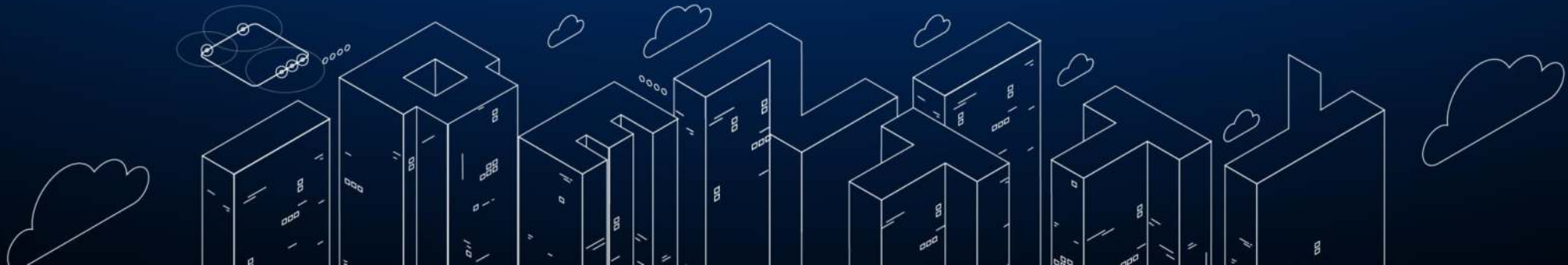




ID4AFRICA2023

AUGMENTED GENERAL MEETING



PS1

10:30-13:30

THE IDENTITY VERIFICATION ECOSYSTEM

DAY 1

S1 | DIGITALIZATION OF SERVICE: IDENTITY USE AT POPULATION SCALE



DR. J. ATICK
EXECUTIVE CHAIRMAN



S2 | ACCELERATING DIGITAL TRANSFORMATION: THE POLICY ROUNDTABLE



AMB. PROF. J. BITOK
PRINCIPAL SECRETARY
State Department for Immigration
& Citizen Services, Ministry of Interior
& National Administration
The Republic of Kenya



MR. E. OWALO
CABINET SECRETARY
Ministry of Information,
Communications & Digital
Economy
The Republic of Kenya

S3 | IDENTITY VERIFICATION: SCALING IDENTITY SUPPLY-SIDE



PROF. K. ATTAFUAH
NIA, GHANA



M. YEJJOU
DGSN, MOROCCO



ENGR. A. AZIZ
NIMC, NIGERIA



T. MALIK
NADRA, PAKISTAN



R. KISEMBO
NIRA, UGANDA



T. SETYABUDI
MHA, INDONESIA



ID4AFRICA

Knowledge You Can Trust

LIVECAST

Simulcast as **EP39**



ID4AFRICA 2023

23-25 May | Nairobi | Kenya

PS1 THE IDENTITY VERIFICATION ECOSYSTEM

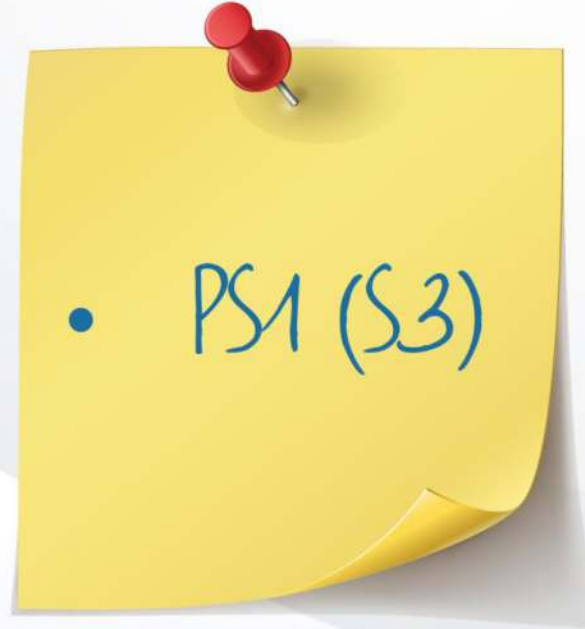
S1 | SCENE SETTING PRESENTATION

DIGITALIZATION OF SERVICE: IDENTITY USE AT POPULATION SCALE



BY DR. JOSEPH J. ATICK
EXECUTIVE CHAIRMAN
ID4AFRICA

BE ON THE LOOK OUT FOR REFERENCE MARKERS



EXAMPLE

THIS INDICATES
THE TOPIC IS
ADDRESSED IN:

PS1(S3)
Plenary Session 1 (Segment 3)



•PS1 (S3)



AFRICA'S IDENTITY DEVELOPMENT JOURNEY

ESTABLISHING IDENTITY



ENABLING USE



IDENTITY AS DPI



IDENTITY VERIFICATION

ESTABLISHING IDENTITY



Enrollment
Data capture

Uniqueness
Deduplication
(1:N Match)



- PS1 (S3)
- PS2 (S3)

VERIFYING IDENTITY

1:1 Matching



Data Rich



High User
Expectations

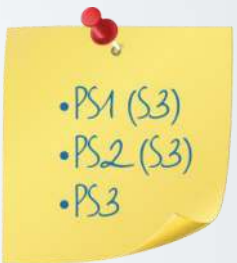


Complex
Ecosystems

IDENTITY VERIFICATION PLATFORMS



1 ELECTRONIC IDENTITY (eID)



CREDENTIAL STORAGE

Electronic chip

TOKEN

Card with a NIN

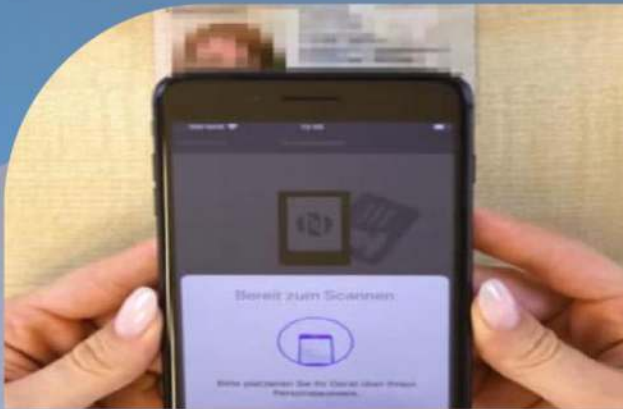
CREDENTIAL PRESENTATION/VERIFICATION

- Primarily decentralized authentication
- Offline functionality

TRUST MODEL

- Secure printing
- Digitally signed credential on electronic chip from trusted authority
- Tamper evident

IDENTITY VERIFICATION PLATFORMS



2 MOBILE IDENTITY (mID)

- PS1 (S3)
- PS2 (S4)
- PS3
- PS4 (S1)

CREDENTIAL STORAGE

Mobile wallet/trusted silicon

TOKEN

SIM/Phone Number linked to NIN

CREDENTIAL PRESENTATION/VERIFICATION

- Primarily decentralized authentication
- Offline functionality

TRUST MODEL

Derived from eID + mobile phone's secure element

IDENTITY VERIFICATION PLATFORMS

3 DIGITAL IDENTITY

- PS1 (S3)
- PS2 (S1)
- PS4 (S2)

CREDENTIAL STORAGE

Central database (cloud)
+ Mobile

TOKEN

- NIN
- App generated Token/No.

CREDENTIAL PRESENTATION/VERIFICATION

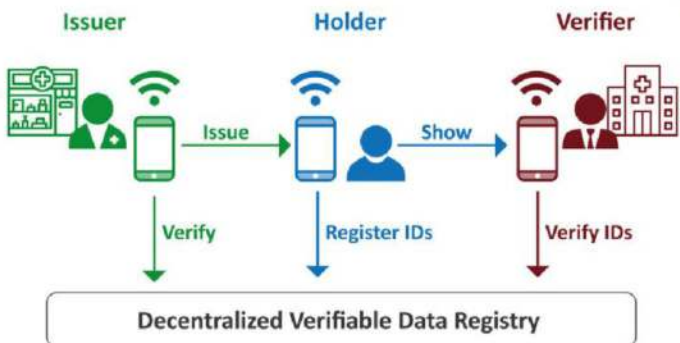
Centralized verification

TRUST MODEL

Matching against trusted database



IDENTITY VERIFICATION PLATFORMS



4 DECENTRALIZED DIGITAL IDENTITY

- PS2 (S4)
- PS3

CREDENTIAL STORAGE

e-Wallet

TOKEN

Derived-- Sector/service specific No.

CREDENTIAL PRESENTATION/VERIFICATION

Decentralized through verifiable credentials (VC)

TRUST MODEL

VC cryptographically signed by authority



PKI

Preprerequisite for identity verification schemes



•PS.2 (S4)

IDENTITY CREDENTIAL AS VERIFIABLE ATTESTATION



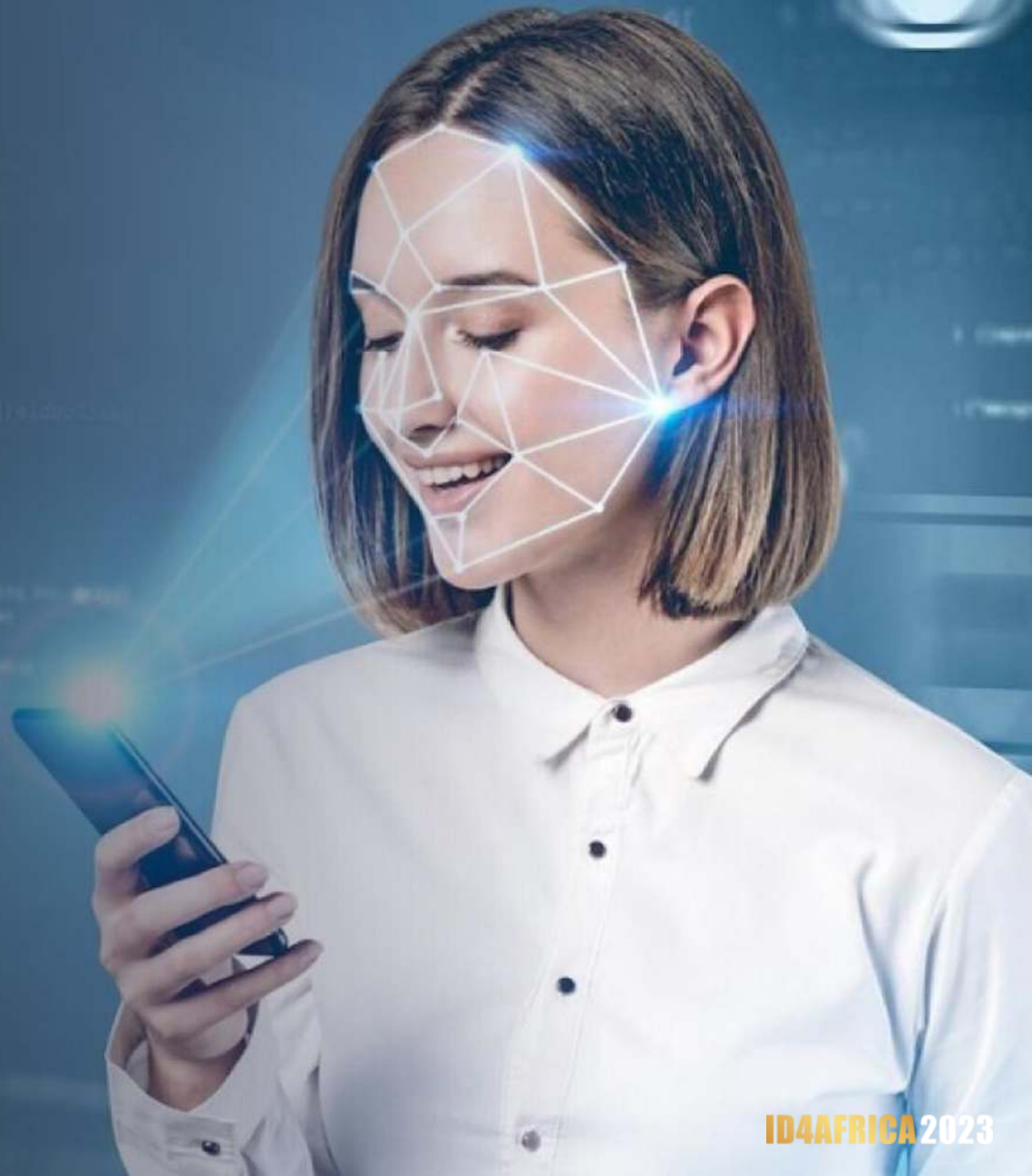


BINDING THE CREDENTIAL

- PS3
- PS4 (S1)

BINDING THE CREDENTIAL

(FACE SELFIE AUTHENTICATION)



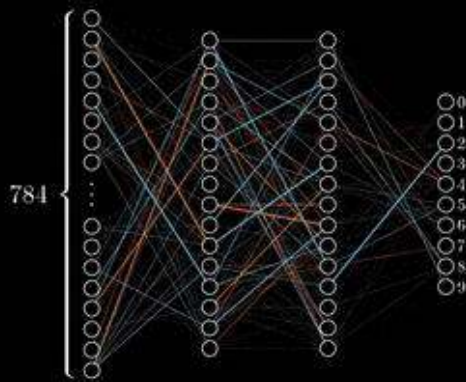


FACE SURVEILLANCE



•PS3

Training in progress...





**ALGORITHMIC
BIAS**

COUNTER MEASURES INCLUDE:

- Multi-factor
- Liveness
- Smart detection
- Risk-based verification models

DIGITAL MANIPULATION



- PS2 (S4)
- PS3



BY 2026 JUNIPER RESEARCH ESTIMATES THAT 5.2 BILLION PEOPLE WILL BE USING THEM

DIGITAL WALLETS

- PS4 (S2)
- PS4 (S3)
- W1

IDENTITY VERIFICATION IN GOVERNMENT STACKS

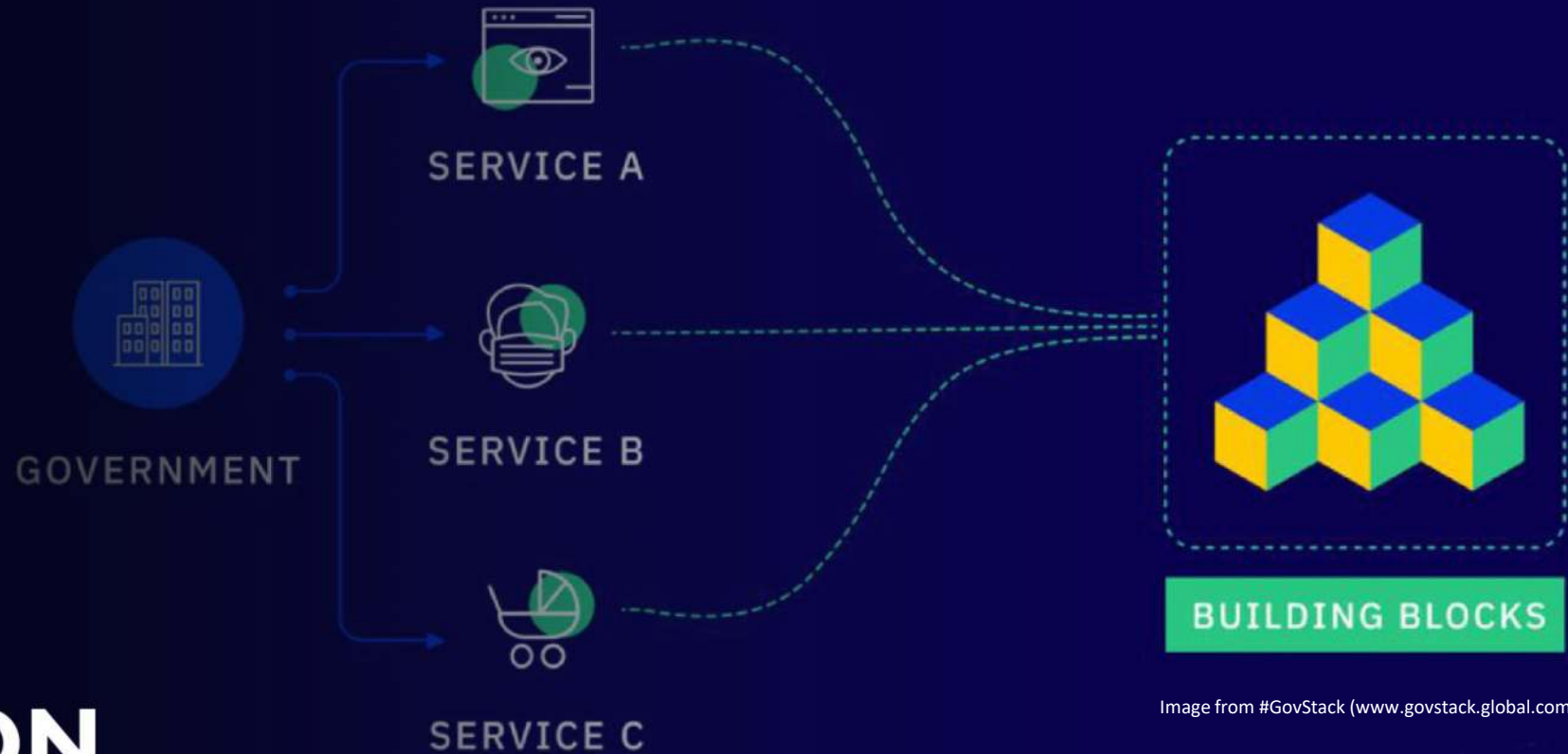


Image from #GovStack (www.govstack.global.com)



FOCUS
on proofing &
provisioning



OFFER
KYC services



LEAVE
transaction
authentication
to 3rd parties



COLLABORATE
on specifications
& interoperability

IDENTITY VERIFICATION: POLICY RECOMMENDATIONS

RELEVANT INITIATIVES

- PS2 (S4)
- PS3
- PS4 (S3)

RELEVANT COLLABORATIONS ON SPECIFICATIONS

- W3C Verifiable Credentials
- OpenID for Verifiable Credentials
- ISO mDL

RELEVANT ORGANIZATIONS ON INTEROPERABILITY





REVENUE & FINANCING

GOVERNMENT

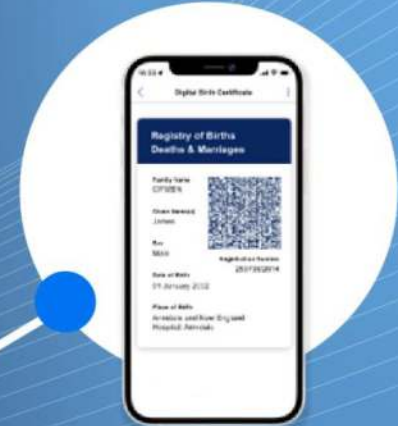
BUDGET

**REVENUE &
FINANCING**

- PS2 (S4)
- PS3



ROLE OF THE PRIVATE SECTOR



DIGITAL FROM THE START: eCRVS

The ACSA Initiative



ID4AFRICA 2023
23-25 May | Nairobi | Kenya

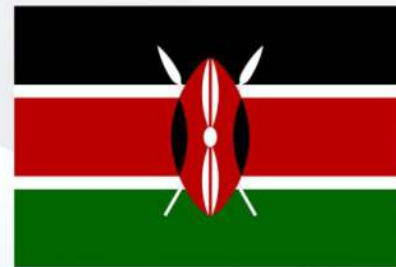
PS1 THE IDENTITY VERIFICATION ECOSYSTEM

S2 | ACCELERATING DIGITAL TRANSFORMATION: THE POLICY ROUNDTABLE

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The Republic of Kenya



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CABINET SECRETARY

Ministry of Information,
Communications & Digital
Economy
The Republic of Kenya

PS2 15:00-18:30

THE DEMAND-SIDE OF DIGITAL IDENTITY

HOST



DR. J. ATICK
EXECUTIVE CHAIRMAN



S1 | DESIGNING EFFECTIVE DIGITAL IDS: LESSONS FROM AADHAAR



N. PAREKH



S2 | THE ECONOMIC VALUE OF DIGITAL ID IN AFRICA: A MULTI-COUNTRY FIELD STUDY



Y. THEODOROU



S3 | DIGITAL IDENTITY FOR SERVICE DELIVERY



I. H. RUMATILA
NIDA
TANZANIA



J. J. TEMBA
TASAF
TANZANIA



M. M. MASSAQUOI
NCRA
SIERRA LEONE



P. BANGURA
CENTRAL BANK
OF SERRA LEONE



F. SETHOKGA
SASSA
SOUTH AFRICA



DR. L. DSANE-SELBY
FORMER NHIA
GHANA



G. HODGES



D. TRUTT

