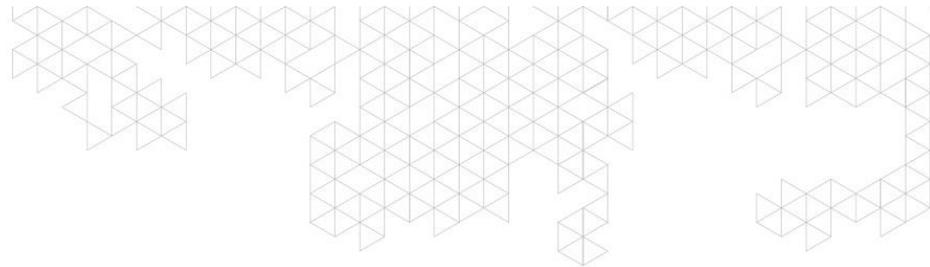


A man with short dark hair, wearing a blue polo shirt with thin horizontal stripes, is sitting outdoors. He is looking down at a small, dark-colored mobile phone held in his right hand. The background is a blurred outdoor setting with trees and a clear sky. The overall lighting is bright and natural.

Mobile Money Global Event

Wednesday October 7, 2015

Cape Town, South Africa



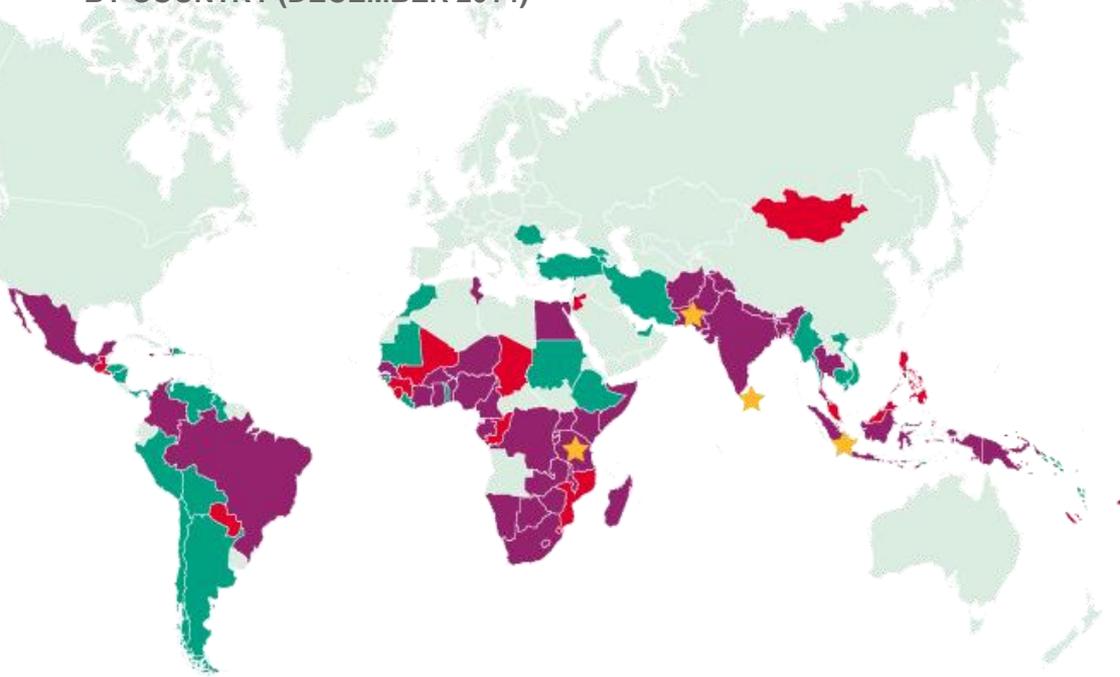
Welcome Seema Desai, Head of Mobile Money, GSMA



Mobile Money

Mobile money continues to expand globally

NUMBER OF LIVE MOBILE MONEY SERVICES FOR THE UNBANKED BY COUNTRY (DECEMBER 2014)



250+ live services in nearly **90** countries

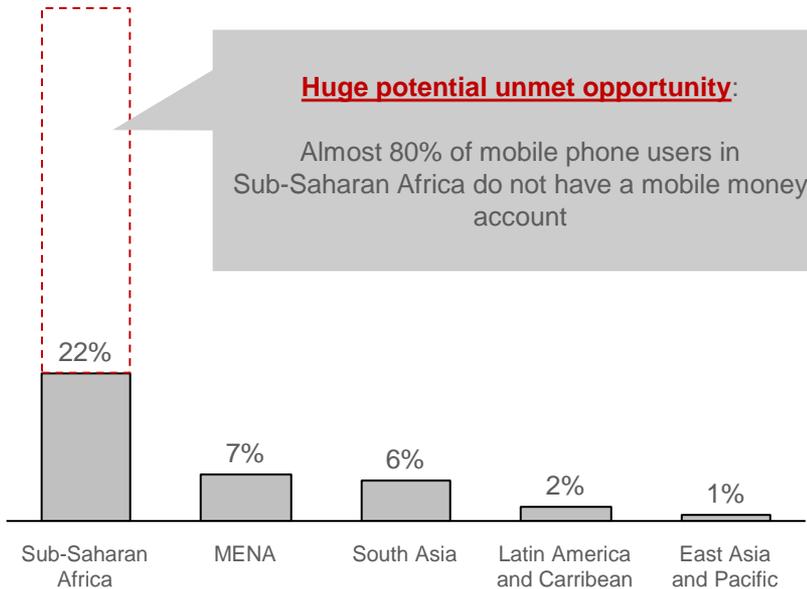
55 markets with at least **2** mobile money services

100+ planned new launches



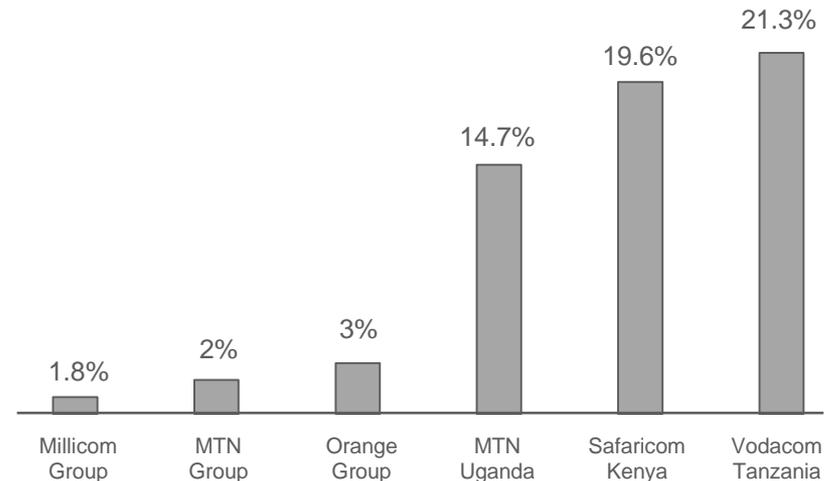
Sub-Saharan Africa is leading the world in Mobile Money deployments – yet there is still huge unmet opportunity

MM Registered Users as % of Active Connections (2014)



Mobile Money Contribution to Revenue (2014)

Sample Operators





Mobile Money

The opportunity can be realised through building a successful mobile financial ecosystem



Embracing the mobile financial ecosystem brings major benefits:

1. More services for customers which better address their financial needs
2. Reduced costs for businesses, governments, NGOs of distributing cash
3. Increased profitability for providers



Mobile
Money

To achieve this vision, there are barriers which must be overcome



**Overcome
regulatory
barriers**



**Crack the
business model
for new
ecosystem
services**



**Drive
industry
collaboration**



**Strengthen
foundations that
support the
ecosystem**



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#mobile360Africa

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Mobile Money

Mobile Money Phase 3 - 2015-2018

Programme outcome

To enable a greater range of digital transactions, which make mobile wallets more central to the financial lives of users, particularly among the unbanked whose financial needs are currently unmet.

Focus areas

- | | | | | | | | | | |
|---|---------------------------------|---|---------------------------------------|---|----------------------------------|---|----------------------------------|---|-----------------------|
| 1 | Accelerate A2A interoperability | 2 | Accelerate mobile financial ecosystem | 3 | Strengthen Ecosystem foundations | 4 | Advocate for enabling regulation | 5 | Share data & insights |
|---|---------------------------------|---|---------------------------------------|---|----------------------------------|---|----------------------------------|---|-----------------------|





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Ramping up Interoperability: New Developments in Rwanda and Madagascar

Stanislas Chevillard – Director, Orange Money, Orange Madagascar

Faith Chisulo – Head of Mobile Financial Services, Tigo Cash, Tigo Rwanda

Chidi Okpala – Director & Head, Airtel Money, Airtel Africa

Moderator: David Lubinski, The Bill & Melinda Gates Foundation

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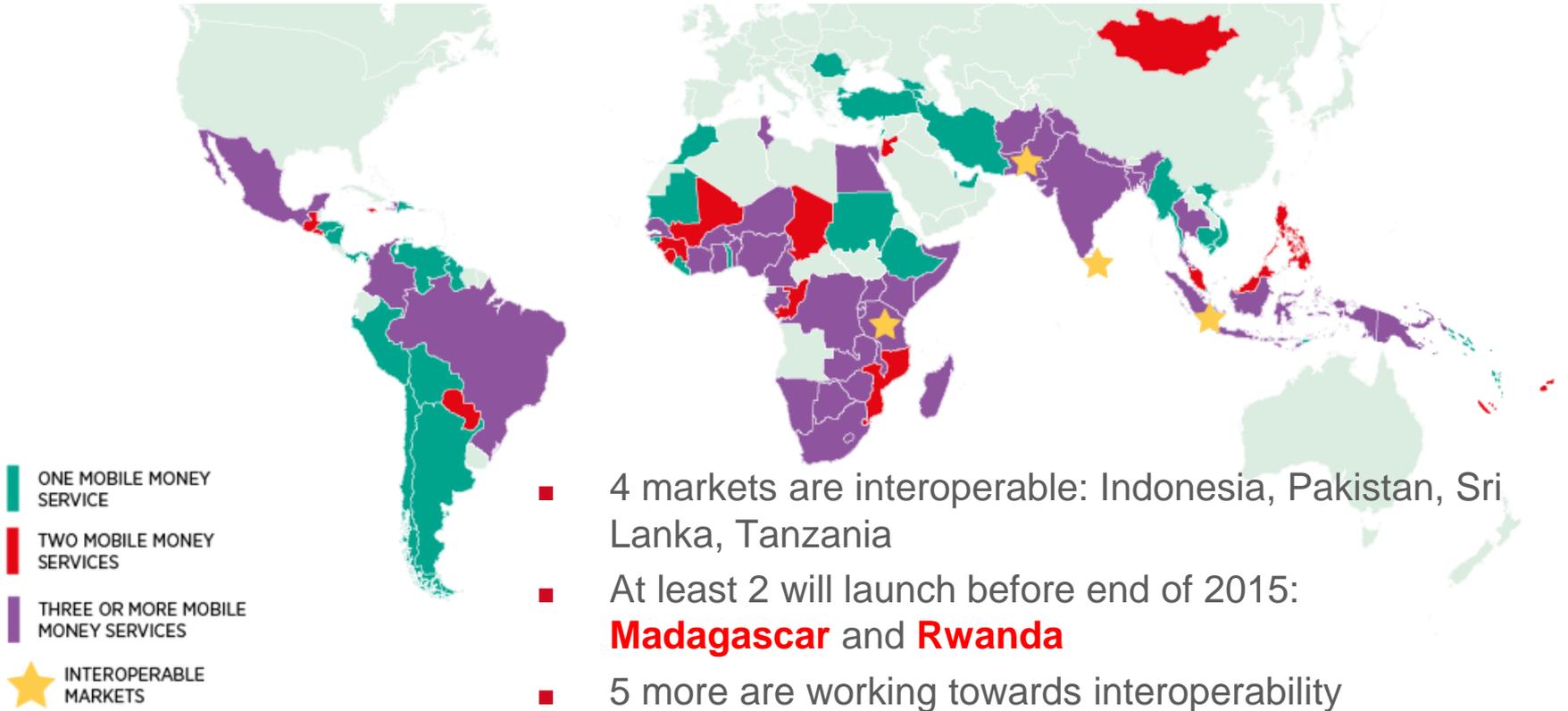
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Mobile money domestic interoperability





Rwanda and Madagascar



Rwanda

	Metrics	Data
Socio Economics	Population	~11,7m
	GDP/capita	638 USD
Financial Inclusion	Adults with formal account	42.1%
Mobile Usage	Mobile connections	~8,2 m
Mobile Money Operators	Tigo (Millicom)	Tigo Cash
	Airtel (Bharti)	Airtel Money
	MTN	MTN Money

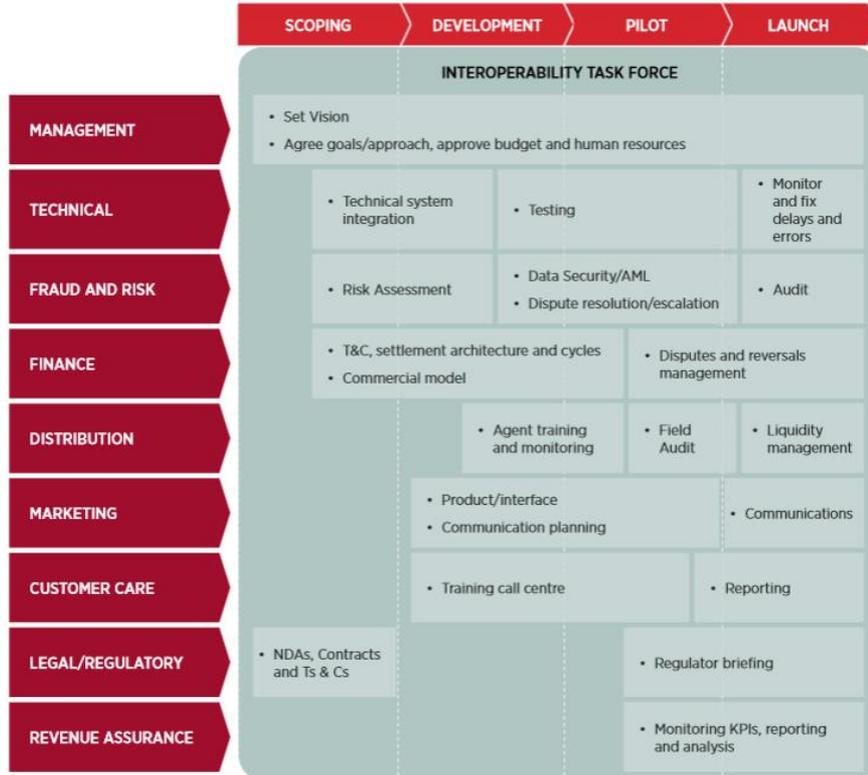


Madagascar

	Metrics	Data
Socio Economics	Population	~23 m
	GDP/capita	463 USD
Financial Inclusion	Adults with formal account	8.6%
Mobile Usage	Mobile connections	~8,2
Mobile Money Operators	Orange	Orange Money
	Telma	M'Vola
	Airtel (Bharti)	Airtel Money

Source: [Findex data](#), World Bank

Setting up a successful taskforce



Leadership

All committed providers have a **shared vision, commit resources** to develop an on time and high performing solution **and invest** in its deployment also after launch.

Planning

The process of delivering the new service is **executed efficiently**, setting up a cross-organisation interoperability **task force**, composed of leaders of the initiative.

Collaboration

Core business areas **work together effectively**
Neutral facilitation is key

Section 1: Governance

- Covers application, adoption, conflict, governance committee, confidentiality and participation clauses

Section 2: Financial Considerations

- Covers financial considerations for pricing/fees, pre-funding, clearing and settlement

Section 3: Risk and Fraud Management

- Covers Risk management, fraud management and Dispute Resolution

Section 4: Transaction Processing

- Account to account transaction processing and transaction authorisations



Mobile Money

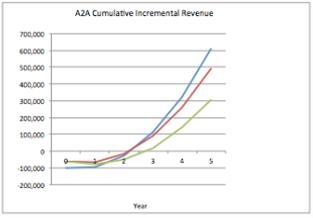
Tools used

Commercial calculator and simulator

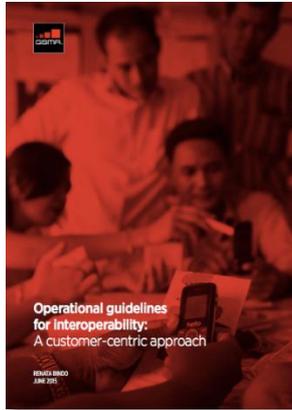
Simple compensation fee calculator - example				
Channel PDP	Transaction type	Revenue (p/c)	Cost (commission/merch/fee)	Margin
Cash-IN	Deposit	0.00%	(0.50%)	(0.50%)
PDP	PDP	1.00%	0%	1.00%
Cash-OUT	Withdrawal	0.00%	(1.50%)	(1.50%)
Total		1.00%	(1.50%)	(0.50%)

OF-Net PDP (Sender side)				
Transaction type	Revenue (p/c)	Cost (commission/merch/fee)	Margin	
Cash-IN	Deposit	0.00%	(0.50%)	(0.50%)
PDP	PDP	1.00%	0%	1.00%
Compensation fee (OUT)	Interchange	0.25%	0%	0.25%
Cash-OUT	Withdrawal	0.00%	(0.25%)	(0.25%)
Total		1.25%	(0.75%)	0.50%

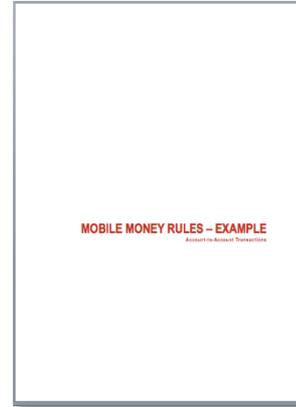
OF-Net PDP (Receiver side)				
Transaction type	Revenue (p/c)	Cost (commission/merch/fee)	Margin	
Cash-IN	Deposit	0.00%	0%	0.00%
PDP	PDP	0.00%	0%	0.00%
Compensation fee (IN)	Interchange	0.00%	(0.25%)	(0.25%)
Cash-OUT	Withdrawal	0.00%	(1.00%)	(1.00%)
Total		0.00%	(1.25%)	(1.25%)



Operational considerations



Inter-party rule set Draft MOUs



Technical evaluation frameworks

Switch benchmarks

URS document

ASSESSMENT CRITERIA	RELATIONAL ASSESSMENT	NEUTRAL PROCESSOR	COMMERCIAL PROCESSOR	PAIRED CONNECT TO NATIONAL ACH	DIRECT CONNECT TO NATIONAL ACH	COMMERCIAL PROCESSOR FOR BANK INTERFACES
RISK IMPACT	Low	Medium	High	High	High	High
IMPLEMENTATION COMPLEXITY	Low	Medium	High	High	High	High
TRANSACTION COST IMPACT	Low	Medium	High	High	High	High
REGULATORY FRAMEWORK	Low	Medium	High	High	High	High
AGREEMENT FRAMEWORK	Low	Medium	High	High	High	High
SCALABILITY	Low	Medium	High	High	High	High
USER EXPERIENCE	Low	Medium	High	High	High	High
TIME TO MARKET	Low	Medium	High	High	High	High



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Digitising Government Payments

Imdad Aslam - Interim CEO & Director DFS, Karandaaz
Alban Luherne – Director, Orange Money

Moderator: Claire Scharwatt – Senior Market Engagement Manager,
Mobile Money, GSMA

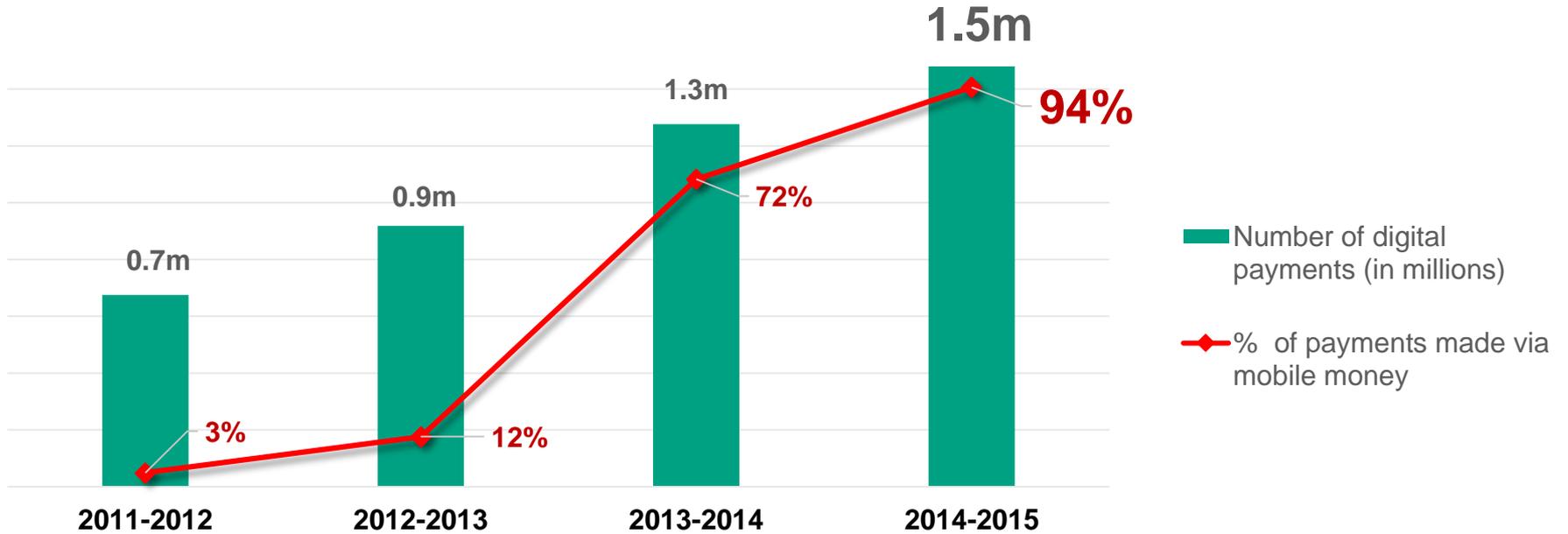
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Digitizing school registration fees with mobile money



- Government commitment
- Pilot with MTN and CelIPaid

- Orange joins

- Integration through API

- Digital payment becomes mandatory
- Moov joins

Areas of collaboration

- 1** Developing a harmonized customer experience
 - Agreement on unified customer journey on USSD
 - Implement seamless technical integration via API
- 2** Co-funding a national marketing campaign
 - Jointly co-planned, co-funded and co-managed by payment providers and Ministry of Education
- 3** Harmonising the settlement of funds



Key benefits

MNOs	Government	Schools	Students
<ul style="list-style-type: none"> ✓ Increase customer adoption ✓ Enhance value proposition ✓ Sustainable, seasonal use case ✓ New revenue stream 	<ul style="list-style-type: none"> ✓ Remove cash handling costs, security concerns & administrative burden ✓ Improve payment efficiency ✓ Reduce leakage of funds ✓ Increase transparency 	<ul style="list-style-type: none"> ✓ Earlier payments → better budget management ✓ Increase in overall fee collection → larger budget 	<ul style="list-style-type: none"> ✓ Reduce time, cost & security concerns ✓ Increase transparency in terms of pricing ✓ Better user experience ✓ Easier to get proof of payment receipts



Panel discussion

Alban Luherne

Orange Money Director, Orange Group

Imdad Aslam

Interim CEO & Director of Digital Financial Services,
Karandaaz

Claire Scharwatt

Senior Market Engagement Manager, Mobile Money, GSMA



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The Economic Impact of Mobile Money in the Digital Economy

Sheila M'Mbijewe – Deputy Governor of the Central Bank of Kenya
James Ivan Ssettimba – Head of Financial Inclusion, Bank of Uganda

Moderator: Mia Thom – Engagement Manager, CENFRI

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Economic Impact of Mobile Money in a Digital Economy – Kenya's Experience

Presentation by

Sheila M'Mbijewe
Deputy Governor, Central Bank of Kenya

At the

GSMA Mobile 360 Africa, Cape Town, South Africa

October 7, 2015

Outline

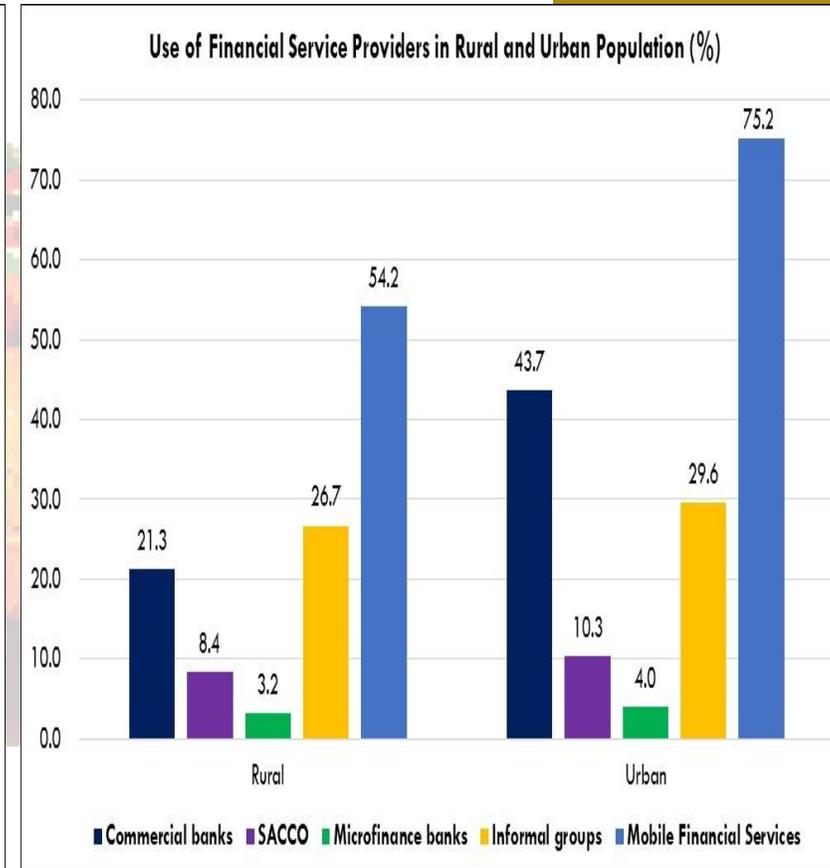
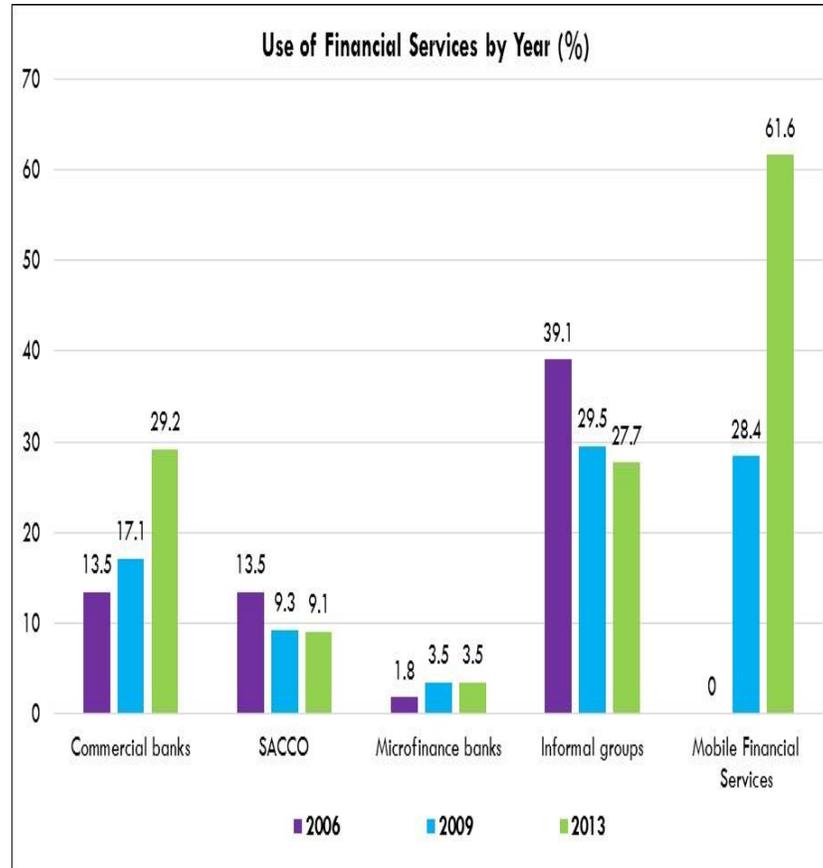
1. Kenya's Mobile Phone Landscape
 2. Role of the Central Bank
 3. Economic Impact of Mobile Financial Services
 4. Summary
- 

1. Kenya's Mobile Phone Landscape

- Kenya has one of the fastest mobile phone service adoption rates in Africa:
 - ✓ As at June 2015, there were 36.1 million mobile phone subscribers (a mobile penetration of 83.9%).
 - ✓ There were 27.7 million mobile money service subscribers, and 129,357 mobile money agents.
- Like most developing countries, there are supply and demand side barriers to accessing formal financial services – about 70% of Kenya's population lives in the rural areas.
- The mobile phone platform has provided access to financial services by the critical mass.

1. Kenya's Mobile Phone Landscape:

Mobile financial services are the most preferred in Kenya due to lower transaction costs, accessibility and convenience.



Source: Fin Access Surveys, FSD

2. Role of the Central Bank

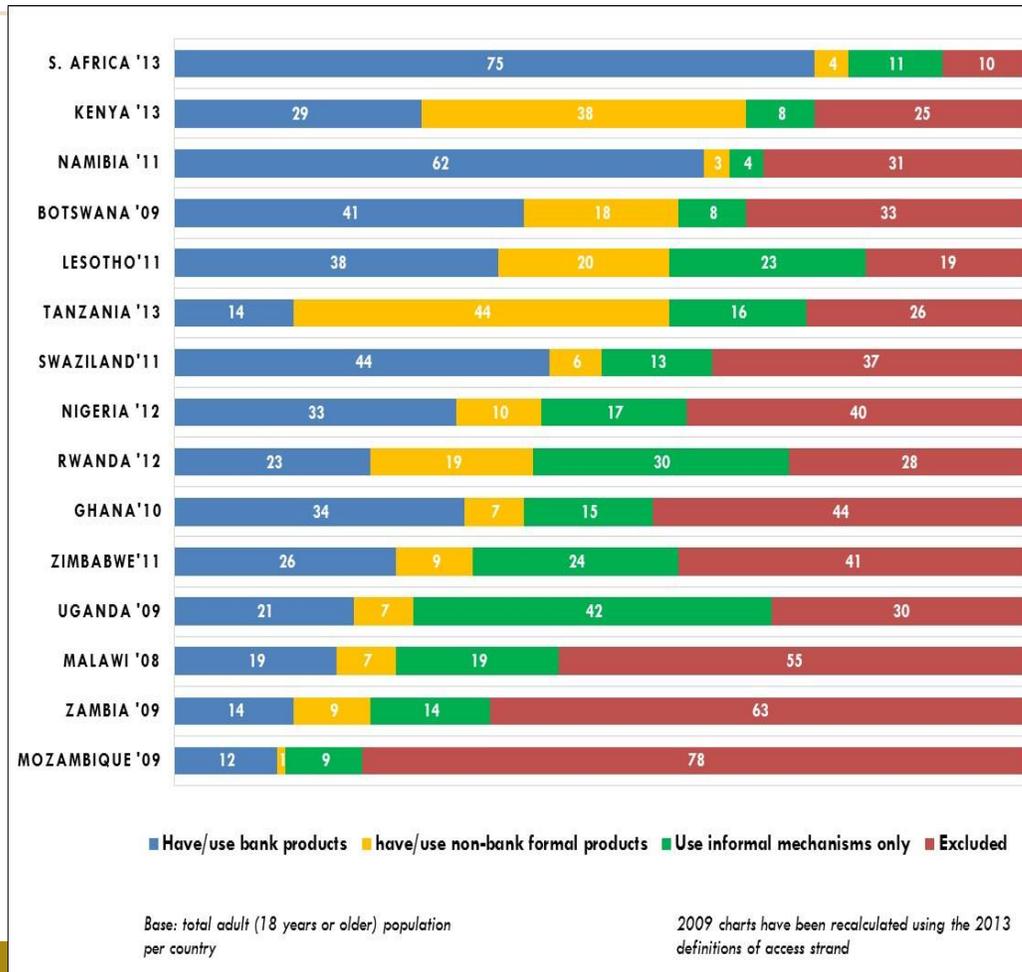
- Mobile money services have transitioned from cash transfer system to integration of interfaces and linkages with financial institutions payment systems.
- The Bank plays two main roles in mobile financial services – Policy Development and Regulatory Oversight.
- The Bank also plays an active role towards the seven key pillars of mobile financial services development in the World Economic Forum's Mobile Financial Services Development Report, 2011 – regulatory proportionality; adoption and availability; consumer protection; end user empowerment and access; distribution and agent network; market competitiveness and market catalysts.
- The Bank is also promoting innovative delivery channels beyond the brick and mortar infrastructure – creating appropriate support infrastructures such as deposit protection, consumer protection and financial education.

3. Economic Impact of Mobile Financial Services

- A sound, safe, efficient and stable inclusive financial system is critical for inclusive growth and achievement of *Kenya's Vision 2030 development goals*.
- The impact of mobile financial services on economic development in Kenya has been felt in three broad areas:
 - ✓ financial inclusion,
 - ✓ financial sector development, and
 - ✓ Economic growth and monetary policy.

3.1. Economic Impact of Mobile Financial Services:

Financial Inclusion in Kenya has improved significantly since 2006



- The proportion of adult population using formal financial services in Kenya increased from 27% in 2006 to 67% in 2013.
- Rural areas registered the highest growth – 142% (from 25% in 2006 to 60% in 2013) compared to urban areas with an increase of 124% (from 36% in 2006 to 80% in 2013).
- Kenya has the highest ranking or share of adults with a mobile money account in East Africa (at 58 percent, followed by Somalia, Tanzania, and Uganda with about 35 percent).

Source: Fin Access Surveys, FSD

3.2. Economic Impact of Mobile Financial Services: *Financial Sector Development*

- As at June 2015, there were over 90 million mobile money transactions, valued at about USD2.16 billion (KSh227.9 billion).
- Total mobile money transactions averaged USD72.1 million (KSh7.6 billion) per day.
- The average size of the mobile money transactions per customer has increased from USD29.1 (KSh3,067) in March 2007 to USD81.6 (KSh8,601) in June 2015.
- MFS are being used to pay for various services including driving license renewal, payment of bus fares, parking charges, and utility bills.

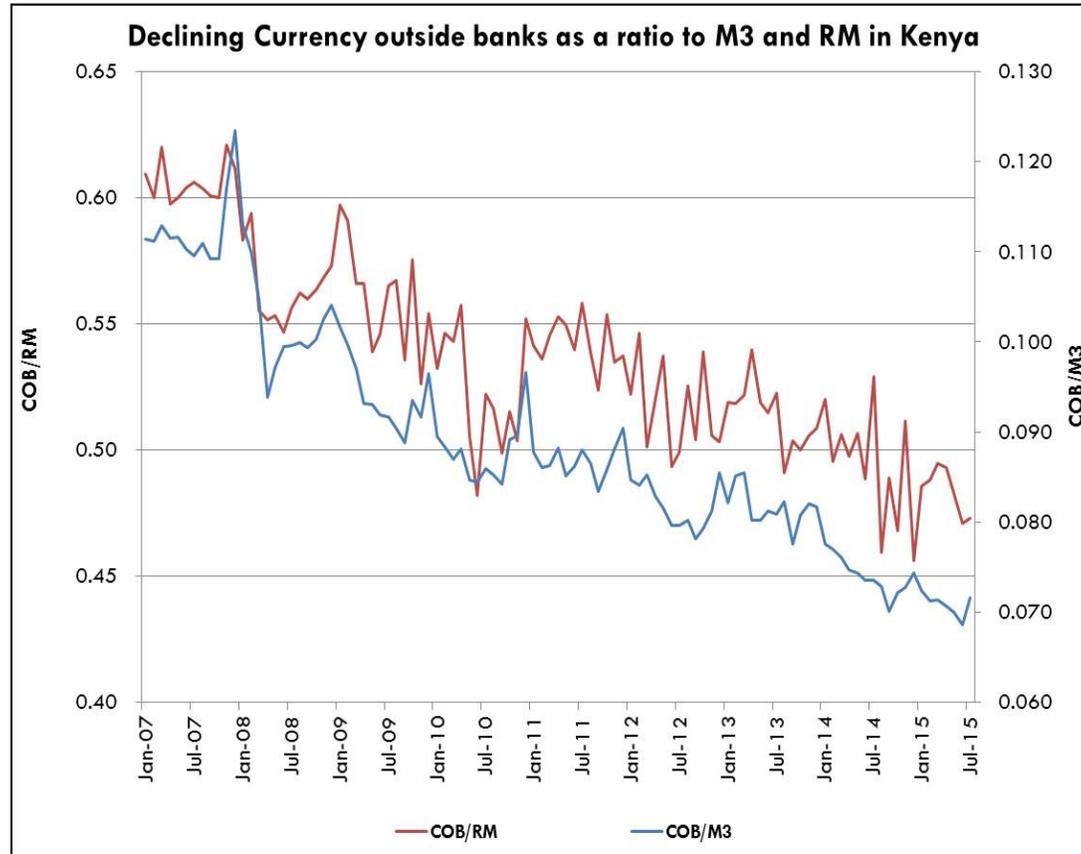
3.2. Economic Impact of Mobile Financial Services: *Financial Sector Development...*

- Mobile payments account for over 80% of the volume of payment transactions (7.4% of the total value of transactions).
- Rapid increase in mobile payments attributed to linkages and partnerships between financial institutions and Telcos in providing mobile financial services.
- Mobile financial services have created numerous job opportunities especially for the youth population in our country – there are 129,357 approved mobile money agents.

3.3. Economic Impact of Mobile Financial Services: *Impact on Economic Growth*

- Mobile phones have enhanced access and usage of financial services, including access to credit.
- A recent IMF study (IMF Working Paper WP/15/22) shows that improvements in access to credit, depth of credit and credit intermediation efficiency increase growth.
- The study shows that a 1% growth in access to credit and credit intermediation efficiency can increase Kenya's GDP by 0.63% and 1.17%, respectively.
- Similarly, the study shows that a 1% increase in the depth of credit can increase Kenya's GDP by 0.47%.

3.3. Economic Impact of Mobile Financial Services: Impact on Monetary Policy

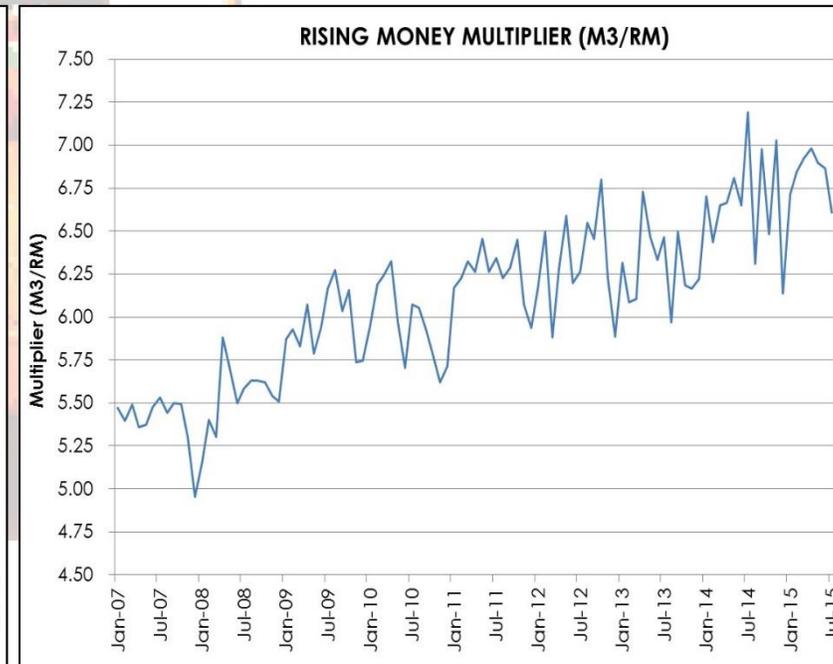
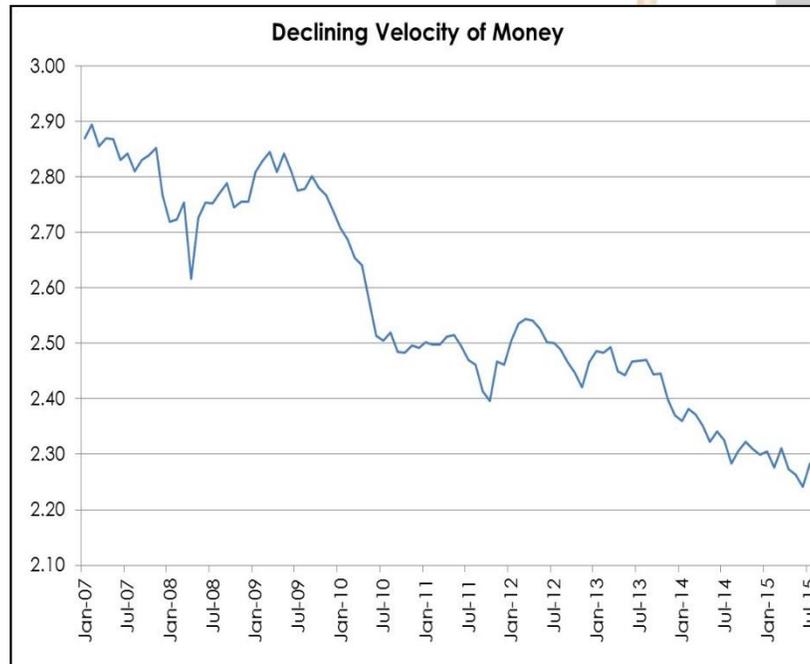


Source: Central Bank of Kenya

- The amount of currency outside the banking sector (COB) as a ratio of Broad Money (M3) and Reserve Money (RM) has reduced significantly – an indicator that less and less money is being held outside the formal financial system.

3.3. Economic Impact of Mobile Financial Services: Impact on Monetary Policy...

- The velocity of money (ratio of nominal GDP to money supply, M3) – has been declining, an indication of the increasing financial depth.
- The Money Multiplier – the ratio of Broad Money (M3) to Reserve Money (RM) – has been increasing an indication of the growing innovation in the financial sector.



Source: Central Bank of Kenya

4. Summary

- Mobile money is still a nascent industry that can be leveraged upon by financial market players to enhance efficiency in the provision of financial products and services.
- Mobile financial services are evolving – we have moved from the test and learn approaches that were employed in the initial stages, to the models we have now.
- The growth in mobile financial services has a positive impact on economic growth, but pose challenges on the monetary policy framework.
- Challenges continue to exist, as well as the risks posed, as the digital platforms continue to evolve.
- Countries should continue to share experiences and strengthen partnerships based on best practices to address these challenges – this will accelerate financial inclusion in developing countries.



BANK OF UGANDA

Ivan James Ssettimba
Bank of Uganda

October 7, 2015

Mission: To Foster Price Stability and a Sound Financial System



Introduction

- The digital economy is the result of the transformational effects of new General-Purpose Technologies (GPT) in the fields of information and communication.
- The digital economy has impacted all the sectors of the economy and social activities, for instance:
 - retail, transport, financial services, manufacturing, education, healthcare, media and so on.
- The expansion of the digital sector has been a key driver of economic growth



Mobile Money Services in Uganda

- Mobile money services were first introduced in March 2009; currently there are six mobile money schemes in Uganda.
- The BOU has only approved mobile money operations when this is done in partnership with a Supervised Financial Institution (SFI).
- Mobile Money Service Providers (MMSP) are required to hold, in an escrow account in their partner SFI, the equivalent of all the mobile money that has been issued to their customers and agents.
- MMSPs, which are not regulated financial institutions cannot intermediate nor use the funds that have been mobilised through the sale of mobile money.



Mobile Money Services in Uganda

	2009	2010	2011	2012	2013	2014
Registered customers (millions)	0.6	1.7	2.9	8.9	14.0	18.5
Number of transactions (millions)	3	29	88	242	400	496
Value of transactions (billions SHS)	133	963	3,752	11,663	18,982	24,050

Number of registered customers and Volume and Value of Mobile Money Transactions in Uganda (2009-2014)

- The number of registered mobile money customers exceeds half the population of Uganda.
- Uganda's population with access to formal financial services increased from 28% in 2009 to 54% in 2013* - a significant part of this increase is attributed to increased access to mobile money services.

* FINSCOPE survey 2013



Mobile Money Services in Uganda

Product/Service	Status
Transfers/Remittances (Ability to send money to the bottom of the pyramid customers)	Live
Merchant Payments – enabling SMEs and Corporates to receive payments P2B	Live
Statutory payments (Taxes) P2G	Live
Bulk Payments: Salaries, wages B2P e.g. Sugar, Tea and Construction firms	Live
Micro Loans and Savings	Pilot
Group wallets for SACCOs and VSLA	Pilot
Cross border	Pilot
Mobile banking; transfers from bank account to M-wallet	Live



Economic Impact of Mobile Money

Consumption Certainty

- The ability to execute instantaneous P2P transfers, compared to the alternatives of transporting money in person or using a bus driver increases one's purchasing power, implying that they have the capacity to consume immediately has a multiplier effect and positively impacts on output.

Increased employment opportunities

- Agents carrying out cash-in cash-out
- Customer service representatives
- Bank staff
- MMSP staff



Economic Impact of Mobile Money

Growth in Tax Revenue

- Using mobile money instead of cash or cheque for P2G and B2G makes it simple, easy and quick for a taxpayer to settle their obligations.
- The ease, convenience, ubiquity of the service and speed of the mobile transactions increases tax revenue.
- Such a service launched in Uganda was projected to at least collect an additional USD 25 million in taxes every month.



Economic Impact of Mobile Money

Improving efficiency

- The adoption of mobile money services has decreased administrative costs for companies.
- Mobile money has increased transaction speeds and reduced outstanding credit times, minimizing how long it takes to collect and inquire after payments.
- The power company UMEME, reported a 99.1% revenue collection rate in 2014 compared to 94% in 2012, the increased revenue collection rate was partly attributable to increase in mobile money payments



Social Impact of Mobile Money

Support families to keep children in school, especially the most vulnerable

- School fees can be securely and conveniently paid using mobile money. Funds can be stored in the mobile wallet, and small, frequent transactions made out, reducing the cash flow burden on the family.

Improve access to healthcare

- With mobile money, the poor have a simple and safe way to save money for future health care costs.
 - *Specific products can be designed for this purpose, for instance, a service that enables pregnant women to make small mobile payments to a health service provider, to meet expected costs related to childbirth.*



Social Impact of Mobile Money

Provision of social benefits

- The Senior Citizens Grants deliver UGX 25,000 (approximately US\$8) (2013 value) monthly to senior citizens (people of age 60 years and above).
- The Vulnerable Family Grants on the other hand pay out UGX25, 000 monthly to vulnerable households with low labour capacity and high dependency. As at February 2014, the Programme reached 113,000 beneficiaries, with over UGX 32 billion disbursed.
- All these grants are being made through use of mobile money.



Conclusion

- The delivery of affordable financial services to a population using mobile money is associated with the attainment of a nation's crucial economic and social goals.
- Providing financial services draws credit into the banking system, leading eventually to GDP growth. It increases the creation of capital, leading to an increase of free enterprise. It develops the depth of a nation's private sector, which in turn builds new jobs
- These financial developments reduce a nation's overall income inequality, increase income growth among the lowest paid quintile of the population, and accelerates poverty alleviation.
- However some challenges still exist
 - fraud
 - network/connectivity problems,
 - limited interoperability and
 - services for people with special needs



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To OTC or not to OTC? The Values and Sustainability of a Cash to Cash Model

Fariq Cader – Senior General Manager, Dialog Telecom Ltd.

Brad Magrath – Co-Founder & CCO, Zoono

Omar Moeen Malik – Head of Strategy & Payments, Telenor Pakistan

Gregory Reeve - GM Mobile Financial Services, Millicom

Moderator: Anup Singh – Senior Manager, Microsave



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Spotlight on Rural Supply: Critical Factors to Create Successful Mobile Money Agents

Lara Gilman – Market Engagement Director, Mobile Money, GSMA

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Audience poll! *(do you agree or disagree?)*

- Mobile money has a limit for how far it can reach.
- Mobile money in the vast majority of markets has not yet reached its limit.
- Mobile money could and should be extending further.

Why?

The potential of mobile money in rural areas

Social Impact opportunity

- Estimated 70% of the poor live in rural areas.

Commercial opportunity

- Predominantly rural markets capture significantly less than advanced markets overall.
- Urban saturation risks longer-term growth.

CAPTURED ADDRESSABLE MOBILE MONEY MARKET
(ACTIVE 90-DAY CUSTOMERS PER GSM CONNECTIONS)⁹





Scope & methodology of research

Assumption 1

The feasibility of **servicing** customers sustainably is a core barrier to reaching rural.



Assumption 2

There are **successful agents** operating in rural areas.

Research questions

1. What enables a rural agent to be successful?
2. Can providers use this to adapt operational strategies and extend reach?

Approach

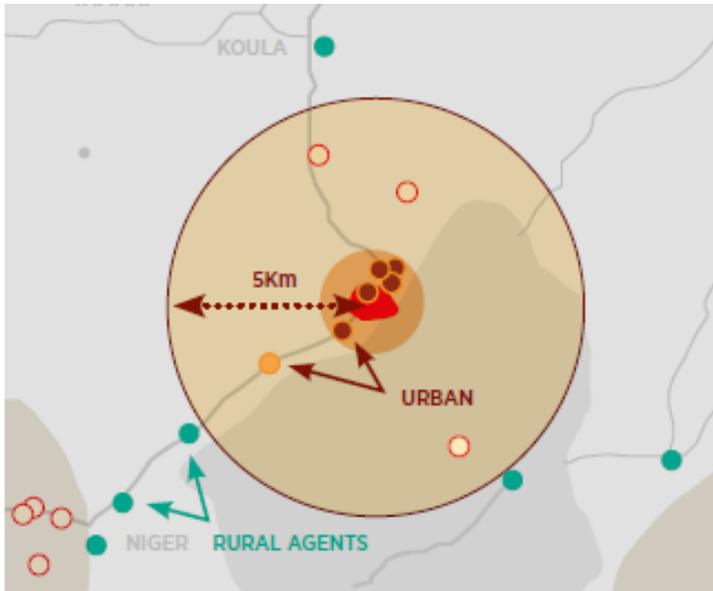
1. Transactional data analytics
2. Quantitative phone-based interviews with ~ 2000 agents
3. Field-based interviews with ~ 500 agents & 40 master agents





Baseline definitions: Rural & Success

Defining Rural



Defining Success

- Agents have been segmented based on their monthly value of activity
- 4 segments have been created: a dormant group with no transaction in the analysed month and 3 tiers (low, medium and high- top 20%)
- Successful agents are part of the 'high' segment
- Active agents is a merger of the 'low' & 'medium'

*Although categorizations were cross-referenced with other months to ensure no abnormal seasonality

Country focus: Mali & Chad

Date of launch

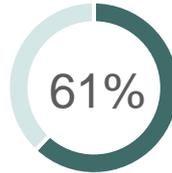
% of rural population 

% of agents in rural areas 

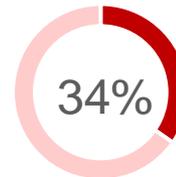
% success rural agents 



Mali



Chad





Overview of key findings



#1 Local context matters: Strategic growth

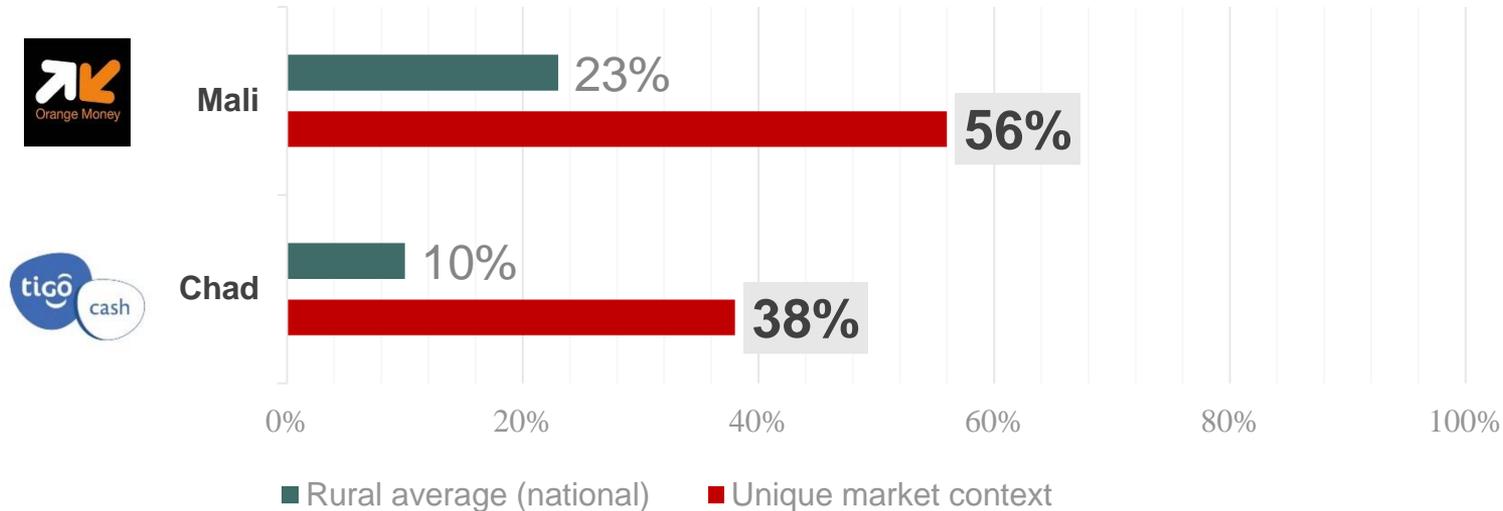
#2 Re-think rural agent profile & selection

#3 Liquidity: Bridging the access gap

#4 Rural: An opportunity for collaboration?

#1 Local context matters: Strategic growth

% of successful rural agents in unique market context vs, average

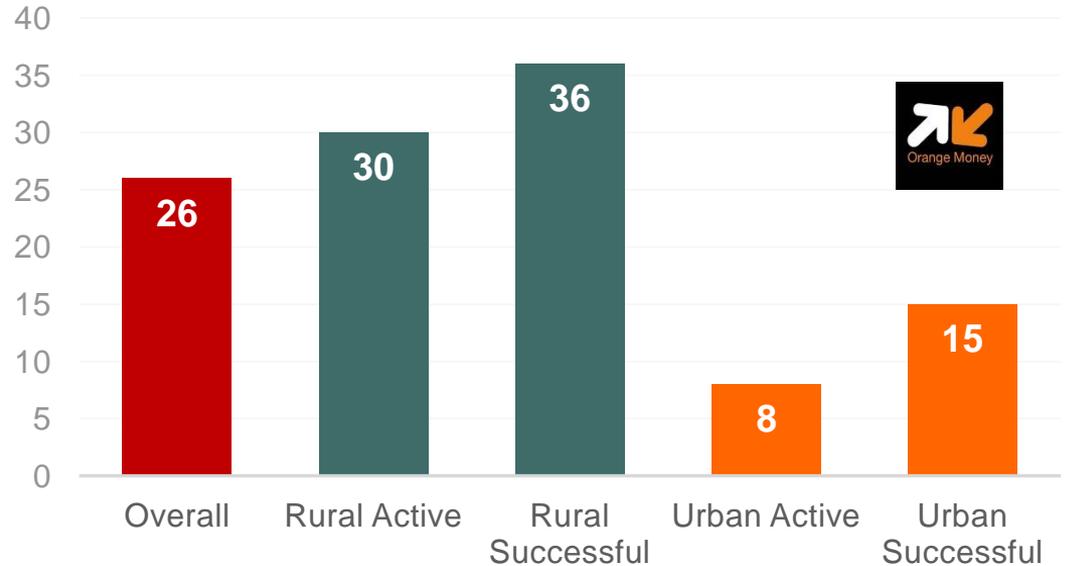


#2 Re-think rural agent profile & selection

Rural agents look different

- **Older established businesses**
- Broader product portfolio
- Customer loyalty and trust play an even more important role

Seniority of business (in months), Mali

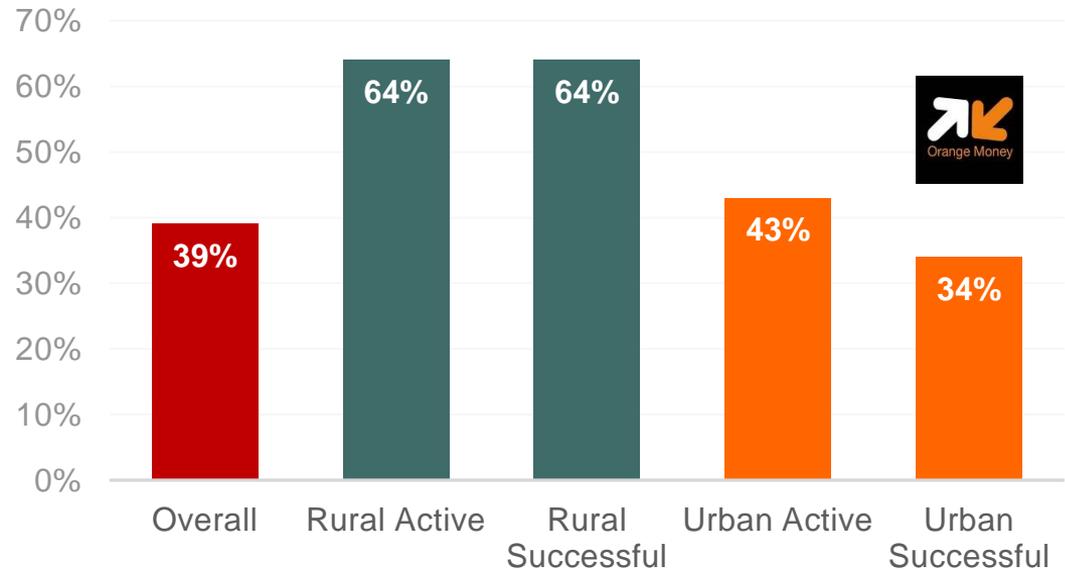


#2 Re-think rural agent profile & selection

Rural agents look different

- Older established businesses
- **Broader product portfolio**
- Customer loyalty and trust play an even more important role

Orange Money agents that offer sim and airtime scratch cards



#2 Re-think rural agent profile & selection

Rural agents look different

- Older established businesses
- Broader product portfolio
- **Customer loyalty and trust play an even more important role**

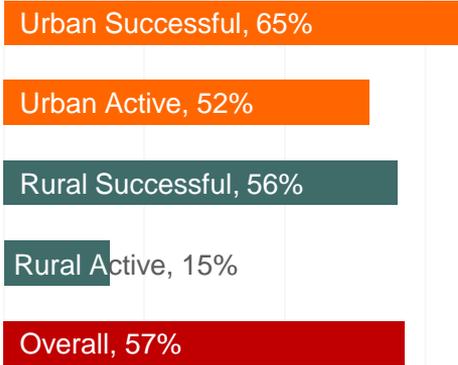
80% of rural customers stay with the same agent in Chad
(Transactional analytics)



42% of successful rural Tigo Cash agents reported knowing the majority or all of their customers **before starting their business**

#3 Liquidity: Bridging the access gap

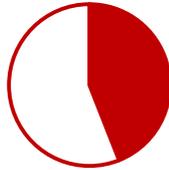
Liquidity is a challenge and banks are an enabler...



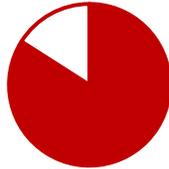
% of agents in Mali with access to financial services



...however, there are successful agents lacking banking infrastructure...



In Mali, **44%** of successful rural agents lack access to financial services.



In Chad, **84%** of successful rural agents lack access to financial services.

...and master agents play the key role.

Successful rural agents in Chad were

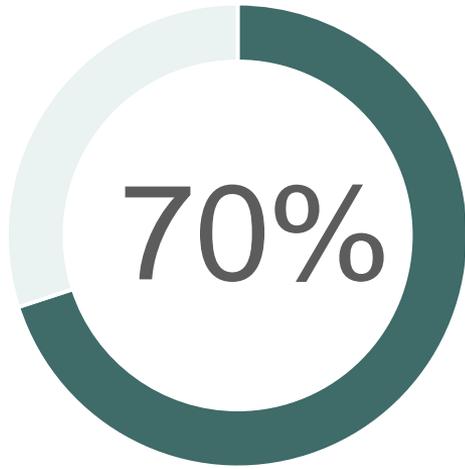
4x

more likely to have their masteragent visit them to rebalance.

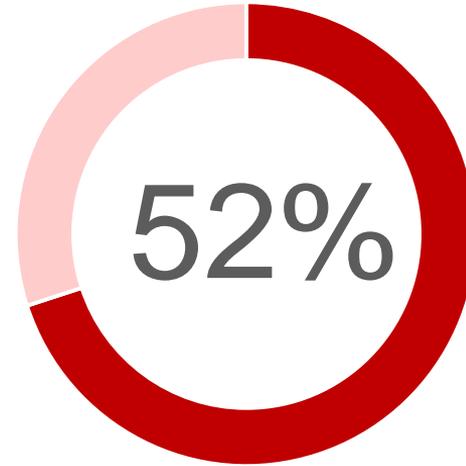


#4 Rural: An opportunity for collaboration?

Tigo Cash agents offering Airtel Money (% of total)



Rural successful



Rural unsuccessful

Next steps

- Workshop: Creating a Go-to-Market Tool
- Full report released today
- Upcoming blog series
- Iterating toward best practice...



SEE YOU NEXT JULY

DAR ES SALAAM, TANZANIA



AFRICA

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