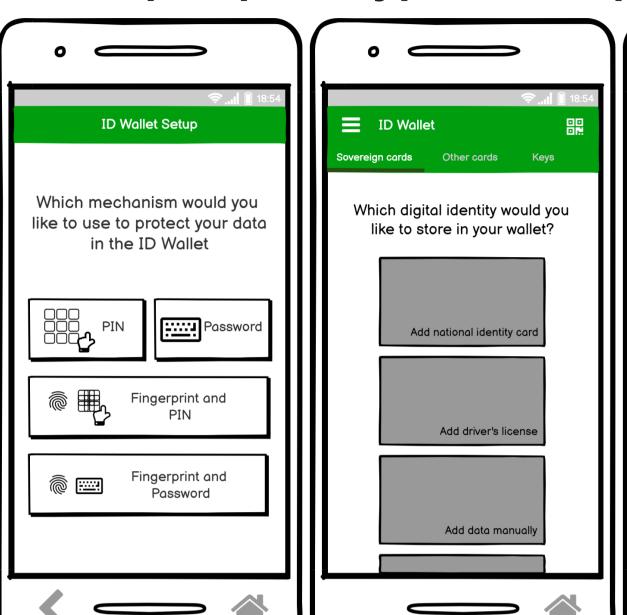
This work was done during the ONCE project publicly funded by the German Ministry of Economic Affairs.

Federal Ministry for Economic Affairs and Climate Action Deine Daten in Deiner Hand

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

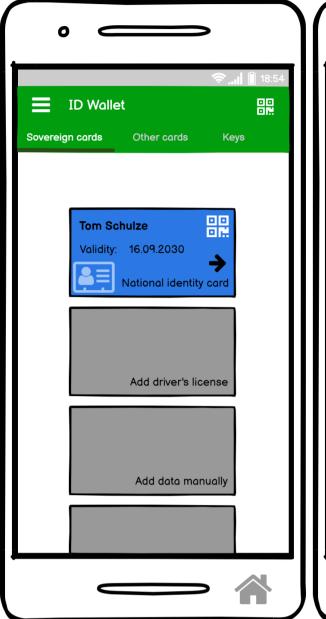


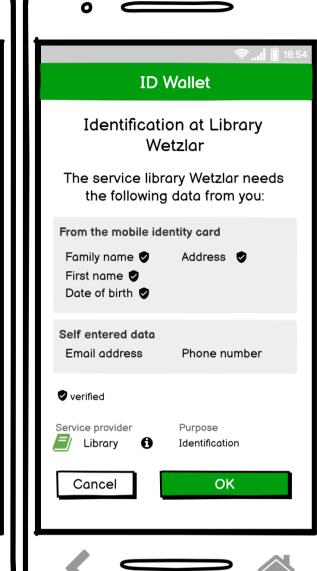
Setting of the

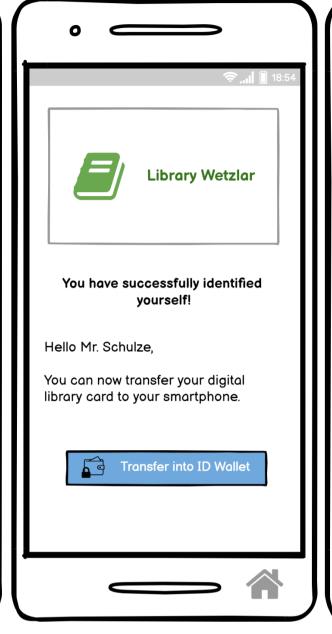
protection mechanism





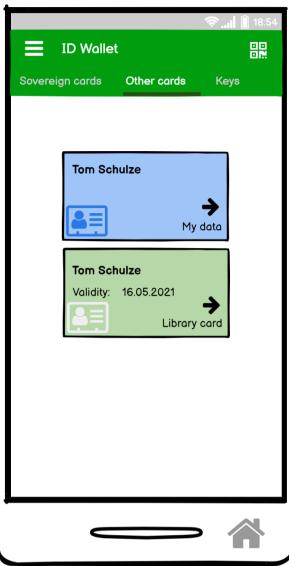






Identification to the library with digital ID card and

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





User decides and which data are used for authentication

-Creation of the digital national identity card------



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

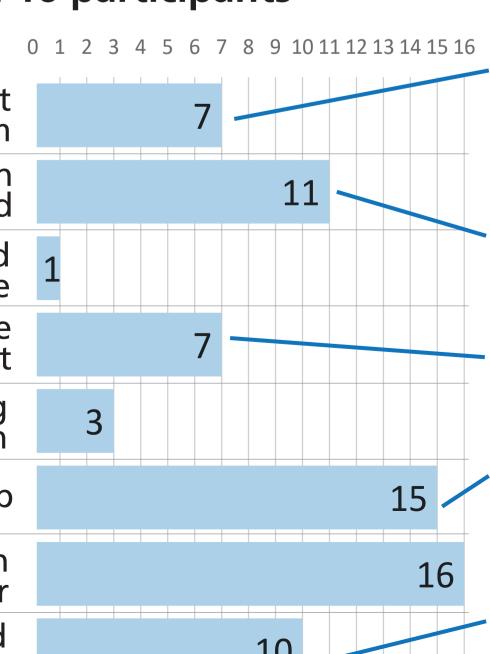
 Requirements identification with focus group (6 participants) Qualitative study with 16 participants (8 per interation of prototype) Approx. uniformly distributed participants across age (18 - 56 years) and gender

Results of the qualitative study with 16 participants

Willingness to make an extra effort to protect their data by setting a protection mechanism Using the fingerprint to confirm a transaction or unlock the wallet was preferred It was not fully clear that the ID card is stored on the smartphone alone Wallet was perceived as secure because participants decided which data was sent Participants were concerned when storing vehicle keys, because they could be stolen

Participants wanted to use the app

Participants could easily understand which specific data is sent to a service provider The handling was perceived as simple and understandable



"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."