

ICAO 

2024 
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SYMPOSIUM

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Benefits with live enrollment in Sweden

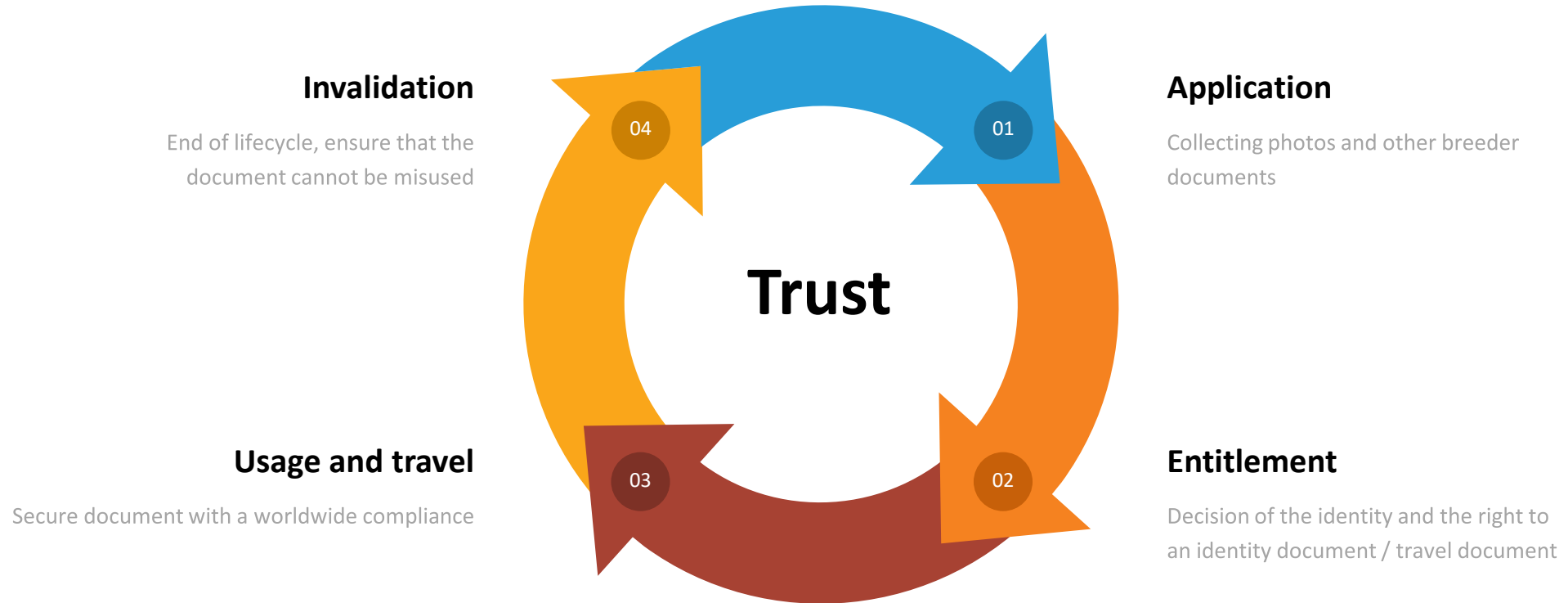
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Lifecycle of a passport



Portrait photos through time

From traditional photos and stamps to electronic documents



1920-1980

Simple paper-based papers and books, gradual enhancement in security features every decade



1980-1998

Hot-foiled security documents, with modern machine readable zones (MRZ) and security ink



1998-2004 and 2005 onward (chip)

Introduction of laminated and polycarbonate ID pages, personalized with laser.

After 2005 the biometric passport were introduced in Sweden



Attack vector changes

Harder to forge documents, the more creative methods are developed to falsify other data such as photos

- Look a Likes (False photos submitted)
- Stolen or forged breeder documents (False registry data)
- Frontmen / Mules (Social engineering)

Not only look a like's

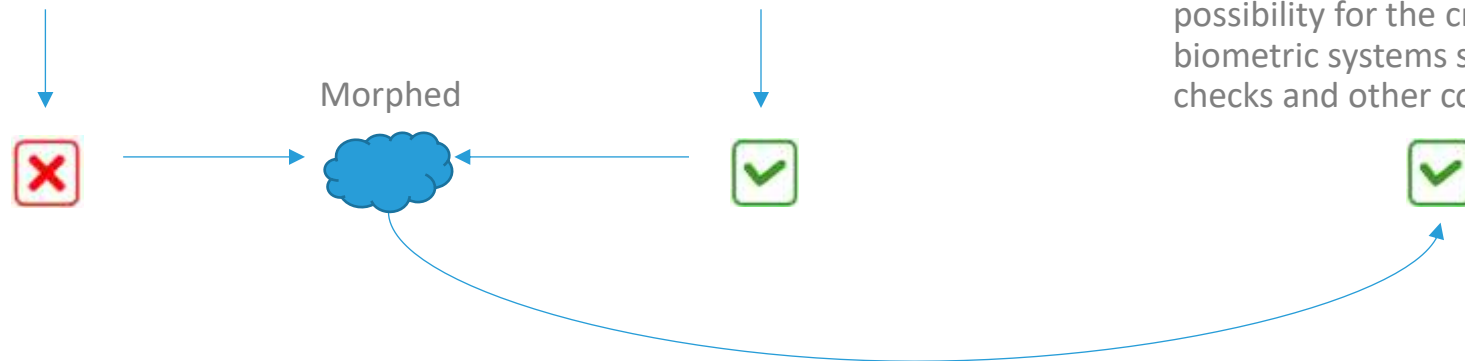
Morphed photos, easy to achieve – hard to detect (Analog and digital submitted)



The criminal

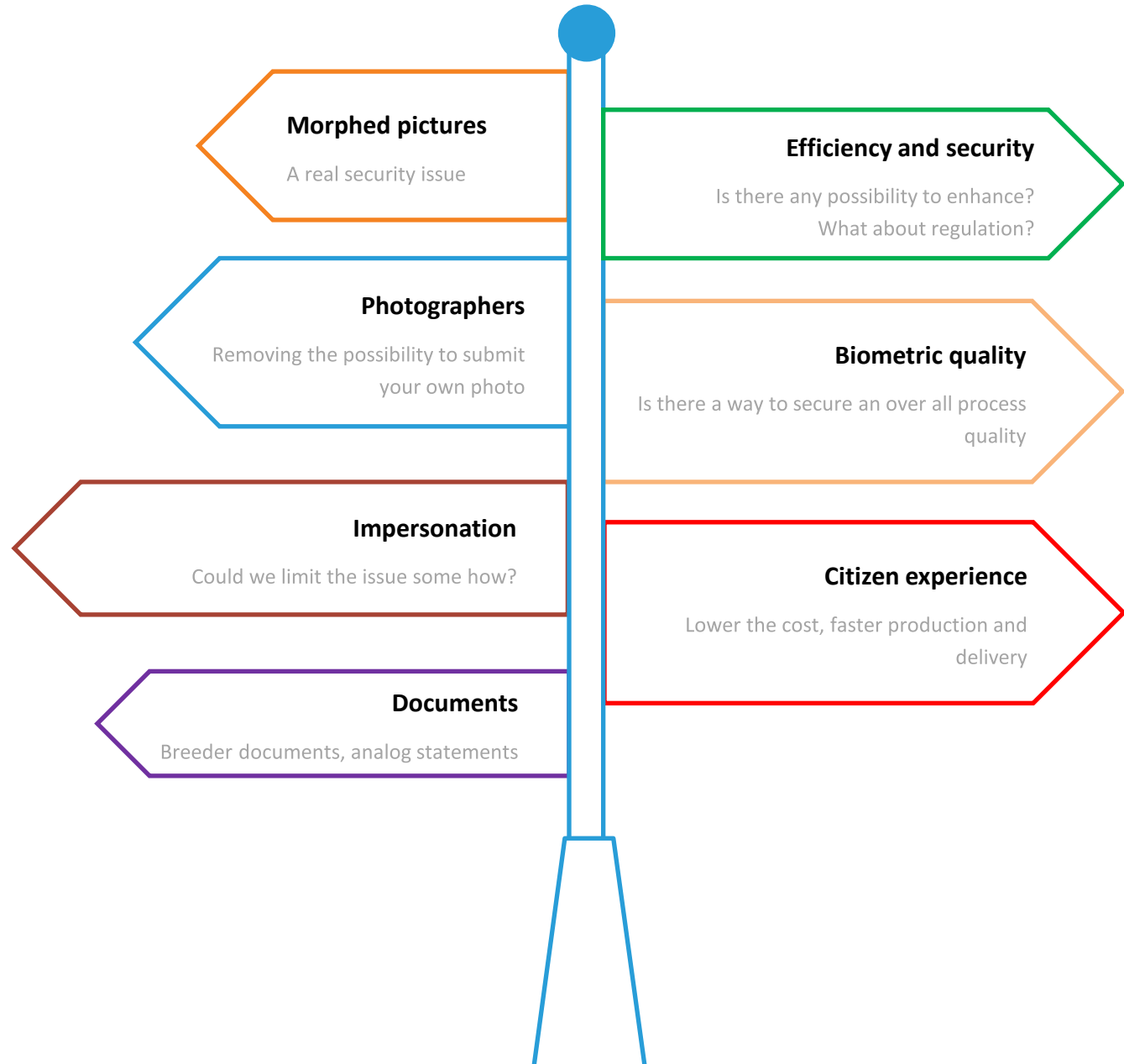
The true identity that is stolen

The morphed picture with the possibility for the criminal to pass biometric systems such as pre-checks and other controls



Change of process - What way and at what cost?

How could the process be more secure
for the citizen and for the issuer of
travel documents



An request to investigate the process was made to the government

Security

- Proof of identity – what data is registred?
- Usage of documents – a clear overview?

Quality

- Efficiency – How to achieve?
- Passport officers – Ease the workload
- Quality of each application – Gain correctness

Service

- Mitigate issues with multiple visits to different authorities and photographers
- Minimize number of different offices to receive applications
- Make it easier for the citizen - One fee, not multiple

ANSÖKAN OM PASS.

VIII

Under åberöppande av de svår, som jag utgör till nedanstående frågor, får jag härmed erhålla ett pass.

Följande tre fotografier bifogas.



Signalement.

Längd i cm (utan skor) 170 cm

Hårfärg mörkblont

Ogonfärg blå

Följande teckenmärken å och ågonfärg ska vara:

Hår: Ljust, mörkt, mörkblont, brunt, svart, grått, vitt, blålila.

Ogon: Blå, grå, blåbrun, brun.

Frågor:

- På vad sätt styrker såhanda sin identitet?
- Fullständigt namn?
- Födelsort och -datum?
- Födelsort, församling och här (resp. motsvarande utländska administrativa områden)?
- Orlovstätt: gift, ogift, skild?
- Titel eller yrke?

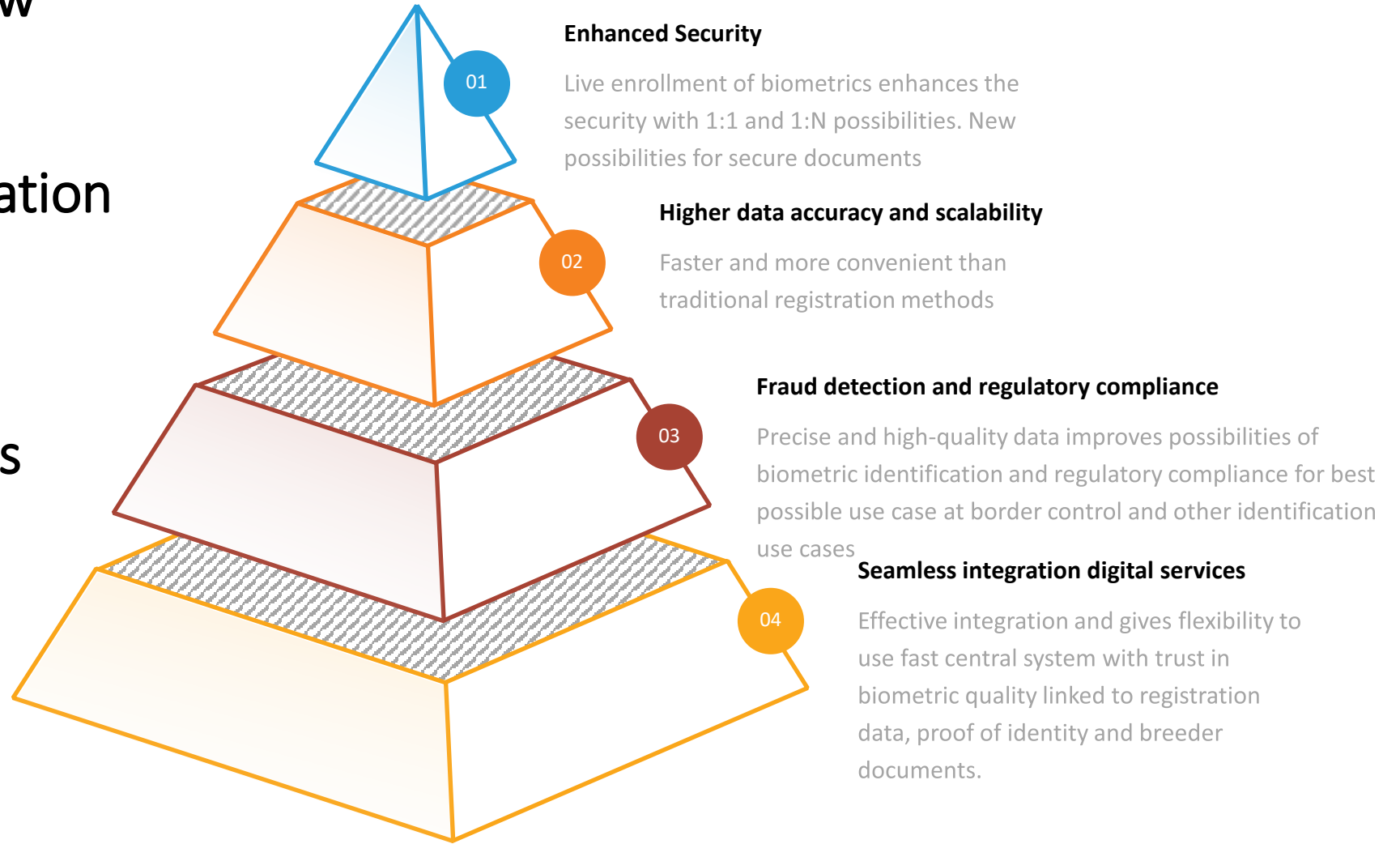
Svar:

Svenskt pass nr. 101 utfordrat i San Francisco den 11 april, 1925 av Kungl. Svenska Konsulatet i San Francisco som giltigt till den 11 april 1940.

- Greta Garbo
- Den 18 sept., 1908
- Katarina församling, Stockholm
- Ogift
- Sjundeapeterska (Aotress)

The result - New concept

A digital application process with biometric live enrollment at passport offices





2004

Proposal new passport law

New system was developed with all-in-one solution for one application. Training were done to 500 officers over one year.

250 biometric kiosks in 110 offices

2002-2003

Preparation legislation – Information about unauthorized individuals to spoof applications, impersonation and more.

Fee 40-45 euro in total – deliverance 2-4 weeks

790.000k citizens paper applications/ year



2005

Adoption of the passport law

An agile approach actually made it possible to collect data before 2005, ahead of the time schedule.

Fee 40 euro – deliverance 1 week

First 800.000k citizens enrolled/ year



2012

With full control of the portrait pictures enrolled there was possibilities with next level enhancing of security features in passport and identity cards security features

Deliverance 1 week

Now - 250 biometric kiosks in 110 offices



2009

Fingerprint biometrics mandatory collected, stored on passport chip together with portrait photo. Swedish embassy's now have live enrollment world over.

1.000.000 citizens enrolled/year



2015

New addition to passport law, limiting the amount of possible applications per documents validity period.

Now – 290 biometric kiosks in 110 offices

1.550.000 citizens enrolled/year



2024

Adding electronic services to enhance the secure layers of identity proofing and strengthen the citizen experience

Fee 50 euro – Deliverance 1 week

2.000.000+ applications /year

2019

New equipment, high quality biometric equipment to secure a state of the art quality of biometrics.

320 biometric kiosks in 110 offices

1.900.000 applications /year



Future

Enhance the over all experience of identity management both for citizen and the authority.



Other benefits of live enrollment

1. Enhanced Security – Pictures possible to trace to the document
2. Improved user experience – Takes seconds to photograph the citizen
3. Higher data accuracy – Fast and accurate ICAO quality and biometric test evaluation
4. Fraud detection and regulatory compliance – Look a likes in applications eliminated, morphed pictures eliminated
5. Seamless integration with digital services – Can be used with security features in passports and identity cards as well as within the identity systems and future services as DTC

Increasing trust over time



Over time - historical data with high trust



1 Photo

2 photos

3 photos

4 photos +

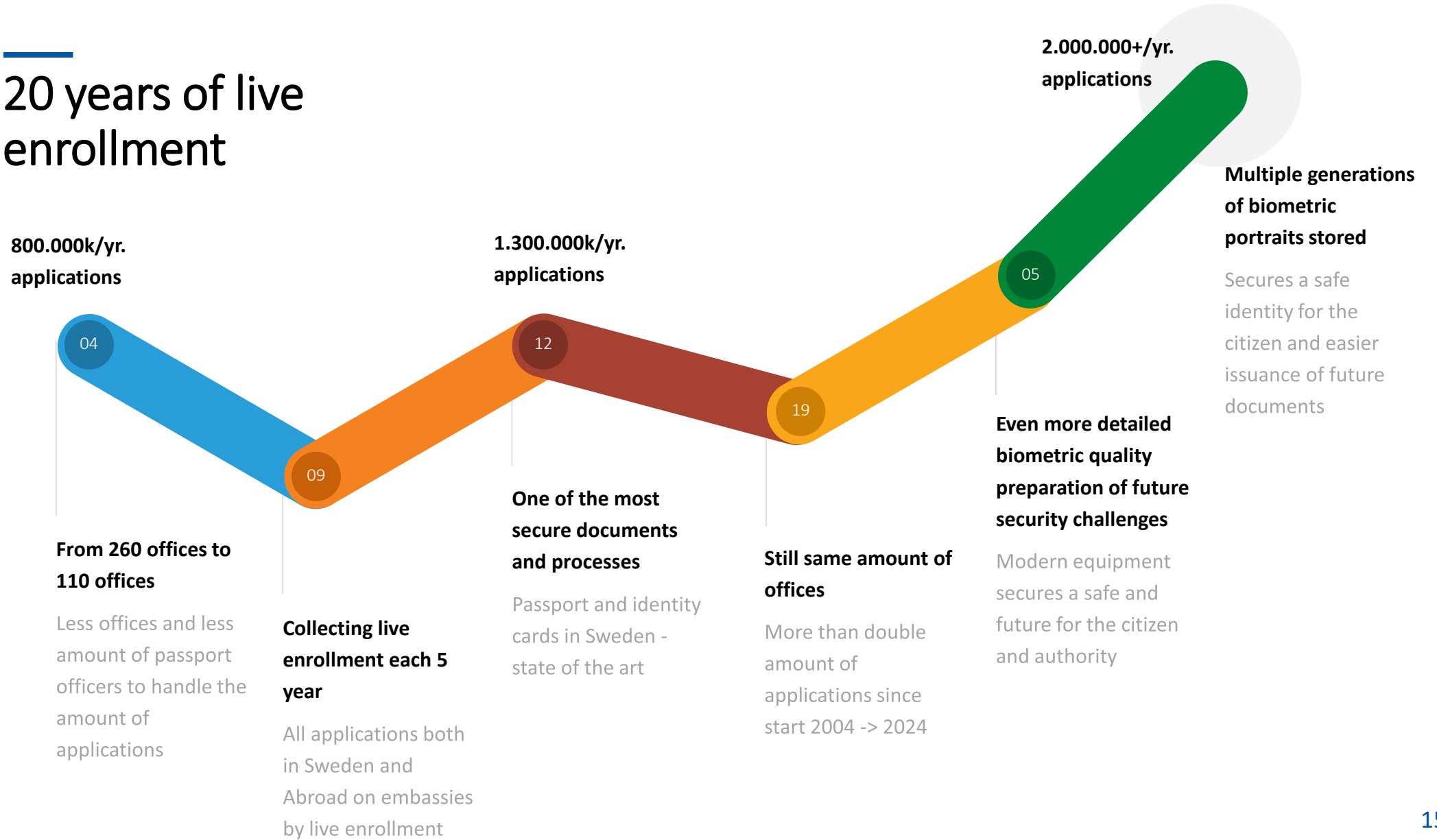
2005

2010

2015

2020

20 years of live enrollment



Thank You

