International Finance Corporation
World Bank Group

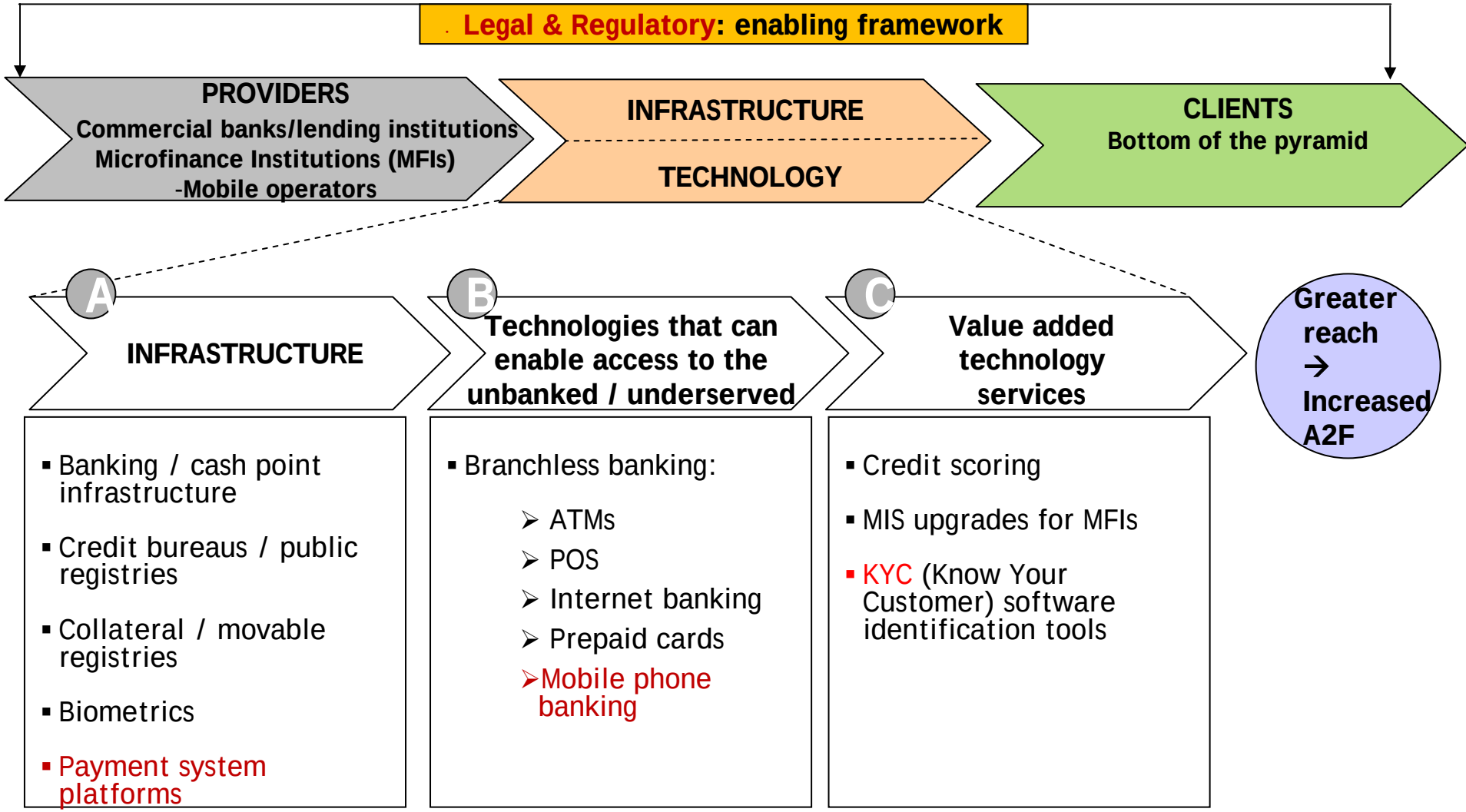
M-Banking Potential in Papua New Guinea

Port Moresby, November 30, 2009

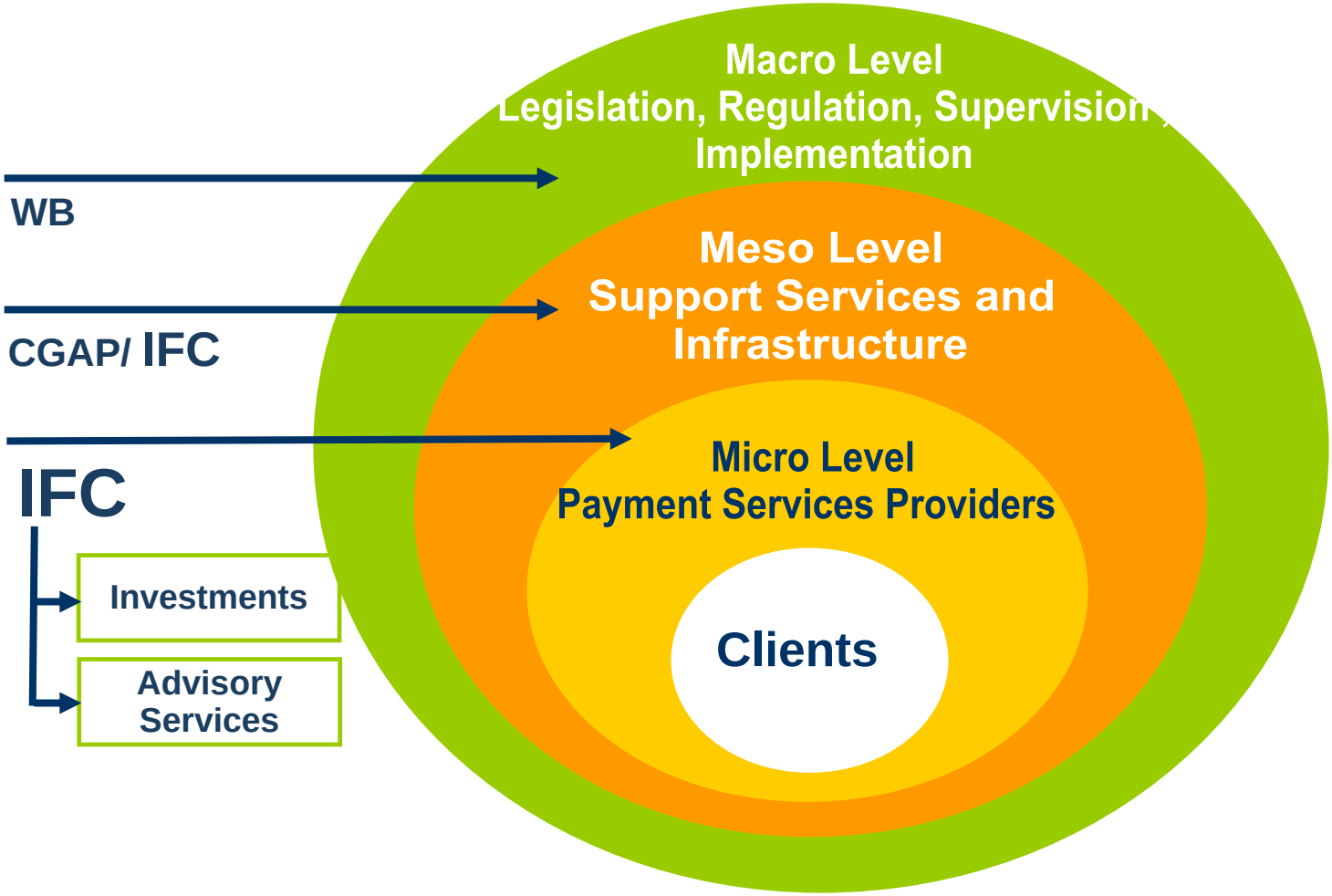
INTERNATIONAL FINANCE CORPORATION (IFC)

- **IFC is the private sector arm of the World Bank Group and has 181 member countries**
- **The corporation aims to strengthen the private sector in developing countries through loans, equity, structured finance and advisory services, among others.**
- **IFC's mission is to promote sustainable investment in developing countries, reducing poverty and improving people's lives through:**
  - Financing private sector investment
  - Mobilizing private capital in local and international financial markets
  - Providing advisory and risk mitigation services to businesses and governments
- **In FY08, IFC committed US$11.4 billion and mobilized an additional US$4.8 billion through loan participations and structured finance for 372 investments in 85 developing countries.**
- **IFC will typically contribute 5%-20% in equity investments and maintain the investment for 8 to 15 years.**
- **IFC is profit oriented, charging market rates for its products and services.**
- **IFC's bonds are in strong demand all over the world and are assigned the highest rating (AAA/Aaa) by Moody's, S&P and Fitch.**

Key Enablers for Extending Access to Finance



Working with IBRD and CGAP to Increase Access to Finance



WBG Support: An Overview

The World Bank helps regulators to
(1)SWOT and needs assessment
(2)Establish supervision/ oversight of third party service providers
(3)Draft strategies, policies and regulations as needed
(4)Ensure mobile/ branchless payment solutions fit within national payments systems strategy
(5)Develop and implement national payment systems

IFC supports the policy makers / regulators in close collaboration with the PSDG supports the development of an appropriate regulatory environment:

- ✓ Facilitating workshops with key stakeholders
- ✓ Delivering trainings on international standards to regulators
- ✓ Organizing study tours to other markets
- ✓ May fund PSDG

IFC supports operators and financial institutions to implement branchless banking solutions; may include establishment of third party payment service provider

✓Investment
✓Advisory Services

IFC Activities - Examples

Indonesia:	Regulators workshop, market education
South Africa, India:	Investment into a third party mobile money operator or alternative payment technology vendor, linkages with MFIs
Cambodia, Pakistan:	Agent development and change management strategy advisory services to bank-led models
Cambodia:	Regulatory advice
Mozambique, Senegal:	Mobile money development master planning, stakeholder coordination and capacity building
Brazil:	Advisory service for a new bank subsidiary to serve BOP market with technology solution
Uganda, Sri Lanka:	MNO distributor / retailer capacity building linkages
Mozambique, Chad, Azerbaijan, Peru:	Suppliers capacity building / local economy development linkages with large corporate

Access to Finance is Limited in Asia

Country	%
Afghanistan	n/a
Bangladesh	32
Bhutan	16
Cambodia	20
China	42
India	48
Indonesia	40
Lao PDR	n/a
Malaysia	60
Maldives	n/a
Mongolia	25
Myanmar	19
Nepal	20
Pacific Islands	10
Pakistan	12
Papua New Guinea	n/a
Philippines	26
Sri Lanka	59
Thailand	59
Timor-Leste	n/a
Vietnam	29

Percentage of the adult population with access to an account with a financial intermediary *Source: Finance for All (World Bank)*

Branchless banking increases number banked

Branchless banking can dramatically reduce the cost of delivering financial services to the poor (by more than 50%)

1. For Kenya to reach middle-income levels of branches and ATMs at current costs requires a $2 billion investment - 6x pretax profit of the Kenyan banking system in 2008
2. Yet, in just 3 years the number of Kenyans considered to be formally financially included has almost doubled to 41% - largely due to the introduction of M-PESA
3. 30% of M-PESA users and WIZZIT customers were previously unbanked and 20% of Filipino m-money users live on < $5/day, showing these services reach the poor
4. 21% of M-PESA users say they use the service to store money
5. In Brazil, 398 million deposit and withdrawal transactions worth $39.6 billion were done by agents in 2007, accounting for 1 in every 5 transactions
6. Successful providers view their agents as an important category of customer, rather than a passive channel

Source: CGAP. Scenarios for Branchles Banking in 2020

Comparison Group + Before & After Methodology

Pool: 9,977 WING's users
(Feb to Apr 2009)

Baseline (July 2009):
268 (out of 1,694) in 4 locations
(PP, SR, Kampong Cham, Sihanouk Ville)

Follow-up (Nov. 2009):
268 customers in 4 locations
(PP, SR, Kampong Cham, Sihanouk Ville)

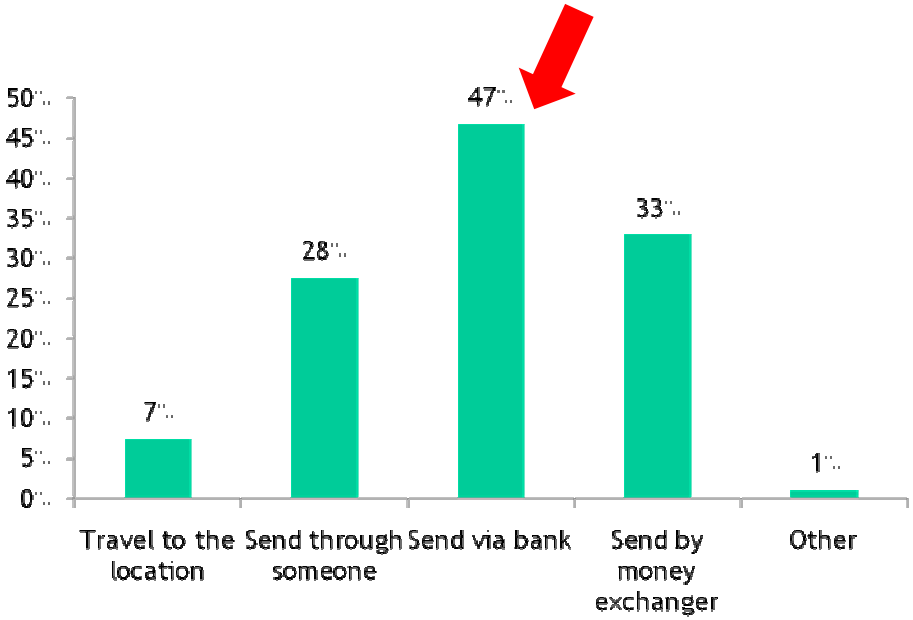
Comparison Group (Nov. 2009):
~200 customers in 4 locations
(PP, SR, Kampong Cham, Sihanouk Ville)

New Pool

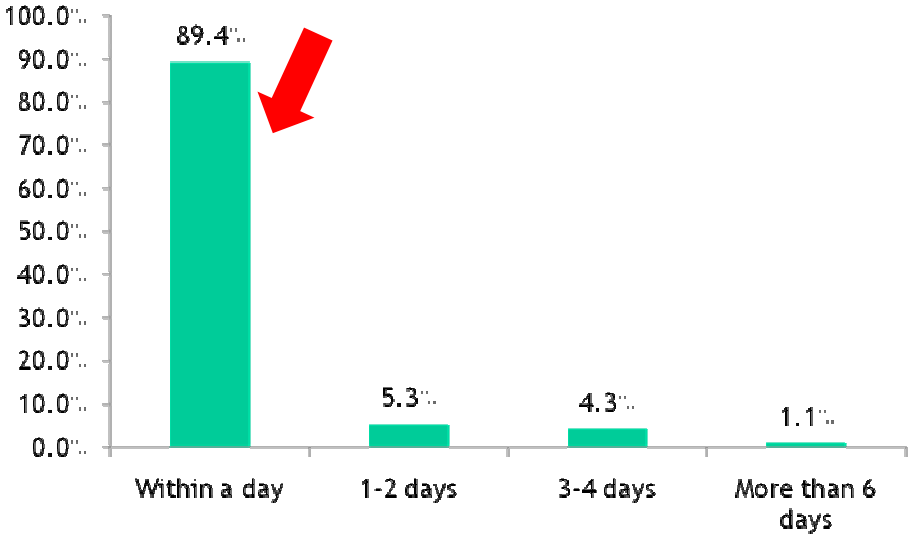
Total	**9,977**
With phones	3,234
Total in 4 Locations	4,801
With phones	1,694

Mode and Time to Transfer

How Did You Transfer?

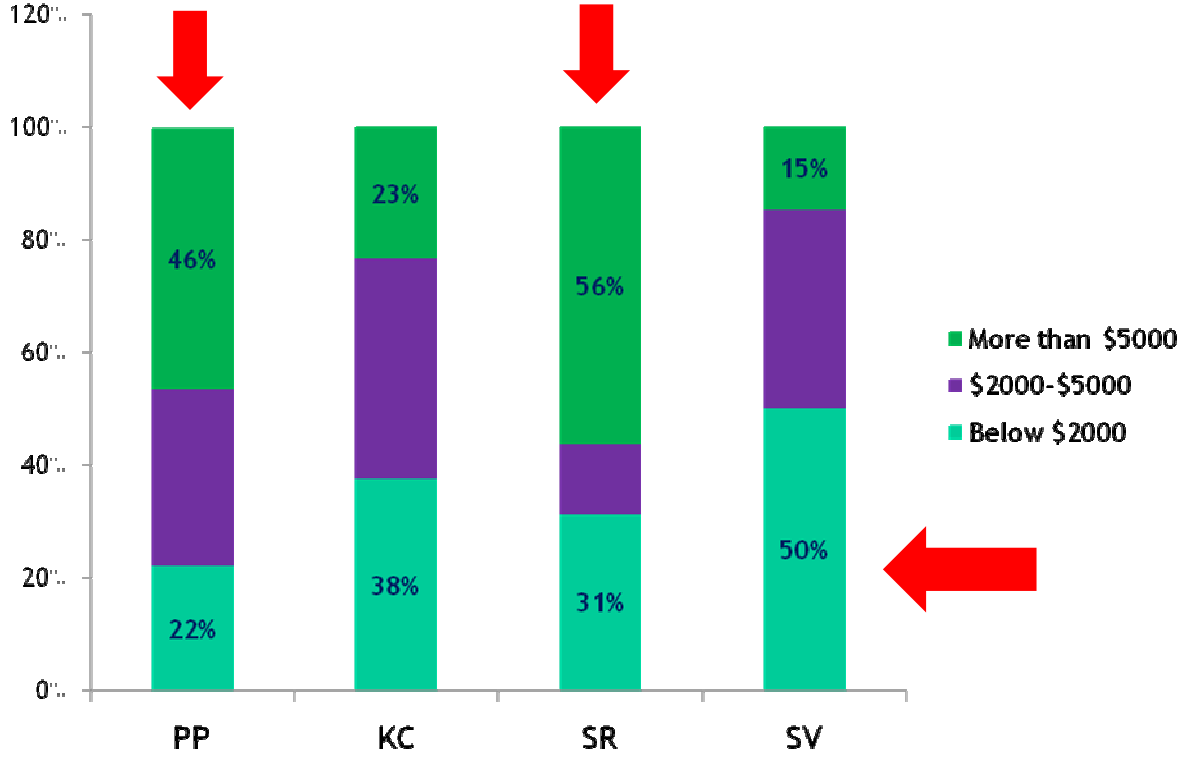


How Long Did It Take?



WING competes with banks for its banked clients (46%)

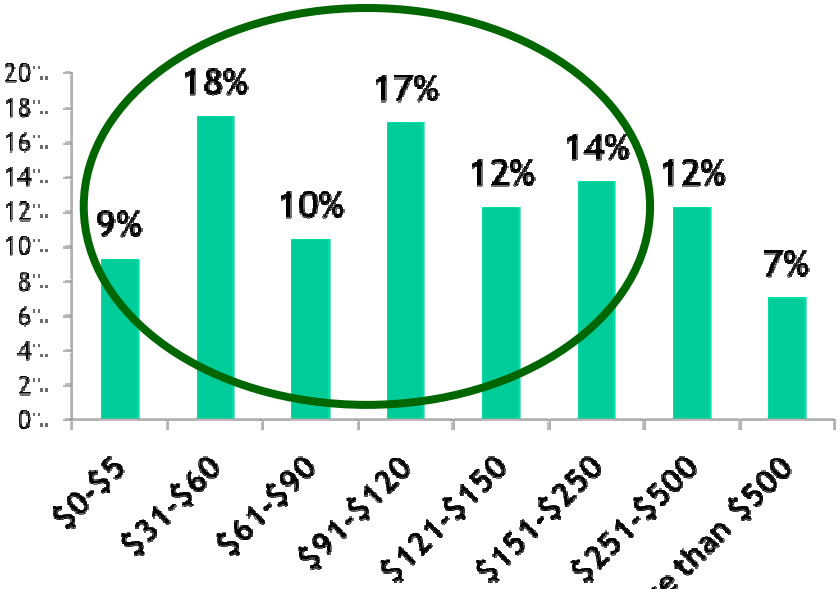
Clients' Total Income

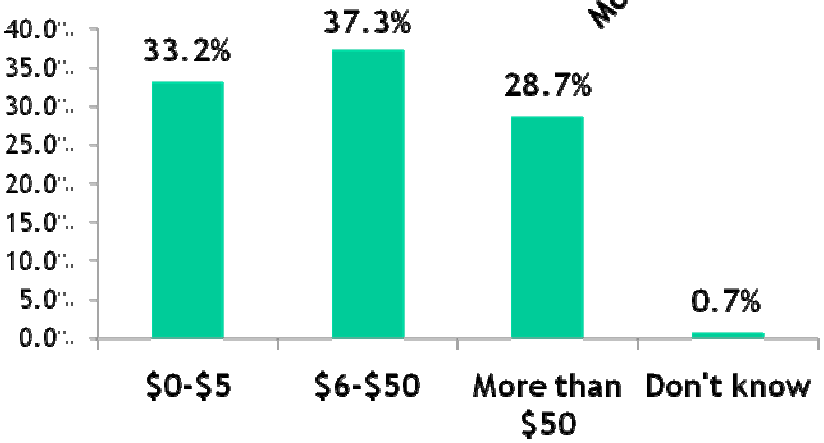


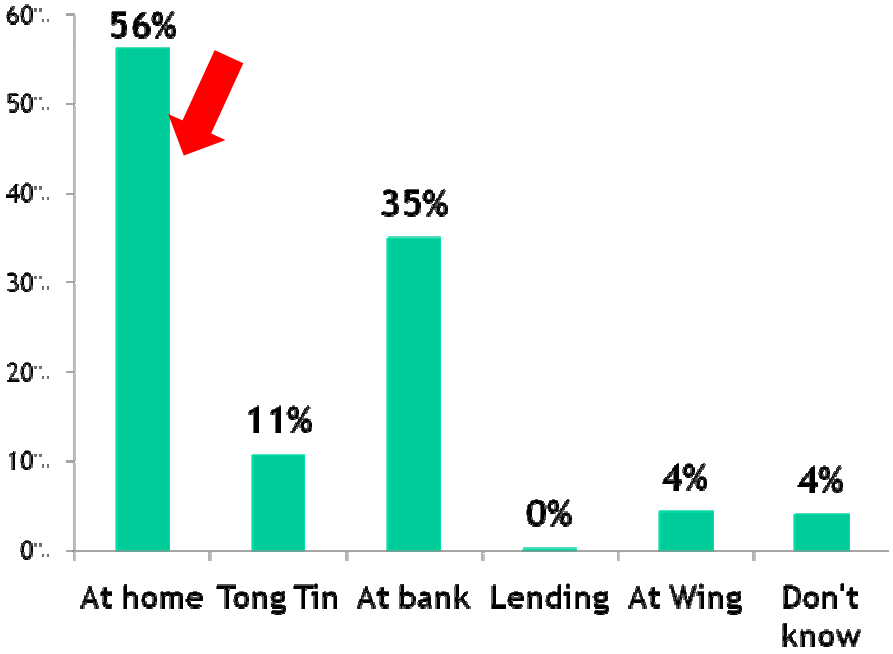
- **Up to 50% of Clients have household income less $2,000 per year.**
- **On average $1-$2/person/day**

WING is serving POOR

Spending/Saving Volume and Saving Methods

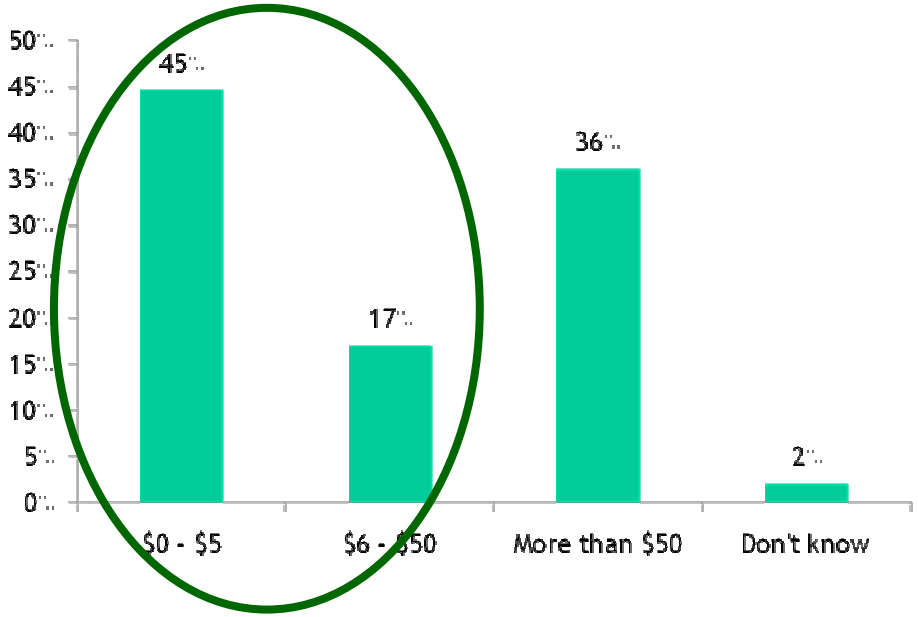


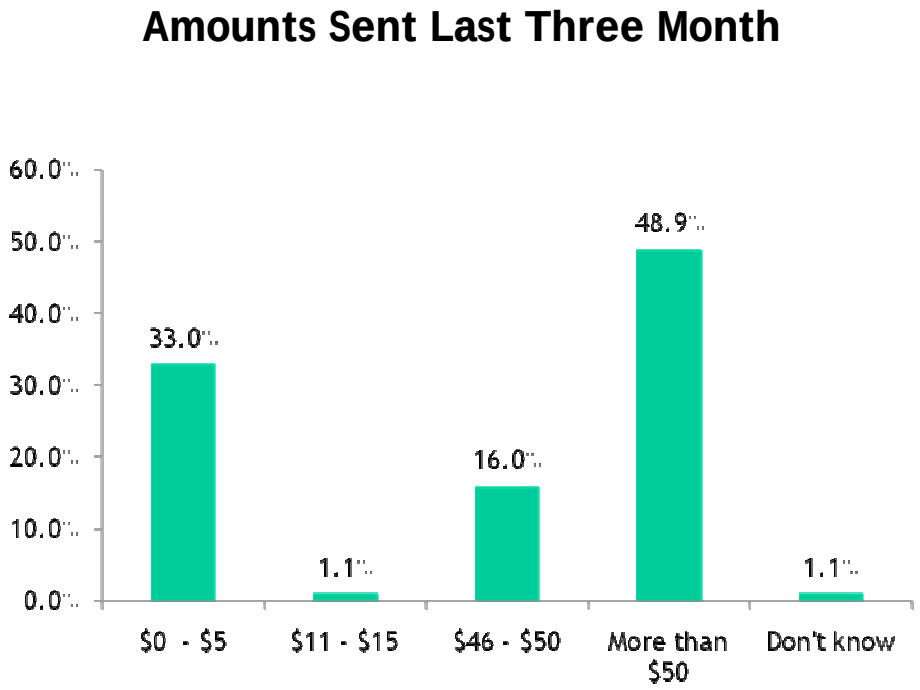




WING serves lower end of market

Amounts Sent Last Month





Transfer amounts reflect early clients profile

WING's Clients

- **56% clients do not have any bank account, this rate is higher in provinces**
  - 44% of clients in PP are unbanked
  - 61% of clients in KC…
  - 81% of clients in SR…
  - 79% of clients in SV…
- **2/3 of unbanked are women**
- **On average, 47% clients are unemployed*, of which 66% are women**
- **62% send/ receive less than 50 US$**

WING is reaching the UNBANKED and LOW INCOME groups

* Unemployed + farmers, housewives

E-Money Success Factors

1. Conducive regulatory environment and flexible, open-minded regulators
2. High mobile phone penetration, low access to finance and evidence of latent demand for services
3. Extensive network of access points for customer acquisition, cash-in/cash-out
4. Familiarity with text messaging, electronic top-up, and concepts of electronic value on a phone helps
5. Sachet economy in which population is used to purchasing products and services in small quantities
6. Willingness of public and private sectors to invest in innovation
7. Driving awareness and acceptance through aggressive marketing
8. Regulator is prepared to deal with new instruments

M-PESA Distribution Model

M-Pesa has established over 6,000 agents that service 5 million registered users. Safaricom retains control over training and monitoring at all retail outlets. Agents operate on commission, earning $0.50 for each new subscriber, the same amount when a customer makes their first deposit, and smaller commissions for each transaction the agent facilitates on behalf of existing customers. A typical agent makes twice as much revenue from M-PESA than from the sale of airtime. A survey suggests that 90% of agents are profitable. Those who face troubles are primarily rural agents who have significantly higher withdrawals than deposits, which results in regular, often costly trips to the nearest bank branch.

"Banking Agents—the key to successful mobile banking services." February 18, 2009. CGAP.

Source:UNDP/IFC Research 2009

Regulatory Environments

Highly Regulated Market

1. Clear directive on mobile payments and banking.
2. Only banks are entitled to offer mobile payment services.
3. No mobile to mobile international remittances allowed.
4. Very restrictive on cash-in and cash-out

Regulated Market

1. Allows consolidated account models where private companies can operate M-payment services as licensed money transmitters.
2. Strong pre-paid industry, growing annually.

Innovative Market

1. Allows Telco to handle subscriber's cash with a telco account.
2. Allows telco to accept and disburse cash from its outlets / agents.
3. Money held in trust at a bank.

Source: GSMA Mobile Money Summit 2009, Barcelona, Obopay.

Making Regulations Work

The goal is to formulate proportionate regulatory policy that gives space for innovation while permitting branchless banking to scale up safely.

- No one-size fits all solution. Regulations should be country and context specific
- Regulations need to be flexible and evolve to meet needs of the fast paced innovations in mobile banking
- Has to be a consultative approach between regulators, policy makers and industry
- Must promote competition and innovation

Source: CGAP Focus Note No. 43. Regulating Transformational Branchless Banking: *Mobile Phones and Other Technology to Increase Access to Finance.* January 2008.

Regulation versus Innovation

- No or inappropriate regulation could potentially be harmful
- Existing regulation in most developing countries is inadequate:
  1. Not equipped to handle the convergence of telecommunications and finance
  2. May have loopholes that cannot cover innovations and fast paced change associated with technology
  3. May be overly restrictive and hinder innovation
- However, innovation cannot be stopped in the name of regulation
- Regulation should not hinder innovation
- What is needed is proportionate regulation
- The CPSS-World Bank General Principles on International Remittance Services provide a valid framework for mobile banking.
- In many countries mobile banking will have its regulatory debut with the payment system overseer (generally the Central Bank)

Source: 1) CGAP Focus Note No. 43. Regulating Transformational Branchless Banking: Mobile Phones and Other Technology to Increase Access to Finance. January 2008.

2) Presentation by Massimo Cirasino on Regulating Mobile Money: A Payment System Perspective. World Bank Presented at the Mobile Money Summit held in Cairo in May 2008.

Challenges in Regulating for M-Payment Solutions

- VIRTUAL: less relevance of physical presence complicates surveillance, enforcement, crisis management via traditional methods and channels
- CROSS-BORDER BUSINESS: transcending physical, market, and jurisdictional boundaries
- REPUTATIONAL RISKS: a single negative experience could undermine the credibility of all other electronic payment instruments
- TRANSFORMATION: more competition and innovation, but also more risk of experimental failures
- CONFIDENCE PROBLEMS: unregulated institutions providing payment services
- TECHNOLOGICAL FAILURES

Rules on:

- Determining account opening
- Credit information sharing
- Governing agency relationships
- Know Your Customer (KYC)
- Taxes on telecom services
- Combating Financing of Terrorism / Anti-Money Laundering (CFT/AML)

Necessary but NOT Sufficient Pre-regulatory Conditions

Authorization to use retail agents equipped with ICTs as the cash-in/cash-out point and principal customer interface. The extent of regulation of agents varies by country

- In Brazil, agents, also called "correspondents", are the liability of banks
- In India, agents are limited to NGOs and postal banks resulting in slow uptake of branchless banking

Risk-based approach for combating money-laundering and terrorist financing adapted to realities of remote transactions conducted through agents

- Financial Action Task Force (FATF) strongly recommends "Know Your Customer (KYC)" and "Customer Due Diligence"
  KYC/CDD should not hinder remote branchless banking - South Africa (Exemption 17, Circular 6), Philippines (Circulars 471 & 562)

Source: CGAP Focus Note No. 43. Regulating Transformational Branchless Banking: *Mobile Phones and Other Technology to Increase Access to Finance.* January 2008.

AML/ CFT Measures Should Not Be Restrictive

- AML/CFT procedures are crucial to M-Banking regulation. Stringent procedures can restrict uptake of mobile banking

- AML/CFT rules should:
  - Require limited CDD and KYC procedures
  - Ease face-to-face account opening restrictions
  - Institute electronically enforced maximum allowable transactions, turnovers and balance thresholds

M-Banking provides electronic traceability of transactions as opposed to untraceable transactions in the formal cash economy

Finding the Balance Between Regulation & Innovation

- Flexible but hands-on approach by National Bank of **Cambodia** in regulating mobile banking adopting licensing approach

- Allow WING to operate until regulation is in place
  - Mobile money operator is required to be guaranteed by reliable banking institution
  - The Central Bank requires the operator to provide monthly reports containing necessary information for supervisory purpose
  - Any changes to the business operations must be agreed with the central bank
- Merchants/ agents can conduct KYC

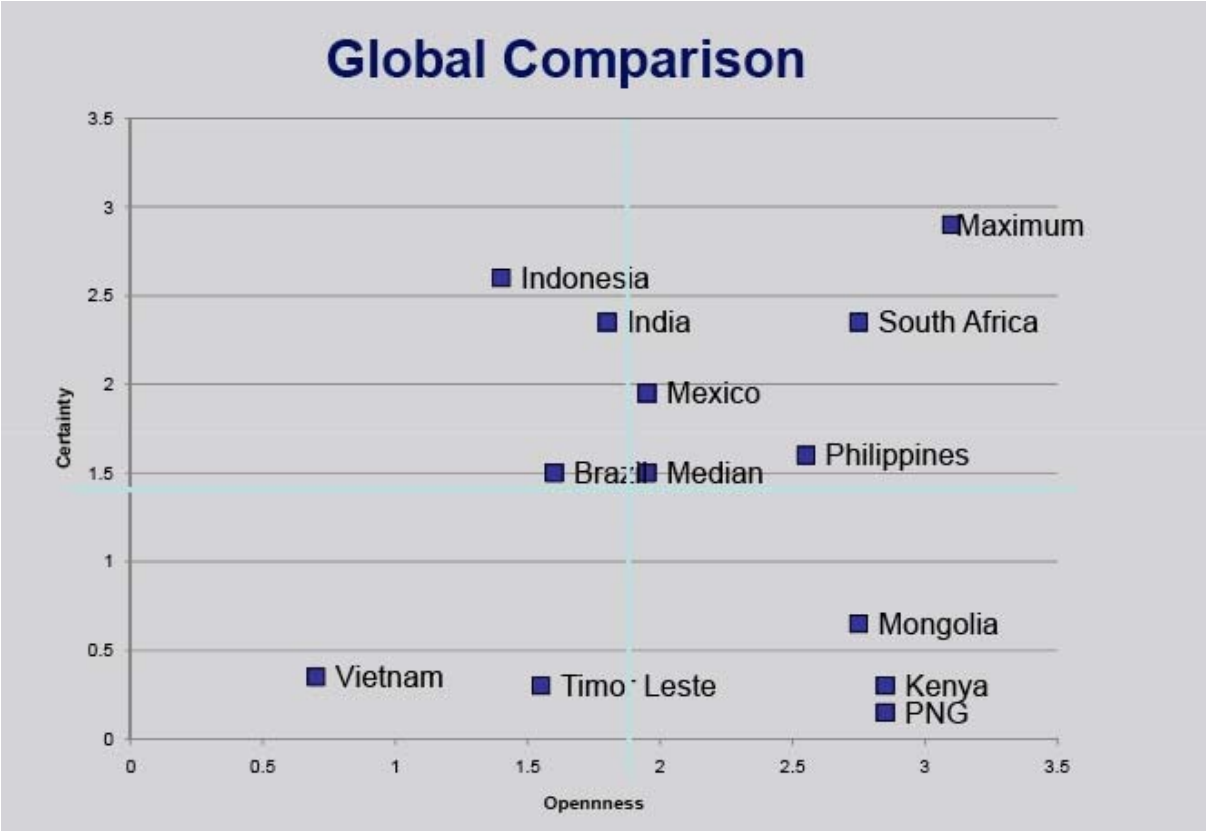
- AML policies enforced through limiting transaction volume

Challenges to be Addressed by NBC

NBC is drafting a Law on National Payment Services and Regulation on Third Party Payment Processor and will address:

- Promote competition and innovation in the industry to avoid monopoly
- Solving the issue of whether Microfinance and mobile payment operator are partners or competitors
- Solving the problem of whether mobile money provide equal access to banking services?
- Central Bank needs to consider policies affecting competition, interoperability, consumer protection
- Multiple currency usage
- National payment system law to clarify NBC's authority, and allow it to create more systematic rules about entry and operation with benefit & protection for clients, providers and the financial system

State of Regulations in PNG



- Open and uncertain, because currently no specific regulations
- Any type of activity is possible, but new regulations could curtail activity at any time - but BPNG expressed desire to work collaboratively with market players
- In late 2008, BPNG stated preference for non-banks to align with banks for deposit taking
- No specific requirements regarding KYC, again preference stated for bank management

Source:IFC Regulatory Analysis 2008/2009

M-Banking Considerations in PNG

1. Small merchants and micro-entrepreneurs make frequent trips to the bank and way for a long time (30 to 90 minutes) in the hot sun to obtain financial services
2. There appears to be great demand for a system that enhances cash safety, which includes not only money transfer but a means to transact, store and accumulate value
3. Theft is endemic across the country, leading businesses and households to seek a non-cash alternative
4. New subsidy systems, such as those being introduced by mining and lumber companies, need inexpensive ways to transfer funds especially to rural poor
5. There is an opportunity, through major money suppliers, to push m-money into the system through salaries, royalties, and purchasing commodities electronically.
6. The existing financial and electronic network is fragmented, has much duplication, and does not provide consistent levels of quality service at present - yet the beginnings of an infrastructure is in place
7. Most purchasing takes place in towns with only small purchases occurring in villages, suggesting there might not be a need for extensive cash points at the village level
8. Mobile network operators already allow clients to transfer airtime to each other and are moving towards an electronic system of top-up to replace airtime cards

Source:IFC Regulatory Analysis 2008/2009

Building a mobile money ecosystem in PNG

1. It's not about cashing in or out, its about cash safety
2. Start with major money suppliers to catalyze a mobile money system
3. Cash-out where people buy and sell, not where they live
4. The cash-out network already exists, but needs improvement - and can be extended by recruiting cash takers
5. Limited person-to-person transfer is already available and accepted, and has the potential to be viral
6. Mobile money solutions should be developed to reach the financial exlued
7. Stored value is demanded and requires risk management and education, not just regulation

Source:UNDP/IFC Research 2009

Thank you for your attention

M-Banking Support in Cambodia

Policy and Regulatory Framework
Branchless Banking and E-Money

Customer Care

Advise on Structure, Staffing and Organization

operates 6 - 22

Response time 28 sec, limited IVR

450 calls /day,

One number for

Minimal fee

Call duration: 4 min

Merchant Network

37,135 clients
#509 agents
Products : loyalty kit/ ATM kit
1,000 WING pilots
20 out 24 provinces

Key Challenges
liquidity & quality of merchants

Manage Change

FI: ANZ, VFC and PRASAC
Telco: Hello, CUBE & Smart, mfone
payroll service for garment industry

Key Challenges
Quality of merchants,
Currency limitations (KHR only)
Bank partners

IMPACT ASSESSMENT

CONSUMER EDUCTATION