



# The Aadhaar Project

NANDAN NILEKANI

CHAIRMAN

UNIQUE IDENTIFICATION AUTHORITY OF INDIA

- OVERALL MANDATE OF THE AADHAAR PROJECT
- AADHAAR AND IT'S POTENTIAL
- DIRECT BENEFIT TRANSFER AND AADHAAR



# WHY AADHAAR FOR INDIA

- ▶ ONLY 50 MILLION INDIAN HOLD PASSPORT
- ▶ CLOSE TO 100 MILLION HOLD PAN CARD
- ▶ CLOSE OF 200 MILLION HAVE DRIVING LICENSE
- ▶ VAST SECTION OF POPULATION DON'T HAVE ANY ID PROOF



# Context of Aadhaar

- ▶ Providing a formal identity proof to millions of residents
- ▶ This identity proof would be a gateway to access services
- ▶ Need to streamline government expenditure – cut wastage and leakage
- ▶ Need for a transparent and accountable system of public expenditure
- ▶ Social inclusion project with a developmental focus



# UIDAI issues Aadhaar numbers...

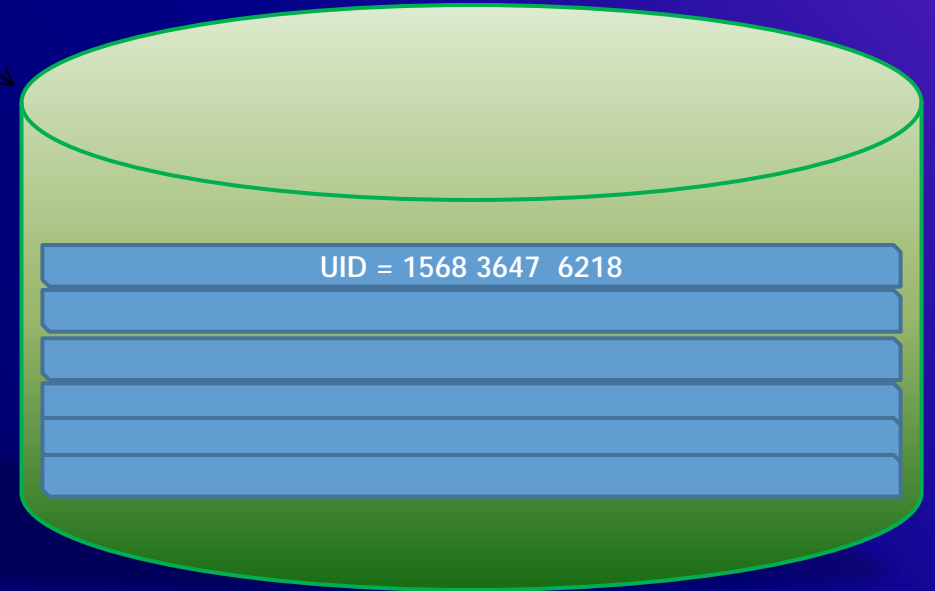


[Redacted]

Name  
Parents  
Gender  
DoB  
PoB  
Address



Basic demographic data and biometrics stored



Standardized identity attributes ✓

No duplicates(1:N check) ✓

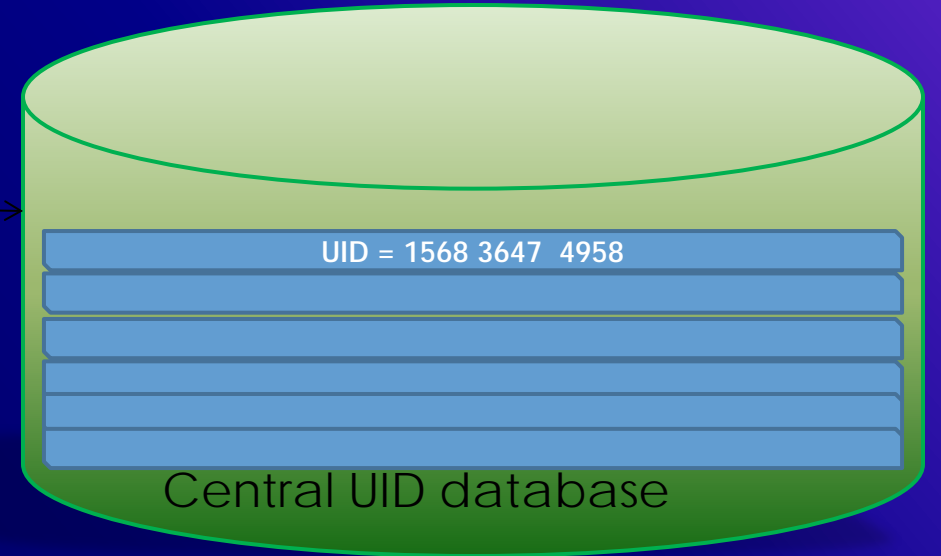
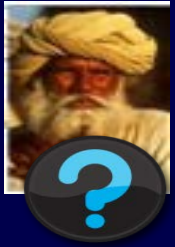
Minimal demographic data collected ✓

UID ⇔ Unique number ⇔ Random number



... and authenticate IDs online, real-time

Authentication - 'Are you who you claim to be?'



- ✓ 1:1 check, no ID fraud
- ✓ Only YES/NO response, no details – no invasion of privacy
- ✓ Person can see self-details, no one else can

# Where are we today...

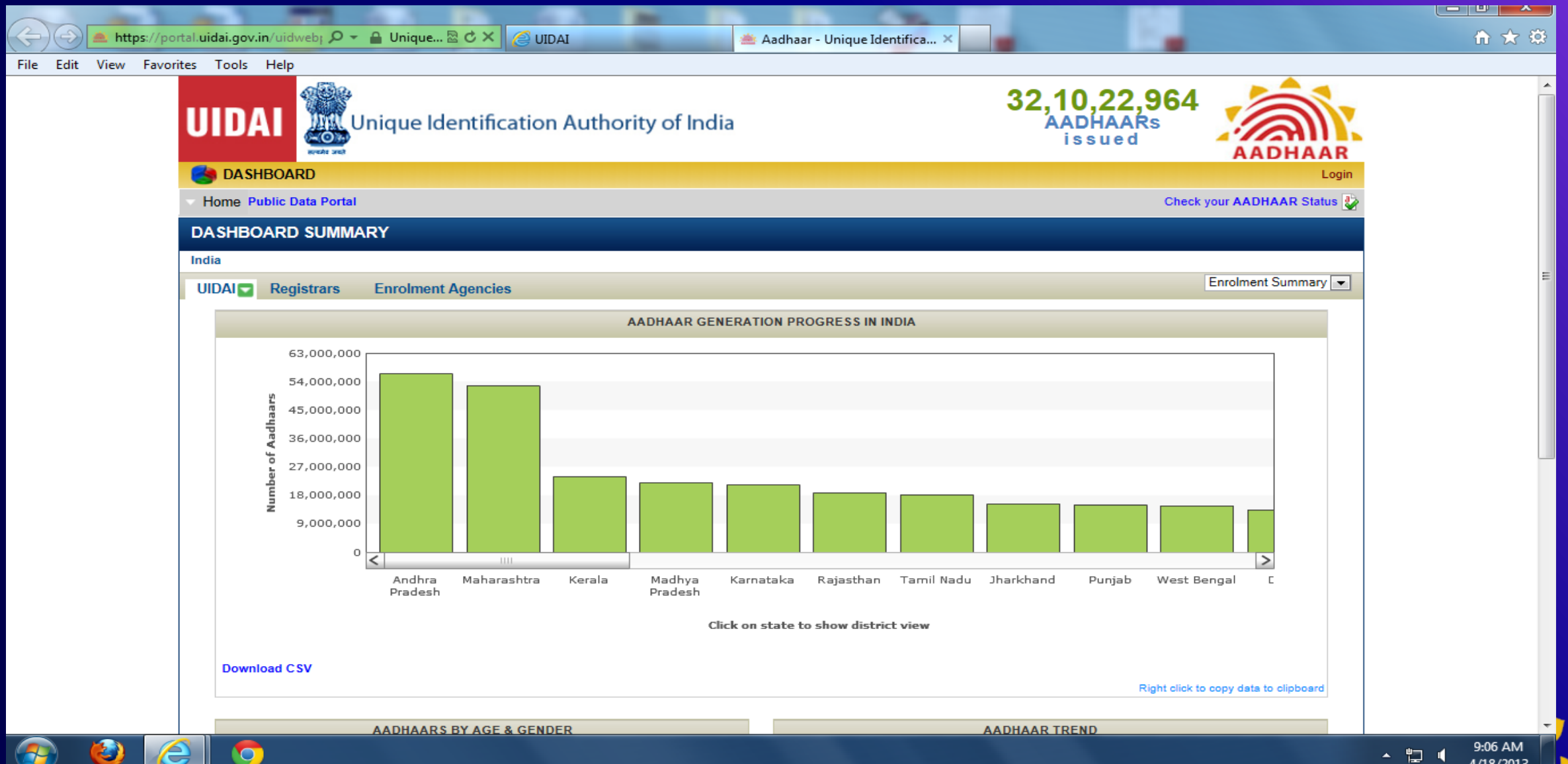


- ▶ UIDAI started issuing Aadhaar in Sept 2010
- ▶ Over 320 million Aadhaars issued so far
- ▶ Over 380 million residents enrolled
- ▶ Target is 600 million by 2014



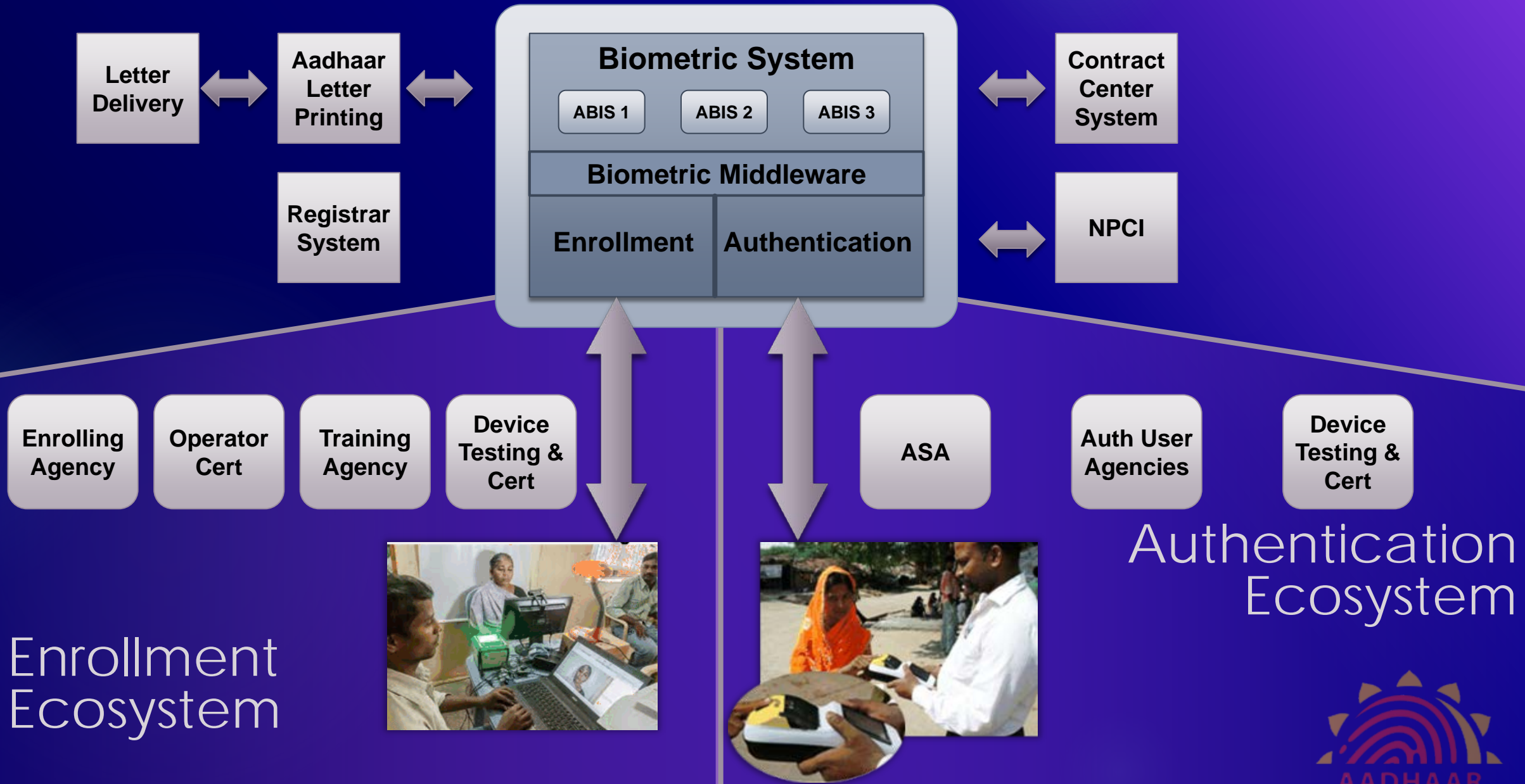


# AADHAAR GENERATION STATUS STATE WISE





# Partner Ecosystem



# Dimensions of the Aadhaar Project

## ▶ Scale

- ▶ Geographically – Daily Operations across India
- ▶ 25,000+ stations deployed

## ▶ Speed

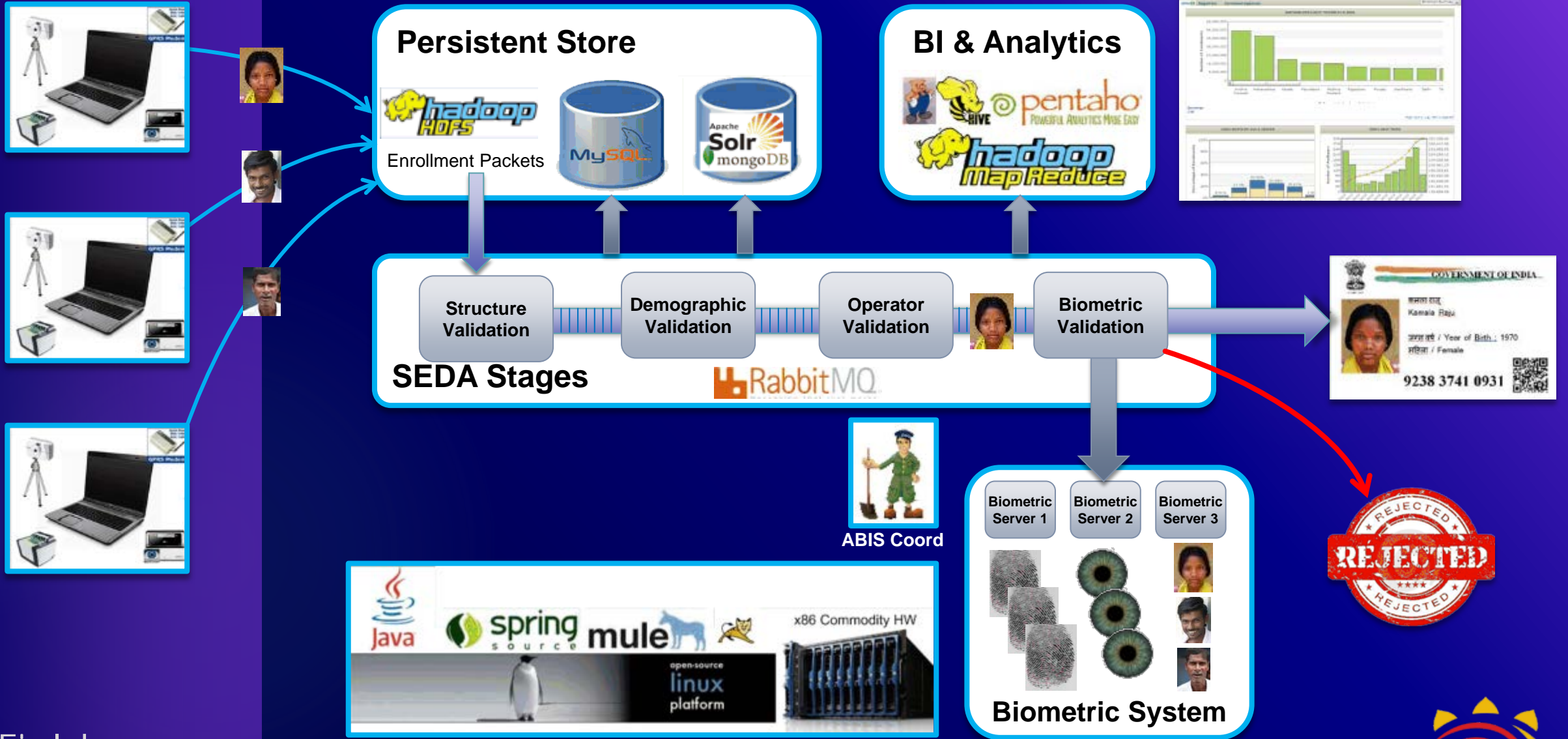
- ▶ ~1m/day mark reached in less than 18 months of 1<sup>st</sup> Aadhaar Generated

## ▶ Operations Model

- ▶ Public (Registrar) -Private ( Enrollment Agency) partnership driven



# Aadhaar Technology



Field Enrollments

Central ID Repository - Data Center





# Enrolment centre, Andhra Pradesh





# Enrolment Centre, Jharkhand



# Enrolment Centre, Puducherry



# Aadhaar and it's potential





# Service Delivery potential due to Authentication

- ▶ Transactions normally require verification of identity
- ▶ Aadhaar online authentication will provide a common platform which can be used across all transactions and other applications.
- ▶ Entitlements should reach the intended beneficiary – non-transferability can be ensured
- ▶ This can be effectively done by authentication at the point of service delivery
- ▶ Many sectors will be able to use as a proof of presence for the beneficiary



# Empowerment, Choice and Convenience

Identity

- Unique identity to every resident of India which is nationally valid – especially useful for those who have no proof of identity

Mobility

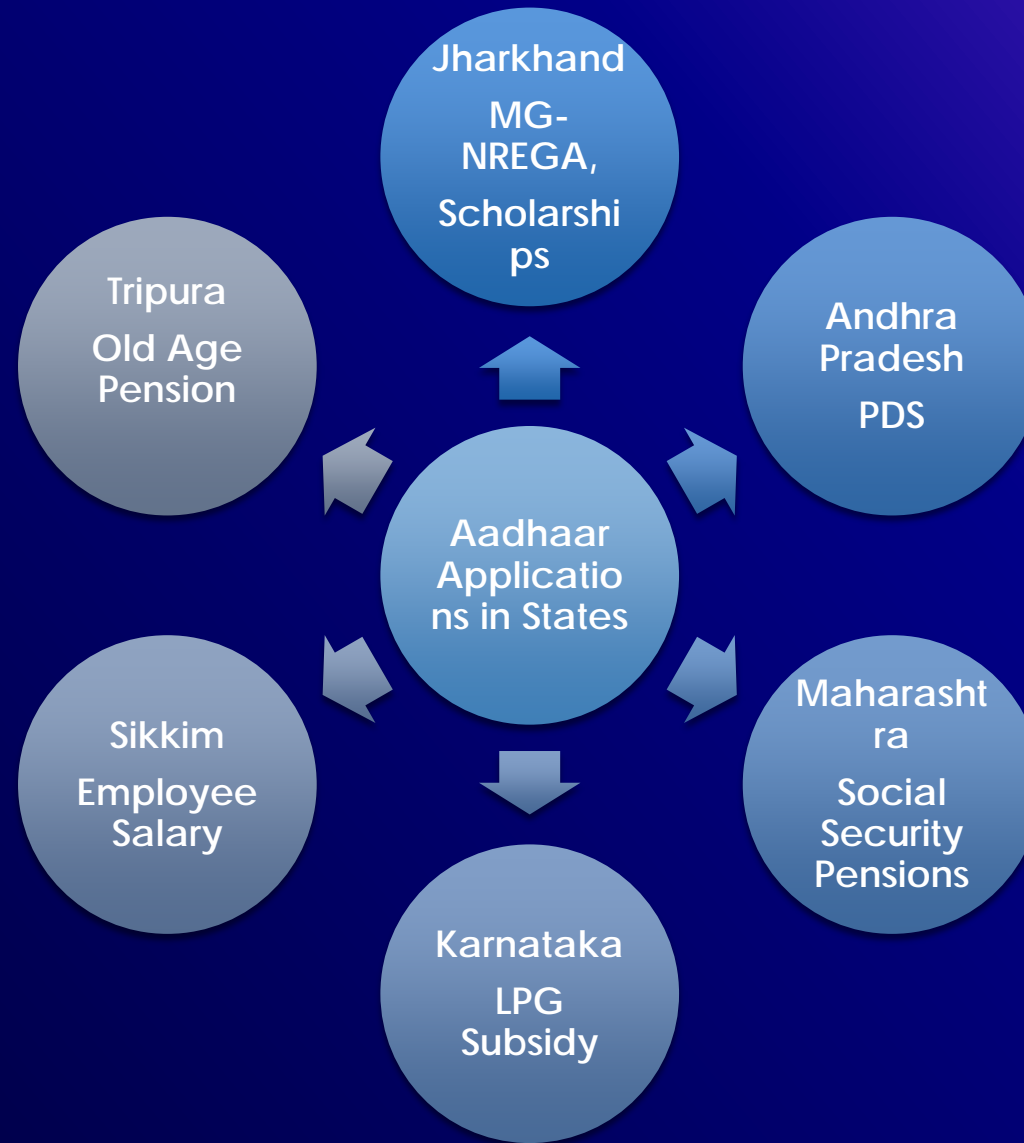
- Aadhaar authentication because of its on-line nature can also be verified anytime, anywhere.

Gateway  
to  
Services

- As Aadhaar can become a KYC for a whole range of products and services (bank accounts, mobile connections, LPG connections, state Govt. services, insurance, etc)



# Aadhaar based government application pilots – Country wide spread





## MNREGA payments through Micro-ATM in Jharkhand





# PDS delivery based on Aadhaar Authentication in East Godavari, Andhra Pradesh





# Old age pension payment in Tripura



# AADHAAR PLATFORM FOR BANKING

## Access

- Open Bank Accounts using Aadhaar – Sufficient KYC
- Existing Bank Account can be linked to Aadhaar number

## Address

- Transfer funds to Aadhaar Enabled Accounts
- Simplifies disbursement of funds – uses only one account for all disbursements – Convenience for the beneficiary

## Transactions

- Withdrawal and deposit, check balance
- End to end auditability and traceability
- Inter-operable, portable anytime anywhere
- Better than local, non-interoperable solutions that limit choice



# Aadhaar accepted as KYC for various services



1 Mobile connections



2 Bank A/Cs, Insurance, etc.



3 LPG Connections



4 State Government Services



5 Train Travel



6

Many other services...



# AADHAAR AS E-KYC SERVICE

1. “Instant” Opening of Bank Account through a Micro-ATM based on Aadhaar authentication – hugely empowering to the unbanked
1. The Aadhaar e-KYC service instantaneously provides basic data (name, address, date of birth, gender, photograph) of the beneficiary to the Bank upon successful Aadhaar authentication.
1. The e-KYC service can scale up to lakhs of transactions on a daily basis
2. Provides convenience to the unbanked. Enables opening of large number of bank accounts on scale.



# DIRECT BENEFIT TRANSFER AND AADHAAR



# All direct cash transfers into one account

Multiple Schemes



Aadhaar Payments Bridge

One Aadhaar linked account

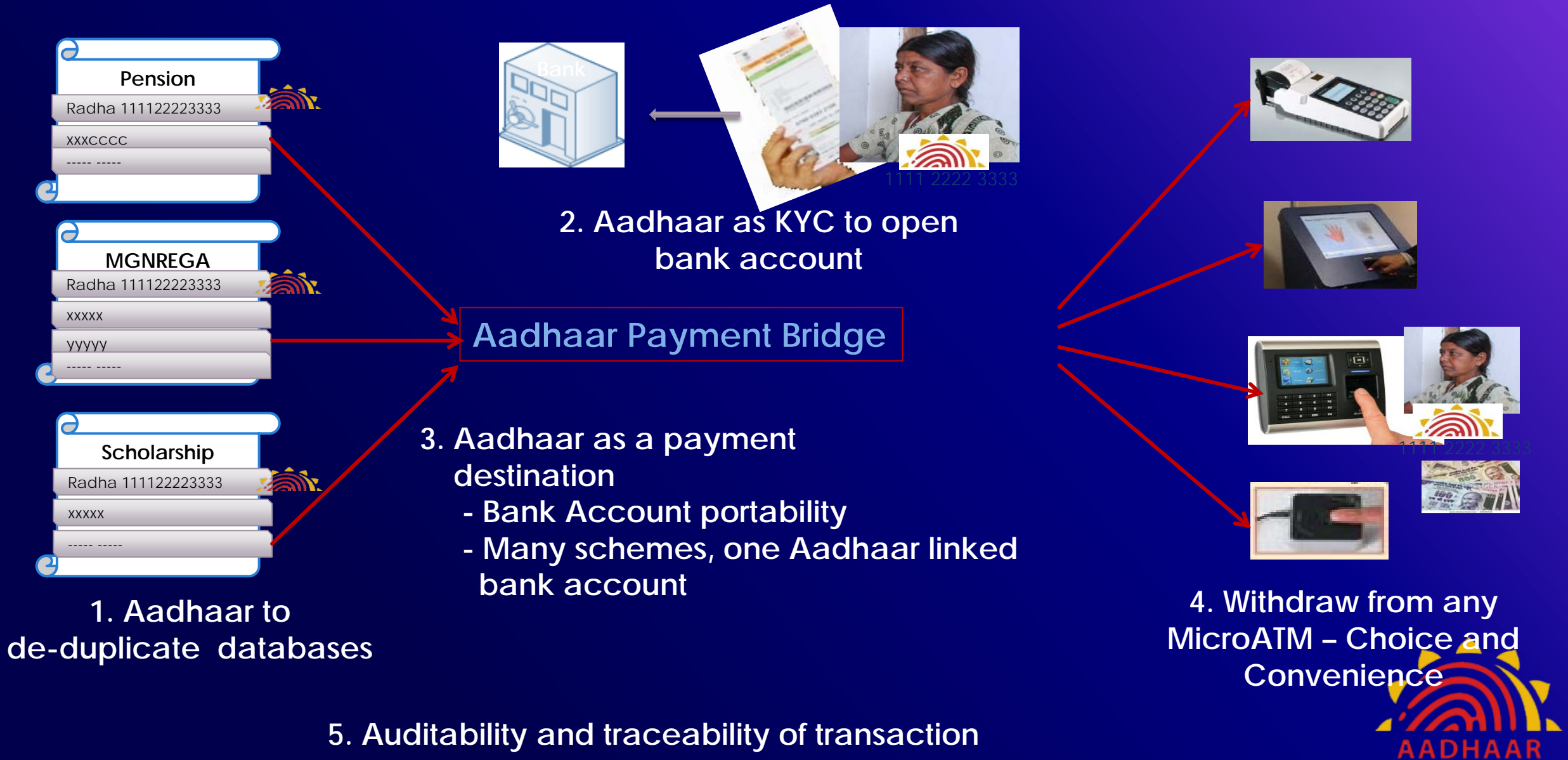


APB Compatible with CPSMS





# End-to-End Direct Benefit Transfer Enabled by Aadhaar



# Micro-ATM transactions

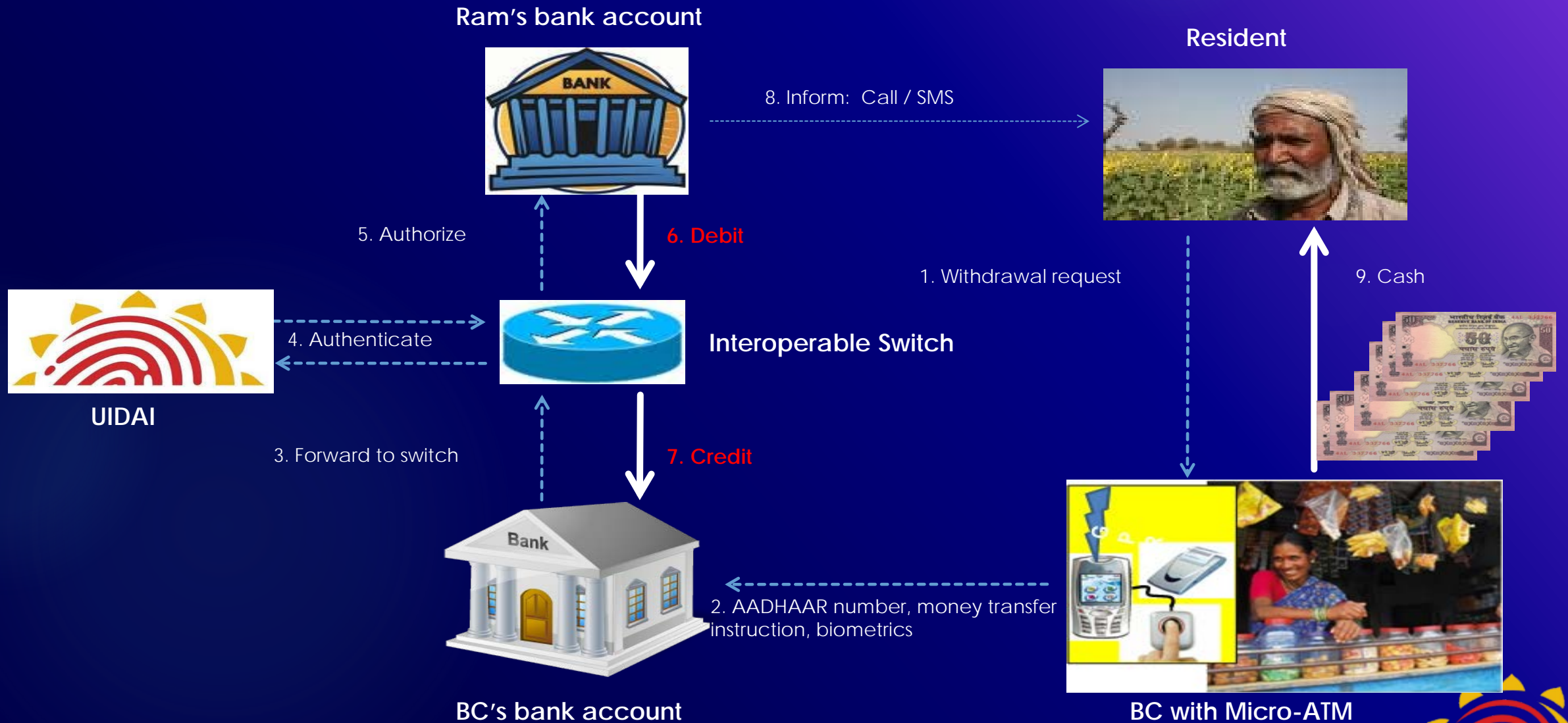
1. HANDHELD DEVICE AND BATTERY POWERED
2. ONLINE CONNECTIVITY THROUGH MOBILE NETWORK
3. MICRO-ATM STANDARDS SET BY RBI AND IBA (MANUFACTURED BY MULTIPLE VENDORS)
4. BIOMETRIC SCANNERS ARE CERTIFIED
5. INTEROPERABLE DEVICES AND CAN WORK FOR ANY BANK AND ANY BC



Total online transaction time less than 15 seconds –  
Verified on the ground from Tripura, Jharkhand, Maharashtra, and Andhra Pradesh

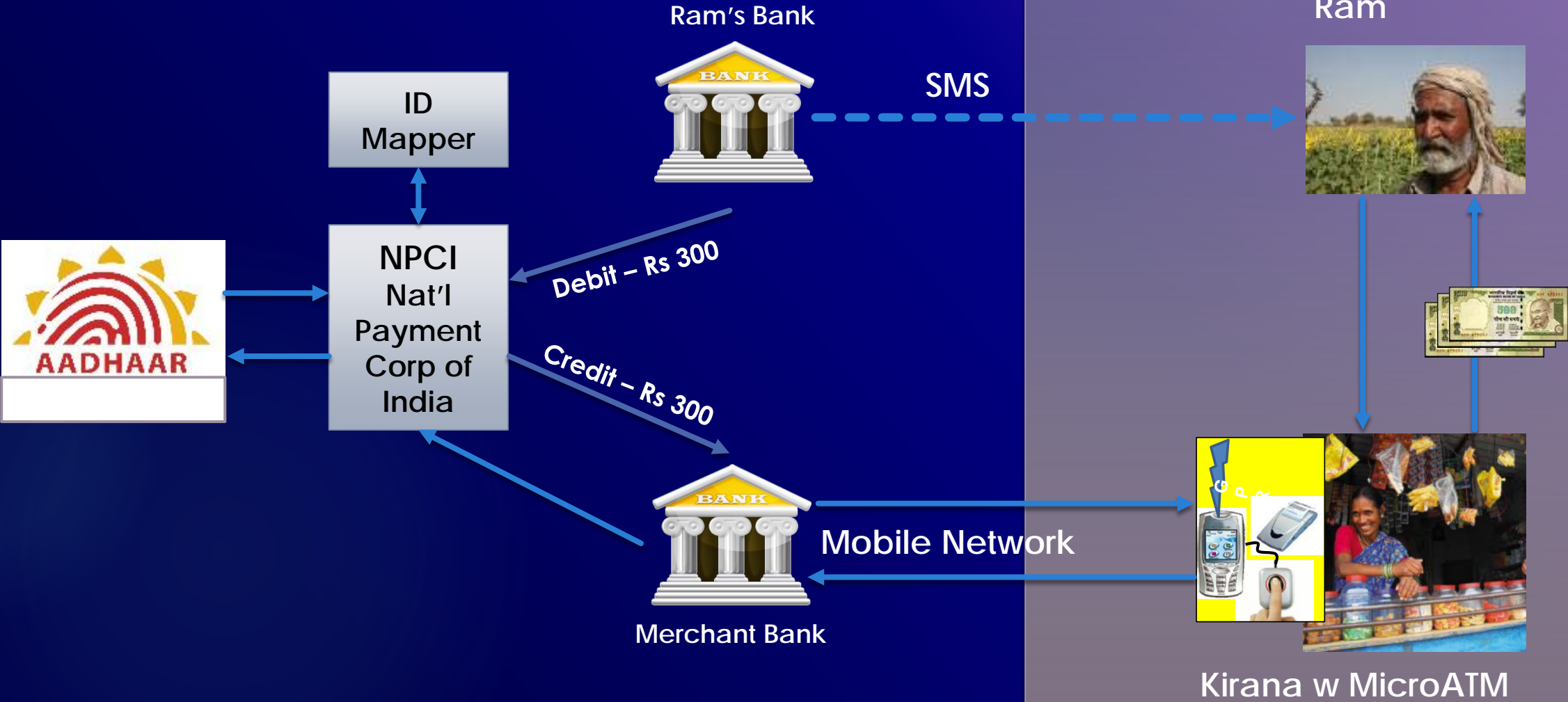


# Convenient cash withdrawal

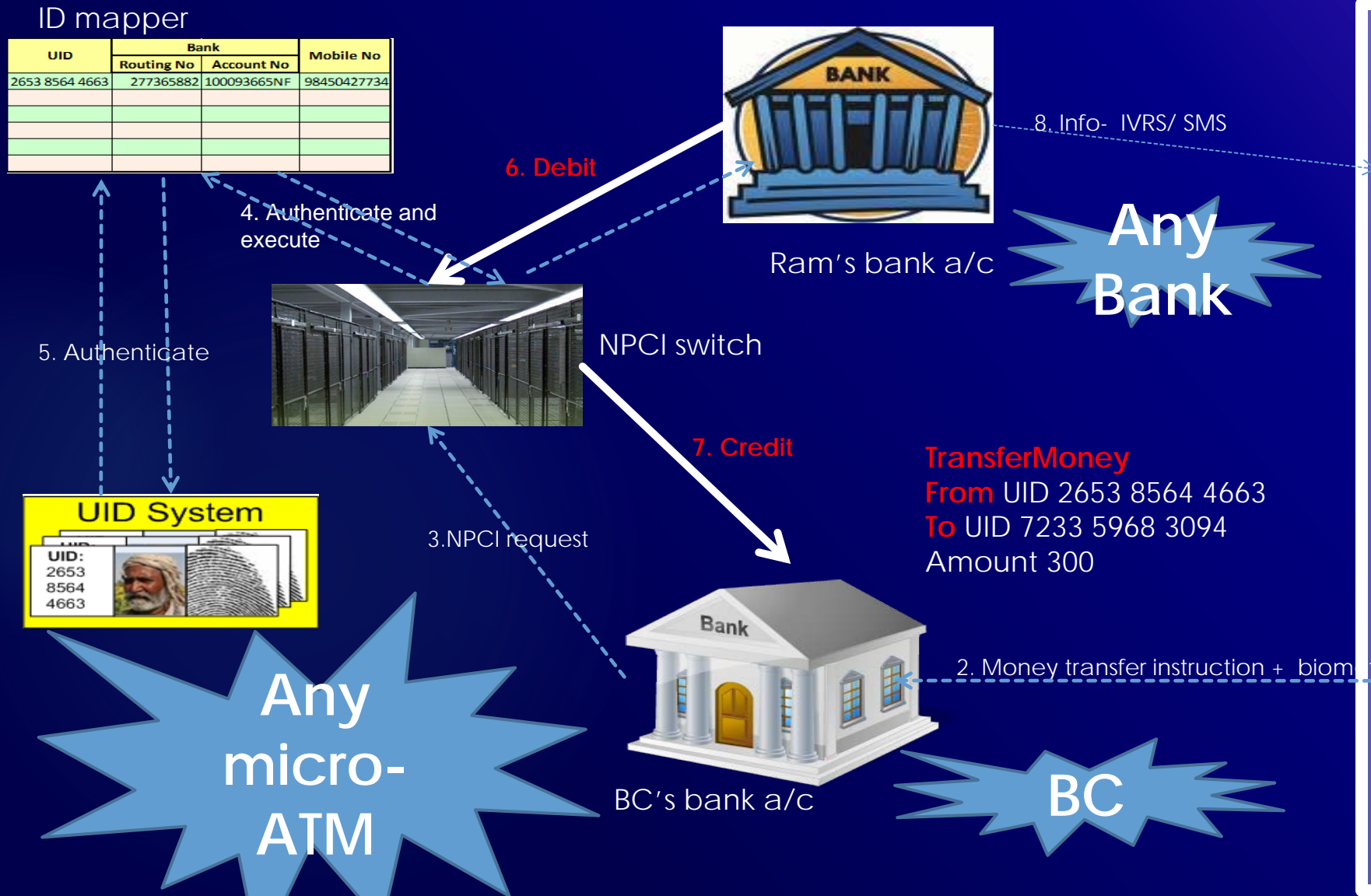




# Ram Withdraws Cash at His Own Village



# Inclusive convenience banking



Resident - Ram  
UID 2563 8564 4663

1. Withdrawal request

9. Cash

BC (Kirana, SHG, PO etc))  
 With Micro-ATM  
 UID: 7233 5968 3094

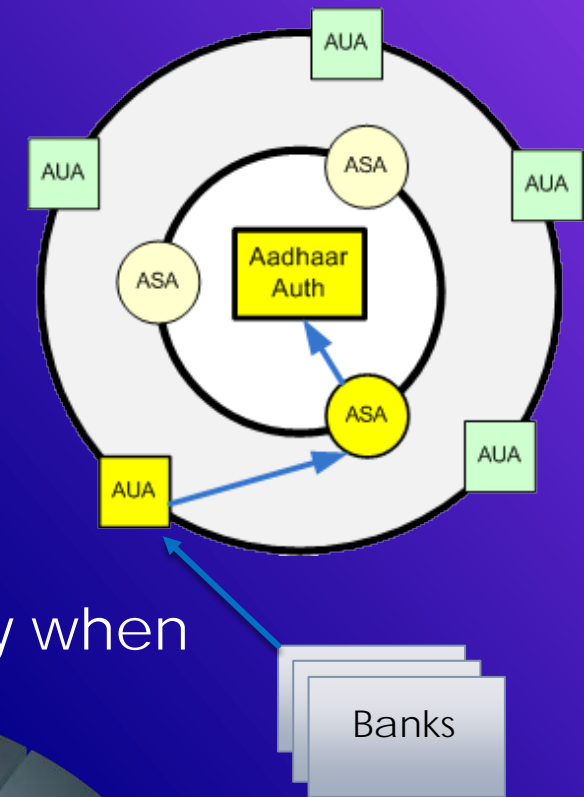
# Data Privacy and Security

## ▶ Enrollment System

- ▶ Aadhaar – random number with no information
- ▶ Data encrypted at source – Enrollment client
- ▶ All packets biometrically signed by operator
- ▶ Raw biometrics never stored in clear and decrypted only when needed
- ▶ Data partitioned across multiple security domains

## ▶ Authentication System

- ▶ Auth response – only YES/NO
- ▶ AUA and ASA perimeters
- ▶ Supports Federated Auth model





# To conclude...

- ▶ The Aadhaar number is a form of empowerment to those who had no proof of formal identity
- ▶ Empowerment is achieved by providing access, choice, empowerment and convenience
- ▶ Government spends large amounts on social welfare programmes



- ▶ Obligation on State to have the capacity to ensure effective implementation as well as reduce leakage and corruption. The expenditure should reach the intended beneficiary
- ▶ The Aadhaar project is **one of the means** by which efficient delivery of service and inclusion with access can be enhanced.
- Extensive use of data analytics tools to improve monitoring of implementation



# The impact...



Aadhaar identity platform and Aadhaar enabled applications can help a billion people to participate in digital economy and avail services tailored to them!

# Thank You

