

Digital Identity Hackathon

INFO



**DIGI- JA
VÄESTÖTIETO-
VIRASTO**



Overview

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What is Digital Identity Project?

Digital services are becoming more and more common, and everyone should be equally able to handle their affairs digitally. When new essential digital services are developed rapidly, this creates a need for a digital identity that can be used with both public and private services. Digital identity could broaden the use of the personal data confirmed by authorities and it helps to ensure the development of individual-centered sharing of data – self-sovereign identity.

The Digital and Population Data Services Agency (DVV) is working with the Finnish Police to develop a solution for digital identity as part of a project by the Ministry of Finance. This development work will result in a new, secure mobile application – **Suomi.fi wallet** - for proofing identity both in electronic and in-person services. An alternative identification solution – **Suomi.fi code reader** - will also be created for using the electronic services for people who cannot or are not willing to use a mobile device for identification.

The aim is to develop a digital identity solution to make everyday life easier. It will adapt to the needs of a changing society, and it would be suitable for new digital platforms as they develop. The digital identity development project is underway from 2020 to 2023.

More:

<https://vm.fi/en/digital-identity>

<https://dvv.fi/en/digital-identity-reform>

26.8.2022



Why must I show all my personal information and identity code when I prove my age at stores and restaurants?

I cannot collect my package from post office when I forget my wallet: why I cannot prove my identity with phone when I can still pay with that?

Not everyone can get banking account and strong electronic authentication which is very much needed in more and more digitalized society.



What is Digital Identity Project?

So, what is under its way to be introduced next year? Suomi.fi wallet is a mobile application for identity proofing, and it includes two types of functions to do that – a digital proof of identity and the transaction ID for foreigners. There will be also separate app to check identity from Suomi.fi wallet. Applications will be available to download through application stores for both iOS and Android. Also, alongside will be developed Suomi.fi code display for those people who are not able to use mobile devices.

A digital proof of identity

This can be uploaded inside Suomi.fi wallet application. It is issued by the police and it works like an official proof of identity like a passport and identity card (excluding working as a travel document). A digital proof of identity is for everyone who has a valid Finnish passport, identity card or identity card for foreign nationals issued by the police. It is free itself, but expenses are covered in passport and identity card prizes. This service can be used in both public and private sector in-person services and as strong electronic authentication device, like banking.

More:

<https://vm.fi/en/digital-identification-application>

Reader application

There will be developed a separate inspection application for checking identity and verifying information from Suomi.fi wallet app in-person. Visually checking

information from Suomi.fi wallet app is not enough – data must be read through QR-code. Proving identity will not require a network connection. This application will be similarly available for download when Suomi.fi wallet application has been introduced.

The transaction ID for foreigners

The transaction ID for foreigners is also operating through a Suomi.fi wallet mobile app and it can be used by foreigners who need to manage their affairs in Finland and have valid passport. The transaction ID is issued by the Digital and Population Data Services Agency. The person is registered in the Population Information System, and this can be done remotely as a self-service, even from abroad. By registering, user receives a personal identity code. The transaction ID for foreigners would only work in electronic services. There will be small fee to start to use this function.

More:

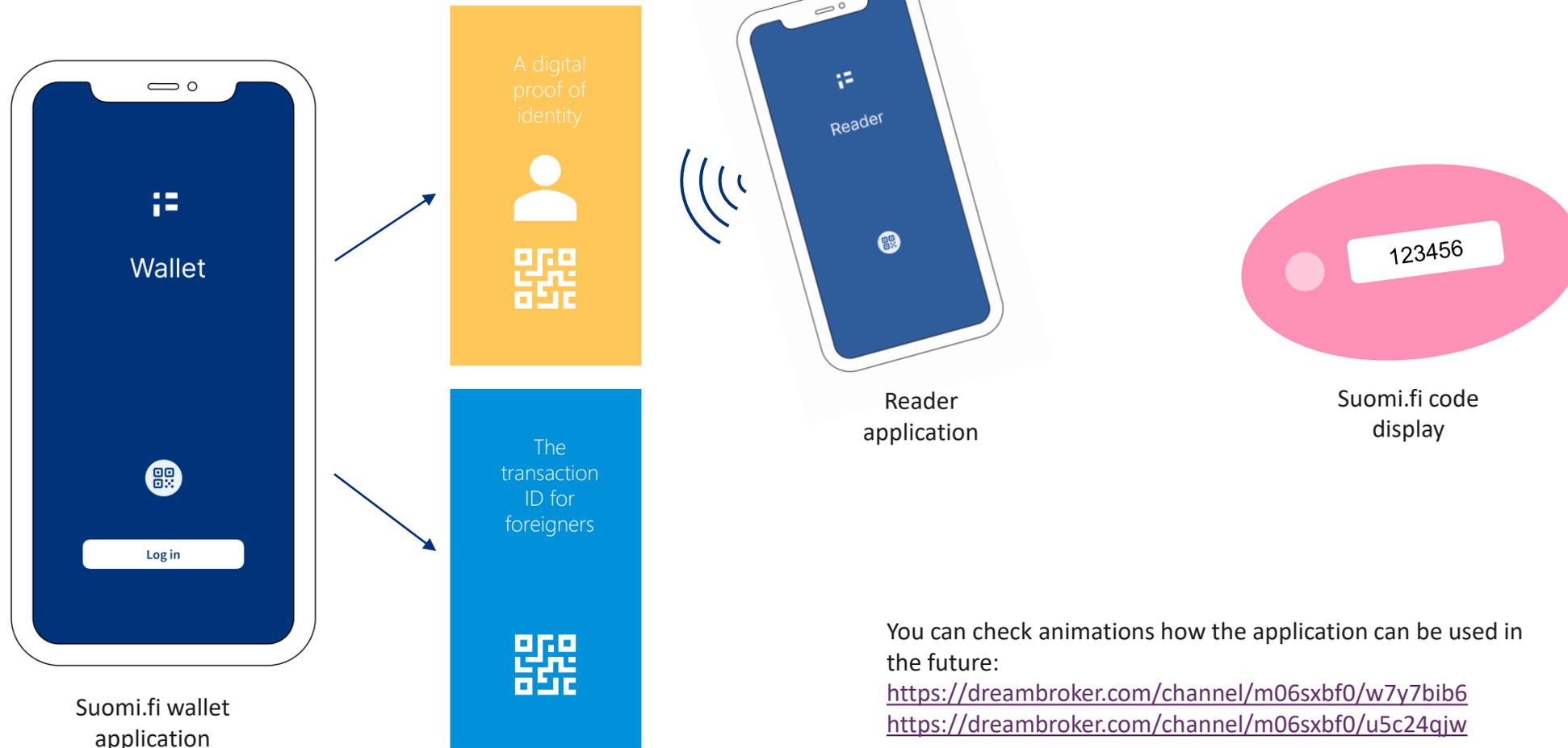
<https://vm.fi/en/digital-service-authenticator-for-foreign-nationals>

Suomi.fi Code Display

If the user does not want or is not able to use the mobile application, they can receive an alternative means of identification for public e-services – Suomi.fi Code Display. This is also issued by the Digital and Population Data Services Agency. The solution is offered via Suomi.fi e-Identification to participating services.



What is Digital Identity Project?



You can check animations how the application can be used in the future:

<https://dreambroker.com/channel/m06sxbf0/w7y7bib6>

<https://dreambroker.com/channel/m06sxbf0/u5c24qjw>



Towards European Identity Wallet

The EU is developing common legislation for European wallet applications, and Finland is actively participating in this work. The goal is to develop secure and reliable solutions for people to manage and use their information in the EU. Digital identity would enable cross-border identification. The Digital and Population Data Services Agency develops digital identity solutions so that they are interoperable with the future European Digital Identity Wallet and serve as a basis for its implementation in Finland.

What is the European Digital Identity Wallet?

Many citizens are already using digital wallets on their smartphones to store their boarding passes when they travel or to keep their virtual bank cards for convenient payment. Under the new rules, European Digital Identity Wallets will be available to everyone. European Digital Identity Wallets are personal digital wallets allowing citizens to digitally identify themselves, store and manage identity data and official documents in electronic format. These may include a driving licence, medical prescriptions or education qualifications. With the wallet, citizens will be able to prove their identity where necessary to access services online, to share digital documents, or simply to prove a

specific personal attribute, such as age, without revealing their identity or other personal details. Citizens will at all times have full control of the data they share.

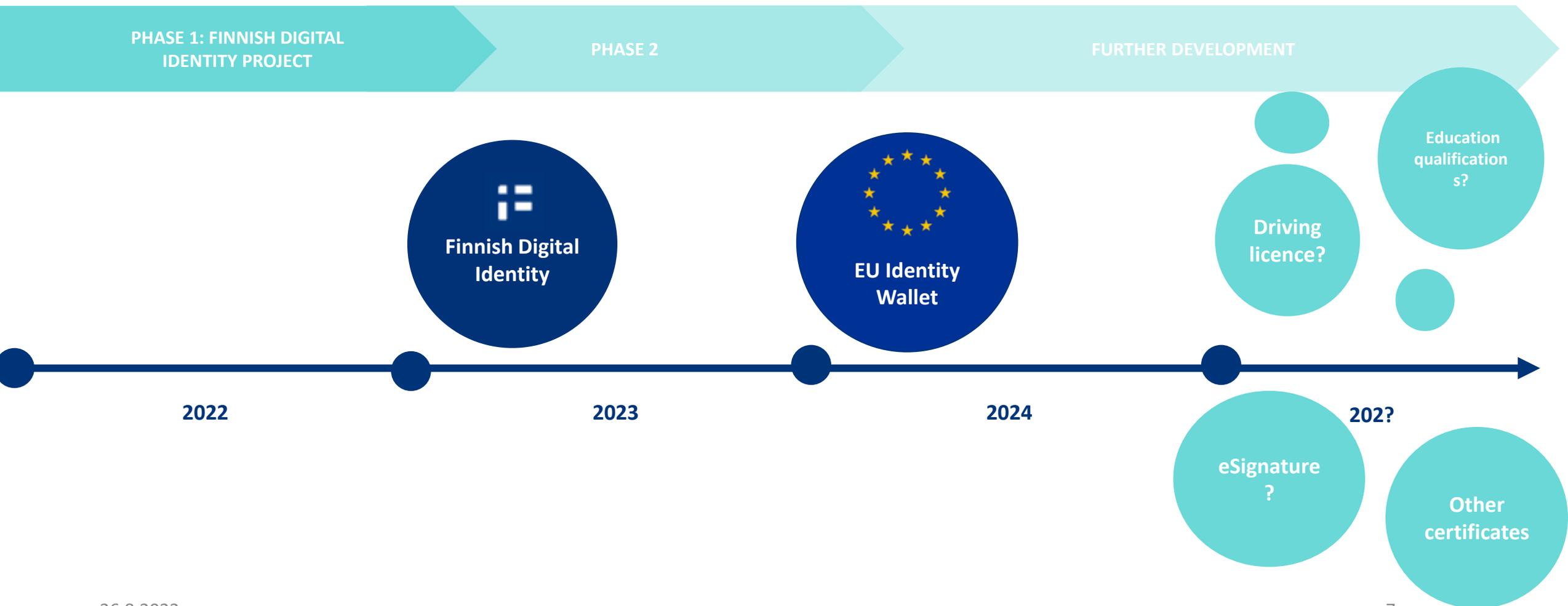
More:

<https://vm.fi/en/european-wallet-application>

https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-digital-identity_en



Towards European Identity Wallet



Design Drivers

Design drivers are words that describe what is our project all about – how we want to do things and what will our product offer. They are crystallizations what are the needs, motivations and goals of our users. Design drivers are formed together with the project team.

We at DVV believe that digital identity should be useful to users – to add value to their lives. It should be reliable – it should be trustworthy and function steadily. Digital identity solution should be easy to use and accessible, and it should be designed for all and add equal opportunities.

In this hackathon, your solution should also reflect same design drivers.

USEFUL

RELIABLE

**EASY TO
USE**

EQUAL



User Profiles

Potential user of digital identity solution could be anyone. To better answer the different needs of very different users, user profiles were formed based on two axis: resources and attitude.

Resources axis refer to any capacities, abilities and skills to adapt to digital society. For example, these can be time, money, health, language skills etc.

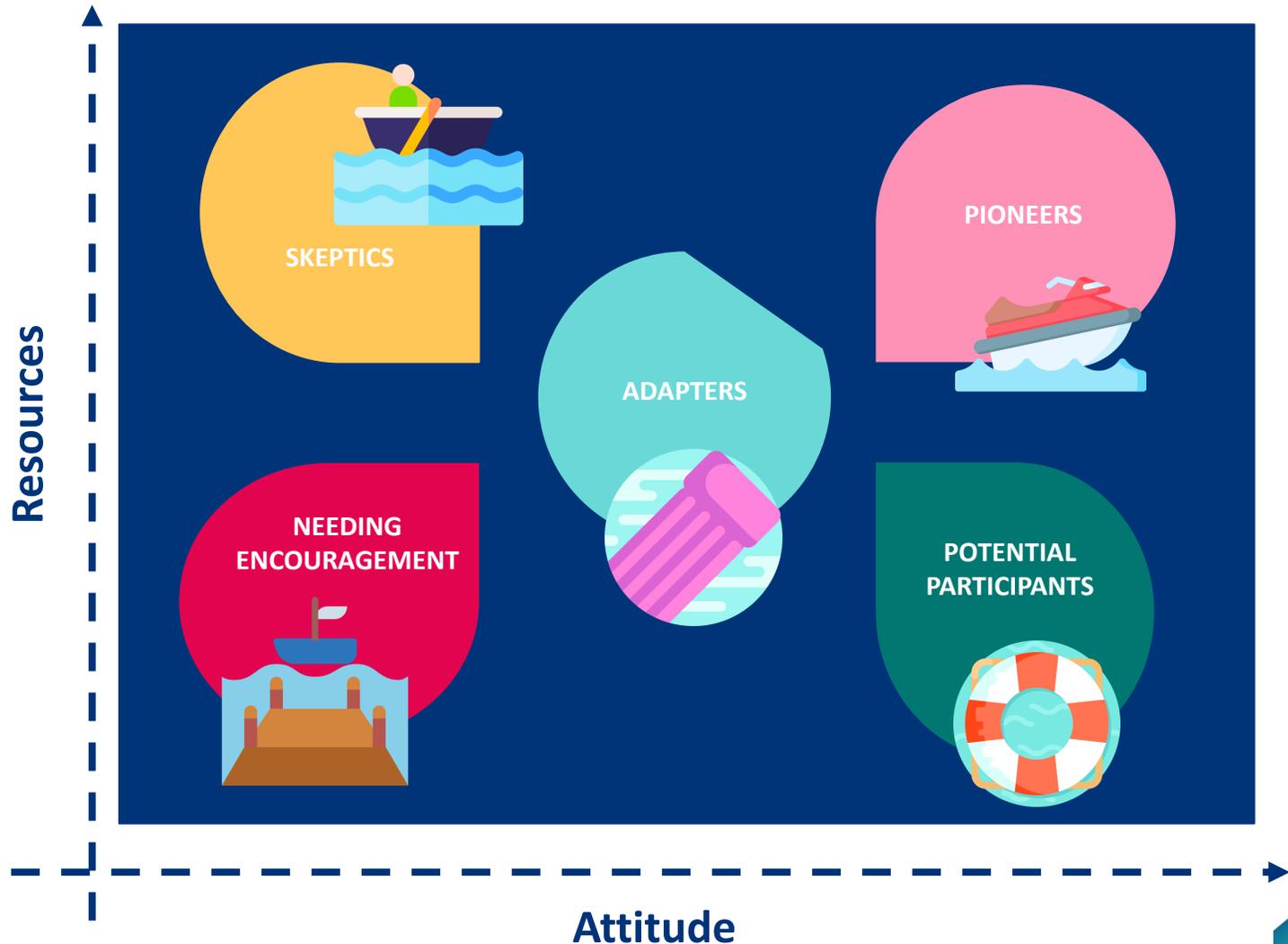
Attitude axis refers to attitude which users have towards new things in general, digitalizing world or for example public services.

For instance, some users might be easily enough skilled to use new digital identity application, they have the newest mobile devices but they in general have concerns about the services government has developed. At the same time, somebody else would really like to try digital identity, but they have serious limitations on their life, and it will be hard for them.

These user profiles are based on interviews with real potential users and workshops done in this project, and for example Sitra's digiprofiles and reports. These loose profiles could be further developed to user personas.

More:

<https://www.sitra.fi/app/uploads/2019/01/citizen-survey-digital-services-all-countries.pdf>



Skeptics

Skeptics are not comfortable with new things and sometimes they resist change as a matter of principle. They would rather wait and observe before they start to use a new service. They have the knowledge and skills needed as well as the resources to use them if only they are motivated to do so. They also might have already skeptical attitude towards government.

To support them with digital identity:

Skeptics need good enough reasoning and justification to motivate them to try something new.



Needing Encouragement

This group is worried about new things because they are cautious and might have a lot of different limitations. Tackling the demands of everyday life might be hard, let alone to get to know new technologies. Their limitations might be related to their financial situation, language skills or executive functions, or they could be more complex, such as not trusting their own skills. They might already have bad experiences with public services, and it is hard to trust that they work for them.

To support them with digital identity:

This group needs encouragement, and in-person support makes their everyday life easier. Easy access support points and some other services, e.g. chat and phone services might help them.

Government is doing this new thing, I doubt that is for me. Can I even use it? I don't have anyone to help me with it.



Adapters

This group adapts to things quite easily. They are not very motivated or interested in getting to know different options. The adapters prefer to solve problems independently rather than ask for help. They don't criticize or praise or call for change aloud and they don't have lot of strong opinions.

To support them with digital identity:

Clear communication helps this group in the first place to get enough information to try digital identity

Oh, I didn't know government has done this new digital identity, surely I try it.



Pioneers

Excited and interested in new things. They have high standards, and they have the knowledge, skills, resources and the ability to utilize them. They appreciate fast and smooth service and abandon new things if they don't match their requirements. They gladly share information and recommendations to others and give feedback if necessary.

To support them with digital identity:

To keep pioneers happy, they need compact instructions and service should be smooth and fast. They need to feel that this new thing really adds value to their life and that it is something different that already existing services.

”

Super nice that I don't have to carry my physical card around anymore!



Potential Participants

Interested in trying new things. Active participation is limited because of challenges in their executive functions, physical and mental wellbeing, life management or social or financial situation. Despite their limitations, they have positive attitude and want to participate actively and pick up new skills.

To support them with digital identity:

Potential participants need personal support, especially in the beginning. Clear, easy to use instructions will help them to get started.



So good that government is doing this new service for me! I'm sure I'll learn how to use it.



Special Needs & Digital Support

Public services are becoming increasingly digitalized and there are many people who do not know how to use digital services. Digital support helps those who need assistance. In digital support, citizens are provided guidance on the use of e-services and smart devices. The development of digital support for citizens is a permanent service of the Digital and Population Data Services Agency. The Agency develops national digital support and coordinates the operation of the digital support network.

In this digital identity development project, it has been important to get to know various user groups and work with them to recognize their special needs and things that might prevent them to use the solution. Here are few insights of different groups collected from workshops, interviews and prototype testing sessions.

Elderly

Of course, age itself does not define that you will have problems to adopt new digital services in your daily life, but we have found out that age might make it hard to remember things, make your hands not as steady as they were and make it hard to see very little things. Many rely on their friends and family.

In general, old people can be as excited to start to use digital identity as others, but they tend to have concerns how safe and trustworthy the solution will be. They might already have bad experiences with lost password and phishing attempts. Some have even described digital world as monster that scares them.

Old people appreciate clarity not just in the applications itself but on how things are instructed. Accessible instructions should come in many forms like text and pictures and as printable options, videos and as personal support in service points.

Continuity and as well as simple, understandable terms for new things are important. We have heard many wishes that there shouldn't be any vocabulary needed when starting to use digital identity.

Cognitive accessibility

With cognitive accessibility we can ensure that people with limitations in cognitive abilities (for example perception, memory, language, attention, problem solving, and comprehension) can use digital identity. Making sure that the services are cognitively accessible, they are not easy to use just for example people with dyslexia or intellectual disabilities, but also for everyone.

We have worked regularly with people with intellectual disabilities, and they are excited about new digital identity solutions, since not all of them are able to get banking accounts. Digital identity could possibly help more people to get more independent.

Our test group has said that they are eager to adopt new technologies, but usually this feels safer when done with someone else, most often with family or friends.



Special Needs & Digital Support

Supporting devices

Not everyone can use technology without extra support. For example, people with visual impairments might need screen readers. By obeying Web Content Accessibility Guidelines (WCAG) we ensure that digital identity applications will be usable with screen readers.

Also physical restrictions and disabilities might make using mobile devices hard. For example, our test person uses mobile phone, but through his laptop and the main thing they were interested in is that if the digital identity is usable with remote access solutions.

Being low point on your life

Sometimes digital services are not accessible to users because of hard life situation and problems with health, finance, drug abuse or even imprisonment.

For example, we have interviewed homeless people with problems with substance abuse and even they are interested in this new solution, since they are not always able to use banking services and therefore not able to get strong electronic authentication.

They had in general concerns towards new applications – applications are on mobile devices that tend to get lost or broken. Many use service point or library computers and phones to handle their affairs. Getting new phone and renewing banking accounts is financially hard. Suomi.fi code display could be

also an option for them, but they thought that it is also a small device that can be lost easily. In imprisonment where mobile device use is limited, code display could be useful.

Of course, sometimes troubles are as simple (and complex) as financial problems. The phones of the users might be so old that the newest applications don't work and replacing the phone is too expensive. If the user has not a valid passport, they must renew it before they can get the digital identity application. There has been also concerns that it might be too big cost to travel to police office and renew passport, if users are living on remote areas.

More:

<https://dvv.fi/en/digital-support>

<https://www.w3.org/WAI/standards-guidelines/wcag/>

<https://www.selkeasteille.fi/kognitiivinen-saavutettavuus/mita-on-kognitiivinen-saavutettavuus/>

<https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/design-4-all>



Service Provider Needs

The digital identification application will affect both private companies and public sector service providers in many ways and open up new opportunities for them to provide electronic and in-person services. Service providers can start to use reader application to check identities in-person or integrate an inspection interface provided by the Digital and Population Data Services Agency into the company's own systems, for example, a cash register or customer system.

On this section, you can find few examples on different fields how they think they could benefit from digital identity. On hackathon, you are free to ideate new solutions for any businesses or fields on private or public sector.

Banking & Insurance

Financing field is strictly regulated by legislation, e.g. regulations for prevention of money laundering and terrorist financing. When handling your financial affairs, bank must identify their customers in many points. Strong electronic authentication is offered for electronic services, and you need valid passport or ID in-person. Digital identity could help to identify the customers of banks and insurance companies when they have lost their passports or have forgotten to renew them. Especially, banks are interested in new ways to identify customers on phone and digital identity could be developed to help there.

Access Control

On many fields, it is regulated who can access buildings and certain spaces in them. Visitors of the spaces need to register their visit and check in and out, more regular users usually just use different types of electronic keys.

Most simply, digital identity can be used to identify the users of the spaces when they are registering, but digital identity could be inspected also through interface connected to access control systems. If there would be possibility to connect identity information to information in which companies visitors work, what licenses and permissions they have or if they have a valid security clearance done, it would be easier to ensure that spaces are accessed by only those people who should have the access.

In the future, it could be maybe possible to use phone to go through certain doors, receive notification or alerts concerning space where you are logged into or better follow utilization degree of the building. It could be easier to give access and regulate who have access individual rooms and services for example in co-working spaces.



Service Provider Needs

Healthcare

On healthcare field, it is regulated that customers should be strongly identified, so digital identity could be one more way to be sure who the patients are. Identity is checked when booking appointments online, checking in to clinics (in-person or through check-in machines) and on phone. Many services are most easily bookable through strong electronic authentication. Sometimes on emergency situations, treatments must be started before there is a chance to identify patient. For private healthcare providers it is also important to know if customers are entitled to Kela reimbursements for medical expenses. For customers side, digital identity could be a chance to better control how they share their health data for different providers.

More:

<https://vm.fi/en/digital-identification-application>

https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-digital-identity_en



Future Trends

Finnish Digital Identity will be in use in 2023. There are plans that European wide digital identity will be available following year. Besides information stored in ID cards, citizens could share all kind of information from study degree certificates to right to drive certain vehicles – securely.

But what are future trends that influence how we will use our new way to share data? What kind of functions could be implemented in wallet applications? On the next slide you can read about recognized tensions in DVV's and digital identity's trends to help you think answers in these question.

On this page, you can see some wishes and ideas collected from users what they thought could be included in digital identity wallets in the future.

More:

<https://www.sitra.fi/en/topics/megatrends/>

<https://dvv.fi/en/digihumausreport2022>

Fishing permits

I want this to work on my smart watch

Home keys!

I want to control this app with my voice

Driving licence and my travel card

Starting marriage Process: an examination of impediments and even changing the last name

Student card

It would be handy if I could have kids ID card and Kela information on my own phone



Recognised tensions in DVV future trends

Human ————— Machine

Rapidly developing technology makes life easier, but humanity, human work and interaction still have their place in digital public sector. The division between humans and machines require a lot of choices in the future. Where is technology better, and where is a human best?

Global ————— Local

International tensions, the cracks of globalisation and the fragmentation of the common world are progressing rapidly. However, we are exceptionally connected with the whole world, where even local and regional solutions compete. Where is cooperation needed, where is distance and independence?

Privacy ————— Innovations

How are digital public services built ethically and protecting personal data, yet in such a way that the advantages of digitalisation and enabling technologies are utilized? How much are we willing to compromise for ease and usability?

Long life ————— Performance

People are living longer and longer but aging of the population and the age dependency ratio are unevenly distributed both in Finland and globally. A long life also brings up new health and functional challenges. How can digitalisation improve people's ability to function?

Control ————— Trust

An open society is based on trust, and there is still plenty of trust in Finland. We trust the authorities as well as our fellow citizens. Trust and freedom have been important values in digitalisation development, but often trust is replaced by control. Democratic and autocratic paths of digitalisation are in competition and the choices made now are weighty for the future. How will control and trust be balanced in the future?

Individualisation ————— Diversity

People's needs and life situations are very diverse. At the same time, more individual decisions and choices are accepted and understood in society. How is the diversity of people and individual needs combined in digital services?

Bureaucracy ————— Flexibility

Bureaucracy is needed for things to run smoothly and even more equally, reliably, safely and fairly. However, the bureaucratic mind can avoid seeing new opportunities - the ability to renew and be flexible is also needed. What acquirements are needed to face the future? Should systems be more flexible to people's needs and not the other way around?

Autonomy ————— Automatisatation

A person's autonomy, the way of doing things and capacity to make decisions in one's own affairs, is significant. However, responsibility for choices requires understanding and skills. Automation is about making everyday life run smoothly, but also about giving control into the hands of others. What kind of feelings does digitisation evoke? How should experiences be considered? Can autonomy and automation go hand in hand?





DIGI- JA VÄESTÖTIETOVIRASTO

If you want to know more you can contact
arla.aalto@dvv.fi

dvv.fi