



ID and Service Delivery: Emerging Evidence and Lessons from India

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Overview: India's Digital Reforms

- **India is emerging as a laboratory for digital service delivery**
- **Large scale, wide scope and diverse experiences**
 - Direct benefit transfers to bank accounts (Pensions, Public Works Wages)
 - In-kind delivery with biometric authentication at point of sale (Food Rations)
 - Individualization of subsidies through vouchers (LPG cooking gas)
- **Combining administrative data and citizen feedback for real time governance**
- **We present selected evidence and insights from our studies**
 - Full list of studies available at: <https://www.cgdev.org/topics/digital-dividends>



Aadhaar

Biometric ID for all residents, not national status

1.2 Billion Enrolled in 8 years
(~95% of population covered)

Not card-based
number + online authentication
(fingerprint and iris)

Supreme Court: Aadhaar not compulsory but can be required
for taxes and govt benefits



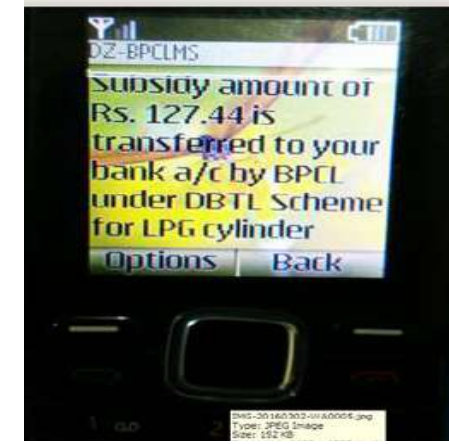
Jan Dhan

Government's financial inclusion
initiative

340 Million new bank a/c opened
starting August 2014
(>80 percent of all adults covered)

500 M bank a/c linked to Aadhaar

- Make service delivery efficient
- Remove price subsidies
- Provide benefits directly
- Save resources



Mobile

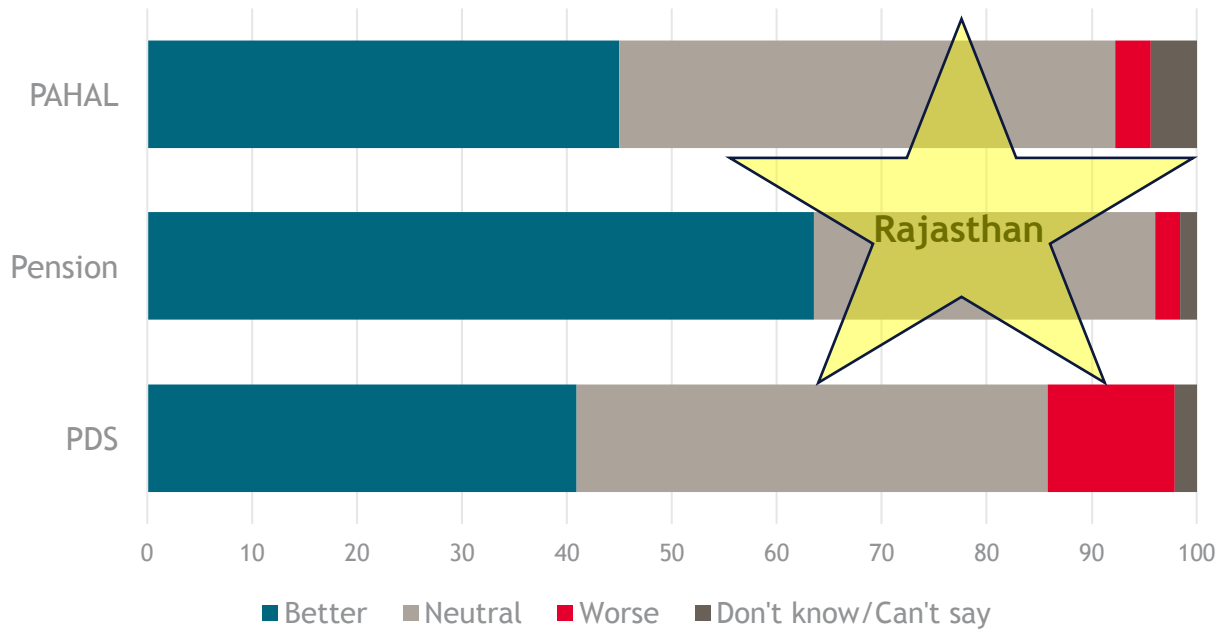
~90 percent penetration

400 M Smartphones

Linkage with Aadhaar and
Bank A/c

Unified Payments Interface
(UPI)

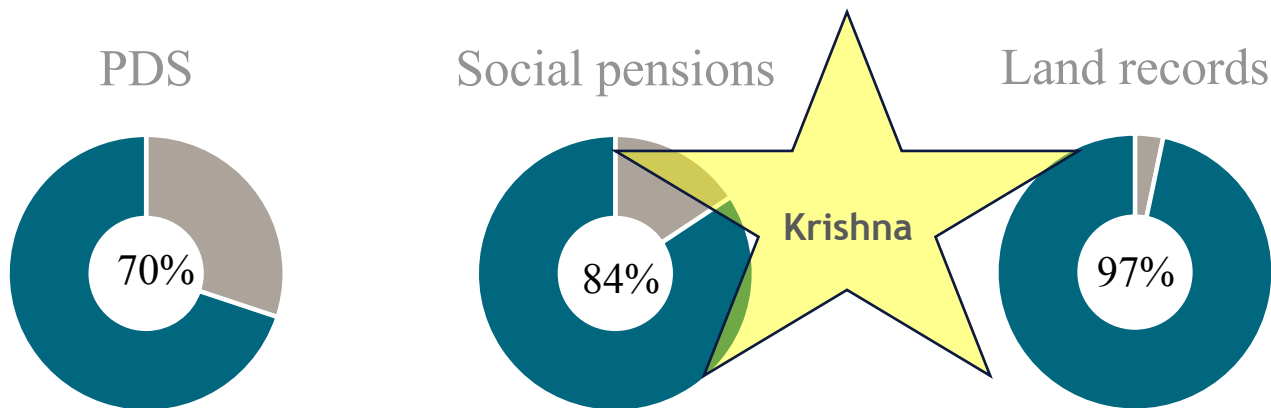
Most Users Like the Aadhaar-enabled Programs



PAHAL: Direct Benefit Transfer of LPG Cooking Gas Subsidy through one-time linking Aadhaar, Bank A/c and Mobile

Pension: Direct Benefit Transfer to bank account with Aadhaar-based deduplication and periodic authentication

PDS: Public distribution system of monthly food rations with **Aadhaar authentication at point of sale**



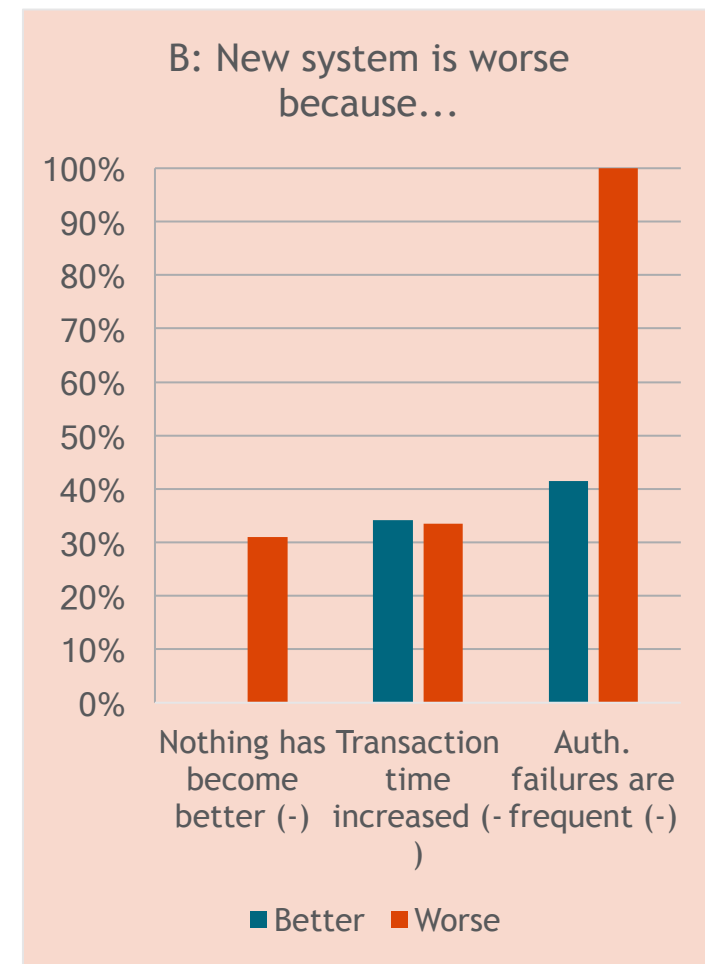
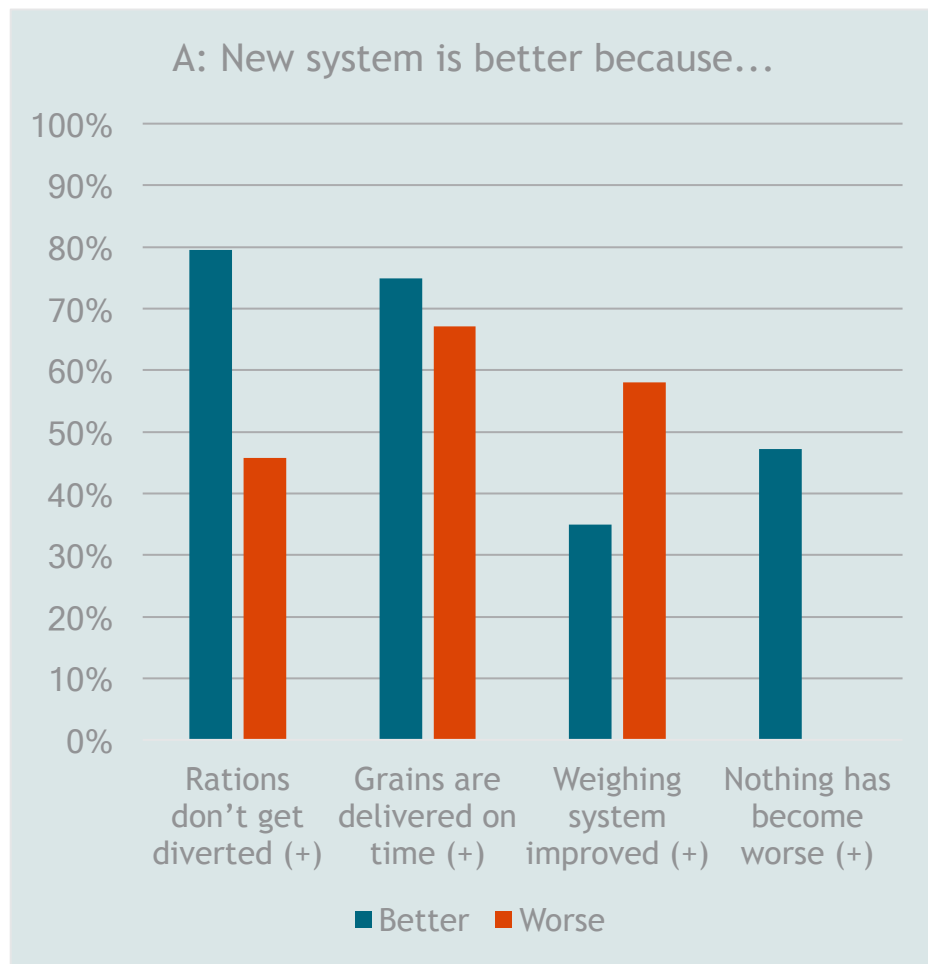
Strong support from landowners, but muted response from tenant farmers

Beneficiaries Like Less Corruption, More Control; Dislike Authentication failures

Reasons for views distinguishing:

- Those who think its better (390)
 - Less corruption - 80%
- Those who think its worse (155)
 - Authentication failure - 100%

“My trust in the system has increased since Aadhaar authentication, no one else can take my grains now”- PDS beneficiary



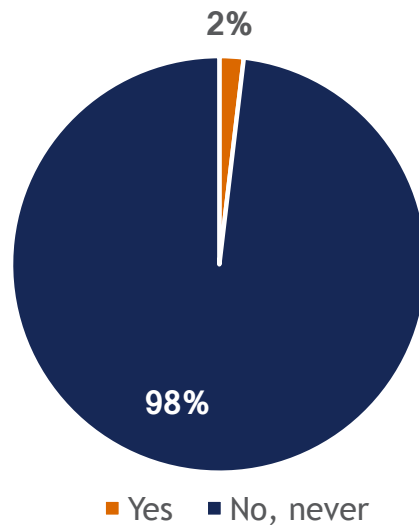
Note: Denominators for each column represent the number of respondents who said that the new system was better (n = 390) or worse (n = 155).

All Biometric systems fail sometimes - but this should not lead to denial of service

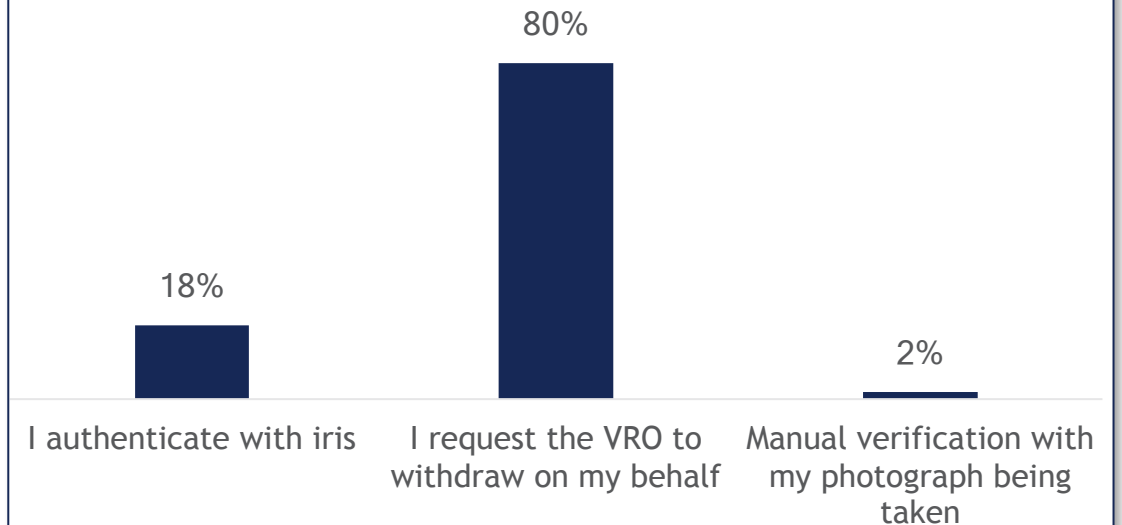
Protocol for managing authentication failures in Andhra Pradesh:

- ✓ In case of fingerprint authentication failure, IRIS is used for authentication. Pension Distribution Officer also takes a picture of beneficiary if IRIS is used
- ✓ In case of IRIS device being unavailable or failure in IRIS authentication, Village Revenue Officer/Pension Distribution Officer authenticates beneficiary on their behalf and hand over pensions
- ✓ In case of frequent finger-print mismatch, beneficiaries are asked to update their biometrics in Aadhaar service centers

Has there been any occasion that you have not received your pension at all because all authentication attempts failed?



What happens when your fingerprint does not match at all?



Using High-frequency Big Data for Real Time Governance

- Two Components of Andhra Pradesh RTG

Integration and analysis of real-time administrative data

- Builds on real-time data from Aadhaar authentications and digital transactions

Real-time customer feedback on service delivery

- In addition to complaints hot-line 1100
 - Beneficiaries automatically surveyed: robocall nudge
 - Reportedly, 15% respond
- If negative, roll over to human to generate complaint
 - Call center, 24/7, staffed by 2,000 operators
- Complaints routed to responsible level of government
 - 24 hour standard to address grievances
- **Districts, departments programs rated on service delivery: “Happiness Index”**



Integrated fingerprint, iris and face recognition hardware

Information, Choice and Voice: Improving Trust and State Capacity



Home About RTGS **AWARE** Contact Us

LOGIN

FANI CYCLONE DASHBOARD

GRIEVANCES
STATUS

1,85,85,987
TOTAL GRIEVANCES

1,82,95,670
CLOSED GRIEVANCES

2,90,317
PENDING GRIEVANCES

— PEOPLE FIRST —

Objectives and Components of RTG



People hub



Land hub



CFMS



Cloud hub



1100

Good Governance

- A.P. CM Connect
- Parishkara Vedika
- Meekosam
- Kaizala
- Social Media
- Print and electronic media

IOT and Surveillance

- Drones
- Sensors
- Dashboards
- Geo tagging
- Biometrics

Infrastructure

- A.P fiber grid
- CC cams
- FSOC (wireless)
- Digital class rooms
- Aadhaar platform and applications

Incidents

- ISRO
- Sensors
- Weather
- Disaster control
- SEOC
- Incidents and events

Did digital reforms lead to fiscal savings?

Our calculation says YES!

- Savings from Aadhaar is a contentious issue in India
 - Opaque estimation methodology for government's claims; many have been challenged
- For PDS we have two pieces of information to estimate:
 1. Smaller beneficiary rolls post-Aadhaar seeding (although cutting beneficiaries was not a policy objective)
 2. Savings from reconciliation: averted diversion of unclaimed rations at the end of each month
- Important point: Dealer margins have been increased to compensate for reduced diversion
- Together, we estimate savings about 35% of the current cost of the program. Allowing for widened dealer margins, savings are 33%.



Payback period for specific investments in digital technology and devices is about 2 months

Very high ROI

Key Lessons and Recommendations

- **Institutional capacity and incentives are central to understanding role of ID and technology in service delivery**
 - ID is not a panacea but only a tool for making service delivery better
 - Rapid rollout of ID facilitates its use but only if there is capacity and strategy for implementation
 - It works best when existing systems function at a basic level of efficiency
 - Authentication can fail so human backup is important to fix accountability and minimize exclusion
- **Digital reforms take sustained effort, attention, learning-by-doing and political will**
 - Empowerment of beneficiaries should be at the motivating factor
 - Good program design plus rapid and continuous feedback is essential
 - Policymakers should be open to redesign as both ID systems and technology mature
 - Digital reforms create winners and losers – need to reshape incentives for service delivery towards performance
- **Digital society requires capability to work with digital systems**
 - Exploit synergies between ID, financial inclusion and mobile technology
 - Acknowledge that certain groups (women, elderly, very poor) may not be digitally capable
 - Take action to improve digital literacy through focused campaigns
 - Significant win-win opportunity for effective public-private partnerships



Thank You!

Please see Conference Almanac for more details

Full list of studies available at:

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