Aadhaar : An effective tool for Social and Financial inclusion

Unique Identification Authority of India

www.uidai.gov.in

Presentation at ID4Africa
2-4 June 2015, Dar es Salaam
Establishing ID is a common challenge

An individual typically accesses multiple services/benefits, at different times

Needs to repeatedly establish ID = problem for the poor

Birth records≠ Address proof≠

= Limited access to services/benefits
Context of Aadhaar

• Providing a digital identity proof to all residents
• Identity as a gateway to access services/benefits
• Need to streamline government expenditure – cut wastages and leakages.
• Need for a transparent and accountable system of public expenditure
• Social inclusion project with a developmental focus
Vision…

To empower residents of India with a unique identity and a digital platform to authenticate anytime, anywhere.
Overview...

• Home grown project designed for Indian context
  – Unique and Globally Watched - largest biometric project ever undertaken anywhere in the world – leap-frogging effect

• The first on-scale deployment of biometric based ID system for development purposes
  – not for conventional usage for forensic/security purposes

• First public online authentication platform in the world
  – superseding conventional off-line, smart card based systems

• Zero time or cost over-run, a rarity in the Government

• A technological feat
  – Over 520 million successful online authentications
Mandate...

• **Enrolment**- identify each individual using biometrics (1:N)

• **Authentication**- Establish a digital platform (1:1) that
  – uses state of the art technology
  – can be accessed anytime, anywhere
  – uses basic connectivity and a simple, inexpensive devices.
  – identifies individuals in a safe and secure manner.

• **Applications**
  – Establish standards/ protocols and provide technical assistance
  – facilitate usage of the digital ID and authentication platform by
    • Central and State Governments
    • Service providers in the public and private sector.
One person: one Aadhaar

Name
Address
Gender
Date of birth

Photo

Both

iris

10
finger-
prints

*Mobile no.
*Email ID

1 person⇔1 number
Random Number
Design Principles

• Minimalistic approach to data
  – Just 4 attributes and biometrics

• Designed for inclusion
  – Flexibility of demographic data, multi-modal biometrics, and flexible processes

• Privacy by design
  – Use of random number, minimal data with no linkage
  – No transaction/pooling data, resident authorized access to identity data
Design Principles

• Strong end-to-end security
  – PKI-2048 encryption from the time of capture
  – Best-in-class security standards and practices
  – Strong audit and traceability, fraud detection

• Open architecture
  – Use of open standards to ensure interoperability
  – Define standards when there are none
  – Allow the ecosystem to build on top of standard APIs
  – Vendor neutral, using of commodity computing and open source
### Features of Aadhaar

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Only Numbers - No Smart Cards</td>
<td></td>
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<tr>
<td>Random Numbers - No Intelligence, No Profiling</td>
<td></td>
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<tr>
<td>All Residents enrolled – Including Children</td>
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<tr>
<td>Uniqueness – Ensured through biometric attributes</td>
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<tr>
<td>No Guarantees to Citizenship, Rights, Entitlements</td>
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<tr>
<td>Security and Privacy of Information Collected</td>
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<tr>
<td>Ubiquitous Online Authentication – From No ID to Online ID</td>
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### Status as on 13 May 2015

<table>
<thead>
<tr>
<th>Description</th>
<th>Figure</th>
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<tbody>
<tr>
<td>Number of Aadhaar Generated</td>
<td>840 million</td>
</tr>
<tr>
<td>Aadhaar saturation (overall)</td>
<td>69.4 %</td>
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<tr>
<td>Aadhaar saturation amongst adult population</td>
<td>85.7 %</td>
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<tr>
<td>Total Authentication Transaction since inception</td>
<td>522 million</td>
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<tr>
<td>Total e KYC Transaction since inception</td>
<td>31.9 million</td>
</tr>
<tr>
<td>Bank Accounts linked with Aadhaar</td>
<td>172 million</td>
</tr>
<tr>
<td>Number of Banks on Aadhaar Payment Bridge (APB)</td>
<td>504</td>
</tr>
<tr>
<td>Number of APB Transactions (numbers)</td>
<td>~300 million</td>
</tr>
<tr>
<td>Total amount involved in APB Transactions (INR)</td>
<td>~120 billion</td>
</tr>
</tbody>
</table>
Benefits of Unique IDs

Reduces Leakages
- No Fakes
- No Duplicates

Provides Identities
- To the marginalized
- To the excluded

Benefits and Services
- Benefits only to genuine beneficiary
- Electronic delivery of services
Value propositions of Aadhaar
A random 12-digit number which can act as a primary identifier throughout the life of an individual

The Aadhaar platform using the world’s most sophisticated technology ensures that every resident gets one and only one number. This is done to an accuracy of above 99.9%.
Authentication means on-line verification of a person’s identity anywhere in the country by various means (Biometric – Fingerprint and Iris, demographic, and One Time Password to registered mobile phone or email id).
E-KYC platform

A platform for sharing demographic information and photograph in electronic format based on consent of Aadhaar holder for instant, efficient and secure service delivery
An Aadhaar-linked Bank account that can receive money just with the Aadhaar number as the financial address (instead of IFSC code/ account number etc.)
Benefits to Residents

• Lifetime identity for every resident

• Nationwide portability.

• Convenience – Residents can get access to services close to where they are.

• Mobility – Resident can access services throughout the country

• Empowerment.

• Instant Access.

• Convenience – these services can be offered anywhere where there is connectivity.

• Bank Account portability – customer can switch financial service provider without having to inform any of the Payee agencies.
Benefits to Government

• **Removes fakes and duplicates** – Huge savings on account of leaner lists

• **End-to-end-transparency** – audit trail contains flow of G2P transaction

• **Identification** - Can verify genuineness of beneficiaries.

• **Outreach** – Can provide services anywhere with connectivity.

• **Productivity** – Instant paperless provisioning of services has great impact and productivity benefit for the economy

• **Inclusion** – Can provide access to services like bank accounts and mobile connections anywhere easily.

• **Audit Trail** – Every e-KYC request has a unique transaction code, cannot be repudiated, and can be easily investigated.
National Mission on Financial Inclusion: Prime Minister Jan Dhan Yojana (PMJDY)

• The plan envisages universal access to banking facilities with at least one basic banking account for every household. (There are 290 million households in India)

• The plan also envisages channelling all Government benefits (from Centre/State/Local Body) to the beneficiaries accounts and pushing the Direct Benefits Transfer (DBT) scheme of the Union Government.

• 59 million accounts are linked with Aadhaar out of 154 million Bank accounts opened so far. 7.5 millions accounts have been opened through e KYC.

Aadhaar is the primary KYC for the opening of bank account
Three ambitious social security schemes launched on 9 May 2015.

- **PMSBY**: Pradhan Mantri Suraksha Bima Yojana (accident insurance)
  
  Cover of Rs 200,000 with premium of just Rs 12 per annum.

- **PMJJY**: Pradhan Mantri Jeevan Jyoti Yojana (life insurance)
  
  Cover of Rs 200,000 with premium of Rs 330 per annum.

- **APY**: Atal Pension Yojana (Pension Scheme)

  *(Aadhaar is the primary KYC document for identification of beneficiaries, spouse and nominees to ease claim settlement and for disbursal of payment directly in the beneficiary’s bank account through Aadhaar Payment Bridge)*
End-to-End Direct Benefit Transfer Enabled by Aadhaar

1. Unique Aadhaar to de-duplicate databases

2. Aadhaar as KYC to open SB account

3. Aadhaar as a payment destination
   - Bank Account portability
   - Many schemes, one Aadhaar linked SB account

4. Transact from any MicroATM – Aadhaar Authentication Secure and Convenient

5. Auditability and traceability of transaction
How Aadhaar can have Maximum Impact with minimum cost

An effective tool for monitoring that every child is born at a hospital, every child is immunized, every child is in school, even school teacher is present at school, mid-day meal is provided, every doctor is present in the hospital, every medicine is given to the intended person, each person gets the food rations, pensions etc.

Healthy & educated India
Aadhaar enabled services – an illustrative list....

**Early Age**
- Birth certificate
- Immunization schedule/ health records
- Schooling – Admissions/ mid-day meals/ RTE
- Scholarship applications
- University Admissions/ Entrance exams

**Middle Age**
- Job application/ Buying a house
- Industrial workers – EPFO/ ESI/ benefits for unorganized sector
- Bank account/ Insurance Policy/ Mutual Funds
- Driving License/ Voter ID/ Passport/ PAN card/ Passport applications
- Contribution to National Pension Scheme

**Old Age**
- Pensions
- Annual Verification for pensioners
Thank You