

# Mainstreaming the Digitalization of Payments into Public Financial Management

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# The Scale of G2P Payments

- Every year governments, development agencies and the private sector make \$ billions in payments to people in developing countries
- Public payments to individuals, including payroll, pensions and transfers typically represent 12% of GDP or more in developing countries
- In 2014 over a billion people received cash transfers and other payments from governments and donors
- The average developing country operates some 20 social safety net programs costing 1.6% of GDP
  - Many overlaps, often not an integrated view around beneficiaries
  - Disconnected registers, delivery mechanisms
- Cash disbursement in humanitarian programming is increasing though most assistance is still in-kind

# Digitalization of Payments and PFM

- Some countries have moved quickly, including Mexico and China but in other countries progress has been slower
  - Many programs still disburse cash (example TASAF in Tanzania)
- Payments mechanisms, as well as the choice between in-kind, voucher and monetary support, are usually considered within the ambit of social protection policy
- Ongoing debate on the merits of different types of programs:
  - Food versus Cash (Alderman et al 2018)
  - Workfare versus Universal Benefits (Ravallion 2018)
- However, the digitalization of payments should also be looked at as an integral part of management of public resources – expediting basic PFM functions
  - Timely payment --- and to the correct payees
  - Accounting and reporting: reconciliation with government accounts
  - Strengthens accountability by creating automatic audit trail
  - Enhances the quality of information: budget execution, cash management
  - Reduces transactions costs for providing payments and services
- Shifts PFM boundary to encompass all public payments. In principle, can be monitored in real time.

# Prerequisites for Digitalization of Payments

## Infrastructure:

- Widespread access to payment accounts, including through mobile technology
- Unique Identification of citizens and other residents
- These are different but not independent:
  - Some countries have moved fast towards mobile money for P2P transactions but harder to use for G2P without unique ID (Tanzania, bKash Bangladesh)
  - Unique and accessible ID lowers the cost of KYC and so enables smaller accounts to be commercially viable (India e-KYC vs Nigeria BVN)
  - Mobile technology and finance create demand for services of ID verification for transactions (Kenya – IPRS, Peru, Pakistan) and can also generate revenue from e-KYC process (Peru, others)
- But also need
- Unitary vision of government objectives and goals. Avoidance of “silos”
  - Payments, mobiles, ID, cut across many different sectors and applications but fragmentation is common, raising costs and reducing interoperability
- A degree of endogeneity with real-time feedback and learning
- Cannot be driven by technology or by donors
  - Parallels with the story of FMIS which has been extensively studied

# Cases

CASE	Main Objectives	Reforms	Effects
India 2009 - ongoing	Rationalize subsidies, reduce leakage, corruption, financial inclusion, tax collection	Unique digital ID Reforming subsidies and transfers E-KYC Payments interoperability	1.1 b. enrolled in Aadhar 280 m bank accounts Reform of LPG and other subsidies Fiscal savings, service improvements
Mexico 2007 - ongoing	Transparency, cost savings, financial inclusion	Single treasury account Digital payments Tiered KYC and other measures for financial inclusion	Payments through single account and digital Over \$1 b per year savings estimated
Ghana 2008 - ongoing	Eliminating ghost workers, tax collection, financial inclusion	Deduplication, smartcards, public payments through e-Zwich	Elimination of 40% of payroll where applied \$35 m savings from one modest application
Estonia 2001 ongoing	Efficient government, inclusion, digital platform for private sector	Unique ID, digital data platform (X-road) and regulatory regime: fully digital administration	X-Road connects 170 public databases Large savings from almost universal digital services

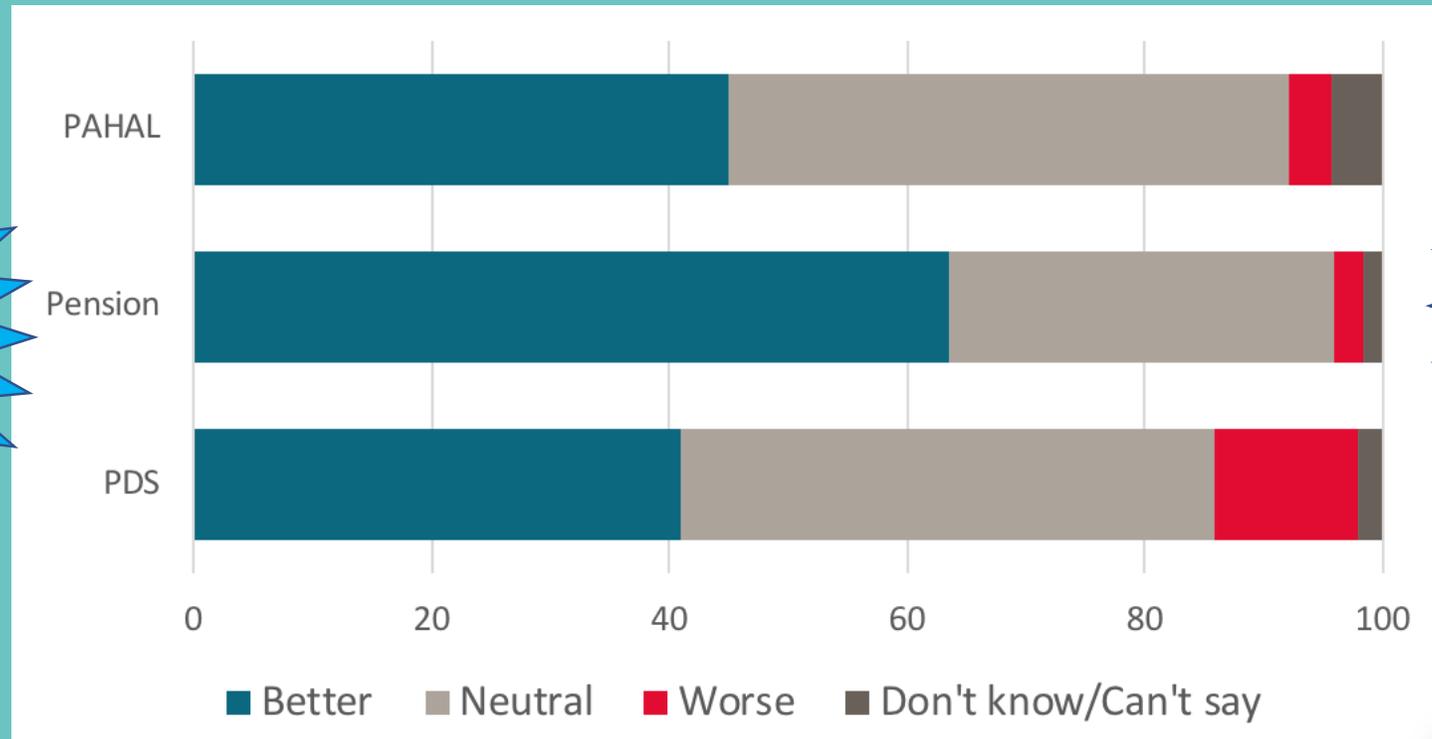
# India

- JAM Strategy: Jhan Dan accounts (e-KYC), Aadhaar, Mobiles
  - Plus UPI for interoperability: 145m in December 2017
- Massive shift towards digital programs and bank payments:
  - PDS, LPG, pensions, others. Often at state level.
- Real-time monitoring of all payments and subsidies:
  - By program, town, shop and beneficiary
  - Towards portability of benefits
- Rationalization of programs: LPG and kerosene
  - Use of common identifier
- Reported fiscal savings from lower leakage
- Financial inclusion esp. women (FINDEX 2017)
- Indications of better service delivery (Rajasthan)
- Feedback into Real-Time Governance
  - Example: Andhra Pradesh



# Beneficiary Views of Three Digital Programs in Rajasthan

**More  
Regularity  
Less  
diversion**



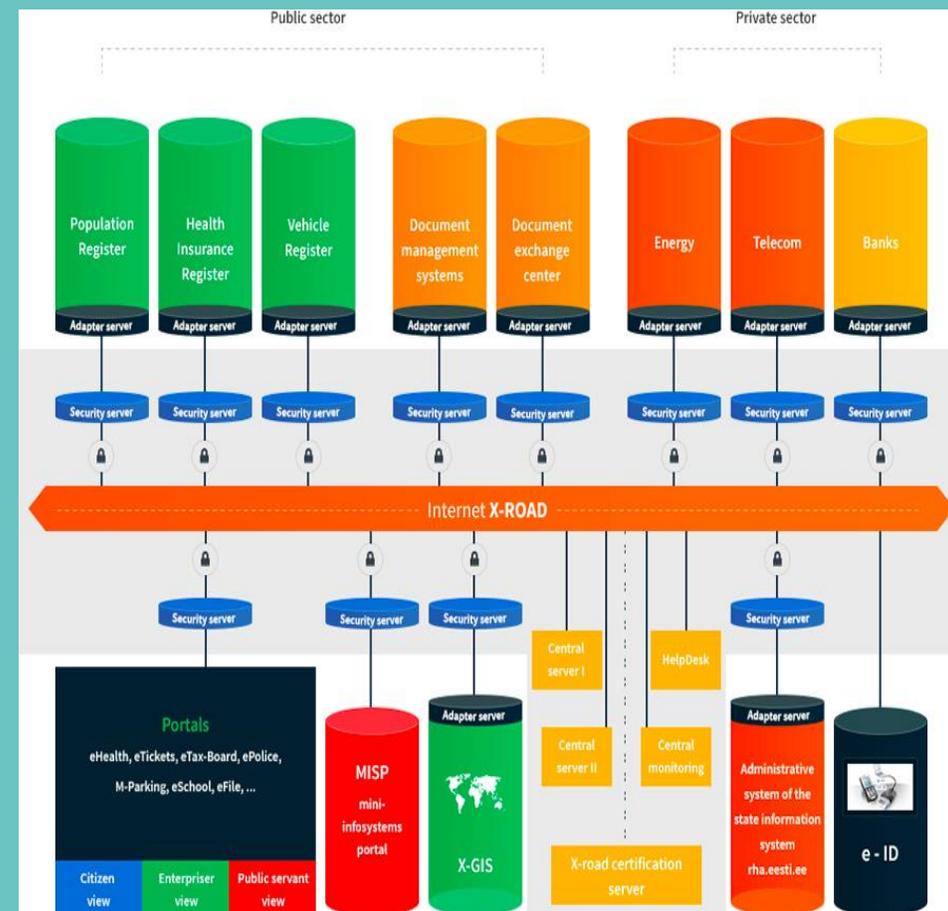
**Authentication  
problems,  
Connectivity**

Many feel the new systems are better, few think they are worse  
Main positive reason: regularity of benefit, less diversion of benefits  
Main negative reason: biometric authentication difficulties (PDS)

**Huge boost to financial inclusion, especially of women: all have accounts now, only one third before**

# Estonia

- Reborn state post USSR; government prioritized digitalization for all services
  - Included extensive training of citizens
- Advanced digital identity system for virtually all citizens; multiple services
- X-Road data exchange layer to leverage existing data for public and private uses. This is essential for efficiency, but need to specify:
  - What data can legitimately be shared with who?
  - How can citizens monitor who has requested their data?
- Savings estimates from X-road 820 years government working time in 2016
- If each e-service request saved 15 minutes of working time, the government would have saved about 9.6% of its staff time.



# Mexico

- 2013 National Digital Strategy built on years of effort
- Single treasury account and digitalization of government receipts
- Regulatory reform to encourage financial inclusion including
- Four-tier risk-based KYC system to facilitate payments accounts
- transparency on fees
- entry of non-bank entities
- Promotion of electronic G2P payments for greater efficiency

# Some Lessons from Mexico

- Changes in law can create momentum, but the effort must be sustained over time by political and technical champions.
- Put the legal and technical infrastructure in place. The Ministry of Finance created the legal framework to enable centralized payments and then built its own IT system; the Central Bank developed a national payments system.
- Shifting in stages: The process started with centralizing government-to-business payments, before moving on to government-to-person payments from 2008. Pensions were also a relatively easy target.
- Both centralizing and digitalizing payments platform delivers higher efficiency and other benefits.
- Identifying the winners and losers so as to design appropriate incentives. Large banks held lucrative government deposit floats under the decentralized process while payments cleared. They opposed the changes and now have to compete for business. Beneficiaries have been freed of the obligation to use a bank chosen by a government department to receive their payments.
- Carefully designed incentives to help persuade end recipients. In Mexico, the law required that the government obtains the consent of workers before shifting their means of payment.
- While financial inclusion goals didn't drive the reform, they are important outcomes of the digitization of social benefits and rural payments.

## Mexico's tiered scheme for opening deposit accounts

	Level 1	Level 2	Level 3	Level 4 - Traditional Bank Account
<b>Max Amount in monthly transactions</b> USD/Month	280 + Max Balance of 370 USD	1,110 <sup>1</sup>	3,700	No limit imposed by regulation
<b>Customer information required to open account</b>	None	<u>Basic:</u> Name, date and place of birth, gender and address	<u>Complete</u> customer information	<u>Complete</u> customer information
<b>Hard copy required?</b>	Not applicable	No	No	Yes
<b>Face to face account opening required?</b>	No	No <sup>2</sup>	Yes	Yes
<b>Means to access funds</b>	Only debit card (for national use). No mobile.	Any electronic means (mobile, card, bank transfers)	Any electronic means (mobile, card, bank transfers)	Any electronic means (mobile, card, bank transfers), and cheques

Notes:

- 1 Level 2 accounts allow additional 2,220 USD in transactions per month if resources originate exclusively from government programs
- 2 Bank may opt for face-to-face procedure

Source: Banxico Circular 2019/95 as modified by Circular 14/2011

# Ghana: A Partial Case

- Background: chronic overstaffing, runaway recurrent spending, public wages over 9% GDP; cash-based payments weakening tax collection
- Use of digital payments to de-duplicated accounts to eliminate ghost workers as substitute for effective payroll management
- Purchase of e-Zwich from Net-1
- Deduplication of e-Zwich account-holders and efforts to pay all public salaries through e-Zwich then to roll it out to private sector wages
- Mixed success— slow rollout and resistance from public sector unions
- Large savings reported from single case of National Service System: 40% of payroll.

## Lessons

- Separate out ID system from payments system
- Expect some opposition to introduction of digital systems



# Conclusions

- We are reaching the point where almost all people have access to mobiles but there is still a financial gap and an ID gap
- Mobiles: 5.6 billion adults; 5 billion unique mobile subscribers (GSMA 2017)
- Financial Inclusion: (Global Findex 2017)
  - 2011-2017 1.2 billion adults have obtained a financial account
  - 2014 - 2017, the share of adults with financial account rose from 62 to 69 percent
  - Is 63 % in developing countries, about 5% less for women
  - India: 2011 35%; women 26%    2017 80%, women 77%
- ID: Increasing but about 1.1 billion people lack (ID4D)
  - About half children who are not registered...
  - And quality of some systems low.....
- There is still work to extend digital infrastructure to poor people in poor countries.
  - Including level and supportive regulation (tiered KYC) and interoperability....
- However, examples like India or Kenya show what can be achieved with a coordinated vision and an integrated approach
- Because of their implications for the management of public resources, these issues should be considered also as part of public financial management.

# THANK YOU

