

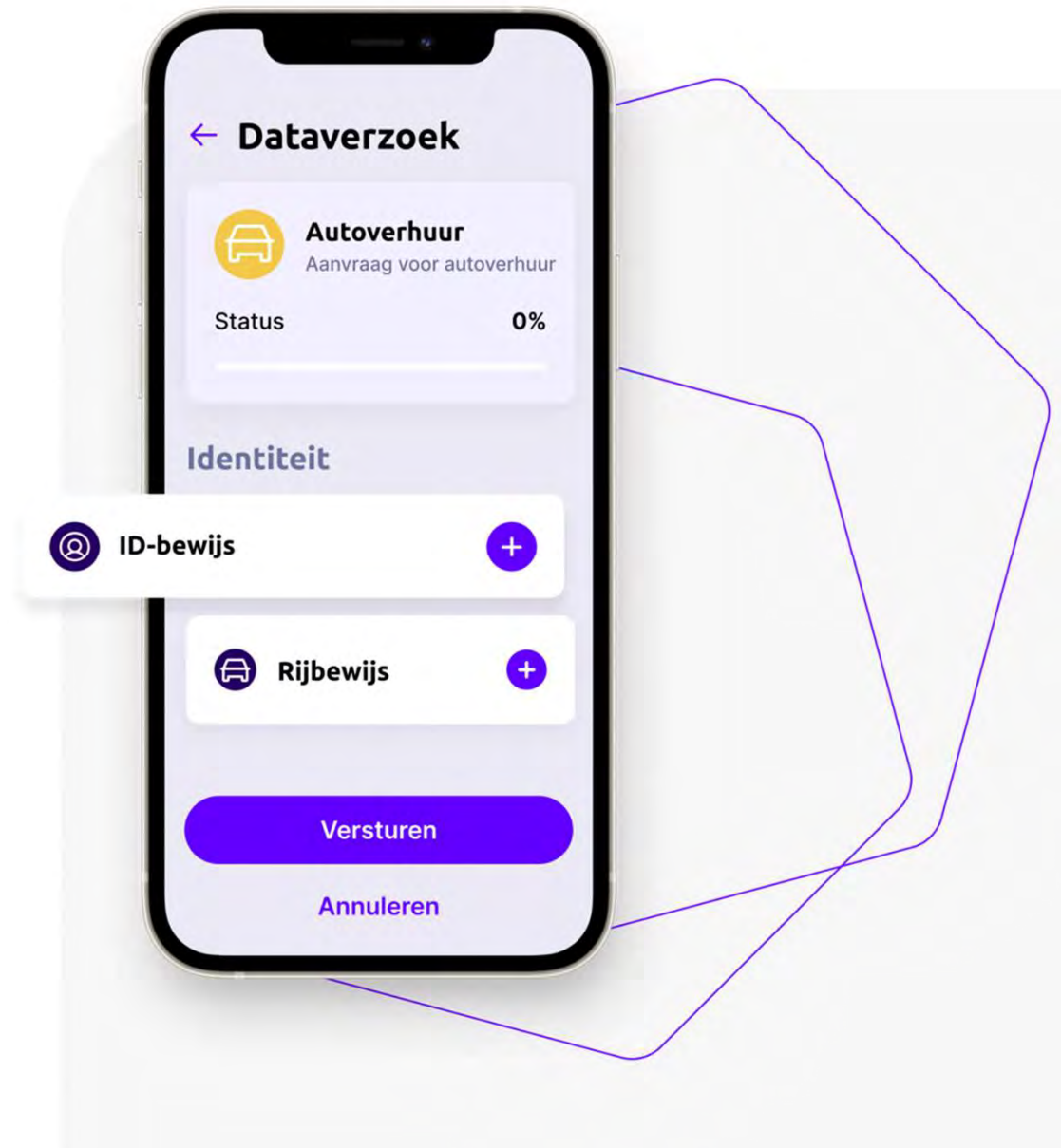


DATAKEEPER

Sharing knowledge regarding use cases & UX

4 years of lessons learned in developing an
identity wallet in the Netherlands

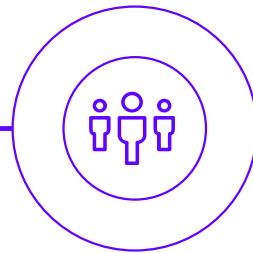
V1.0



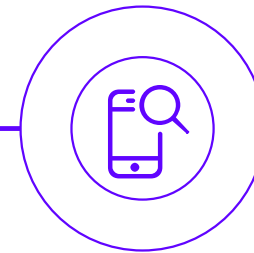
Agenda



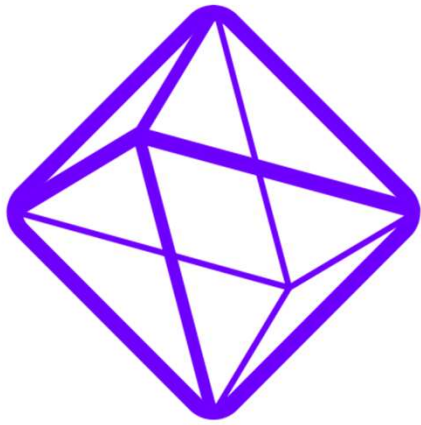
INTRODUCTION
DATAKEEPER



USE CASES



UX RESEARCH



Datakeeper's mission

Datakeeper's mission is to give consumers control over their own data. Datakeeper is a digital data safe in which you can keep all your data simple and safe and share it with parties you trust.

Datakeeper is the Dutch Data Sharing & Identity Wallet offering benefits for consumers and businesses

Benefits for consumers

A personal digital wallet, in which validated data such as identity, income, age and address are **securely stored on people's own mobile device** and nowhere else. Allowing people to **easily share** the right and only most necessary data with the parties they trust. Putting people in **full control** of their personal data, ensuring **data minimization and consent** management.

Benefits for businesses

Organizations are able to easily, quickly and securely receive **only the most necessary** data from customers or employees. Directly from the source, so they can be sure its **correctness and accurateness** which accelerates the whole process and makes it GDPR proof.



A split into 5 different propositions

Datakeeper Login	Datakeeper Age check	Datakeeper Proof of identity	Datakeeper Onboarding	Datakeeper Financial check
<ul style="list-style-type: none">• Enable organizations and consumers to login to online services or websites, through simply scanning a QR code, or mobile deep linking. This eliminates the need for creating and storing a username and password and other 2 factor authentication solutions.	<ul style="list-style-type: none">• For quick and easy access to physical events, festivals and concerts or when buying alcohol Datakeeper provides a simple age check, where people share their e.g., 18+ or 65+ age credential at the door by scanning a QR code.• <i>Examples of available verifiable credentials: Age, Pasfoto</i>	<ul style="list-style-type: none">• For organizations who need to identify their customers or employees, the Datakeeper ID-check provides consumer's passport, ID card and/or driver's license data. Through a liveness check the holder of the wallet can be remotely identified.• <i>Examples of available verifiable credentials: Age check + passport details, driver's license details, BSN nr, liveness check, phone nr, email</i>	<ul style="list-style-type: none">• For organizations who are onboarding new customers or employees Datakeeper provides a 'Know Your Customer' check. In the KYC Check Datakeeper can provide any combination of data necessary for your specific KYC process.• <i>Examples of available verifiable credentials: ID check + address, IBAN nr, BRP family records, signed contract</i>	<ul style="list-style-type: none">• For organizations who provide loans, mortgages or leasing products Datakeeper provides a highly valuable range of financial data.• <i>Examples of verifiable credentials: Onboarding & KYC check + employment income, pension income, PSD2 based net income & expense reports, savings, investments, properties and debts</i>

Datakeeper products

Data points per product

	Login	Age check	ID check	Onboarding & KYC check	Financial check
Authentication token	✓				
Date of birth		✓	✓	✓	✓
Pass photo		✓	✓	✓	✓
First name			✓	✓	✓
Last name			✓	✓	✓
Document number			✓	✓	✓
BSN personal number			✓	✓	✓
Document issue date			✓	✓	✓
Full Passport, ID-car, Driver's License			✓	✓	✓
Email address			✓	✓	✓
Phone number			✓	✓	✓
Liveness check			✓	✓	✓
Sign contract				✓	✓
IBAN number, holder				✓	✓
Name, address, date of birth (BRP, iDIN)				✓	✓
Income information (UWV, Tax authorities, Pension)					✓
Net Income & expense reports (PSD2)					✓
Equity savings & investments					On request
Properties & WOZ					On request
Tax authorities' debts					On request
DUO student debts					On request

Financiën

- Woonlasten betalingscheck +
- Bankrekening +
- Inkomen +
- Arbeidsverleden & Loon +
- Pensioen +

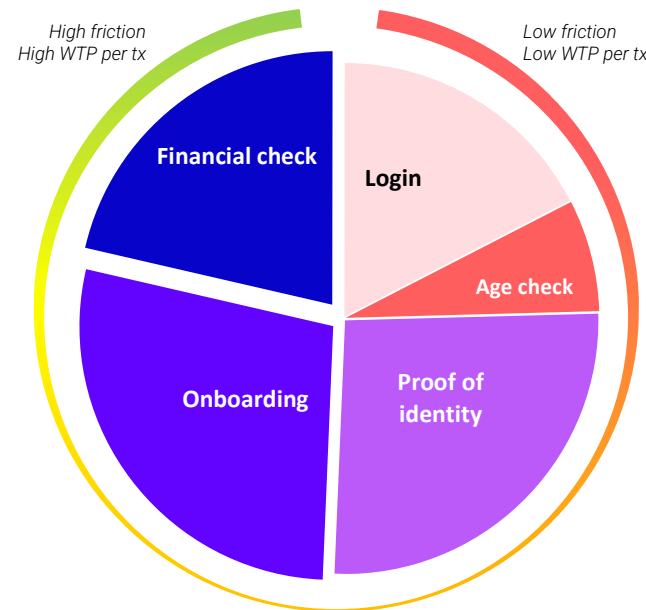
Mijn Identiteit

- Paspoort +
- Rijbewijs +
- ID kaart +
- Persoonsgegevens van bank +
- Liveness check +
- BRP gegevens +
- Telefoonnummer +
- E-mailadres +

Market size



Segments within serviceable obtainable market



Deep dive on two use cases

Proof of identity

Example: Car rental

Customer already submits identity document & driving license at booking

- Direct screening (& cancellation of bookings)
- Authentic documents, less fraud
- Data minimization – easier GDPR compliant
- Automation of process
- Reduce waiting line in the office

Next step: include address information to reduce fraud even more

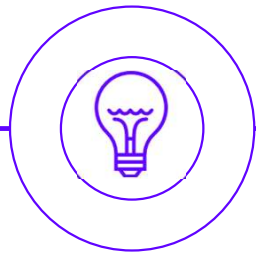
Financial check

Example: House rental

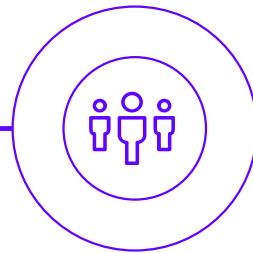
Customer already submits identity & financial data when applying

- Reduces amount of data shared: happy consumer & GDPR compliant
- Control on own data
- Improves speed for customer, less uncertainty
- Better & smoother allocation of houses (with the right data set)
- Reduces fraud
- Reduces data processing time, mistakes & cost
- No incomplete files anymore

Agenda



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UX RESEARCH

Datakeeper & UX

Way of working



"Design is a way of thinking"

Datakeeper & UX

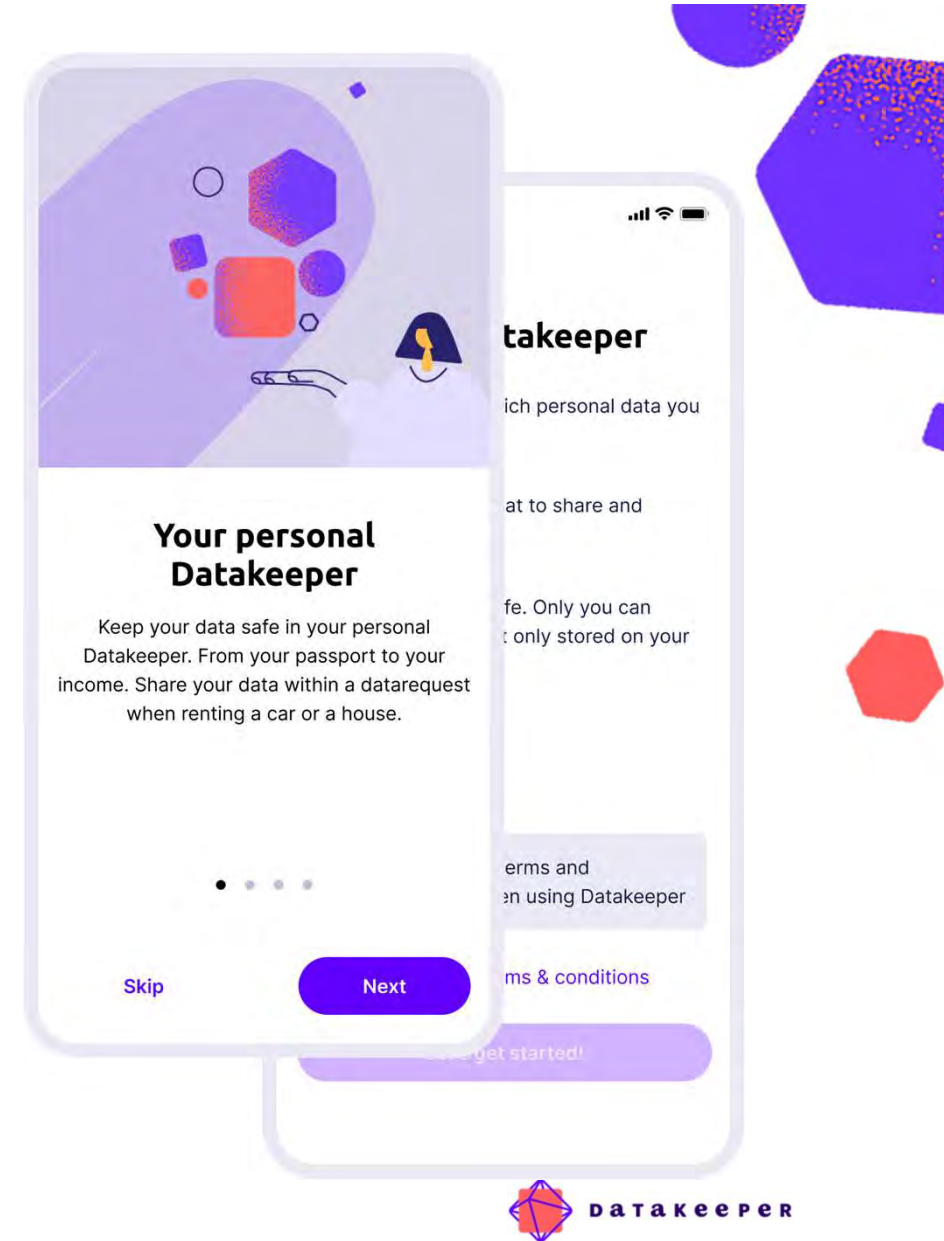
You are in control

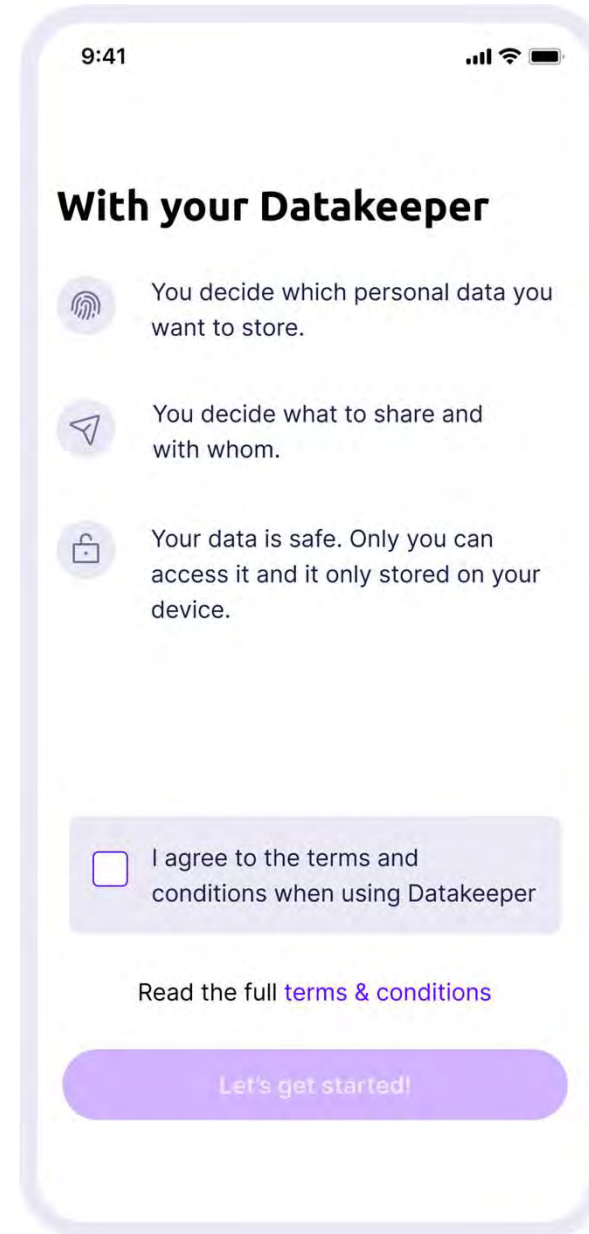
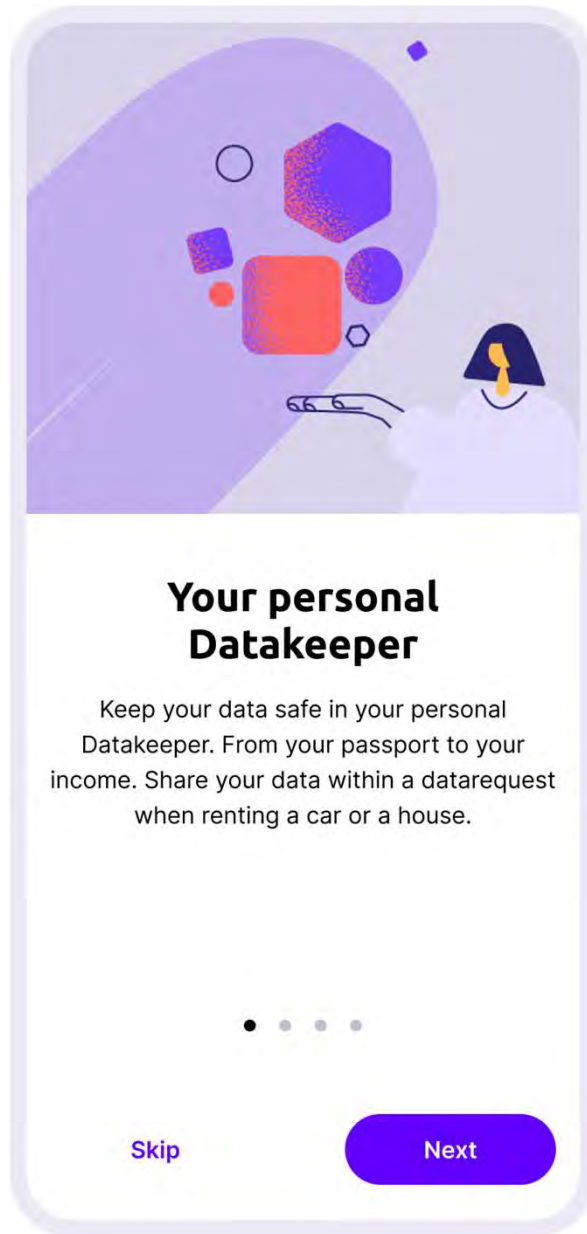
Your data your control

- We provide information to the user during the onboarding what the app can be used for, such as use cases
- We let the user know the data is only stored on their phone/device and they are the only ones that can access it.

Iterating process

- Design is ever-changing as we always collect feedback from our users.





Datakeeper & UX

Zero Knowledge Proof

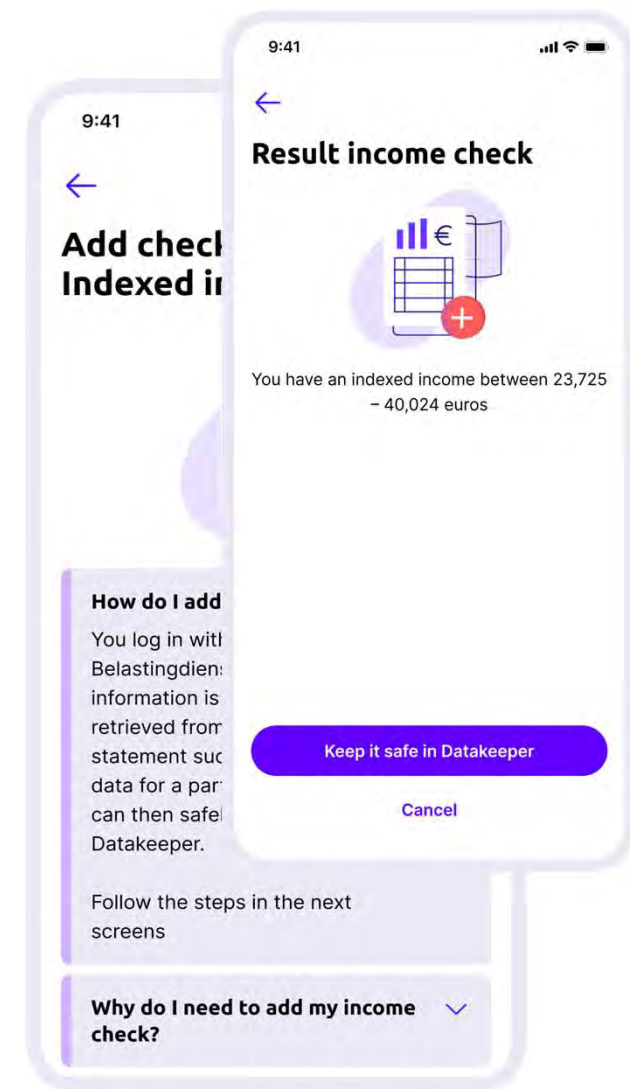
No additional information needed

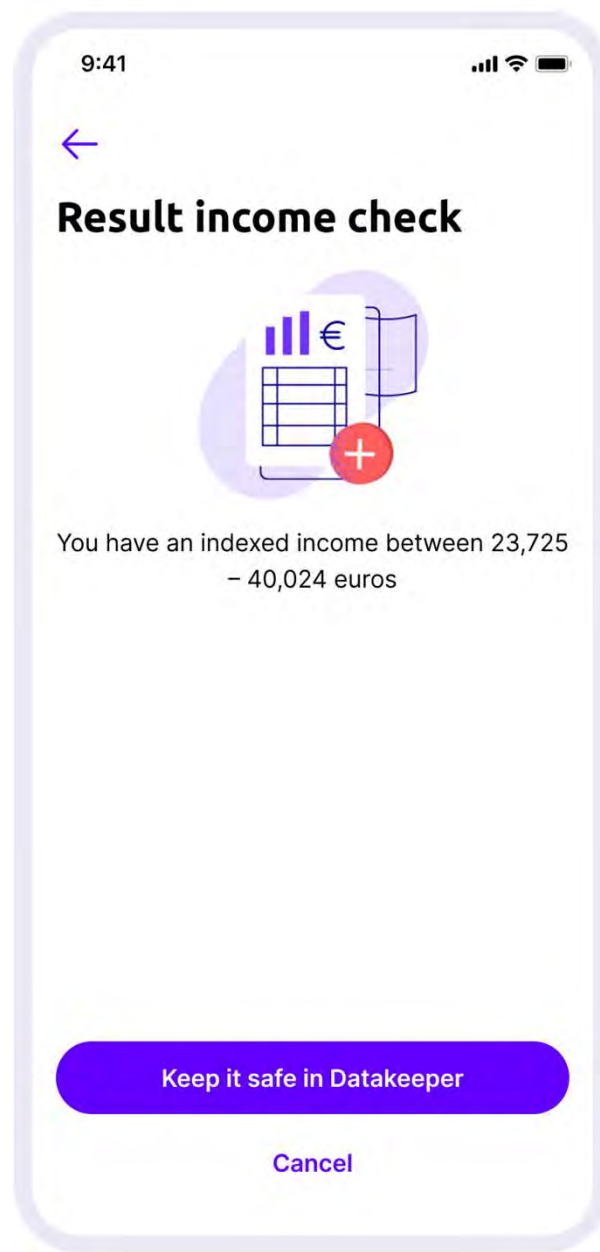
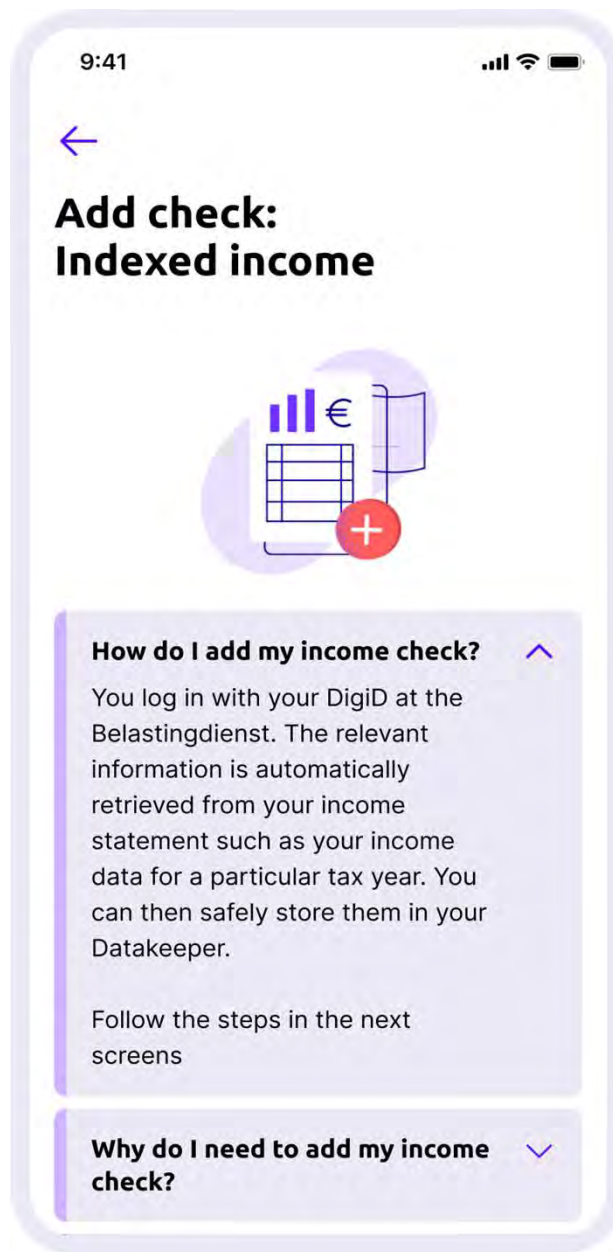
- We use the Zero Knowledge Proof technology for organisations to prove a certain (range of) age or income of a user without sending any additional information besides the fact that the statement is true.

- YES he is above 18 years old.

GDPR PROOF

- Data minimization is automatically applied when no data is shared apart from a YES or NO.





Datakeeper & UX

NFC technology

New technology

- The NFC chip is for a lot of Dutch/European citizens still a new technology which are not aware of
- Users have difficulty with scanning the MRZ of their passport.

Make it visual

- Many of the users will not read, therefore it is important to make it visually appealing. We are A/B testing this.
- For new and different technologies, it is important to take the user by the hand and help them step by step.



Step 1. Scan holder page

- Provide adequate lighting in the room where you are
- Scan the holder page of your passport with your phone's camera



Step 2. Read the chip

- Remove your phone case
- Place the top of your phone on your passport



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Questions?

