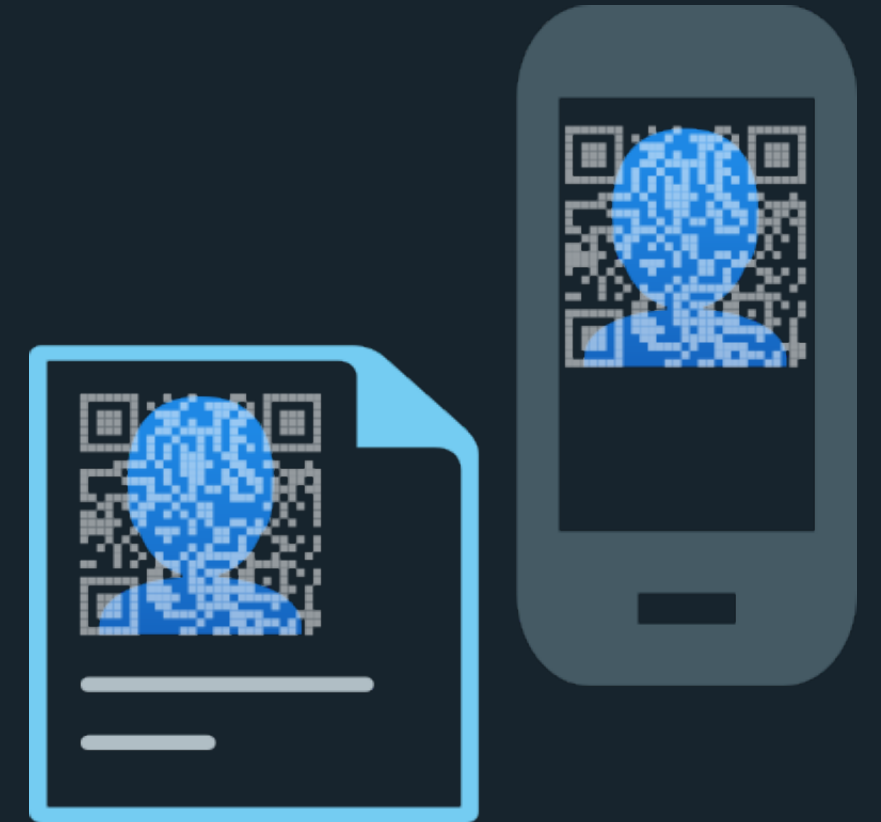


JABface

Simplifying Verification Processes for Personal Documents

SmartCard Forum Schweiz, Herbstevent, 8. November 2023



Dr Markus Mederer, mm@monkeyfirst.ch, +41 79 364 24 85
Monkeyfirst AG, Winterthur, CH

Personal Document Verification Today



<https://www.ticketpay.de/ticketpersonalisierung>

Motivation

Zufriedenheit ist die
Feindin des Fortschritts.

Innovation cheque supported by



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Innosuisse – Swiss Innovation Agency



Deniz Mederer, Co-Founder

PhD in Biology, worked in research,
science transfer, PR and with children.



Markus Mederer, Co-Founder

PhD in Information Systems, founded his
first Business and IT Consulting firm in
2011, designs solutions for banking.

About us

We built up a small reliable **network** from scratch, with **research**
and **implementation partner** and relevant **market players**.
We **received** Innosuisse **funding** and gained **insights** into current
market challenges during evaluation. Deniz' **communication** and
Markus' **prototyping** skills let us **react quickly** on such **opportunities**
and build **working prototypes**.

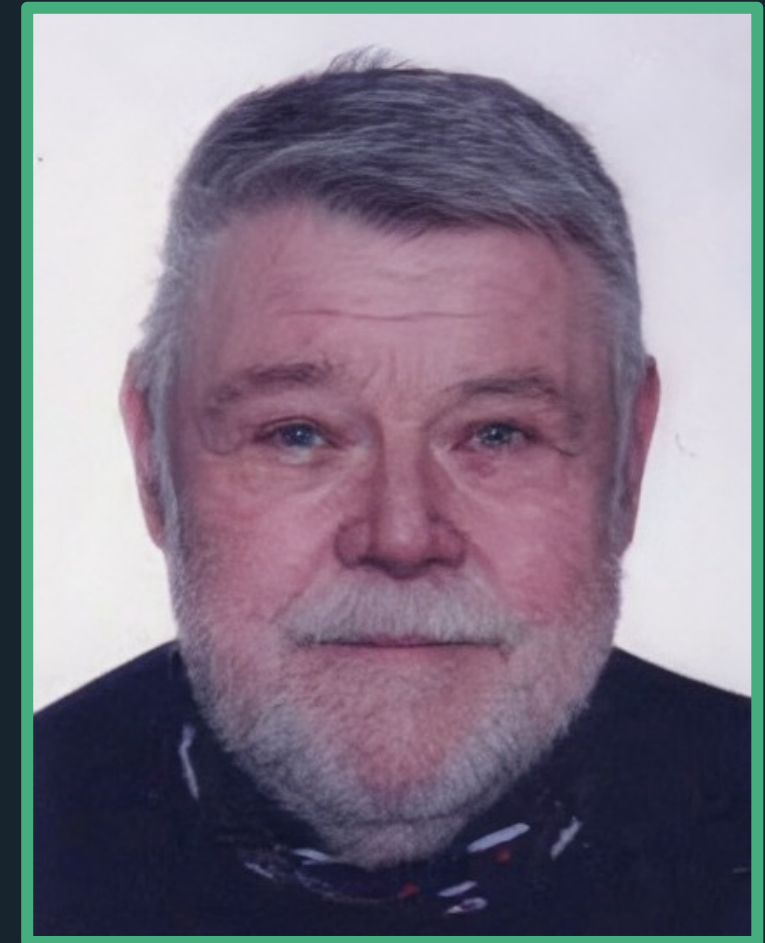
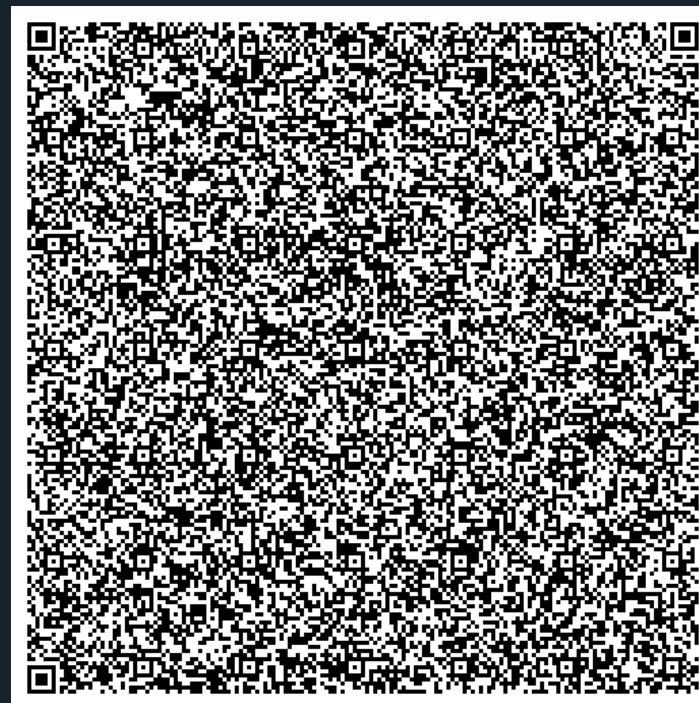
Prof. Dr. Sébastien Marcel
Research Partner, Idiap

What if...

5/22



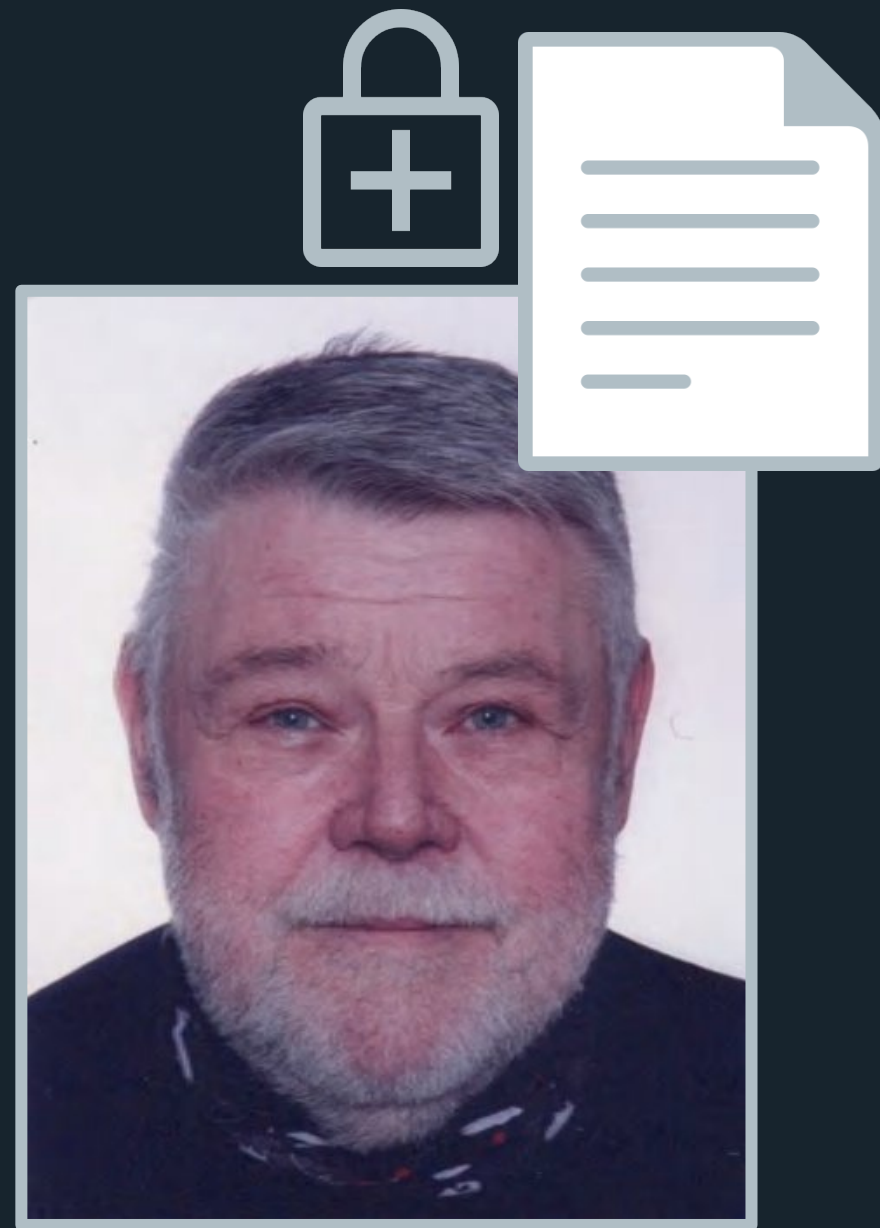
original



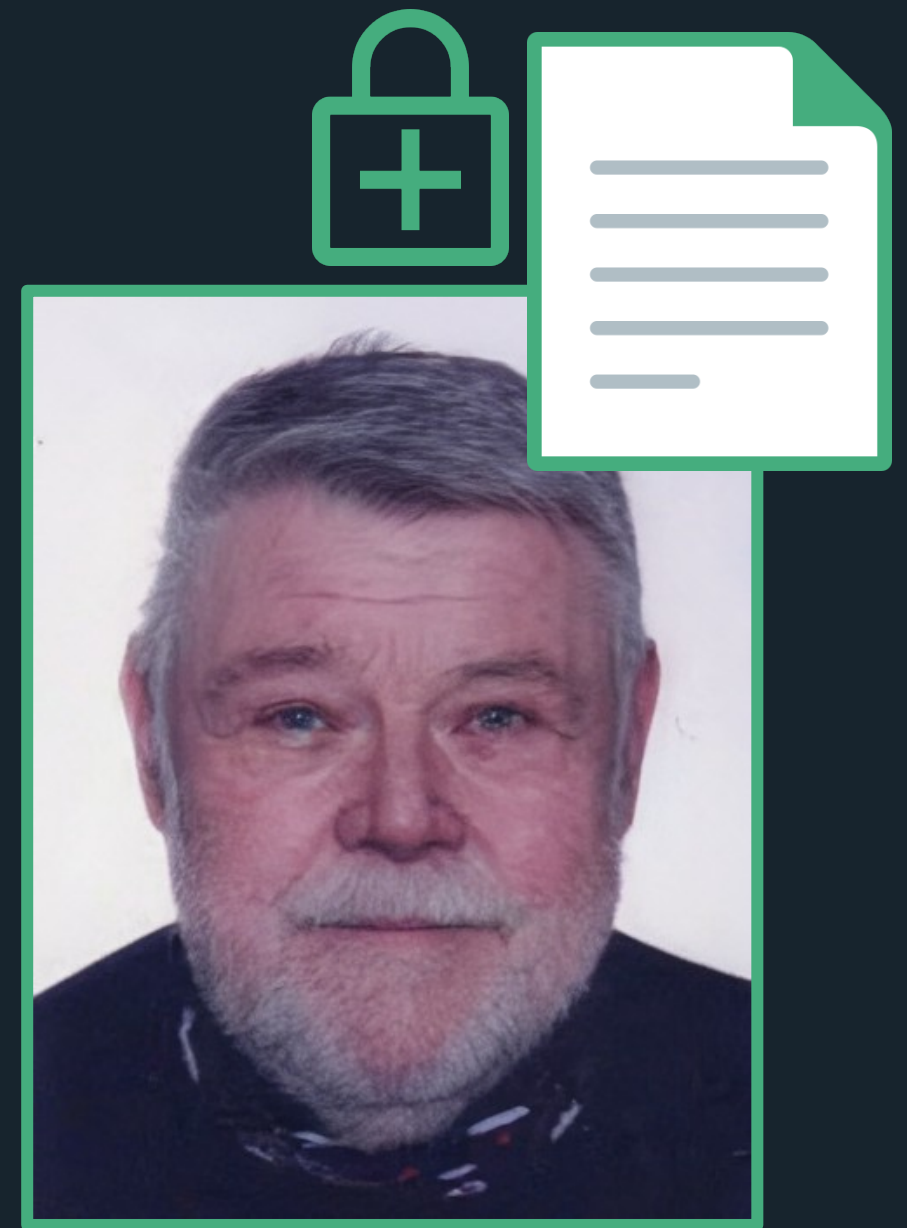
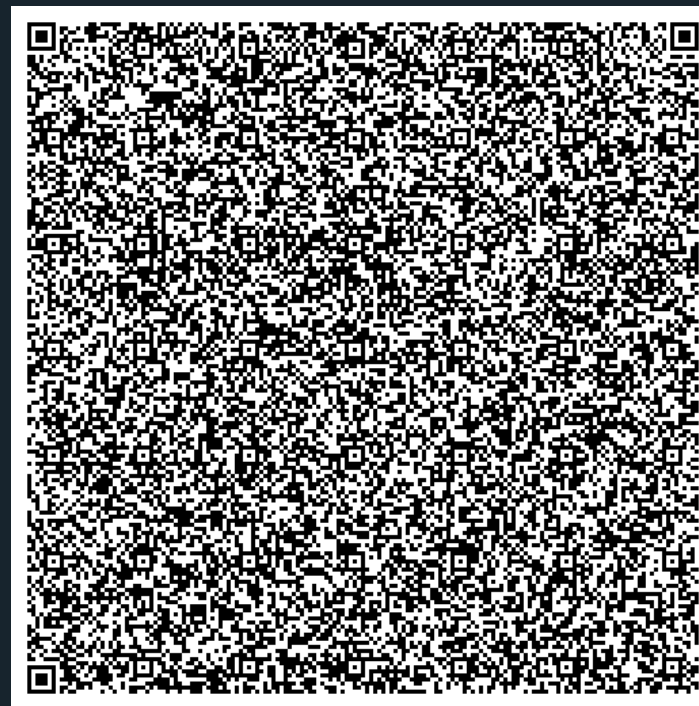
decompressed

...and add Personal Document Data?

6/22



original



decompressed

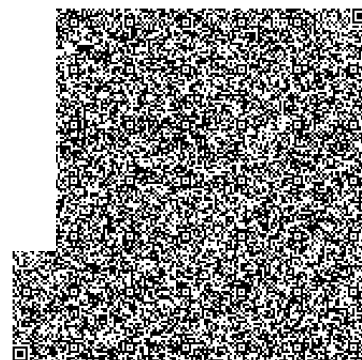
All data required for verification
is stored signed and encrypted in
a personalized QR-Code.

Testset
Karlheinz Zeisig

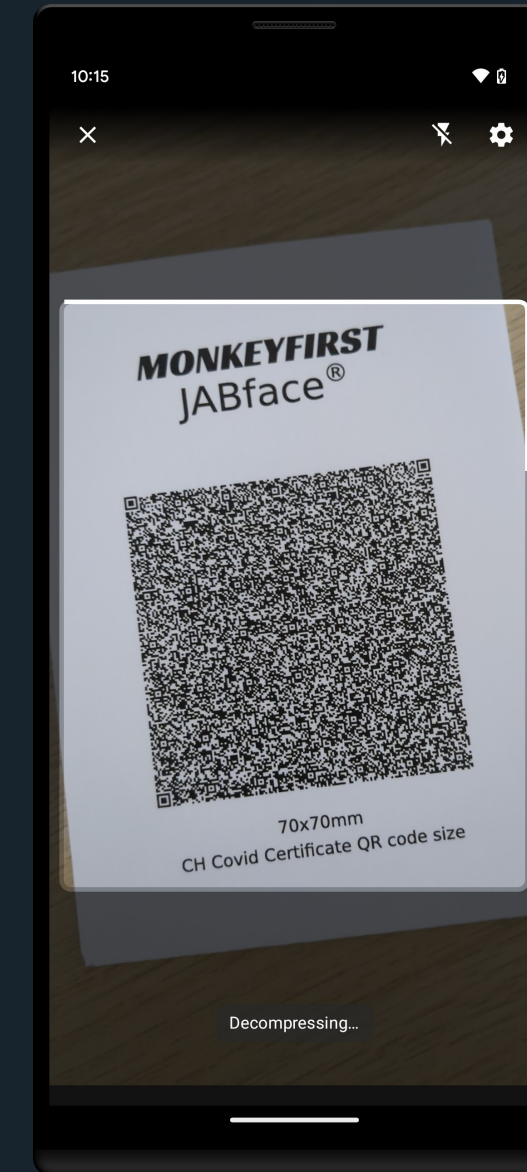


KHZeisigPP.jpg
Original

MONKEYFIRST
JABface®



70x70mm
CH Covid Certificate QR code size



The document is verified **offline** with
the QR-Code. Reading the code
checks the **document's validity** and
the **photo's authenticity**.

Why a QR-Code?

- Printable on and off device
- Issuing is cheap
- Inclusive

Personal Document Data

- Ticket ID
- Cashless Payment Account ID
- Name, Date of Birth
- ...

Personalizing a NFC chip...



<https://www.get.systems/cashless>

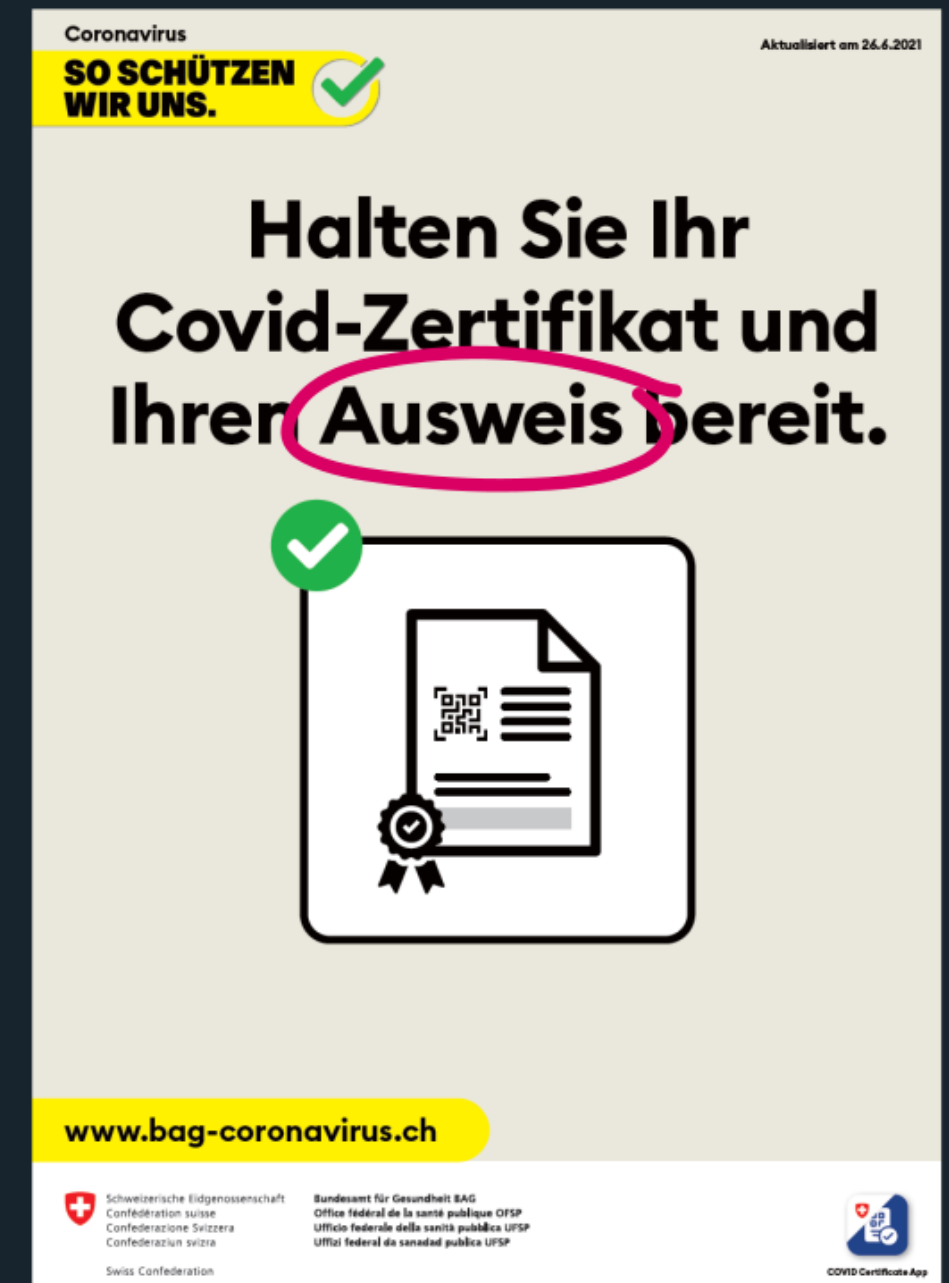
Personal Document Data

- Ticket ID
- Cashless Payment Account ID
- Name, Date of Birth, Place of Birth
- ...

ID Ownership

Not an issue in developed countries.

But how to verify a Personal Document
for a person not having an ID?



How can we make the world a better place for all of us?



Mani with Friends, Kaokoveld Namibia (© Deniz Mederer 2022)

1 Billion

people lack an official proof of identity

1 in 2 Women

in low income countries does not have an ID, limiting their access to critical services and participation in political and economic life.

161 countries

have ID systems using digital technologies, reinforcing the need for robust privacy and data protection safeguards.

<https://id4d.worldbank.org/global-dataset/visualization>

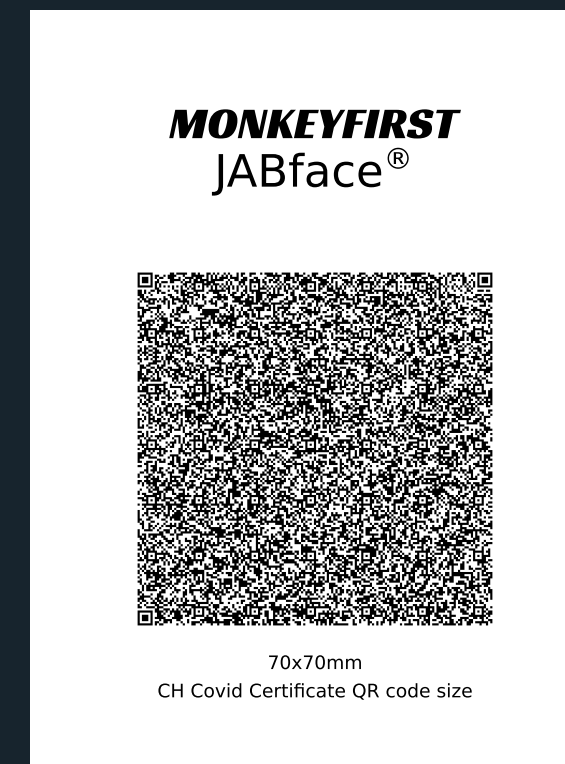
© monkeyfirst.ch

Not having an ID can

- exclude from financial services, applying for a job, financial government support, voting in elections,
- prevent from obtaining a SIM card or mobile phone service, receiving medical care.

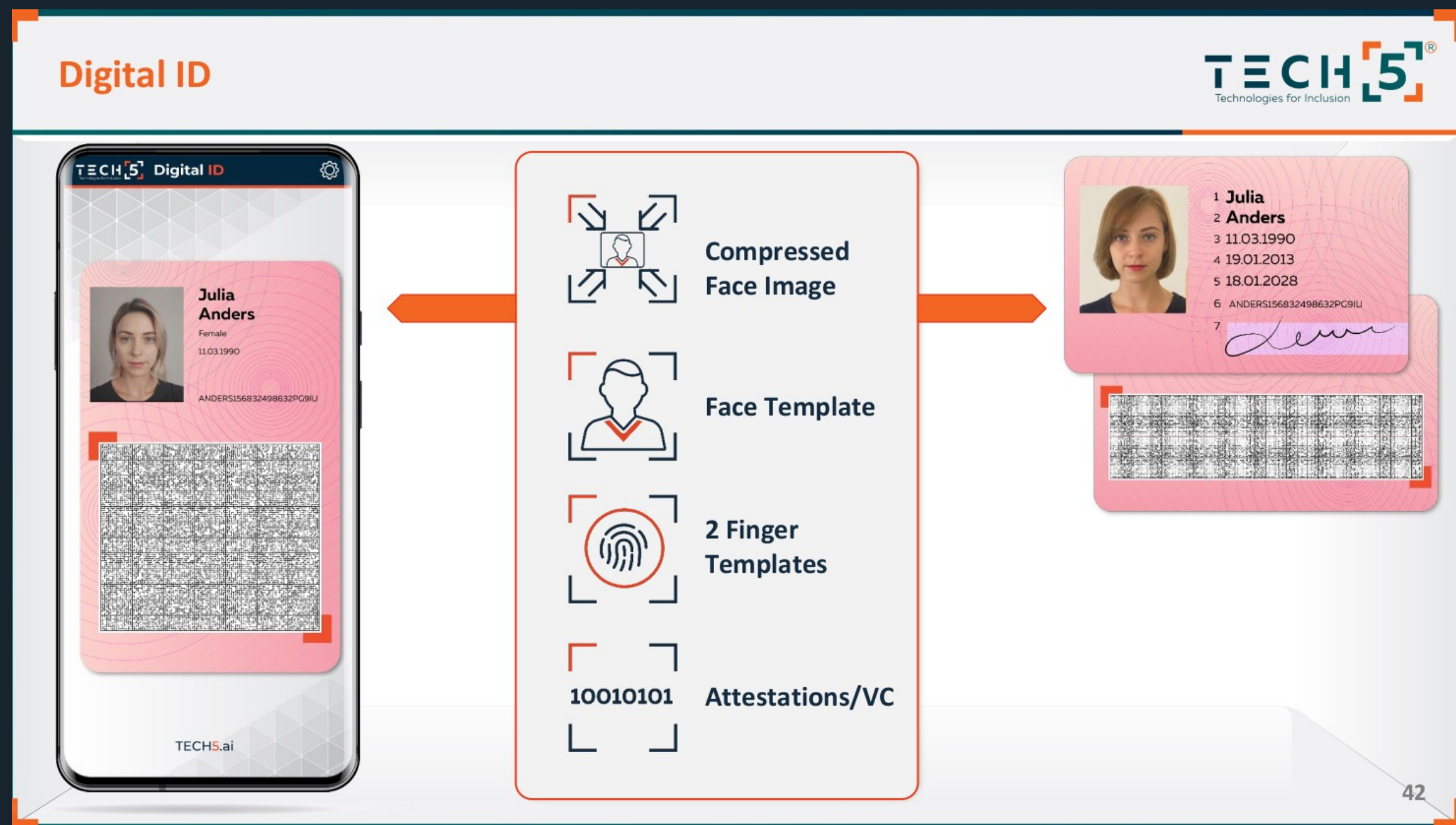
Digital Divide

Digital Personal Documents should work for people with **limited digital infrastructure access** or without adequate digital skills.



Solutions exist...

TECH5

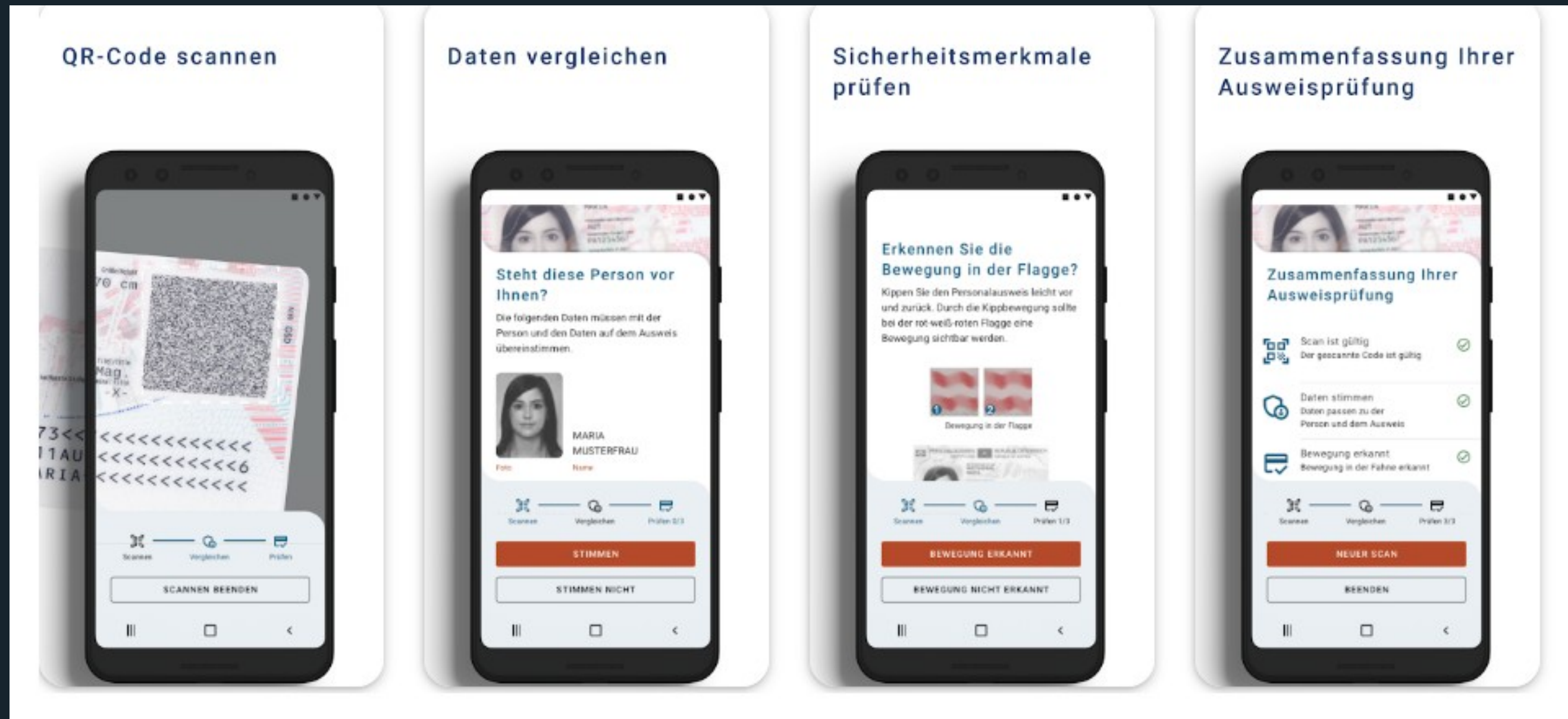


<https://eab.org/events/program/320?ts=1699338081908>

Why an Image?

- Enabling Visual **and** Biometric Verification
- To avoid Patent Infringement
- Patent granted (in US) for Biometric Template in QR-Code

Österreichische Staatsdruckerei



<https://play.google.com/store/apps/details?id=at.gv.bmi.check>

Why an HQ Image?

- To generate a Biometric Template from decompressed Image
- Minimizing the loss in Recognition Accuracy

Research
Partner

Idiap

Community

EAB
TeleTrust
SmartCard Forum

JABface[®] by
MONKEYFIRST

IP

Partner for
Field Test

...

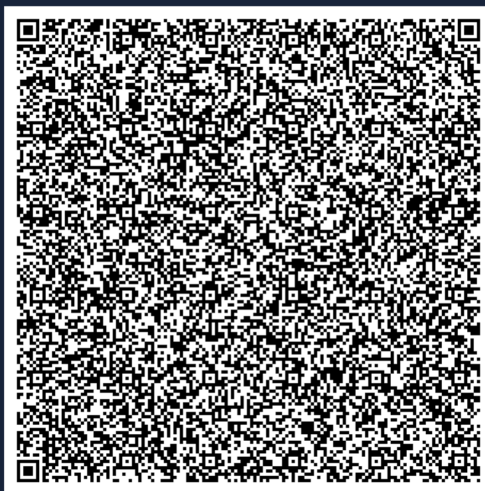
...

Our
Network

Demo@Apéro

JABface®

Just A Beautiful face Verification



50x50mm JF1

ID-1 size 53.98mm

© **MONKEYFIRST.ch**



Scan oder click für die
Android Demo-App.