



Identity Management in PUBlic SERVICES

D2.11 IMPULSE pilot assessment V1

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RVK**

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Deliverable nature:	Demonstrator (D)
Dissemination level: (Confidentiality)	Public (PU)
Delivery date:	28-02-2023
Version:	1.0
Total number of pages:	26
Keywords:	Co-creation, pilot testing, survey, interview, focus group

Executive summary

This deliverable provides information of all the pilot activities that were performed during the first piloting round. In addition, the document provides highlights of the piloting procedure as well as some of the piloting results. The results are generalized across all pilot sites.

Document information

Grant agreement No.	101004459	Acronym	IMPULSE
Full title	Identity Management in PubLic Services		
Call	DT-TRANSFORMATIONS-02-2020		
Project URL	https://www.impulse-h2020.eu/		
EU project officer	Giorgio CONSTANTINO		

Deliverable	Number	D2.11	Title	IMPULSE pilot assessment – V1
Work package	Number	WP2	Title	Co-creative design and piloting
Task	Number	T2.5	Title	End-user pilot

Date of delivery	Contractual	M25	Actual	M25
Status	version 1.0		<input type="checkbox"/> Final version	
Nature	<input checked="" type="checkbox"/> Report	<input checked="" type="checkbox"/> Demonstrator	<input type="checkbox"/> Other	<input type="checkbox"/> ORDP (Open Research Data Pilot)
Dissemination level	<input checked="" type="checkbox"/> Public	<input type="checkbox"/> Confidential		

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Keywords	Co-creation, pilot testing, survey, interview, focus group

Version Log			
Issue Date	Rev. No.	Author	Change
15.02.2023	0.5	Jiri Musto (LUT)	Pilot assessment documentation
20.02.2023	0.6	Jakob Amsussen (ARH)	Document review
23.02.2023	0.8	Alicia Jimenez (GRAD)	Document review
24.02.2023	1.0	Jiri Musto (LUT)	Document improvement based on review comments

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1 Introduction

This documentation presents the activities and assessment of the first piloting round, held in August 2022 to October 2022 (M19-21). This deliverable is designed to be a demonstration and provide a text representation of the activities.

Figure 1 presents the original piloting plan that was developed for the piloting roadmap (D2.6). The pilots were planned to be several days with activities in the beginning, middle, and end. The total time for the piloting activity was anticipated to be 20-30 days. However, during their real execution, the pilot plan had to be shortened and the structure of the activities had to be changed.

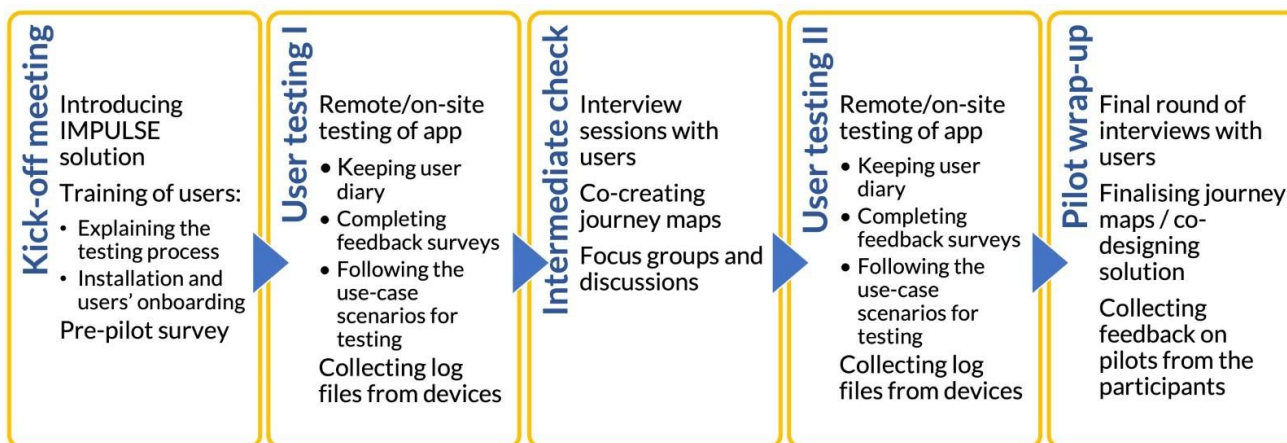


Figure 1. Piloting plan (D2.6).

Table 1 presents the original piloting activities that were planned if they were included in the actual piloting activity and what changes were done.

Table 1. Comparison of planned pilot activities to executed activities.

Planned Piloting activity	Executed during the pilot	Modifications done to the activity
Kick-off meeting	Yes	No modification.
Pre-pilot surveys	Yes	No modification.
Extended user testing I and II	No	Only one round of testing done within couple of days.
User diaries	No	User diary was removed due to testing period being shortened and done on-site.
Feedback surveys	Yes	Post-pilot survey
Interviews	Yes	No modification
Focus groups	Yes	No modification

Deviating from the original plan, the user diaries were removed, and testing was concentrated in a few days instead of several days in two phases and the order of activities had to be changed. Essentially, the *User testing II* (shown in Figure 1) was removed completely and the intermediate check acted as the pilot wrap up. Due to time constraints, the testing of IMPULSE took precedence over other activities and after the testing period, the focus group and interview activities were executed. Otherwise, the designed activities were held mostly as planned. The different activities were designed to provide quantitative and qualitative data for analysis and improvement of the IMPULSE solution.

2 Pilot design

This section will cover each pilot activity separately and show the templates that were given for the public administrations. Each section will also provide a small snippet of the relevant activity results.

2.1 Pre-pilot survey

The pre-pilot survey was meant to gather demographics and background information of the participants to identify their knowledge and comfort with similar technologies.

Below is the pre-pilot survey that was used for all case sites provided in their own language. The survey questions were mostly same for all pilot sites. Question 7 had some additional options for ARH as they have their own NemID/MitID.

RVK survey had two additional questions. As the target group were vulnerable citizens, they were asked if they require help using a smartphone and if they possess an electronic ID. The latter question was relevant because the citizens may be prohibited from getting an electronic ID due to their vulnerability status.

Introduction

This survey is part of the end-user pilot testing executed by the IMPULSE project team. The survey is meant for all participants to fill. The survey will be anonymous.

This is the pre-pilot survey, which has background questions related to you, and your current opinions and knowledge regarding digital services. There will be another survey after the testing of the IMPULSE solution, asking of your experiences and opinions.

Participant identifier (given by the local public administrator) _____

This identifier will only be used to be able to combine the pre-pilot and post-pilot surveys together when examining the answers. Remember to use the same identifier in both surveys.

1. **How old are you?**

Please input your age in years _____

2. **What is your gender?**

- Male
- Female
- Diverse
- Prefer not to answer
- Prefer to self-describe as _____

3. **What is your highest level of education?**

- Not completed primary school
- Completed primary school
- Completed secondary school
- Completed post secondary vocational studies, or higher education to bachelor level or equivalent
- Completed upper level of education to master level or equivalent
- Completed doctoral degree
- Prefer not to answer
- Other _____

4. **I use smartphone to...**

	Never	Rarely	Sometimes	Often	Always
--	-------	--------	-----------	-------	--------

Stay connected with my family / friends (phone, SMS, messaging, etc.)					
Stay informed about what is happening around me (news, social media)					
Run my business / do my work tasks (email, phone)					
Use services in my area (shopping, taxi, membership app, bonus card, public transport)					
Interact with the public services (tax management, library card, online banking, electronic voting)					

5. **What do you think of digital services?**

	1 Strongly disagree	2	3	4	5 Strongly agree
Digital services are better than traditional services					
Digital services are difficult to use					
The government (authorities) should transform public services into digital					
I trust the authorities more when public services are offered in digital					

6. **I am concerned about privacy when accessing services over the internet**

Strongly disagree 1 2 3 4 5 Strongly agree

7. **Which of the following digital identity technologies have you used or heard about?**

	I have not heard of this technology	I have heard of this technology	I have used this technology
Username + Password			
Smartcard + PIN number			
PIN			
One-time passwords / codes			
Two-step authentication (SMS codes, Google authenticator, etc.)			
Fingerprint recognition			
Face recognition			
Voice recognition			
Eye (iris) recognition			

8. **If you have used biometric (facial, fingerprint, voice, eye recognition) technologies, why have you used them? Please select all that apply.**

- I was interested in new technology to try it out

- I was convinced it is more secure and reliable
- I had no choice but to use the device with biometrics
- I use biometric technologies for work
- I use biometric technologies on my free time
- I is easier / more convenient than passwords or PIN codes

2.2 Pre-pilot survey result summary

Table 2 presents the demographic distribution of the pilot participants. The median age of participants were 47 years old and most of the participants had a higher level of education. Gender was divided amongst participants overall but in specific locations the actual distribution may be different. While the number of participants based on the pre-pilot survey is 38, this includes several participants from a case site that had not been able to run the full pilot and thus, are missing from other activities.

Table 2. Demographic representation based on the pre-pilot survey answers.

Question	Value
Amount of participants	38 participants in total
Average age	46 years
Median age	47 years
Gender distribution	60 % male, 36 % female, 4 % other
Highest education level	8 % doctorates, 29 % masters or equivalent, 29 % bachelor or equivalent, 21 % secondary school, 13 % prefer not to answer
Concerned about privacy (1-5 disagree to agree)	3.47 average, 26 % are not concerned

The rest of the question responses are summarized in Figure 2, Figure 3, and Figure 4.

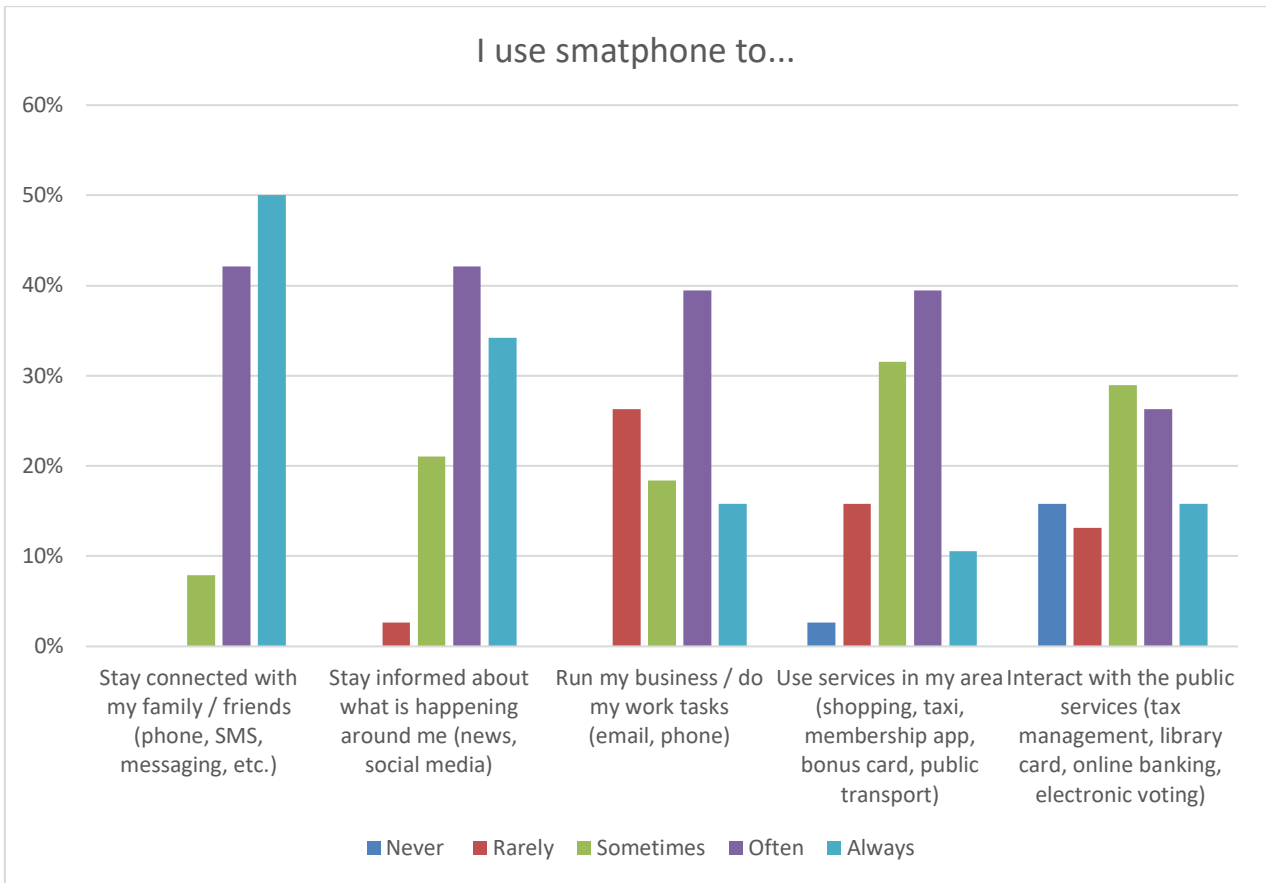


Figure 2. Pre-pilot survey Q4.

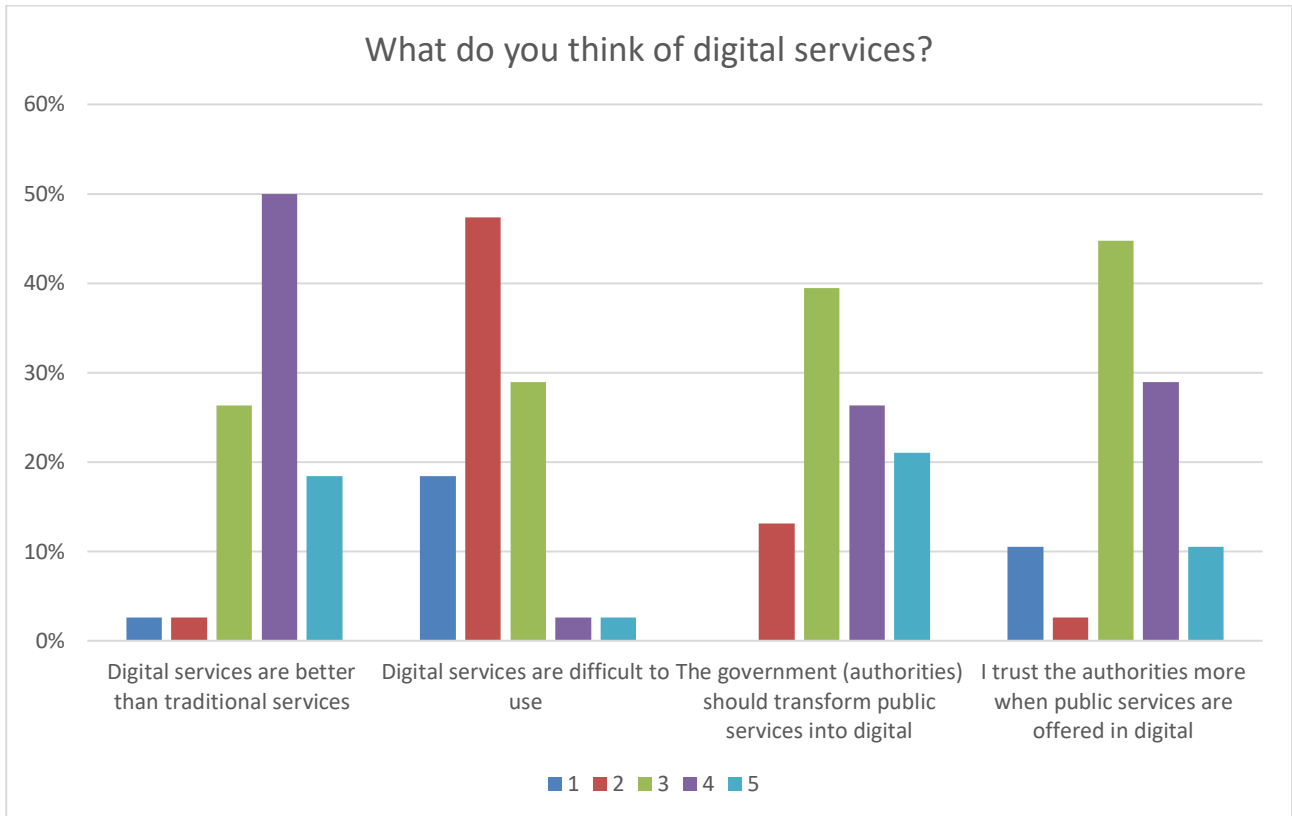


Figure 3. Pre-pilot survey Q5.

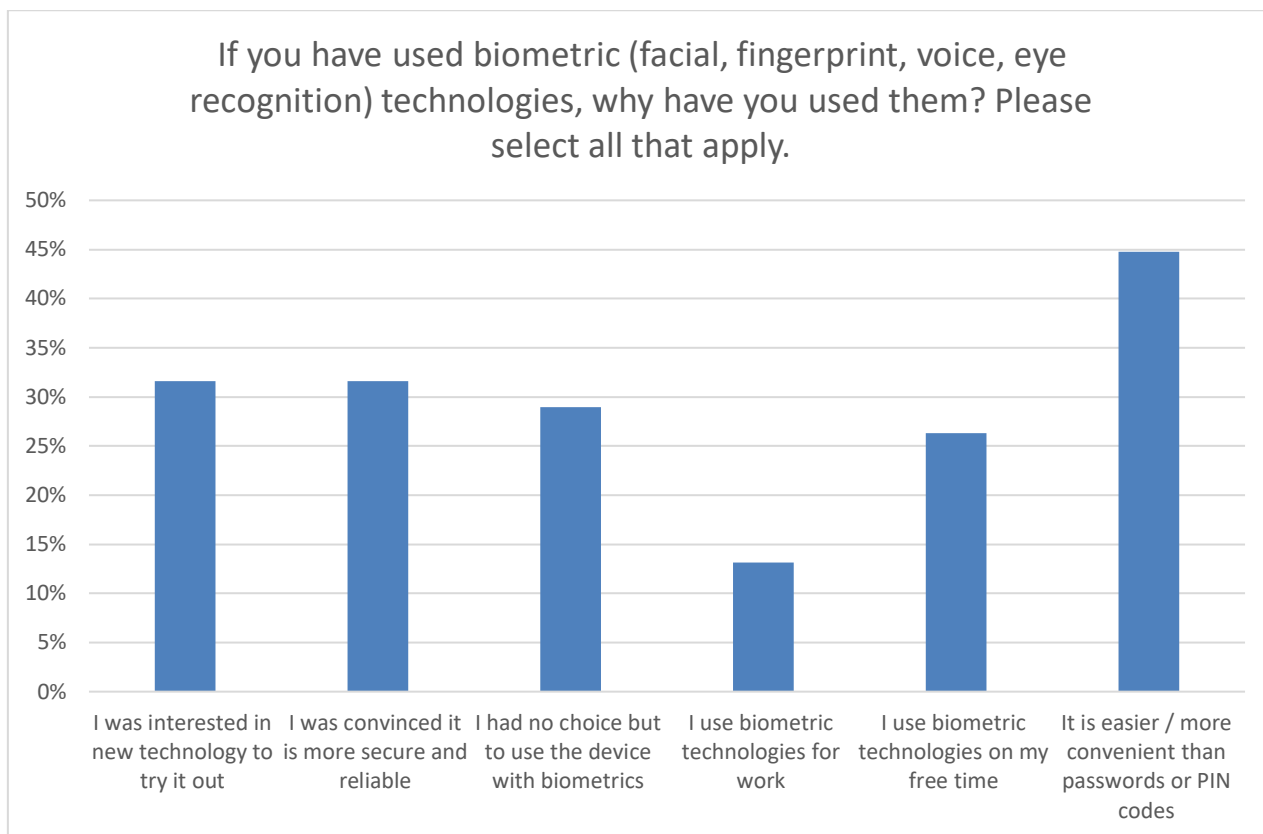


Figure 4. Pre-pilot survey Q8.

2.3 User testing of the IMPULSE solution

Each pilot site ran the testing in their preferred way. Some had multiple days reserved for testing, while others had only one day when they gathered every participant to test IMPULSE solution.

Table 3. Testing periods in each case site.

Pilot site	Testing period
ARH	October 11th, 2022
ERTZ	Postponed to early 2023
GIJON	October 11th-14th, 2022
MOP	October 12th-14th, 2022
RVK	Postponed to early 2023
UCIC	October 12th, 2022

The case owners were instructed to ask users to test the solution in different ways and locations if possible to see how well the onboarding and authentication processes work.

The piloting period had to be reduced from the original plan due to EBSI notifications that it will go offline at some point after mid-October. In reality, EBSI went offline in December but there was no information on the actual shutdown date given by the EBSI team so the testing of the application had to be done by 15th of October in case the service was shutdown the following week. This led to some sites not being able to run the pilot properly involving less than the desired amount of participants.

Similarly, due to other unforeseeable events, two pilot sites were not able to complete the pilots on time. On one pilot site, the case representative had a medical issue which led to them not being able to commit to the project for a longer period of time and on another site, there were delays due to change in people involved with the project.

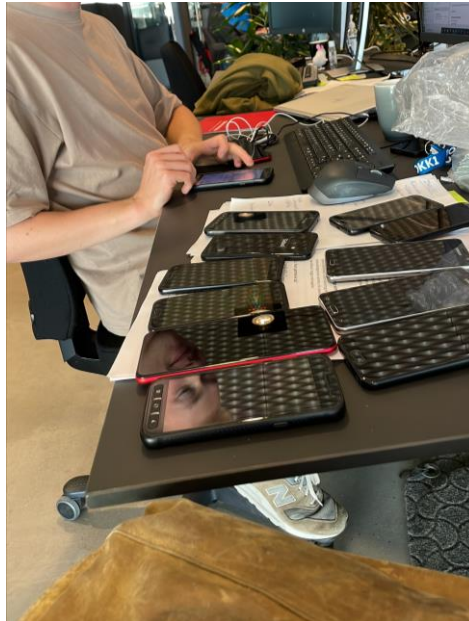


Figure 5. ARH employee preparing phones for the pilot testing.

2.4 Focus group activity

The focus group was executed in the same way in each case site but the number of participants varied across the case sites. The recommended number of people to participate in the focus group activity was six to eight people. While the focus group script provided a framework for the focus group, the case owners were allowed to deviate from it and have additional questions and topics that were not mentioned in the script.

Below is the given focus group script:

IMPULSE focus group activity

Document summary

- **Use:** To prepare and run focus group session with the objective to collect user feedback
- **Who should use it:** Partnering Lead and Focus Group Moderator
- **Tool type:** Guidance
- **How to use it:** Reference for running the focus-group session

1.Scope and purpose

Focus group

- **Duration:** 1-2 hours (depending on accessibility of participants)
- **Tools required:** Notebook, voice recorder, video recorder, sticky notes and marker pens, flip-chart paper or whiteboard, participant consent forms
- **Participants:** 6-8 people who tested IMPULSE app
- **Expected outputs:** Text (transcript, notes), audio recordings, video recordings, photos

Focus group is a user research method aimed at understanding opinions and attitudes towards specific topic through an **informal group discussion** with the invited users.

Focus-group sessions are conducted as a part of pilot activities after end-users interact with IMPULSE software to test its features.

Focus-group session is run by **Moderator** who guides a group through a set of questions.

The role of Moderator:

- ensure the session is run following preplanned script
- encourage participants to contribute to the group discussion
- avoid situation where one participant's opinion is dominating
- facilitate the group discussion for all participants

The focus group **discussion is recorded** for data collection and analysis in project and research related tasks.

The remainder of this document describes the structure of IMPULSE focus group script.

2. Structure

2.1 Preparations

The focus-group session is organised by the partnering public administrations in the municipal premises of their respective pilot site.

A venue should be convenient enough for the participants and suitable for the tools' setup to run a group session and record the discussions.

Before the session begins, Moderator must ensure that:

- **all the participants are informed** that their discussion can be recorded in audio/video formats and the recordings are used for research and project related purposes as described in Participant consent form
- the results of the group discussion will be **anonymised and cannot be traced** back to participants individually
- should any participant refuse to give their consent they are **free to withdraw** from the session at any time
- tools for **audio/video recording** of the session are in place and functioning, along with the template for Journey Mapping exercise

If appropriate, incentives can be offered to the invited participants, such as coffee and snacks.

The focus group should be carried in **informal setting** to stimulate non-judgmental environment and make the participants feel free to discuss the given topics.

2.2 Introduction

Focus group introduction

In the beginning of session, Moderator:

- Welcomes participants
- Introduces hosts of the session (IMPULSE Consortium and public administration)
- Explains the goal, format, and expected outcomes
- Informs the participants that the session will be recorded and results anonymised

The session begins with short introduction on goal, format, and expected outcomes of the group session.

The **topic of the discussion** is "*IMPULSE technologies for accessing online public services*". The topic sets to explore **user experiences and opinions** about IMPULSE after testing the software. It is therefore structured around the questions such as:

- "*How was your interaction with IMPULSE?*",
- "*Did you find IMPULSE promising for your every-day use? Why and why not?*",
- "*What could make IMPULSE more appealing?*".

Moderator reminds the participants that the objective of the focus group is not about finding a consensus, but more about **understanding different perspectives**.

2.3 Journey Mapping activity

Journey Map summary

- Is supplementary, **not the key** activity of the focus group session
- Can **facilitate the discussion** offering different views to reflect on
- Serves to **outline participants' statements** and collect summaries of their experiences

The discussion is supplemented with the exercise activity called Journey Mapping. It should help participants **outline their key statements and visualise the process** of interacting with IMPULSE software.

The Journey Map is present in pre-defined template on a flip-chart paper or whiteboard (see Figure 1). The template can be easily replicated in a drawn format.

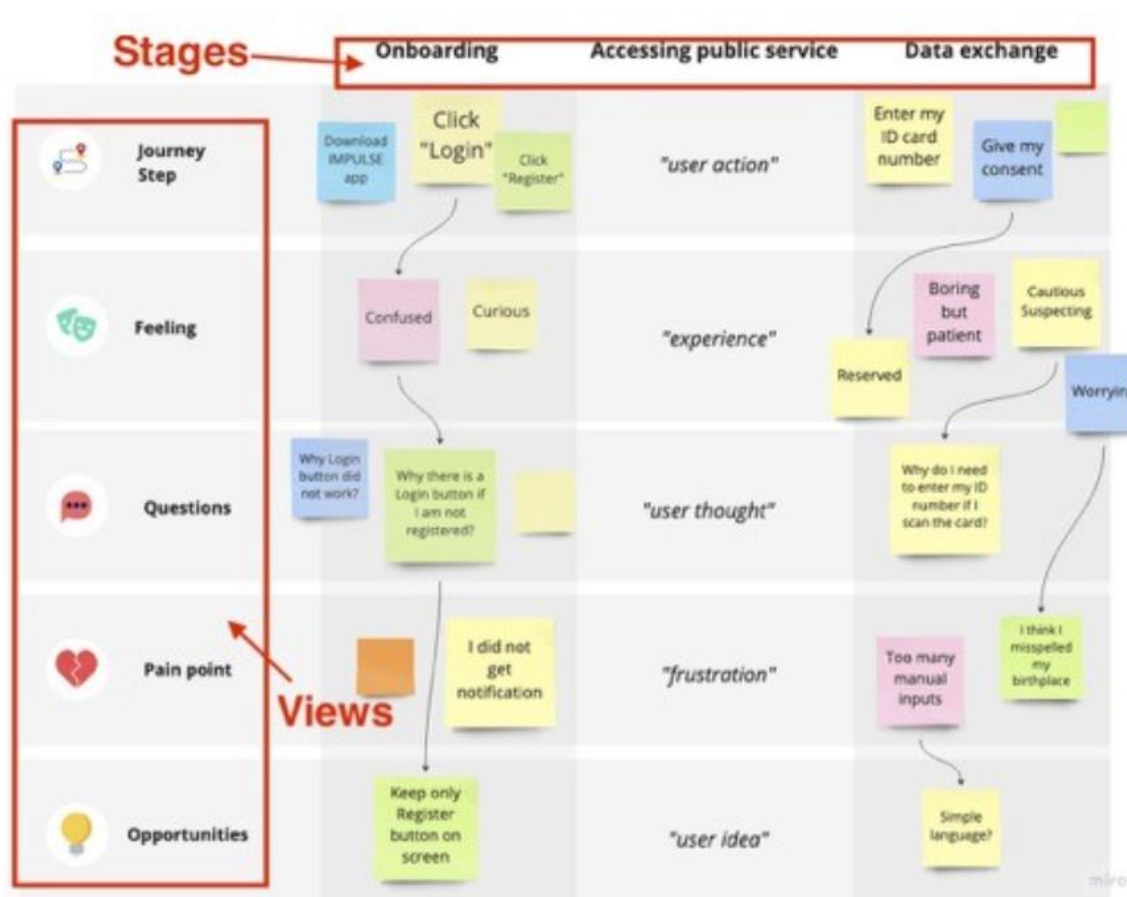


Figure 1. Journey Map template.

There are **three high-level stages** that generally describe IMPULSE functionality from the user's perspective:

- *Onboarding* - first use of the app, from downloading to registration process
- *Accessing public service* - actions taken after registration was complete (i.e., login with IMPULSE)
- *Data exchange* - reflections on sharing personal data and app's informativeness

The stages are highly aggregated to give participants flexibility and space for their thinking about taken actions. It's up to the participants to define **how specific the action** was, as long as they can make **meaningful reflections** on them.

There are **five views** corresponding to different stages of interacting with IMPULSE application:

- *Journey Step* - **any** actions that users took while testing the app
- *Feeling* - experiences and reactions evoked at the stage by the app

- *Questions* - thoughts or uncertainties the users had regarding the app
- *Pain point* - malfunctions the app that raised frustrations or negative reactions
- *Opportunities* - ideas on what and how the app should work to improve the experiences

The views can help **guide the participants in their reflections** while discussing the topic. Participants or Moderator can write down their key **statements on a sticky note** and place it in the Journey Map field which corresponds their view and the stage.

By doing so, participants share their experiences, preferences, and frustrations to keep the discussion on track and further stimulate the exchange of opinions.

The statements can be **connected with the lines** drawn between the sticky notes on different view levels. For example, the action "Register in IMPULSE" could evoke the *feeling* of "Confusion" as some misleading button was present on the app's screen. Further, the *opportunity* could be to "Leave the Register button as the only option on screen".

The sticky notes can also be **freely moved** vertically or horizontally, and the **statements can be repeated**. Ideally, the statements' outline should follow **left-to-right** direction to help visualise the overall IMPULSE workflow.

Moderator can initiate the exercise with the first action that was required to use IMPULSE, "Download the IMPULSE app". After that, the participants can be asked the questions, such as "*How easy was it for you to find the app in store?*", "*How long did it take for the app to download/install?*".

Further actions should be stated by the participants while Moderator can write them down on sticky notes to facilitate the activity.

If necessary, Moderator can stimulate the participants' thinking by asking the questions:

- "*What was the following action you took with IMPULSE?*"
- "*How did find the registration process?*"
- "*Did you try to click on Login button first?*"

Another technique to stimulate the discussion is asking "What if...?" questions, which can add new perspectives on the topic.

There is **no strict framing nor completion goal** for the exercise. Rather, it should guide the discussion and help participant reflect on their testing experiences.

3. Closing focus-group session

Once time of the session is up and participants finish sharing their meaningful comments, Moderator can wrap-up the discussion. This could be the final questions to participants, such as:

- "Would you recommend using IMPULSE app to other people?"
- "Do you think it is a good idea to use IMPULSE in future?"
- "Would you see yourself using IMPULSE app regularly?"

Moderator reminds the participants, that taking part in this group discussion they **contribute to the design** of future technology.

Moderator thanks the participants for their **time and commitment** and invites to follow up the IMPULSE project for future updates and events.



Figure 6. Focus group in Bulgaria.



Figure 7. Focus group in Italy.

2.5 Focus group result summary

As the focus groups are more open-form discussion, the answers are difficult to quantify compared to survey responses. There were a lot of common points made across all different case sties and here is a short summary of them:

- **Onboarding:** The onboarding process was found the most cumbersome as there was a lack of information provided for the user. Many users did not receive any kind of confirmation if the onboarding was successful or not, and only after testing the login functionality they found out that the onboarding was indeed successful.
- **Login:** The login part of the application was found to be easy-to-use and worked quite well. The login process was straightforward and did not require any additional information from the user, only the selection of the digital identity to be sent to the platform.
- **Facial recognition:** Most participants trust the facial recognition technology as long as it is provided by a trustworthy organization.
- **Other positive feedback:** The IMPULSE solution seems promising and provides a good (or better) alternative to the systems currently in-use.
- **Other negative feedback:** Not working on iOS and there are no mentions of privacy policy in the app.
- **Suggestions made by users:** Provide in-app tutorial or help screens to guide the user, show the user what information is being sent to the system when logging in, possible alternative login methods in case the cameras are not functioning properly.

2.6 Interview

Each case site were asked to interview at least four participants. The interviewer was allowed to ask their own questions and follow ups if there was anything specific the case owners would like to know from the interviewees. The recommended number of participants for the interviews was four people and preferably, at least two should not be participating in the focus group activity to get more diverse responses.

Below is the interview template provided to all case owners.

Interview questions for pilot participants

This document contains the interview questions for pilot participants. The interview should be done in 1:1 setting. It would be recommended to have at least 4 participants interviewed. All questions (and possible follow ups) are recommended to be asked.

The interviewer can ask additional questions not given in the list if

- The answers given by the participant would encourage additional follow up questions (use your own judgement)
- The case owner has additional questions they would want to ask from the participant that are not included in the list.

The interview answers should be recorded in as much detail as possible. A transcription of the interview would be the best solution but if that is not possible, writing the answers manually with as much detail as possible is also viable.

Participant id _____ (the same participant ID used for the survey answers)

1. **Do you feel at ease with facial recognition?**
 - a. Why yes / why not
 - b. **Follow up:**
Would you feel more / less comfortable with other biometric technologies (such as fingerprint recognition)?
2. **Do you think that the use of A.I in electronic identity can affect your rights?**
 - a. How would they affect?
 - b. **Follow up:**
Would this be a dealbreaker for you in using a solution such as IMPULSE?
3. **What is the best part of the IMPULSE solution in your opinion?**
 - a. Please describe why

4. **What is the worst part of the IMPULSE solution in your opinion?**
 - a. Please describe why
 - b. If the answer is “only works on Android”, please ask the participant to name something else.

5. **Regarding your personal data, do you think that they are more protected with IMPULSE than with other digital identity solutions?**
 - a. Why yes / why not?
 - b. **Follow up:**
How would you want your personal data be protected?

6. **Is there anything you would NOT change in the IMPULSE solution?**
 - a. If there is, please describe why you would not change it or why it is important not to change it.

7. **How would you improve the IMPULSE solution?**
 - a. Features, bugs, different use-case, etc.

8. **Would you consider using the IMPULSE solution in the future?**
 - a. Why yes / why not?
 - i. If not, what if the solution was further improved? Is there anything that would make you change your mind and consider using IMPULSE?

9. **Is there anything you would want to comment on regarding the IMPULSE solution or the pilot activities?**

10. **Would you be interested in participating in similar activities in the future with the IMPULSE solution?**

2.7 Interview result summary

This section presents a summary of the responses for the interview questions. The summary of responses are presented in Table 4.

Table 4 . Interview result summary.

Question	Summary of responses
Q1	Most interviewees felt comfortable with facial recognition. Feeling comfortable with other biometric technologies was indecisive as some felt more and others felt less comfortable with other technologies. Few mentioned they would like to have alternatives and would feel more comfortable then.
Q2	Most did not think the artificial intelligence in this technology would affect their rights but agree that this would be a dealbreaker.
Q3	Most respondents mentioned the quick identification and ease of use of the application. Some specified that facial recognition is the best parts of the IMPULSE solution.
Q4	The worst part of IMPULSE varied amongst interviewees. Most common theme was the difficulty of onboarding but there was also mentions of always being connected to internet and not feeling secure with the current facial recognition technology.
Q5	Most interviewees felt their personal data to be protected with the IMPULSE solution but there were some who were unsure.
Q6	Most interviewees would keep facial recognition as the identification method.
Q7	To improve the IMPULSE solution, most proposed to have more information provided to the user during the various steps. Another proposed improvement was an alternative login method in case facial recognition cannot be used.

2.8 Post-pilot survey

The main goal of the post-pilot survey was to find out the attitudes and opinions of the users who actually tested the IMPULSE solution. Below is the post-pilot survey given to each case owner.

Introduction

This survey is part of the end-user pilot testing executed by the IMPULSE project team. The survey is meant for all participants to fill. The survey will be anonymous.

This is the post-pilot survey, which will ask your opinions regarding the IMPULSE solution.

User identifier (given by the local public administrator) _____

This identifier will only be used to be able to combine the pre-pilot and post-pilot surveys together when examining the answers. Remember to use the same identifier in both surveys.

1. **How likely would you be to use the IMPULSE solution instead of the digital identity (log in) systems you currently use (username/password, smartcard, PIN, etc.)?**

Not at all likely 1 2 3 4 5 Very likely

2. **Answer the following only if you answered 4 or 5 to the first question: Why would you use the IMPULSE solution? Tick only the most important ones for you (maximum of 4)**

- It is intuitive to use
- It makes assessing online services faster / more convenient
- It is modern and interesting
- It gives me control over my data
- It is secure
- It does not require a passwords
- With facial recognition, I am less worried about hackers
- Other reason (please specify) _____

3. **Answer the following only if you answered 1 or 2 to the first question: Why would you not use the IMPULSE solution? Tick only the most important ones for you (maximum of 4)**

- I do not want to depend on my smartphone
- I do not have a smartphone
- I am worried about what happens if I lose my smartphone or it is stolen
- I am worried about facial recognition technology
- It is too complicated
- I use too few online services to make IMPULSE worthwhile
- I am worried about hackers and identity theft
- Switching to a new system is too much hassle
- Other reason (please specify) _____

-
- 4. **For which online services do you think the IMPULSE solution would be the most suitable? Please select no more than 3.**
 - Online banking
 - eHealth (e.g. electronic communication with a doctor to get a prescription instead of going in person)
 - Digital vaccination certificate for Covid or other diseases
 - Social media
 - e-Commerce (e.g. Amazon, AirBnB)
 - Completing tax returns online
 - Registering for social services online
 - None
 - Other (please specify) _____

5. **Please circle all of the following words and phrases that you feel describe IMPULSE.**

- | | | |
|--------------------------------------|--|----------------------------|
| | Unnecessary | Privacy-friendly |
| Convenient | Dangerous | Not useful |
| Complicated | Easy-to-use | Weird |
| Surveillance | With IMPULSE I can decide who gets my data | Safe |
| Makes signing up for services easier | Saves time | Makes login process easier |
| Creepy | IMPULSE gives me control over my data | Boring |

6. **Please share your opinion on the following:**

	Strongly disagree	1	2	3	4	Strongly agree
	1	2	3	4	5	
I found the IMPULSE solution unnecessarily complex						
The IMPULSE solution reduce/simplifies the number of steps in accessing PA services						
I think that I would need technical support to be able to use the IMPULSE solution						
I feel comfortable using the IMPULSE solution						
Overall, I find the IMPULSE solution useful						
I would recommend the IMPULSE solution to other people						

7. **People may need to share documents and certificates online, like their driver’s license, university degree, or CV.**

If the IMPULSE solution would let you store and share verified digital copies of your documents, would you likely use this feature?

- Yes
- No

8. **Would you prefer a universal digital identity (based on your identity card) that works for any online service or have different digital identities for each service you use?**

- Different digital identities for each service
- Digital version of identity card, a universal digital identity



2.9 Post-pilot survey result summary

This section presents the answer distribution to most of the post-pilot survey responses. These distributions are presented in Figure 8, Figure 9, Figure 10, and Figure 11.

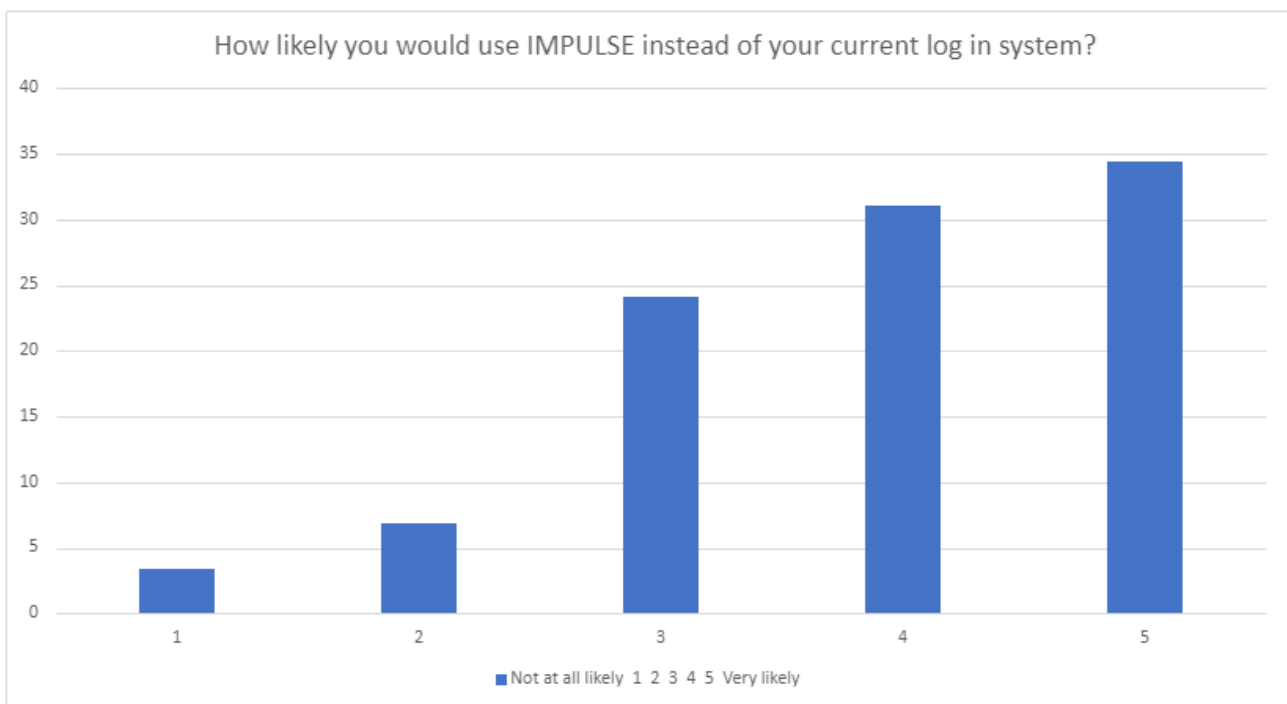


Figure 8. Post-pilot survey Q1.

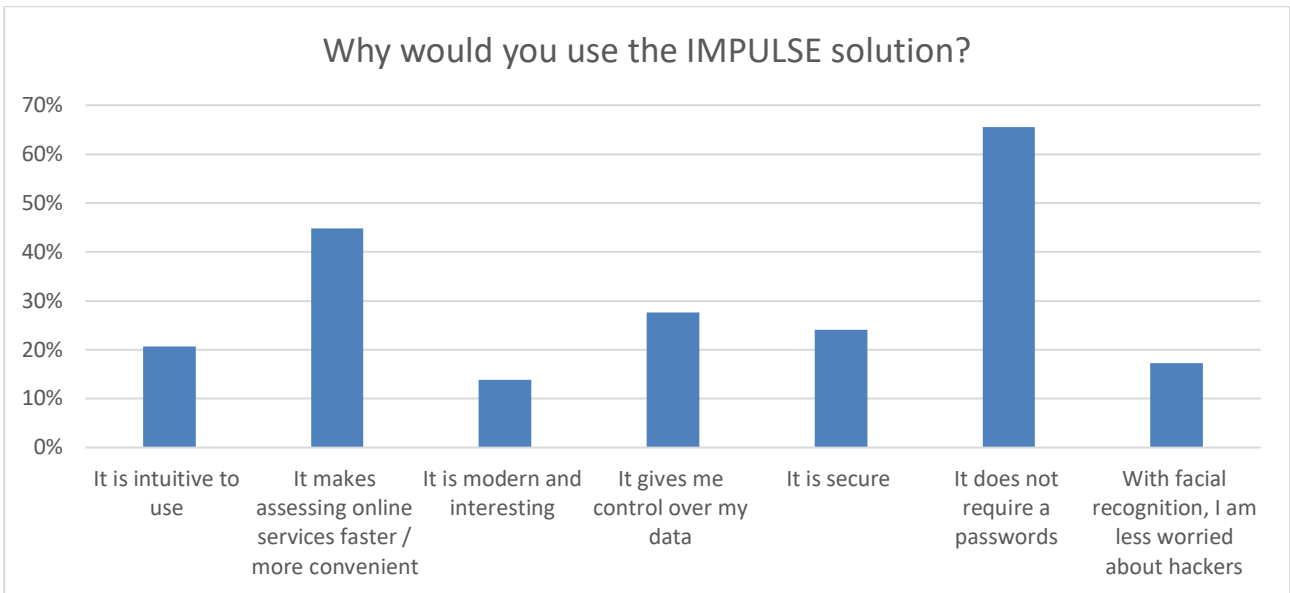


Figure 9. Post-pilot survey Q2.

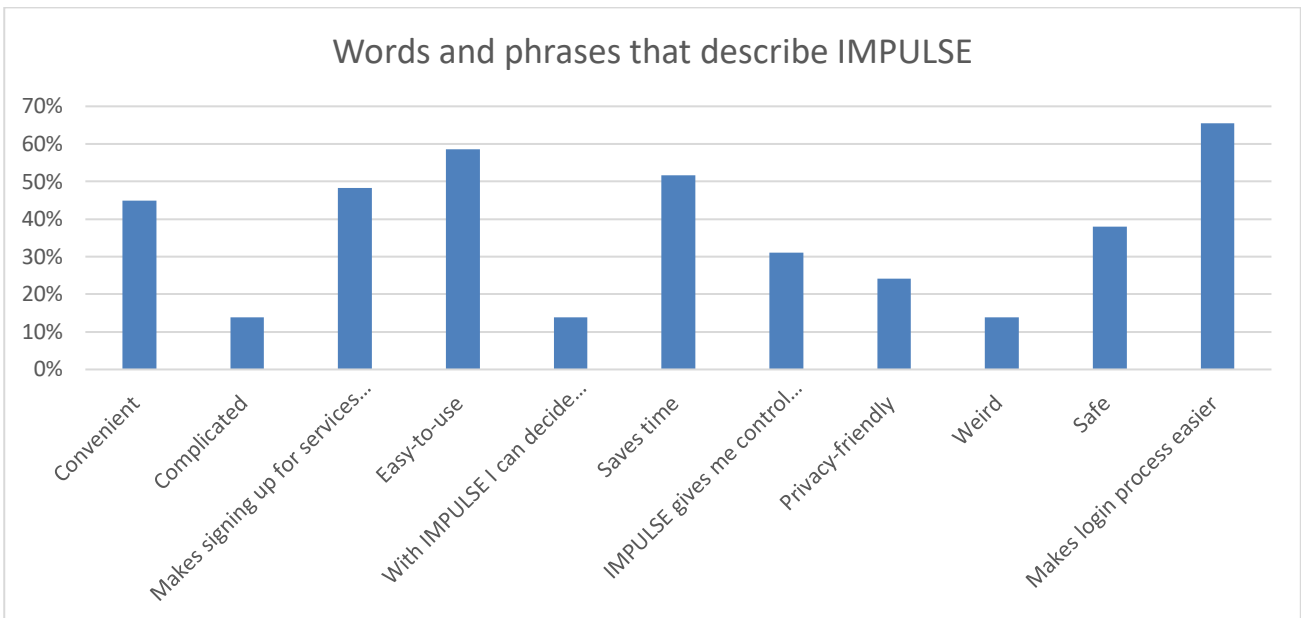


Figure 10. Post-pilot survey Q5.

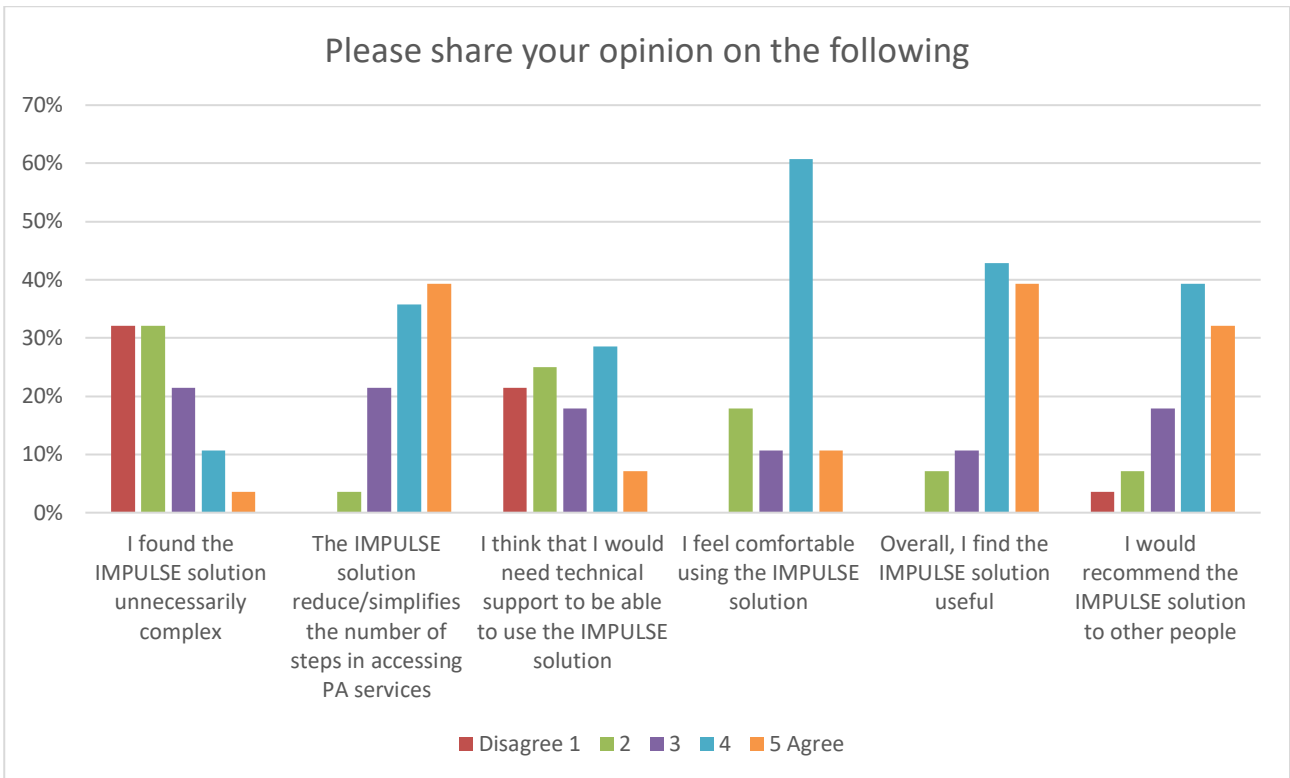


Figure 11. Post-pilot survey Q6.

3 Highlights of the pilot

While the case sites were given instructions for each of the activities, there were some variances amongst the sites. Due to the low number of participants in one site (ARH), the interview questions were integrated to the focus group activity and it provided good results as well. With the testing of IMPULSE solution, users were given a free method of testing and while it was expected that the users would test IMPULSE in different environments, it was not expected that they would also try and attack the solution. For example, some participants tested facial recognition by providing a picture of the required ID document or for the selfie image. This proved to be an interesting idea and provided additional information to the technical partners in regards to the security and safety of the IMPULSE solution.

From the point of view or results, most users had issues with the onboarding process of IMPULSE. The onboarding was seen more cumbersome compared to the authentication and this shows in the number of steps users actually have to take when onboarding. There was also a lack of notification and information on the onboarding process and users were not sure if the onboarding was successful or not.

On the other hand, the signing in was seen as easy-to-use and it worked most of the time without any problems. The lack of passwords and usernames was deemed as the biggest selling point of the IMPULSE solution for most users. However, some more technical users did raise concerns on the security of the facial recognition and how well it could be cheated. Figure 12 shows that majority of users have used username & password while only half have used facial recognition before. This means that the technology was new for half of the people and their first experience was with the IMPULSE solution.

Few of the testers did question how the data is stored as there was no privacy policy available in the IMPULSE app. In addition, there is a lot of data given to the system when onboarding but the users do not know what data is actually being sent to the service they want to log in to.

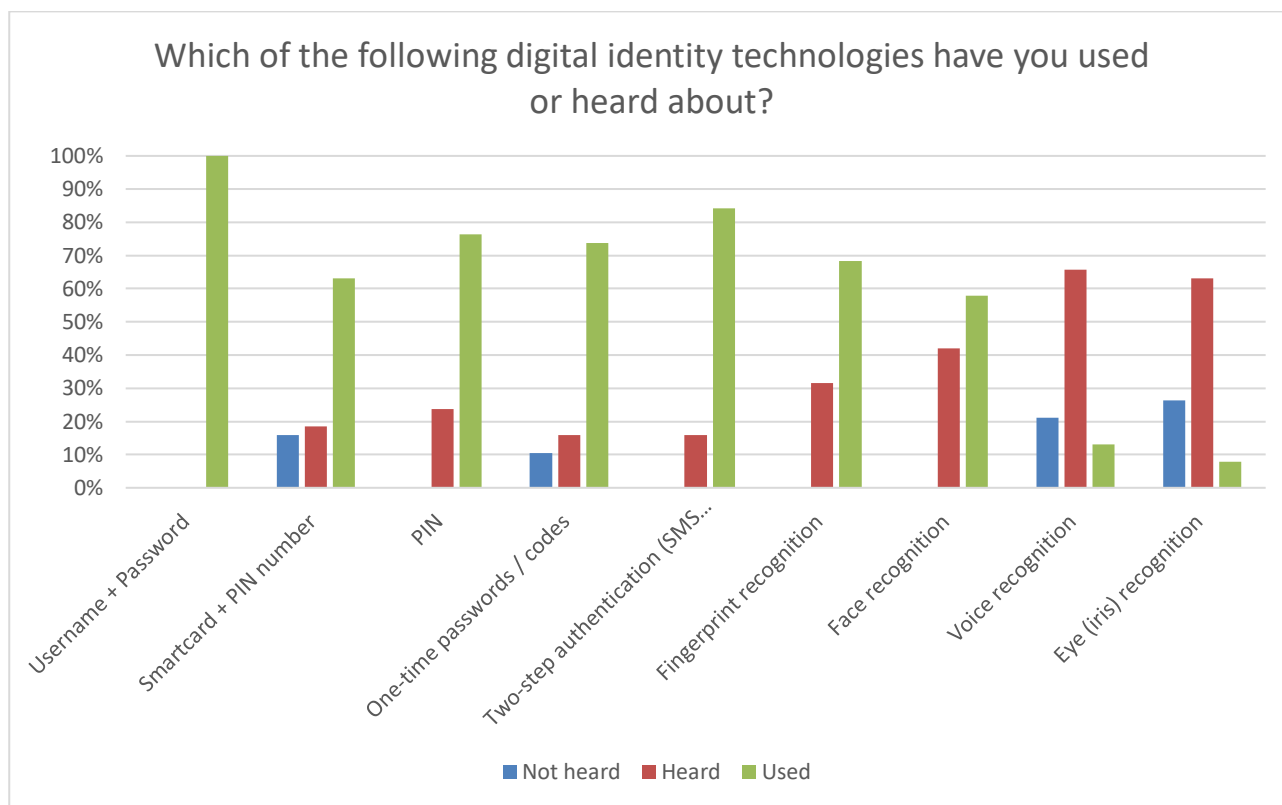


Figure 12. Pre-pilot responses on electronic identification methods experience.

In regard to ease of use, Figure 3 shows how participants perceived the digital services offered by the public administrations. Most agree that digital services are better than traditional ones but at the same time, they disagree on the actual transformation of services from traditional to digital. Most users perceive digital services to be easy-to-use so it would make sense to transform public services to digital. In the next piloting round, there should be an additional question asking why users think that the services should or should not be transformed to digital.

4 Conclusion

The pilot activities were run mostly successfully considering the adaptation from the original testing roadmap and EBSI shutdowns. For the next round of pilots, there needs to be a backup plan for similar technical issues. The actual execution of pilots will also be changed, so that each site could be run at different times, giving the technical team the possibility to focus on helping one pilot site at a time instead of having everything run in parallel.

The pilot activities themselves were successful and provided useful information to the research team. Some of the questions in the surveys and interview will be modified as based on the responses, in order to provide additional relevant information. Furthermore, with the improvement of the IMPULSE solution, there are additional questions that need to be asked as well.

Overall, the timing of the pilots and recruitment need to be improved and adapted to each pilot target group requirements, but the activities themselves can re-used in the final pilot round with some modifications to the content. For the second pilot round there will be created an individual pilot timing planning per use case.