



BANKSERVAFRICA

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# DIGITAL IDENTITY

## THE SOUTH AFRICAN STORY

Fri, 20 August 2021



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- Elements of Digital Identity and use cases developed globally
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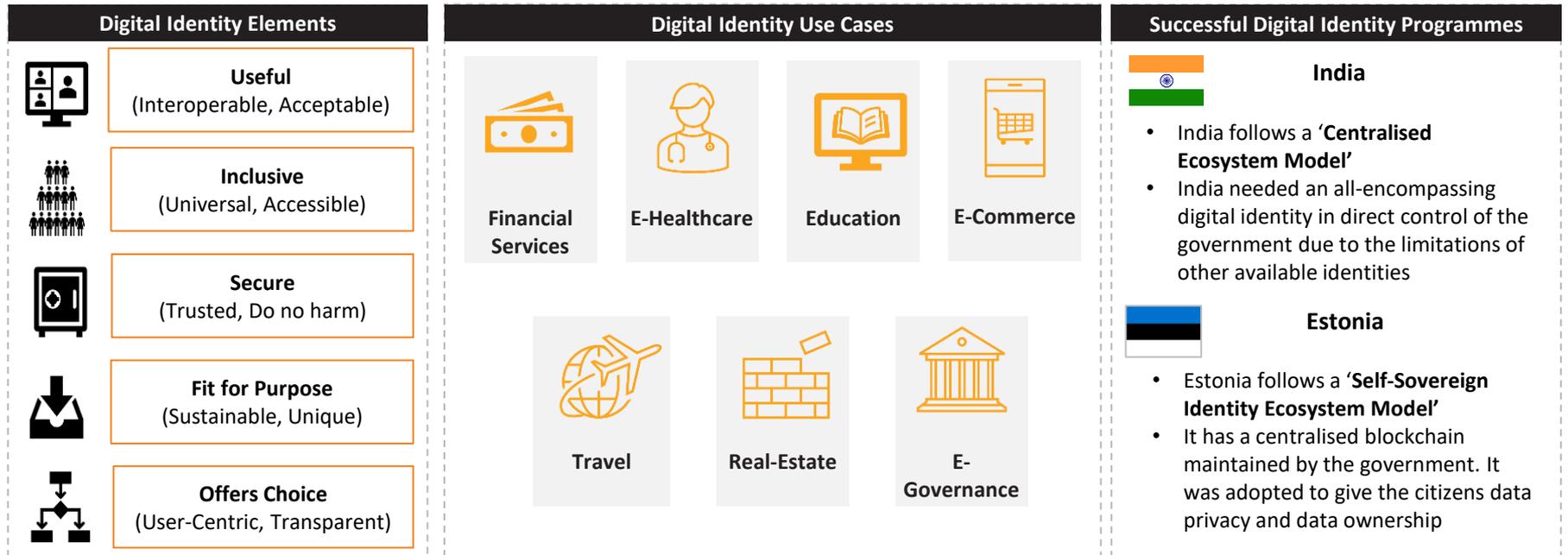
## 2. Need for Digital Identity in South Africa

- Need for Digital Identity in South Africa
- Key initiatives in digital Identity in South Africa, overall approach and outcomes

## 3. Way Forward

# DIGITAL IDENTITY HAS BECOME A CRITICAL ELEMENT OF THE POST-COVID DIGITAL-FIRST SOCIETY

Digital Identity constitutes of a set of electronically captured, stored attributes and credentials that can uniquely identify a person as well as individualise a person in a computer-based environment.



# THERE IS A NEED FOR A SOUTH AFRICAN DIGITAL IDENTITY ECOSYSTEM TO MOVE TOWARDS A DIGITAL ECONOMY

Digital Identity has the potential to unlock opportunities in financial services, enhancing productivity within the economy and simplifying administrative processes

## Digital Identity will enable us to:



### Authenticate

Verify the identity of individuals conveniently and securely with a contactless process



### Improve Reachability

Increase access to various services and employment opportunities as well as enhance productivity



### Drive Innovation

Improve efficiency and enable innovation for public- and private-sector services (i.e., the delivery of social safety nets and facilitating the development of digital economies)

### Benefits to the Economy

- **E-commerce increased by 35% in 2020** and with it increased the need for an online authentication system
- **With 84% of the population dependent on public healthcare services**, digitising these services can improve health provision and generate revenue
- Reduced cost and increased efficiency

### Benefits to the Citizens

- Since 2020, consumers shifted their spending habits to embrace contactless payments and online shopping. **About 86% of consumers now have access to more payment methods**
- Inclusion and convenient access to services
- Improved FICA processes with reduced fraud

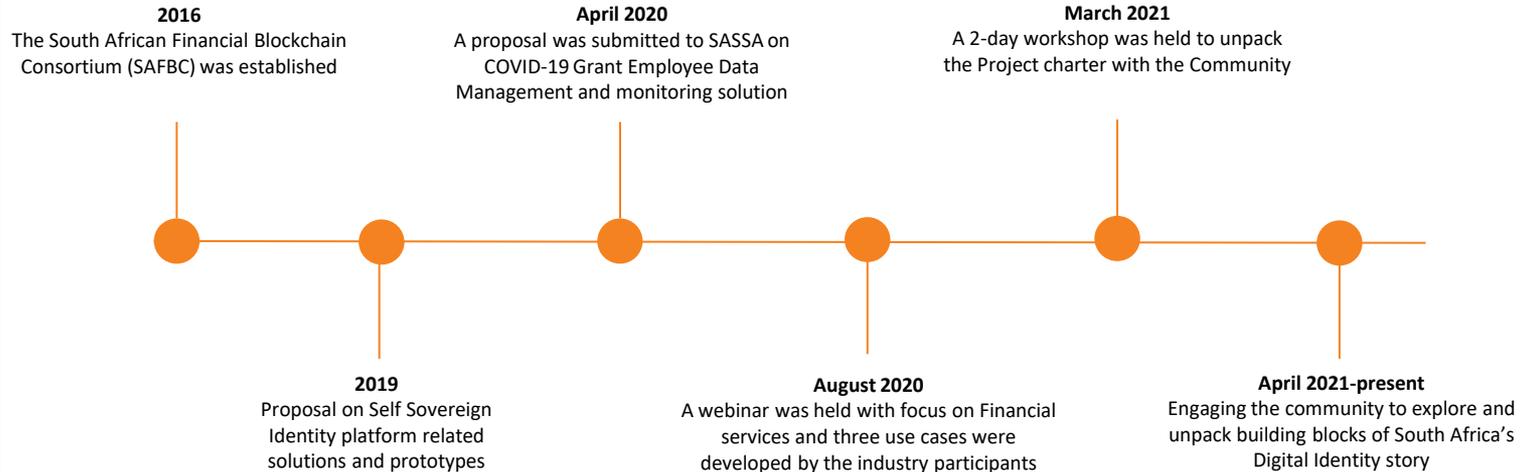
### Benefits to the Government

- Simple and streamlined administrative processes
- **About 61% of the population received some form of Social Grants in 2020**; thus, digitising this process can reduce the long queues at the various access points
- Integrated services across G2P and G2B

# BANKSERVAFRICA WAS APPROACHED BY THE SELF-SOVEREIGN IDENTITY CONSORTIUM TO LEAD THE DIGITAL IDENTITY INITIATIVE

The journey so far

Current Phase



## Project Scope

- BankservAfrica appointed PwC to design a framework for the South Africa Digital Identity story
- PwC supported BankservAfrica in mobilising and coordinating the digital identity community

# THROUGH A COLLABORATIVE APPROACH, BANKSERVAFRICA ENGAGED THE COMMUNITY TO EXPLORE DIGITAL IDENTITY



Guiding Questions and Community Outcomes	
What should be the proposed <b>digital identity ecosystem model</b> for South Africa?	A hybrid ecosystem model that can combine the strengths of both ecosystems – Centralised and Self Sovereign Identity
What should be the <b>key use case</b> for the South African digital identity?	The use cases to explore in the short term are e-KYC, Digital Onboarding and Digital Signatures (Bank ID). The focus areas are Financial Services, Social Benefits and Healthcare
Who will be the <b>key stakeholders</b> in the South African digital identity ecosystem and what will be their <b>respective roles</b> ?	DHA will be the 'golden source' of identity. There could be multiple credential providers supported and governed by a trust framework
What will be the proposed <b>governance framework</b> of the Digital Identity Story in South Africa?	There is a need to appoint a scheme operator/administrator that provides leadership supported by a board to provide oversight
What should be the <b>overall technology framework</b> and considerations?	A Distributed Ledger Technology (DLT) which is scalable, fast and secure. The chosen technology should be tamper-proof and able to avoid cyber attacks or threats

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## Next Steps

1



Publish public report on Digital Identity - A South African Journey

2



Continued engagement with the Digital Identity Community and key stakeholders

3



Develop commercial case for change for some of the identified use cases

4



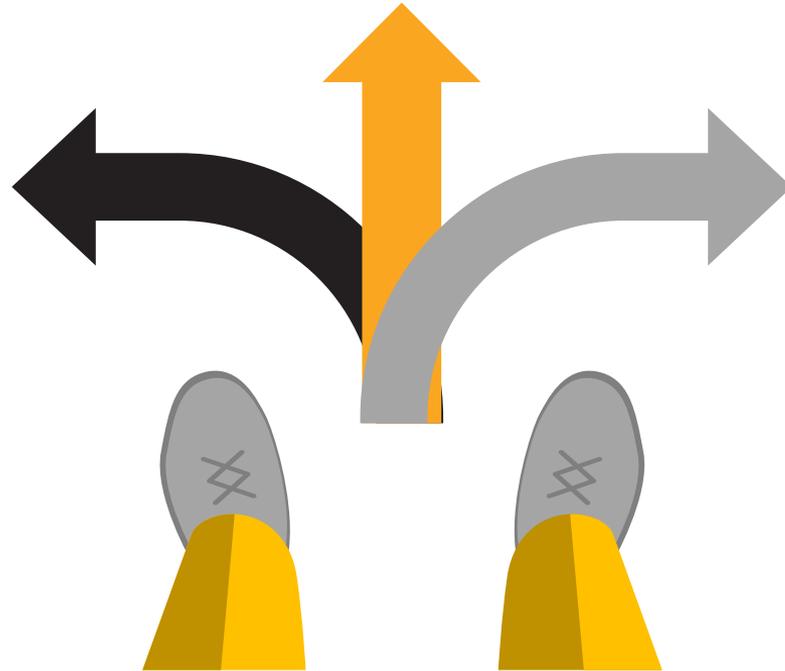
Establish sandbox environment that will be leveraging the technology and development efforts from these platforms that were built by banks and others as part of the SAFBC initiative

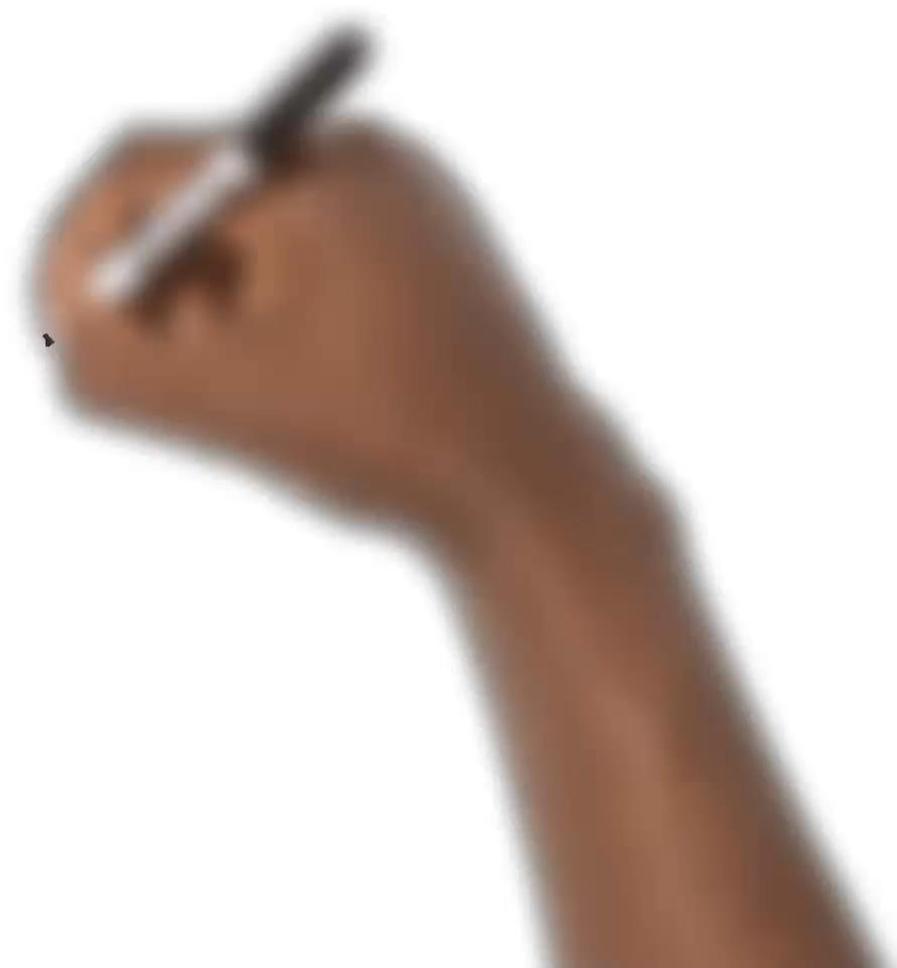
# CALL TO ACTION

1. Buy-in on the commercial case

2. Support from community and enablement

3. Need for ambassadors for driving change within their organisation





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**KEEN TO JOIN THE CONVERSATION?**

PLEASE CONTACT  
THE DIGITAL IDENTITY PROJECT TEAM

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**Thank You**



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# Annexures

# GLOBAL SUCCESS STORIES – INDIA, SWEDEN, ESTONIA



**What digital identity ecosystem model was adopted and why?**

## INDIA

**Centralised Model** - The need for an all-encompassing digital identity due to the limitations of other available identities and direct Government intervention to facilitate the process

## ESTONIA

**Self-sovereign identity Model** - The need give the citizens data privacy and security while maintaining ownership. Implemented with a centralised blockchain maintained by the government

## SWEDEN

**Federated Model** - Although a National ID existed, banks came together to collaborate and create a Digital ID backed by a trust framework from Central Authority



**Who are the stakeholders involved?**

**Central Authority:** Unique Identification Authority of India(UIDAI), **Identity Providers:** Unique Identification Authority of India(UIDAI) , **Identity Operator:** Unique Identification Authority of India(UIDAI), **Relying Parties:** Banks, Electricity Boards etc. and **Enablers:** Enrollers, MEITY

**Central Authority & ID Operator:** Information System Authority (RIA), **ID Providers:** Police and Border Guard, Ministry of Foreign Affairs and **Enablers:** E-Estonia briefing centre, SK ID Solutions

**Identity Authority:** Finanssiell ID-Teknik BID AB; **ID Provider:** 10 Major Banks; **Identity Operator:** Private, Operators (like Signicat); **Relying Parties:** Tax Dept.(Skatteverket), e-comm firms etc. and **Enablers:** Signicat, Private Providers



**What was government's involvement in the DI programme?**

**Monitoring** the issuance of the cards, **introducing** several social welfare schemes around Aadhaar and **managing** data privacy & security

**Oversight** and **issuance** of ID

**Defining** and **regulating** the identity framework as well as **endorsing** providers



**What technology was used in the development of digital identity?**

Biometric Deduplication; Data encryption using two of the most robust public key cryptography encryptions

The underlying architecture is a KSI Blockchain, use SplitKey technology in Smart-ID application

Federated digital ID architecture with SSO schemes that allows a user to access multiple separate services by identifying information established in one security domain

# KEY HIGHLIGHTS OF THREE SUCCESSFUL DIGITAL IDENTITY PROGRAMMES (2/2)



**How long did it take for successful adoption of digital identity?**

## INDIA

Aadhaar was conceptualized in 2006 UIDAI was formed on 2009; the 1st Aadhaar was issued in 2010. As at 2021, almost 1.3 billion Aadhaar has been generated

## ESTONIA

The e-ID was first issued along with digital signature in 2002. Mobile-ID and Smart-ID platform were subsequently launched. Over the years, multiple services have been onboarded

## SWEDEN

BankID started in 2001 when the EU law changed to recognise an electronic signature as equal to a physical signature. With the growth of mobile, mobile BankID penetration in the country has reached 96% as at 2021



**What regulatory and policy frameworks were adopted?**

The Aadhaar Act 2016 is the main law governing Aadhaar (Identity). It includes measures to ensure the inclusion of women, children, senior citizens, persons with disability, unskilled and unorganized workers

The country as part of EU follows all GDPR measures and they have strict policies against misuse of personal data and access to data by entities

A consortium between Swedish's major banks was formed in 2001 and a second framework contract procurement was established in 2004



**What are the accelerators that enabled adoption of the digital identity?**

The Identity programme focused on inclusivity, incentivisation of benefits for public and private sector organisations, improvement in the distribution of social benefits and ensured transparency in enrollment

**Smartphone Penetration:** Smartphone penetration is around 63.13% of the population, which helped adoption  
**Banks leading the adoption:** The two largest banks Swedbank and SEB, were first to implement Mobile-ID for their services

Banks' collaboration to develop the BankID solution and build an integrated ecosystem