

**Abstract**

This poster presents a concept that allows multiple digital identities from different sources to be stored in one app. This application, the so-called identity wallet, enables both the secure storage of a sovereign document such as the national identity card, as well as the storage of identities from the municipality or from private companies, so that users can identify themselves online with different levels of assurance.

Developed prototype of an app for storing multiple digital identities



Setting of the protection mechanism

Creation of the digital national identity card

Identification to the library with digital ID card and transfer of the digital library card to the wallet

Research questions

- How understandable and acceptable is the identity wallet concept?
- To what extent are the users aware that the ID comes from a sovereign document?
- What factors influence the perception of control over the data?

Features of the concept of the identity wallet



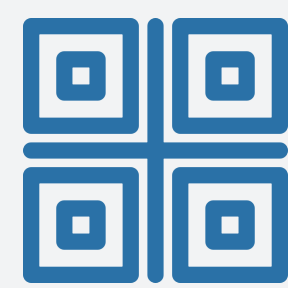
Storage of sovereign IDs, credentials, keys (hotel, car, etc.)



User decides which ID document and which data are used for authentication



Data sending only with the consent of the user



On-site identification with a QR code of the ID

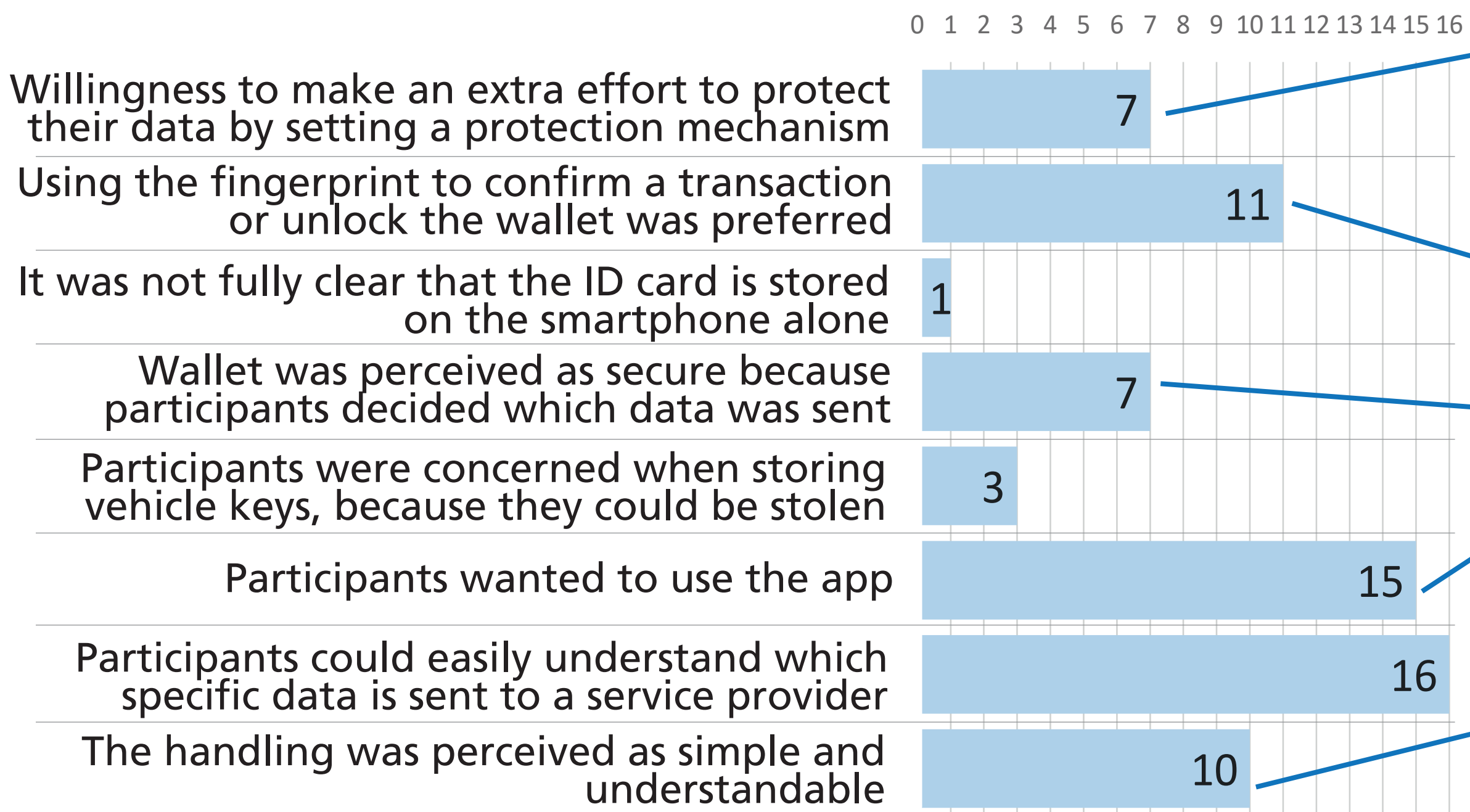


Supply of information about the requesting service

Evaluation of the concept with a total of 22 participants

- Requirements identification with focus group (6 participants)
- Qualitative study with 16 participants (8 per iteration of prototype)
- Approx. uniformly distributed participants across age (18 - 56 years) and gender

Results of the qualitative study with 16 participants



"My personal data is particularly worthy of protection and I think it is good that it is additionally protected".  
"I like that the stored data in the wallet can only be seen after unlocking".

"Using the fingerprint is very convenient, but I would also like to have an alternative in case it doesn't work."

"I like the fact that only with my consent e.g. my fingerprint the data is sent"

"The idea is very interesting. Can I download the app already?"

"That was easy. Then I only need to have my smartphone with me. I always have it with me anyway. But I forget my wallet from time to time"

Perception of trusting the concept

16 out of 16 trusted the concept but their trust is strongly influenced by the operator of the future identity wallet



9 out of 16 for the state as operator



7 out of 16 for a company as operator

"If the wallet handles national IDs, it only makes sense to me if the state runs the app. Otherwise, I would not trust the application."

"The state is only interested in collecting more data about me. Therefore, the operator of this application should be a private company."