



Payment systems

An introduction

**Training Course on “For Protection and
Promotion: The Design and
Implementation of Effective Social Safety
Nets”**

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Objective of a payment system

Successfully **distribute**
the **correct amount** of benefits
to the **right people**
at the **right time** and **frequency**
while **minimizing costs** to
both the program and the beneficiary



Outline

- Introduction: Objectives and instruments
- The IPSA payment tool
 - Guidance Note
 - Assessment tools
- A few examples of digital social payment programs – CGAP
 - The Ti Manman Cheri (TMC) Program, Haiti
 - The Pantawid Pamilyang Pilipino Program (4Ps)
- Wrapping up & discussion



Specific objectives

- To ensure that the designated amount of benefits are delivered predictably to entitled recipients and on time;
- To reduce administrative program costs and beneficiary transaction costs and to minimize potential errors, fraud, and corruption throughout the payment process.
- An additional program objective is to provide beneficiaries with access to financial services (i.e. savings, loans, remittances, etc) to link them into the wider economy.



What happens when it does not work? An example

- India (Dominique Van de Walle, Manasa Patnam et al)
 - NREGA – NATIONAL RURAL EMPLOYMENT GUARANTEE IN BIHAR
 - HH issued a “job card” on application
 - Adult HH member provided work on demand (s.t. 100 day HH max. limit Unemployment allowance paid if work not provided
 - Wages paid on piece-rate basis as per Schedule of Rates Payment in cash through bank or post office accounts
- Survey (baseline, 3000 hh)
 - Mode of wage payment: 45% in own post office accounts Cash from mates (23%) + contractors (11%):
 - Only about half the time were job card entries & signatures done at time of payment
 - As a result only 40% knew what is the right amount



Challenges

- How to design a system that takes into account:
 - Type of program
 - Current and future needs
 - Different circumstances? (Rural vs. Urban; availability of electricity, telephone network, etc.)?
- How much to invest in administrative capacity and infrastructure? (hardware and software) to lower delivery cost in the future
- How to integrate new designs and hardware into established processes



Type of program: Recurrent vs Emergency

Cash Transfers

- Recurring
- May be conditional
- Recipients unbanked or financially underserved
- Cash/paper based payments – may be costly, inefficient and susceptible to fraud

- Card based products
- EFT Credit Transfers

Emergency Relief Assistance

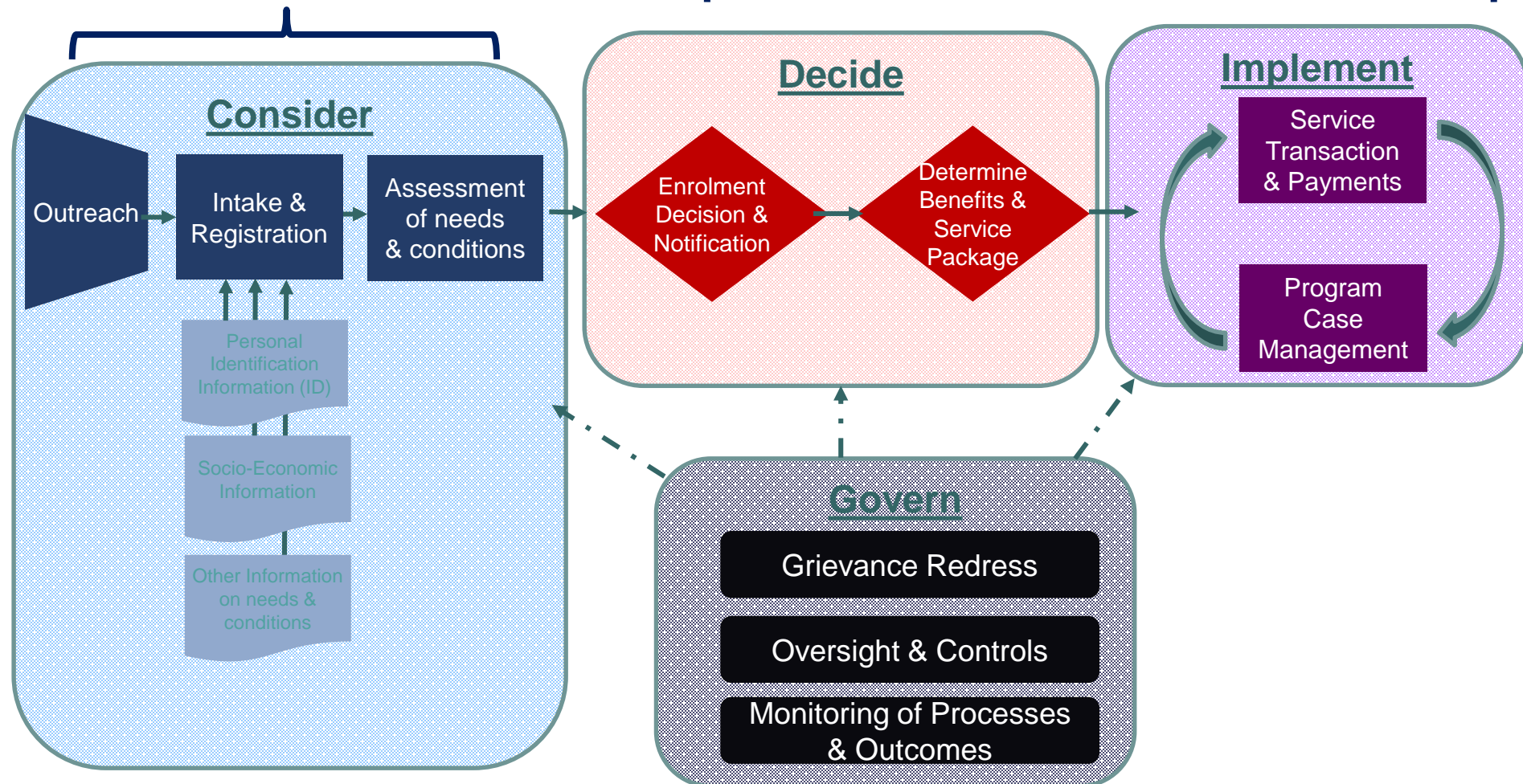
- One time
- Recipients unbanked or lack of access to bank acct
- Cash/paper based payments –may be costly, inefficient and susceptible to fraud

- Single use prepaid cards
- Mobile/wireless ATMs to supplement card usage

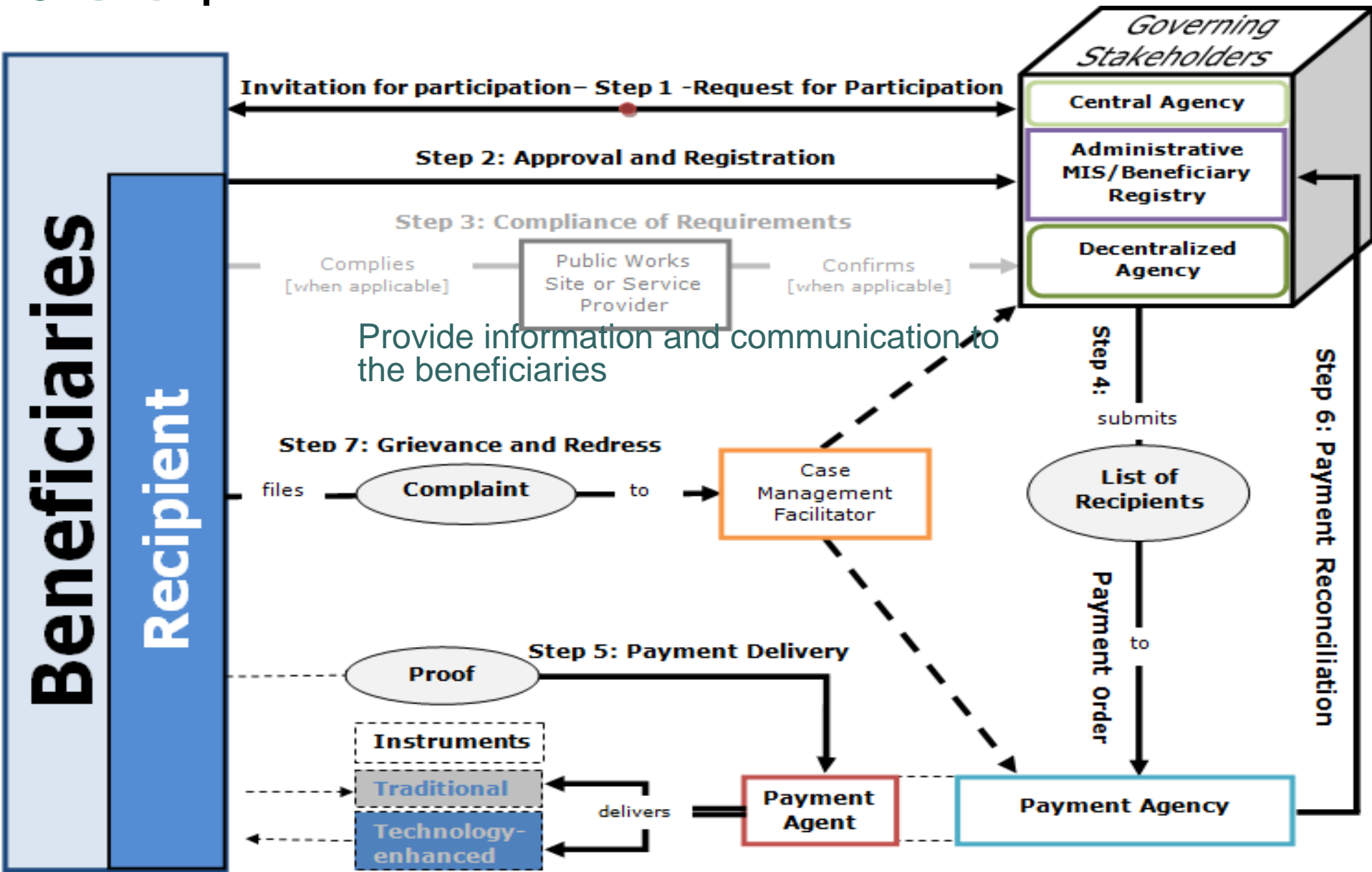
Payment processes are a component of implementation phases or “business processes”

Business Processes for Program Delivery (Population = beneficiaries)

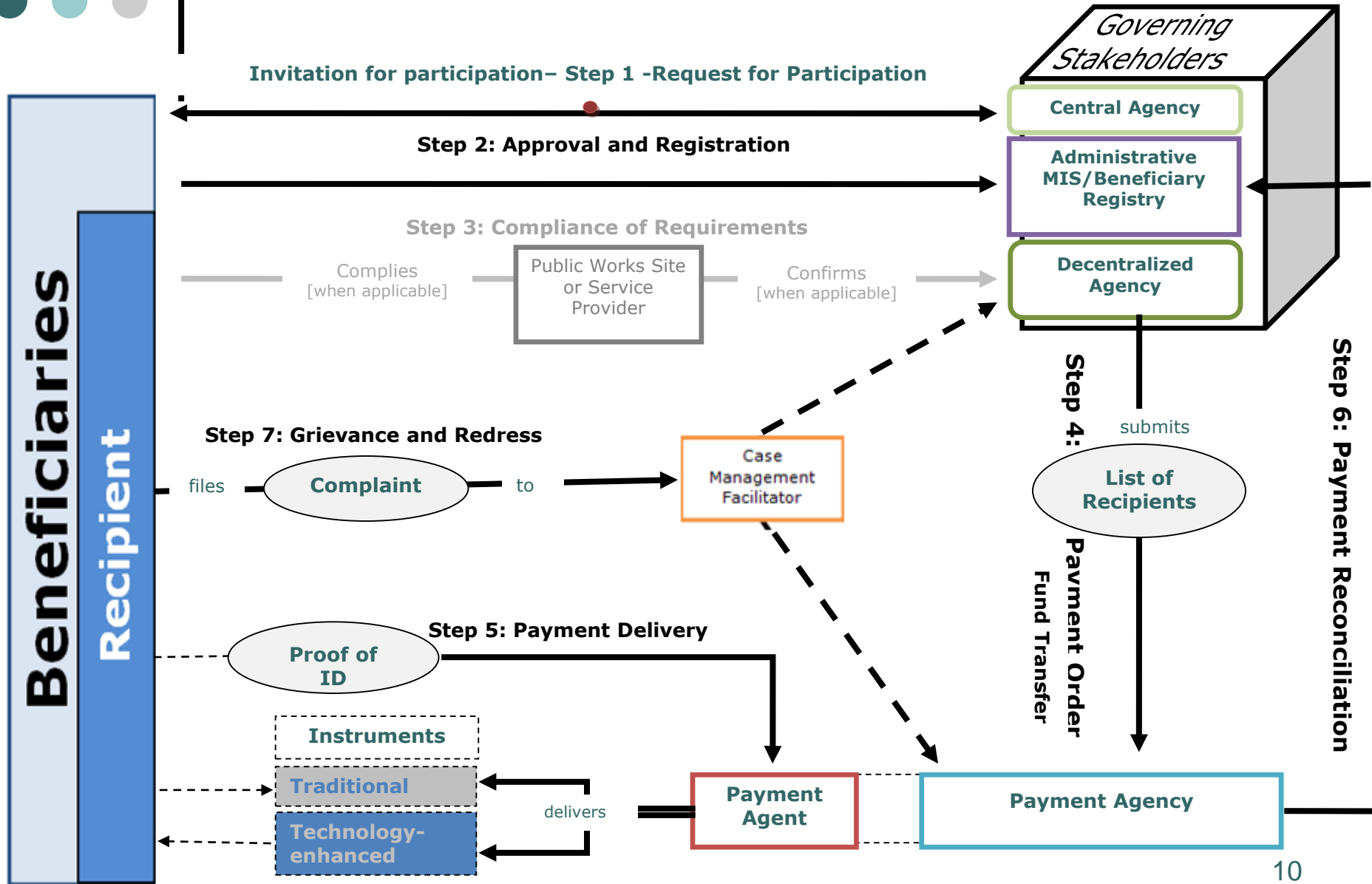
Business Processes for Determining Eligibility (Population = all clients / potential beneficiaries)



Basic payment flow



The Seven Steps involved





Various Payment Agencies, Agents and Instruments and Costs

Agencies Responsible	Agents Intermediary	Instruments
<ul style="list-style-type: none"> ● State and Private Banks ● Public Agencies ● Private Vendors (mobile phone companies) ● Microfinance institutions 	<ul style="list-style-type: none"> ● State and private branches ● Mobile Banks ● ATMs ● Business correspondents and agents ● Retail stores 	<ul style="list-style-type: none"> ● Cash notes ● Checks/Vouchers ● Bank Accounts ● Electronic Payments <ul style="list-style-type: none"> ● Debit cards ● Smart cards ● Cell phones

ALWAYS PROS AND CONS TO CONSIDER



Agents - Intermediary

- *Banks, mobile banks and ATM*: retail banking
 - Can use consolidated or individual accounts
 - Can travel to locations if not many branches
 - ATMs
- Business correspondent
 - The Caixa in Brazil has created an impressive network of **banking correspondents** present in all of the country 5,500 municipalities
- Retail stores
 - SNAP in US and Food stamps in India

Instruments



- Cash
- Checks and vouchers
 - Reclamation chain
- Bank accounts & direct transfers
- Electronic payments
 - Debit cards, Prepaid cards, Smart cards, Cell phones and mobile money

Electronic Payment – CALP Study [<http://www.cashlearning.org>]

	Pre-paid card	Smart card	Mobile money	Mobile voucher
Description	Debit card read in any valid ATM or POS	Plastic card with chip, read in any valid Point of Sale machine	Cash transferred between 'mobile wallets' on mobile phone via sms	Voucher code and unique ID sent via sms
Initiatives included	Philippines Chile Pakistan	Kenya Zimbabwe Malawi Niger DR Congo (under development)	Kenya Niger Philippines Cote d'Ivoire Haiti	Syria Zambia Zimbabwe Kenya (under development)
Context	Flood response	Social Protection Food insecurity Displacement	Displacement Early recovery Food insecurity Livelihoods	Food insecurity Displacement
	Urban, Rural	Urban, Rural	Urban, Rural	Urban
Scale (HH)	300 <> 1.3m	1000 <> 60,000	100 <> 8,000	1000 <> 20,000

● ● ● | Some options:

Agent with a cell phone



- Recipients visit a local payment agent, provide an ID and/or account number, and request the payment. After verification (via SMS). The agent hands cash to recipient using its own money and keeps additional record of transaction for reimbursement, reconciliation, etc.
- The recipient deposits the requested amount from its virtual account into the agent's account via SMS. After confirming the deposit, the vendor hands cash to the recipient.
- POS device or card reader slot is attached to handset. In this case, the steps in 'Agent with POS device' are followed.

Summing up Electronic Payment Instruments

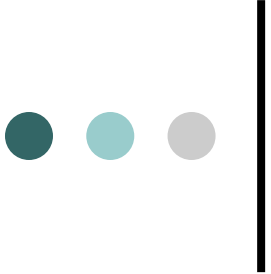


Payment Instruments	Payment Needs Satisfied	Required Industry Infrastructure	Required Institutional capabilities
Debit cards	Real-time payments, Face to face , online and remote transactions; recurring bill payments	ATM and EFT POS networks. Credit bureaus. Rules and standards for inter-operability, dispute resolution and consumer protection	Centralized account management. Access to ATM and POS networks.
Prepaid/Stored value cards	Real-time payments, Face to face , online and remote transactions; recurring bill payments;	ATM and EFT POS networks. Rules and standards for inter-operability, dispute resolution and consumer protection	Access to ATM and POS networks. Real-time transaction authorization and monitoring systems
Smart Card	Real-time payments, Face to face, online and remote transactions;	POS and agent network	Centralized account management. Access to POS networks Real-time transaction authorization and monitoring systems
Mobile payments and e-commerce (virtual wallets)	Real-time payments, Person to person including cross border remittances, utility bill payment, micro-payments and purchase transaction capability	Enabling legal framework. Merchant / Agent network Linkages with existing inter-bank and payment card networks.	Interface mobile payment infrastructure with banking accounts (savings or credit) or create a prepaid product. Ability to service far-flung merchant/agent network



Over to:

- ISPA payments tool
- CGAP - Digital Social Payments and Financial Inclusion
 - Case studies



How do you design a payment systems?

- Design a system that takes into account country specific financial and technological infrastructure
 - Lots of resources available: ISPA TOOL, GCAP, CALP
- Understand the objectives of the agencies involved and by providing the right incentives
- Frequency and location of payments matters
 - Impact on *the cost of delivering transfers*
 - Impact on program delivery
- *Political economy considerations* should not be ignored in the selection set up or modernization of existing delivery mechanisms.
 - Reforming current delivery systems might not be easy because of the resistance from interest groups (those currently engaged in the system)



Final suggestions

- Separate payment delivery (contracted out) from program delivery
- Make use of any pre-existing delivery systems and local infrastructure, including bank accounts, databases and national identity systems
- Well integrated designed systems can evolve and improve over time – Mexico, Niger, Kenya, etc.
- Be aware of the tradeoffs among the alternative options
 - Cost and efficiency on the one hand and accountability and frequency of payments on the other
- Experiment with new available technologies and introduce them gradually – Test and test

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