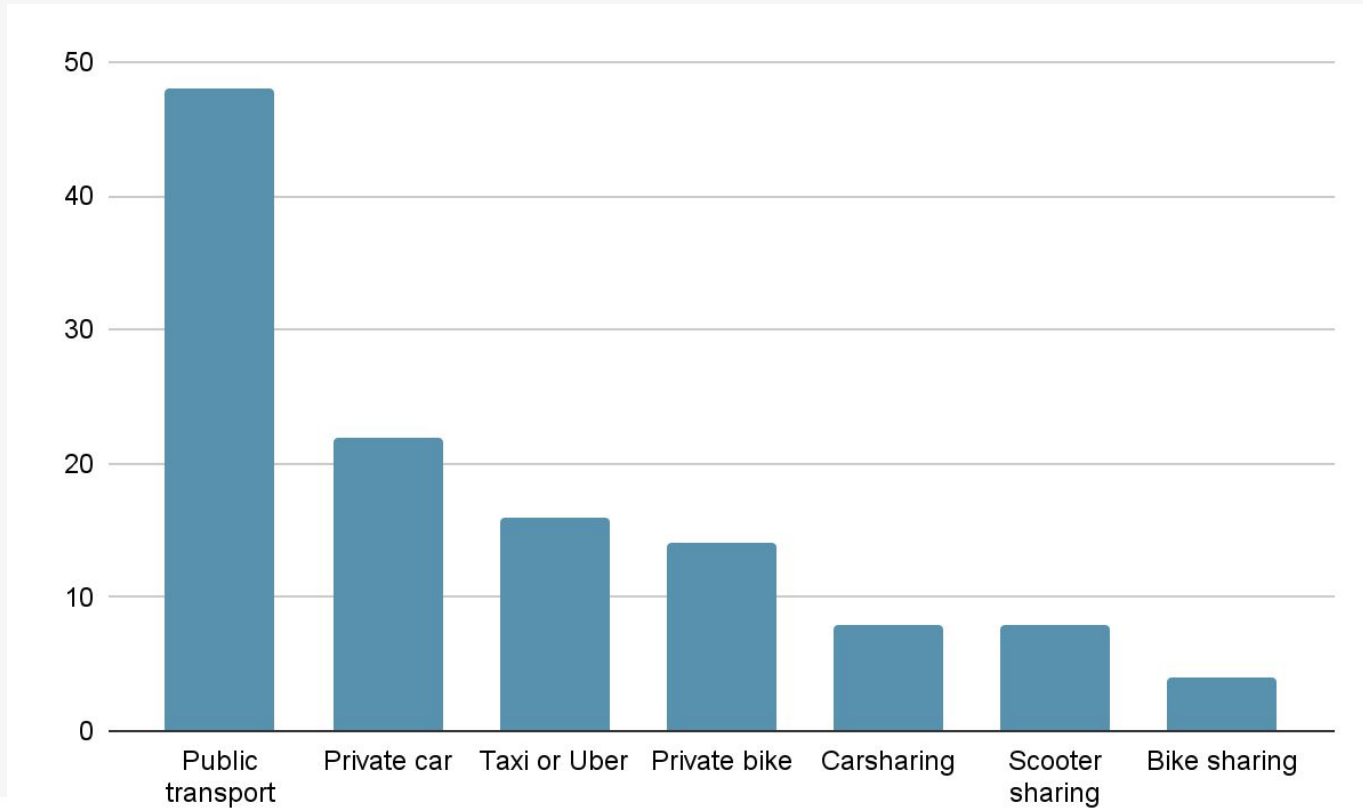
Preliminary Conclusions

T3.3 Digital Pillar Experiment

Results satisfaction survey (N = 50)

How useful do you find this pillar?

Average	1.9

Legend: 1 = very satisfied, 5 = not satisfied at all

Male	1.8
Female	1.9

Native lan.	2.1
Non-native	1.8

- 30	1.4
30-49	2.1
+ 50	1.7

no/pri/sec	1.8
post-sec.	2.0

Results satisfaction survey (N = 50)

How easy did you find it to look up information?

Average	2.1

Legend: 1 = very satisfied, 5 = not satisfied at all

Male	1.6
Female	2.3

Native lan.	2.1
Non-native	2.1

- 30	1.6
30-49	2.1
+ 50	2.5

no/pri/sec	2.2
post-sec.	2.0

Results satisfaction survey (N = 50)

How likely is it that you would use this pillar if you saw it in the streets?

Average	2.1

Legend: 1 = very satisfied, 5 = not satisfied at all

Male	2.1
Female	2.2

Native lan.	2.1
Non-native	2.2

- 30	1.8
30-49	2.2
+ 50	2.1

no/pri/sec	2.3
post-sec.	2.0

Results satisfaction survey (N = 50)

Which functionalities of the pillar do you find most useful?

Realtime timetable   Facilities   Map

Average	RT

Male	RT
Female	RT

Native lan.	RT
Non-native	RT

- 30	RT
30-49	RT
+ 50	RT

no/pri/sec.	RT
post-sec.	RT

Results satisfaction survey (N = 50)

Which functionalities of the pillar do you find most useful?

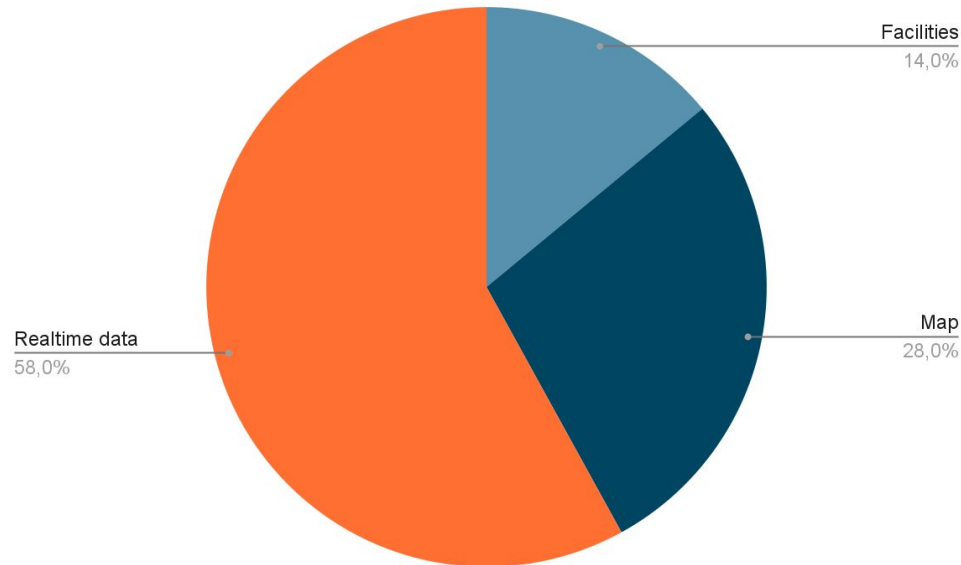Realtime timetable   Facilities   Map

Facilities
14,0%

Map
28,0%

Realtime data
58,0%

User Experience

Appreciated by testers

→ Multiple languages

→ Good alternative to SmartPhone

→ Shows non-mobility services as well

→ Real time information

Suggested by testers

→ Add non-official languages

→ Explain concepts such as 'carsharing'

→ Should be more like Google Maps

→ More efficient booking

Let's Wrap it Up

1. Mpact, VUB and UT are analysing how to make digital pillars more user friendly and inclusive via tests in so-called 'difficult neighbourhoods'.

2. One of the challenges will be to make these technologies more accessible for older people and female users (with immigration background).

3. Users are interested in additional features (booking, Maps) and are not always well informed about shared mobility concepts.

Jelten Baguet

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