Mobile Financial Services (MFS) Strategy
Glossary

ACSI  Amhara Credit and Savings Institution
ADSCI  Addis Credit and Savings Institution
AEMFI  Association of Ethiopian Microfinance Institutions
AFI  Alliance for Financial Inclusion
AML  Anti-Money Laundering
ATA  Agricultural Transformation Agency (Ethiopia)
B2P  Business to Person transfers
CBE  Commercial Bank of Ethiopia
CBO  Cooperative Bank of Oromia
CFT  Combating the Financing of Terrorism
DECSI  Dedebit Credit and Savings Institution (Tigray)
DFID  Department for International Development
DOB  Date of Birth
ET  Ethio Telecom
ETB  Ethiopian Birr
FCA  Federal Cooperative Agency
FIs  Financial institutions
G2P  Government to Person transfers
IP  Intellectual Property
KYC  Know Your Customer
MFI  Microfinance Institute
MFS  Mobile Financial Services
MNO  Mobile Network Operator
MOFED  Ministry of Finance and Economic Development
NBE  National Bank of Ethiopia
NFC  Near Field Communication technology
OCSSCO  Oromia Credit and Saving Share Company
OMO  Omo Micofinance Institution
P2P  Person to Person transfers
RFS  Rural Financial Services
SC  Steering Committee
SLA  Service-Level Agreement
SSA  Sub-Saharan Africa
STK  SIM Toolkit
TSP  Technology Service Provider
USD  United States Dollars
USSD  Unstructured Supplementary Service Data
Agenda

- Executive Summary
- Overview mobile money and financial access
- Current situation in Ethiopia
- Intervention overview
- Recommendation A: Establish multi-stakeholder task force
- Recommendation B: Allow Financial Institution (FI) - Technology Service Provider (TSP) partnership model
- Recommendation C: Simplify KYC requirements
- Recommendation D: Simplify agent onboarding
- Recommendation E: Institute and enforce SLA commitments for Ethio Telecom
- Recommendation F: Accelerate government adoption of MFS
- Recommendation G: Coordinate efforts for capacity building
- Way forward
- Appendix
This strategy focuses on enabling the use of mobile money and its integration with agent banking.

**Main focus of this strategy:** Enabling mobile money and its integration with agent banking
A variety of stakeholders and country comparables have been used to determine options for Ethiopia

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Engaged Stakeholders</th>
<th>Country Case Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFS regulator</td>
<td>National Bank of Ethiopia</td>
<td>Bangladesh</td>
</tr>
<tr>
<td>Financial institutions</td>
<td>Commercial Bank of Ethiopia</td>
<td>Brazil</td>
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<td></td>
<td>AEMFI</td>
<td>India</td>
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<td>TSPs</td>
<td>Apposit</td>
<td>Kenya</td>
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<td></td>
<td>Belcash</td>
<td>Nigeria</td>
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<td></td>
<td>Kifiya</td>
<td>Pakistan</td>
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<td>eVentive</td>
<td>Peru</td>
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<td></td>
<td>MOSS (M-BIRR)</td>
<td>Philippines</td>
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<tr>
<td>Industry experts</td>
<td>Malcolm Vernon (Enclude)</td>
<td></td>
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<td></td>
<td>Dan Diamond (BCG)</td>
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</table>
From an in-depth review of comparable countries 7 enablers for FI-led models were identified

<table>
<thead>
<tr>
<th>Description</th>
<th>Comparable country experience</th>
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<td>Strong leadership on issue from government</td>
<td>Comprehensive government support in the DRC resulted in quick roll-out of MFS</td>
</tr>
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<td>Regulation covers all relevant issues and does not leave room for major confusion or misunderstandings</td>
<td>Most countries worked with international expert bodies (CGAP, GSMA) to draft regulations</td>
</tr>
<tr>
<td>Regulations should ensure level playing field and enable competent providers to compete</td>
<td>Bangladesh Bank advocated active role of non-Fi partners; Pakistan allowed a flexible range of Fi-led partnerships</td>
</tr>
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<td>Regulations should manage risks (AML/CTF/Fraud etc.) while still being practical to serve the unbanked (easy enrolment of clients/agents etc.)</td>
<td>Despite widespread usage of technology, overly restrictive registration criteria proved to be prohibitive in the Philippines</td>
</tr>
<tr>
<td>End-users need to have access to a functioning and reliable mobile network</td>
<td>In Kenya, 60% of the rural households have now access to FS. Mainly because of MFS, enabled by a mobile penetration rate of about 70% (nationwide)</td>
</tr>
<tr>
<td>Fls need to have the know-how and motivation to drive, implement and manage a transformative technology-based project</td>
<td>In Pakistan, Telenor acquired Tameer Bank to combine financial and technological expertise</td>
</tr>
<tr>
<td>End users need some degree of (financial and technical) literacy to adopt MFS</td>
<td>Lack of awareness and customer education significantly slowed down expansion in Nigeria</td>
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</tbody>
</table>

1Includes access to all formal financial institution; excludes informal access.
Based on cross-country enablers a phased set of seven recommendations have been identified.
To build government support propose establishing multi-stakeholder task force to coordinate and champion scale up

Goal: Build Government support

Establish multi-stakeholder task force

Description
- Main objective of task force is to focus on mobile financial services regulations and propose changes to the regulatory environment, but a broader mandate can be considered
- Task force should assume responsibility to refine regulations and create a roadmap to successful implementation
- All stakeholders should be represented in task force

Rationale
- Mobile Financial Services affects a variety of stakeholders and success can only be achieved if all stakeholders coordinate their efforts to establish a functioning MFS system
- Current regulatory processes have been slowed due to lack of “national champion”

Enablers addressed
1

Country example
- Peru, Pakistan, DRC
To improve the regulatory environment propose amending operative model and simplifying regulations

**Goal: Create enabling regulatory environment**

<table>
<thead>
<tr>
<th><strong>B</strong> Allow FI-Technology Service Provider (TSP) partnership model as best practice in FI-led model</th>
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<tbody>
<tr>
<td><strong>Description</strong></td>
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<tr>
<td><strong>Rationale</strong></td>
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<tr>
<td><strong>Enablers addressed</strong></td>
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<td><strong>Country example</strong></td>
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<table>
<thead>
<tr>
<th><strong>C</strong> Simplify KYC requirements</th>
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<td><strong>Country example</strong></td>
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<table>
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<tr>
<th><strong>D</strong> Simplify agent onboarding</th>
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</tr>
<tr>
<td><strong>Country example</strong></td>
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</tbody>
</table>
To provide certainty around telecom infrastructure recommend instituting and enforcing SLAs with Ethio Telecom

Goal: Ensure telecom infrastructure support

Institute and enforce SLA commitments for Ethio Telecom

Description
- Introduce requirement for ET to sign SLAs with MFS providers
- Introduce coverage rate requirement
- Introduce quality of service regulation index

Rationale
Increase planning security for MFS providers and uphold pressure on ET to improve network

Enablers addressed
5

Country example
International best practice
To build capacity and demand among target population recommend scaling up government use of MFS and capacity-building campaigns

Goal: Build capacity, trust and improve literacy of target population

**F** Accelerate government adoption of MFS

| Description | Government should scale up use of MFS to make and receive payments (disbursement schemes, tax, etc.)
| Government should partner with various banks and MFIs to encourage use of channel |
| Rationale | Build trust in and familiar with MFS at end-user level |
| Enablers addressed | 1 7 |
| Country example | Pakistan, India |

**G** Coordinate efforts for capacity building

| Description | Coordinate financial literacy/empowerment initiatives and capacity building with development partners, possibly with a focus on rural FIs |
| Rationale | • Address low technical capacity at rural FIs which might lead to slow expansion in rural areas
• Reduce marketing costs of MFS providers to serve less literate rural households |
| Enablers addressed | 1 6 |
| Country example | Kenya, Bangladesh, Nigeria |
## High level implementation plan for MFS strategy

<table>
<thead>
<tr>
<th></th>
<th>Proposed Next Steps</th>
<th>Key Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Establish multi-stakeholder task force</td>
<td>• Office of the Prime Minister, NBE, Ministry of Finance and Economic Development, Ministry of Communication and IT</td>
</tr>
<tr>
<td>B</td>
<td>Allow FI-TSP partnership model</td>
<td>• Task Force</td>
</tr>
<tr>
<td>C</td>
<td>Simplify KYC requirements</td>
<td>• Task Force, NBE</td>
</tr>
<tr>
<td>D</td>
<td>Simplify agent onboarding</td>
<td>• Task Force, NBE</td>
</tr>
<tr>
<td>E</td>
<td>Institute and enforce SLA commitments for Ethio Telecom</td>
<td>• Task Force, NBE, Ministry of Communications and IT</td>
</tr>
<tr>
<td>F</td>
<td>Accelerate government adoption of MFS</td>
<td>• Prime Minister’s Office, Ministry of Finance and Economic Development</td>
</tr>
<tr>
<td>G</td>
<td>Coordinate efforts for capacity building</td>
<td>• Prime Minister’s Office, Task Force, Ministry of Capacity Building</td>
</tr>
</tbody>
</table>

### Proposed Next Steps

- The government should review the MFS service mandate with the NBE and push for a task-force inclusive of all stakeholders.
- Engage the Task Force for an in-depth review of the model.
- Review and amend clause 2.1 from Circular No. FIS/01/2014.
- Relax the regulatory KYC requirements to ensure inclusion for the poor.
- Consider amendments to agent requirements to enable scaling of MFS.
- Engage policymakers to ensure that the MNO delivers reliable and standardized service that ensures a level playing field.
- Increase use of mobile channels for aid disbursements, salary payments to public employees, and for government-owned utilities, taxes, etc.
- Coordinate efforts to build trust and capacity: forums to develop consensus on MFS operations and regulations, workshops by development partners, financial literacy programs for rural and unbanked users.
ATA should aim to play an active role in the roll-out of MFS in Ethiopia

Step 1: Decision on role which ATA should play in the process

<table>
<thead>
<tr>
<th>Passive role</th>
<th>Active role</th>
<th>Leading role</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Support task force and other stakeholder activities</td>
<td></td>
<td></td>
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<tr>
<td>• Lobbying for rural population’s interest without official mandate</td>
<td></td>
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<tr>
<td>• Aim to get active mandate within task force (for example for analytical support)</td>
<td></td>
<td></td>
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<tr>
<td>• Take leading role in task force</td>
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</tbody>
</table>

Recommended

Step 2: Integration with RFS strategy

• Analyze fit with broader RFS strategy

• Integrate with RFS strategy, in particular
  • What role can existing/reformed rural FIs play in providing access to rural households through MFS?

Step 3: Fill gaps in existing strategy

• Deep dive on business case:
  • Analyse demand side for mobile financial services in Ethiopia
  • Estimate investment / profitability for FI/TSP-partnership model
  • Analyse cost to end-user to evaluate suitability for financial inclusion

• Deep dive on alternative models (in particular other forms of agent banking)
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Broadly two ways to use mobile technology to access financial services

1. Mobile Financial Services
   (aka mobile money)

   Mobile Financial Services (MFS) uses information and communication technologies (ICTs) and non-FI retail channels to deliver financial services.

   MFS can offer a range of services:
   - Bill Payments and Retail Purchases
   - Domestic and International Remittances
   - Savings
   - Insurance and Credit

   MFS requires agents to perform cash in/out, so this solution, like branchless banking, requires a retail network in order to succeed.

   Example: M-PESA/M-SHWARI (Kenya)

2. Agent banking
   (aka branchless or correspondent banking)

   All transactions are conducted through an agent or correspondent, who offers a suite of financial products and services to customers on behalf of a financial institution.

   Distinct from mobile financial services in some ways:
   - Customer does not require mobile phone
   - Potential to offer broader suite of products
   - Can use different technology (e.g. POS devices)

   Example: EasyPaisa (Pakistan)
There has been rapid deployment of mobile money services in recent years, with Sub Saharan Africa leading the way.

**Rapid uptake of technology in developing countries in recent years**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>11</td>
</tr>
<tr>
<td>2008</td>
<td>16</td>
</tr>
<tr>
<td>2009</td>
<td>38</td>
</tr>
<tr>
<td>2010</td>
<td>64</td>
</tr>
<tr>
<td>2011</td>
<td>116</td>
</tr>
<tr>
<td>2012</td>
<td>179</td>
</tr>
<tr>
<td>2013</td>
<td>219</td>
</tr>
</tbody>
</table>

**Distribution of mobile money services by region (2013)**

- SSA: 51.7%
- South Asia:
- Middle East & North Africa: 11.5%
- Latin America & Carribean: 13.3%
- Europe & Central Asia: 16.1%
- East Asia & Pacific: 6.0%

Most developing countries have deployed two or more mobile money services.

- **Sub Saharan Africa (SSA) has led the way for mobile financial services with the vast majority of deployments and best practices**
- **Mobile banking is available in 36 of 47 countries in the region with a majority of the countries having two or more mobile banking services**
Mobile money extends access to payments and financial services beyond the reach of traditional financial institutions.

% of adults in developing countries without a bank account

- Banked: 41%
- Unbanked: 59%

Reasons why adults are unbanked

- Lack of money: 75%
- Cost of opening and maintaining an account or distance from FI: 25%

By end of 2013, nine markets\(^1\) had more mobile money accounts than bank accounts, compared to just four last year.

Use of mobile banking in SSA

- 16% of adults have used mobile banking (2012)
- In SSA, mobile banking has successfully been able to address concerns of the unbanked

% Adults using mobile banking services

- Kenya: 68%
- Sudan: 52%
- Gabon: 50%
- Algeria: 44%
- Somalia: 34%
- Tajikistan: 29%
- Uganda: 27%
- Angola: 26%

Note: 1) Cameroon, the Democratic Republic of Congo, Gabon, Kenya, Madagascar, Tanzania, Uganda, Zambia and Zimbabwe
Pakistan’s FI-led model is preferred by Ethiopia compared to the MNO-led model in Kenya

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
<th>Results / Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M-PESA and M-SHWARI:</strong> Pre-2007, Kenya had low access to financial services: Only 27% had access to the formal sector, and 39% didn’t use formal or informal financial services at all.</td>
<td>Safaricom launched M-PESA in 2007 to facilitate ‘sending money home’ and making payments. M-SHWARI launched in 2012 by Commercial Bank of Africa to provide access to interest-bearing bank accounts and access to short-term loans. Loan disbursements, repayments, deposits, bill payments, and transfers can all be made electronically through a mobile phone.</td>
<td>• At the end of 2013, 11.6 million active M-PESA users and 2.4 million active M-SHWARI users. • Deposit accounts at CBA have grown from 35,000 to over 5M. • In 2006, only 27.4% of the Kenyan population had access to formal financial services; by 2013, this number was 66.8%. • Rural access: 2006 – 24.6%, 2013 – 59.6%</td>
</tr>
<tr>
<td><strong>Branchless Banking in Pakistan:</strong> In 2008 State Bank of Pakistan (SBP) established financial inclusion as a growth priority for its 105 million rural population</td>
<td>SBP established an FI-led model. Signed an MoU with Pakistan Telecommunication Authority to establish a regulatory framework as well as establish a National Consultative Group – task force dedicated to mobile banking. Mobile banking financial services include cash-in, cash-out transactions, fund transfer, bill payments, insurance and loan services</td>
<td>• At end of 2013, there were 42,000 mobile banking agents, 2 million mobile accounts with mobile transaction value reaching US$8 billion • Offered significant flexibility to both MNOs and FIs even in FI-led model • Despite impressive growth, only 9% of population has mobile accounts. Expected to increase to 35% by 2020</td>
</tr>
</tbody>
</table>

M-PESA is an MNO-led model and was one of the first MFS services launched in the world. Increasingly in recent years, adopting regulators are choosing FI-led models, as Pakistan and Ethiopia have chosen.
From an in-depth review of comparable countries, 7 enablers for FI-led models were identified:

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<td>MFS regulation well balances risk with practicality</td>
<td>Despite widespread usage of technology, overly restrictive registration criteria proved to be prohibitive in the Philippines</td>
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<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
</tr>
<tr>
<td>Infrastructure allows for widespread access and user-friendly solutions</td>
<td>In Kenya, 60% of the rural households have now access to FS. Mainly because of MFS, enabled by a mobile penetration rate of about 70% (nationwide)</td>
</tr>
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<td><strong>Financial institution and end-user capacity</strong></td>
<td></td>
</tr>
<tr>
<td>Financial institutions have a good understanding of MFS solutions and its business implications</td>
<td>In Pakistan, Telenor acquired Tameer Bank to combine financial and technological expertise</td>
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1 Includes access to all formal and informal financial services
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• Way forward
• Appendix
Ethiopia lags behind other developing countries in the provision of mobile financial services.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Ethiopia</th>
<th>SSA (avg.)</th>
<th>All developing countries (avg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of MFS launched (2013)</td>
<td>1</td>
<td>2.9</td>
<td>2.5</td>
</tr>
<tr>
<td>ATMs per 100,000 adults (2012)</td>
<td>0.5</td>
<td>4.5</td>
<td>19.5</td>
</tr>
<tr>
<td>Number of bank branches (2012) (per 100,000 adults)</td>
<td>2.9</td>
<td>3.7</td>
<td>9.0</td>
</tr>
<tr>
<td>Mobile penetration (2013) (subscriptions per 100 people)</td>
<td>27.3</td>
<td>66.0</td>
<td>93.9</td>
</tr>
</tbody>
</table>

Ethiopia lags behind most other developing countries, both in Africa and the world in terms of mobile financial services.

1 World Bank classification Sub-Saharan Africa
2 World Bank classification for developing countries in East Asia, Pacific, Latin America, Caribbean, Middle East, North Africa, and Sub-Saharan Africa
Ethiopia has room for improvement on key enablers

<table>
<thead>
<tr>
<th>Situation in Ethiopia</th>
<th>Assessment</th>
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<tbody>
<tr>
<td>NBE leads the regulation process, but progress has been slow. There is no institutionalized body to coordinate the process among the various stakeholders. To a limited extend, NBE engages international experts.</td>
<td>Significant room for improvement</td>
</tr>
<tr>
<td>Current regulation does not cover several aspects of MFS. There is significant confusion around key aspects of the regulation among stakeholders.</td>
<td>Significant room for improvement</td>
</tr>
<tr>
<td>Current regulation puts all responsibilities on FIs, limiting the active involvement of other parties</td>
<td>Significant room for improvement</td>
</tr>
<tr>
<td>Current regulation has very high hurdles to onboard clients and agents. This effectively reduces the risk, but also prohibits a quick roll-out on a large scale</td>
<td>Significant room for improvement</td>
</tr>
<tr>
<td>Current network tends to be unreliable and reaches about 45% of the rural population. However, infrastructure is improving rapidly. Main concerns are about the nature of collaboration with Ethio Telecom.</td>
<td>Room for improvement</td>
</tr>
<tr>
<td>Understanding of MFS at FIs is relatively low due to limited experience with technology. This particularly true for FIs with a rural focus</td>
<td>Significant room for improvement</td>
</tr>
<tr>
<td>There are a variety of initiatives in place, but acceleration and institutionalization is necessary</td>
<td>Room for improvement</td>
</tr>
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</table>

Current situation in Ethiopia is insufficient to allow for scale-up of mobile money
Current regulatory procedures prohibited launch of MFS for over 5 years

Indicative* overview:
No mobile financial service operational

<table>
<thead>
<tr>
<th>Pre-pilot</th>
<th>Pilot</th>
<th>Launch</th>
<th>Live</th>
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<tbody>
<tr>
<td>Piloting</td>
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<tr>
<td>Piloting</td>
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<tr>
<td>Applied</td>
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<tr>
<td>Applied</td>
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<tr>
<td>Tender</td>
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<td>Unknown</td>
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<table>
<thead>
<tr>
<th>Started MFS</th>
<th>ETA to launch</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>4 months</td>
</tr>
<tr>
<td>2007</td>
<td>6 months</td>
</tr>
<tr>
<td>2011</td>
<td>8 months</td>
</tr>
<tr>
<td>2013</td>
<td>8 months</td>
</tr>
<tr>
<td>?</td>
<td>8 months</td>
</tr>
</tbody>
</table>

Status of TSPs engaged in mobile banking

- M-Birr has been engaged in the mobile banking initiative for over five years. It has successfully piloted and is planning to launch in 2014
- BelCash has been actively building out the technology for four years. It is yet to pilot
- Addis I.B./CBE are in the nascent stages

Obstacles to launch

- M-Birr, BelCash and Kifiya have experienced considerable delays owing to changes in regulations which has limited the scope of TSPs and has increased administrative burden
- Lack of coordination in the regulation-setting process and slow roll-out of directives has considerably hindered the roll-out process

Note: M-BIRR (TSP), BelCash (TSP) and Kifiya (TSP/Service Provider) partnered with various FIs; Addis I.B. and NIB work with other TSPs, CBE issued tender

*Data only partially verified
The main reason is that the regulatory environment has clear limitations.

<table>
<thead>
<tr>
<th>Regulatory enabler</th>
<th>Current regulation</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| MFS regulation is clear and complete | - Limited services covered in directives – loans and utility payments not addressed  
- No provision for interest rates on mobile accounts | - Limits use of mobile banking for full spectrum of financial services |
| MFS regulation enables competition among MFS providers | - Foreign firms play a limited role as TSPs. Their interaction is limited to FIs only  
- TSPs can only enter time-bound contracts with FIs, limiting their involvement after a pre-defined time period | - TSPs are the key stakeholder driving innovation in this sector and their participation in mobile banking initiative should be encouraged  
- Their restricted involvement hinders innovation and competition in this space |
| FS regulation well balances risk with practicality | - Agents are typically small businesses which may not have the required detailed documents  
- Rural farmers are required to be KYC compliant (permanent address proof, DOB proof etc) | - Cumbersome due diligence process for agents and customers  
- Acts as a major barrier to entry for both |

Limitations of directives in Ethiopia add complexity to a successful implementation of mobile banking.
There is also a lack of know-how and capacity on both the demand and supply sides.

Capacity building is a focus for all Sub-Saharan African countries.

**Challenges faced by FIs**

- Improving professional capacity of the business: 51% of FIs
- Growing market through new client segments: 20% of FIs
- Obtaining capital to grow business: 19% of FIs
- Dealing with external factor in market: 9% of FIs
- Other: 2% of FIs

**Financial institution reliance on external support for capacity building (% of FIs)**

- No reliance: 25% of FIs
- Less than 50% reliance: 11% of FIs
- More than 50% reliance: 21% of FIs
- Fully reliant: 43% of FIs

Capacity for MFS is low for all stakeholders, on both the demand and supply sides, in Ethiopia.
Communications infrastructure and use of technology is also behind peers, however is not expected to be a constraint for MFS.

Ethiopia lags behind its counterparts, but projections indicate that both mobile penetration and infrastructure/coverage continue to improve at a rapid pace and are likely not to be bottlenecks for solutions.
Agenda

• Executive Summary
• Overview mobile money and financial access
• Current situation in Ethiopia

**Intervention overview**

• Recommendation A: Establish multi-stakeholder task force
• Recommendation B: Allow Financial Institution (FI) - Technology Service Provider (TSP) partnership model
• Recommendation C: Simplify KYC requirements
• Recommendation D: Simplify agent onboarding
• Recommendation E: Institute and enforce SLA commitments for Ethio Telecom
• Recommendation F: Accelerate government adoption of MFS
• Recommendation G: Coordinate efforts for capacity building

• Way forward
• Appendix
Four problem areas can be addressed in a staged process with seven recommendations:

1. **Build government support**
   - Create multi-stakeholder task force

2. **Create regulatory enabling environment**
   - Allow FI-TSP partnership model
   - Simplify KYC requirements
   - Simplify agent onboarding

3. **Ensure telecom infrastructure support**
   - Develop binding SLAs for Ethio Telecom

4. **Build capacity, trust and improve literacy**
   - Accelerate government adoption of MFS
   - Coordinate efforts for capacity building

Immediate term and Medium term phases are indicated on the timeline.
International best practices have been analysed to determine options

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Bangladesh</th>
<th>Brazil</th>
<th>DRC</th>
<th>India</th>
<th>Kenya</th>
<th>Nigeria</th>
<th>Pakistan</th>
<th>Peru</th>
<th>Philippines</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Establish multi-stakeholder task force</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>B. Allow FI-TSP partnership model</td>
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<tr>
<td>C. Simplify KYC requirements</td>
<td>✓</td>
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<tr>
<td>D. Simplify agent onboarding</td>
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<tr>
<td>E. Institute and enforce SLA commitments for Ethio Telecom</td>
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<tr>
<td>F. Accelerate government adoption of MFS</td>
<td>✓</td>
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<tr>
<td>G. Coordinate efforts for capacity building</td>
<td>✓</td>
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</tbody>
</table>

- ✓ Applicable
- Used for recommendation formulation
- ✓ Partly applicable
Recommendations address the enablers according to priority level

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Enablers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strong leadership from government</td>
</tr>
<tr>
<td>A</td>
<td>Establish multi-stakeholder task force</td>
</tr>
<tr>
<td>B</td>
<td>Allow FI-TSP partnership model</td>
</tr>
<tr>
<td>C</td>
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<td>F</td>
<td>Accelerate government adoption of MFS</td>
</tr>
<tr>
<td>G</td>
<td>Coordinate efforts for capacity building</td>
</tr>
</tbody>
</table>

✓ Directly addressed
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**Recommendation A: Establish multi-stakeholder task force**

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- Way forward
- Appendix
Summary: Case for dedicated task force for mobile banking to ideate on regulatory changes and support implementation

Current Situation
Regulations are currently created and implemented by National Bank of Ethiopia

- First such initiative by NBE, lacks experience and expertise in this space
- Mobile banking is a cross-departmental product that requires iterative discussions among multiple counterparties rather than a purely banking product

Recommendation
Establish task force dedicated to addressing challenges and opportunities related to mobile financial services

- Current regulatory scope has certain challenges and untapped opportunities which further need to be explored
- Main objective of task force is to focus solely on mobile banking regulations and propose changes
- Task force should assume responsibility to refine regulations and create a roadmap to successful implementation
- Mandate to accept changes and for passing directives should reside with the Prime Minister’s Office. PM’s Office will function as an overarching body that the task force reports into

Next Steps
Proposed path forward is to engage the Prime Minister’s Office for an in-depth review of option

- Propose creation of dedicated task force as a way to implement proposed changes
- The task force should have representation from the NBE, Ministry of Finance and Economic Development, Ministry of Communication and IT, Ethiopian Banker’s Association, AEMFI and Ethio Telecom
Open dialogue between different parties is a critical step in fine-tuning the regulatory framework

Potential Benefits

- **Inclusive**
  - With multi-party involvement, recommendations established by task force provide an inclusive and supportive regulatory environment
  - Participation of private players such as banks and MFIs is also important as they will be the key players engaged in mobile banking

- **Speed**
  - Policymakers as well as private players will be aware of key challenges from current set of regulations. Recommendations for change and differences of opinion, in this instance, will be sorted quickly
  - Governing body (i.e., Prime Minister’s Office) could set a timeframe to develop policy proposals to speed up the procedure

- **Enforceability**
  - With stakeholders actively involved in policy-making, enforceability of regulations will be easier and widely accepted

- **Level-Playing Field**
  - Governing authority provides an equal say to all parties by engaging various governmental, private stakeholders and external experts

- **Transparency**
  - With regulations being set through a collaborative process, there is more transparency in the regulations, mitigating risk of complexities

“Creating a task force with all relevant stakeholders was really important because it helped us to assess different scenarios, to get a common understanding of the opportunities and challenges, and at the end to find the best solution for the benefit of the entire ecosystem”
- Valentin Claude Ramazani, Secretary, Mobile Banking Task Force Committee, Banque Centrale du Congo
### Current best practices pertaining to establishing dedicated consultative bodies for mobile banking

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
<th>Role</th>
</tr>
</thead>
</table>
| Peru:   | SBS (central bank) proactively fostered regulatory dialogue amongst governmental agencies including Ministry of Economy and Finance, telecom agency, Central Reserve Bank of Peru, and Ministry of Development and Social Inclusion (MIDIS). | • Shaped mobile money legislation by addressing various aspects of mobile banking regulatory environment  
• Successfully demonstrated inter-agency collaboration |
| Pakistan: | Established National Consultative Group which draws representation from branchless banking industry players including FIs, mobile operators, and technology service providers. | • Established consultative body to address challenges related to mobile banking and develop proposals for policy actions  
• Addresses wide scope of protocols including agent code of conduct, agent sharing models, interoperability schemes and consumer protection framework |
| DRC:  | Established Mobile Banking Task Force Committee (CMFT) in March 2011. Task force included representatives from financial and telecom sector, including the Ministry of Finance, Ministry of Post, Telephones and Telecommunications, the Telecommunications Regulatory Authority, the Congolese Banking Association, MNOs, banks, and MFIs. GSMA and Alliance for Financial Inclusion (AFI) also participated. | • CMFT allotted 10 month timeframe to develop comprehensive regulations pertaining to mobile banking  
• Task force met twice a month to design a legal framework  
• Also responsible for projecting the impact of regulation on market uptake and customer adoption of mobile money services |

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**Recommendation A – Establish Multi-Stakeholder task force**
### Key design aspects for an Ethiopian Task Force

<table>
<thead>
<tr>
<th>Element</th>
<th>Recommendation</th>
<th>Rationale for Recommendation</th>
</tr>
</thead>
</table>
| Multi-stakeholder Membership     | • Involve various stakeholders for inclusive solution  
• Include various governmental agencies including representatives from NBE, Ministry of Finance and Economic Development, Ministry of ICT, Ethio Telecom MFIs  
• Include participation of private players such as FIs and technology service providers | • Collaborative process  
• Creates transparency  
• Active participation ensures enforceability  
• Presence of MFIs ensures financial inclusion objectives are met  
• Presence of private players ensures that regulations are commercially viable |
| Mandate                          | • Focus solely on mobile banking  
• Recommend policy changes to current regulations. Authority to issue proposed changes lies with Prime Minister’s Office  
• Establish projection scenarios for customer adoption and successful implementation process | • Prime Minister’s Office should spearhead the initiative  
• Clear mandate of proposing changes addresses need for reforms  
• Currently, evaluation of projected adoption and implementation roadmap are not addressed |
| External Participation           | • Leverage expertise of sector experts such as GSMA and Alliance for Financial Inclusion (AFI) and other relevant development partners | • External knowledge will further help in fine-tuning regulations  
• Associations such as GSMA have valuable cross country insight |
The Prime Minister’s Office should spearhead the mobile banking initiative but with the support of multi-party team

**Recommendation A – Establish Multi-Stakeholder task force**

- Ministry of Finance and Economic Development
- Ministry of Communication & IT (MCIT)
- Ethiopian Bankers’ Association
- AEMFI
- Ethio Telecom
- NBE (regulator; has veto power)

**Prime Minister’s Office**

*Task force will report into Prime Minister’s Office and will comprise of key representatives from each of these stakeholders. Representatives will brainstorm to review of current regulations and provide insight into adoption issues. Ideas will be passed onto NBE for implementation.*

**Mobile banking regulations and strategy for implementation**
Proposed path forward

**Phase 1 – Scoping Study (1-2 months)**

- Seek approval from Prime Minister’s Office
- Create a committee to explore the option and evaluate the most relevant and experienced candidates for the role

**Phase 2 – Strategic Review (2-12 months)**

- Following the endorsement by the Prime Minister’s Office, committee meets on regular basis to conduct in-depth strategic review of the policies and regulations
- Scope of review committee would include:
  - Feasibility of mobile banking under current regulation
  - Suggesting revisions to regulations to ensure success of initiative
  - Implementation roadmap of proposed changes
  - Gather input from expert bodies such as GSMA

**Phase 3 - Implementation (1-2 years)**

- Following endorsement of Government of Ethiopia implement proposed changes

---

**Today**

**Decision Point 1**

**Decision Point 2**
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• Appendix
Summary: Case for allowing FI-TSP partnerships for mobile financial services

<table>
<thead>
<tr>
<th>Current Situation</th>
<th>The current FI-led model for mobile financial services is restrictive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Current regulation for mobile financial services requires all responsibility, control, and tech IP to be with the financial institution, which also places much financial and operational risk on the financial institution.</td>
</tr>
<tr>
<td></td>
<td>• International comparable models have shown that partnerships between financial institutions and other service providers prove to be more effective at delivering solutions and increasing financial inclusion</td>
</tr>
</tbody>
</table>

**Several alternative models were evaluated for the best fit with the Ethiopian context**

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Recommend amending regulation to allow partnerships between financial institutions and technology providers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• This model allows partnerships between TSPs and financial institutions whereby responsibility for transaction data, KYC, client information, etc. lies with the FI, but costs related to technology, marketing, distribution networks, agent training, etc. and revenues may be shared between the two parties in accordance with a signed agreement.</td>
</tr>
</tbody>
</table>

**Next Steps**

<table>
<thead>
<tr>
<th>The proposed path forward is to engage the Task Force/NBE for an in-depth review of the model</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Once the proposed model has been reviewed and approved by the Task Force, clause 2.1 from Circular No. FIS/01/2014 will need to be reviewed and amended to allow tech providers as well as FIs to own the tech IP and participate further in the operation of the service.</td>
</tr>
</tbody>
</table>
There exist five potential models for mobile financial services in Ethiopia along the spectrum from FI-led to MNO-led

<table>
<thead>
<tr>
<th>Model Options</th>
<th>Description of Model</th>
<th>International comparable models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1 100% FI-led</td>
<td>All responsibility, control, and technology intellectual property are held by the financial institution.</td>
<td>• Ethiopia (planned)</td>
</tr>
</tbody>
</table>
| Option 2 FI – TSP partnership | Allows partnership between FIs and TSPs where FIs are responsible for all financial aspects, but marketing, training, and distribution costs can be shared. | • bKash (Bangladesh)  
• MobileMoney (Stanbic - Nigeria) |
| Option 3 100% third party-led (e.g. FI subsidiary) | Payment banks/e-money issuers are able to issue electronic money and host e-wallets in order to facilitate cash transfers, bill payments, airtime top up, etc. but not credit or savings. | • Money on Mobile (India)  
• Celpaid (Cote d’Ivoire) |
| Option 4 FI – MNO partnership | Partnership between FIs and Ethio Telecom where FIs are responsible for all financial aspects, and ET’s network is utilized, and distribution costs are shared. | • Easy Paisa (Pakistan)  
• MTN Money (Uganda, Ghana...) |
| Option 5 100% MNO-led | MNOs are able to issue electronic money and host e-wallets in order to facilitate cash transfers, bill payments, airtime top up, etc. but cannot offer credit or savings. | • M-PESA (Kenya)  
• Dialog (Sri Lanka)  
• Zaad (Somaliland) |
From a review of comparable country models, six critical success factors were identified with which the models can be evaluated.

1. **Competition is enabled through regulation**
   - Rationale: Competition and innovation are both encouraged by allowing different types of providers (FIs, MNOs, TSPs, etc.) to provide different types of solutions which ultimately allow consumers to choose products and services that best meet their needs.

2. **Stakeholders’ strengths utilized yet not stretched**
   - Rationale: FIs have much expertise in financial matters however they generally do not have the technological expertise in-house to provide a comprehensive MFS solution. This success factor highlights whether the right expertise is involved in the project to enable success.

3. **Access to established agent networks is facilitated**
   - Rationale: Hiring, training, monitoring, and management of agent in the network requires substantial effort. This success factor indicates whether these networks are easily acquired or if they must be created from the ground up.

4. **Costs are shared (technology, marketing and distribution)**
   - Rationale: Costs associated with agent networks and driving demand are the highest operating costs for MFS solutions. This success factor identifies if costs are shared or if they are borne by a single party.

5. **Motivation exists to serve the unbanked**
   - Rationale: Due to the low fees earned on low value MFS transactions, FIs alone may not be incentivized to serve the unbanked, while MNO, TSP, and other operators have more motivation to capture this nascent market. In addition, cross-selling opportunities may be available for other products to create additional revenue streams.

6. **Savings and credit products can be provided**
   - Rationale: Due to risks and regulations around savings and credit products, only FIs can offer these products and services. This success factor indicates if these products are inherently provided or can be coupled with an e-wallet.
### Option 2: FI-TSP partnership is the best solution for Ethiopia because it maximizes benefits while minimizing the risks to any one party

#### Success Factors

<table>
<thead>
<tr>
<th>Success Factor</th>
<th>Option 1: 100% FI-led</th>
<th>Option 2: FI-TSP partnership</th>
<th>Option 3: 100% 3rd party-led</th>
<th>Option 4: FI-MNO partnership</th>
<th>Option 5: 100% MNO-led</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition is enabled through regulation</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Stakeholders’ strengths utilized yet not stretched</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
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<td>Access to established agent networks is facilitated</td>
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<td>✗</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Costs are shared (technology, marketing and distribution)</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Motivation exists to serve the unbanked</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Savings and credit products can be provided</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
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</table>

The FI-TSP partnership is recommended for implementation due to the model’s ability to maximize financial inclusion and viability for all stakeholders. *MNO involvement is discouraged as monopoly MNO stifles competition*

*Detailed assessments for each model can be found in the appendix.*
The current limited FI-TSP partnership has its drawbacks which can be remedied by allowing more TSP involvement

<table>
<thead>
<tr>
<th>Description of current regulation</th>
<th>Implication</th>
<th>Proposed FI-TSP partnership</th>
</tr>
</thead>
</table>
| **Technology and Innovation**    | • FIs lack in-house tech expertise  
    • Constant collaboration will be necessary with tech provider for updates and revisions  
    • Conflicts may arise with regards to IP owned by the TSPs | • Perpetual FI-TSP partnership reduces pressure on FIs to become tech experts  
    • Avoids IP issues |  
| **Business Case for TSP**         | • TSP is not incentivized to innovate or to develop solutions for scale | • A full FI-TSP partnership aligns incentives to reach maximum subscriber base |  
| **Cost Burden on the FI**        | • Less attractive to FIs who prefer to invest in other lucrative products like loans. | • In a full FI-TSP partnership the development and marketing costs can be shared with the TSP to reduce the risk for each |  

Mobile and Agent Banking Regulation of Jan 2013
• FIs allowed to enter into agreements with third party TSPs for MFS

Updated directive released in Jan 2014
• FIs shall engage with the TSP only for a predefined and specific period of time acceptable to NBE
There are many direct benefits to the FI-TSP partnership model

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Description</th>
</tr>
</thead>
</table>
| Cost sharing              | While still allowing the provision of high quality financial services, costs and revenues can be shared, thereby reducing the risk of investment to both parties:  
  • Costs to develop technology platforms;  
  • Costs to market the service and drive customer demand; and,  
  • Costs to develop distribution channels and agent networks. |
| Knowledge and expertise    | Partnership allows each party to contribute their relevant skills and expertise, without requiring any new (expensive) skill-building in-house: financial institutions are able to focus on the provision of financial services while tech providers contribute tech solutions, marketing, and distribution expertise. |
| Competition and innovation| This arrangement also encourages innovation and competition in the industry, which will result in a range of solutions available to consumers from which they can choose that which best meets their needs, and ultimately increases rural financial inclusion. |
| Capacity-building         | Allowing TSPs into mobile financial services provides an opportunity for technology companies to develop their capacity and capabilities along with FIs, resulting in a stronger economic growth for Ethiopia. |
| Financial Inclusion       | The profitability in mobile money comes from large volumes, and not large margins. This is different from the banking business model. In a partnership model, the new entity is more inclined to reach out to a large subscriber base, thus driving financial inclusion |
## Indirect benefits and risks of the FI-TSP partnership model

### Indirect Benefits

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Strong technology sector</strong></td>
</tr>
<tr>
<td>Allowing increased participation of TSPs in the MFS space will have a knock-on effect as more associated technology players will enter the market and the resulting competition will encourage innovation to develop more customised products for the market</td>
</tr>
<tr>
<td><strong>Cross-selling of products</strong></td>
</tr>
<tr>
<td>FIs and TSPs involved in MFS can use the opportunity to create and sell a variety of telecom based value added services bringing a range of services to the customers pockets. Example: In Ethiopia, Belcash has developed a platform to connect a range of professional service providers and seekers, like lawyers, doctors, employment etc.</td>
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</table>

### Risks

<table>
<thead>
<tr>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Partnership logistics</strong></td>
</tr>
<tr>
<td>Communication must be high between TSP and FI to ensure clarity of agreements, arrangements and effective division of responsibilities pertaining to technology, marketing and reconciliation of operations.</td>
</tr>
<tr>
<td><strong>Access to data</strong></td>
</tr>
<tr>
<td>Stringent protective measures need to be employed to ensure security of customer data and privacy. The regulations should ensure reduced risks and protect customers from the potential of fraud</td>
</tr>
</tbody>
</table>
bKash in Bangladesh successfully implemented this model which serves as a case study for Ethiopia

**ISSUE**

- Only 40% of adults in Bangladesh had bank accounts in 2011.
- Rurally, 25% of the population has no access to formal or informal financial services (2011)
- Bangladesh Bank (central bank) wanted to develop mobile financial services as a commercially viable, safe, and competitive banking channel
- Bangladesh Bank also wanted competition; they wanted to see diverse technologies used, different agent networks deployed and a range of products available to ensure consumer choice

**OUTCOME & KEY LESSONS**

**OUTCOME**

- In March 2012, bKash had almost **250,000 registered clients** and over **5,000 agents**
- A 2013 GSMA report suggests that bKash may now have **2 million registered users** and the IFC found that bKash had over **40,000 agents** by early 2013, illustrating significant growth year over year
- 40,000 agents represents one agent in every two villages.
- **Cumulative transactions total USD14.8 million** in April 2013
- bKash competes against six other MFS providers in Bangladesh, but has grown the fastest, has the most registered users, and the largest agent network (2012)

**KEY LESSONS**

- Success of bKash is attributed to the successful building of a collaborative ecosystem for mobile payments, including the bank, a tech provider, MNOs, the central bank, agents, and end-users
- bKash’s fast, early growth was in part catalyzed by pro-active intermediation by Bangladesh Bank with the MNOs and BRAC Bank Ltd.: central bank as the ‘honest broker’
- bKash sales team focus on education and training sessions, in order to acquire users but also with a focus on contributing to the nation’s socio-economic development

**APPROACH**

- Only FI-led models are allowed to operate, which “offer an alternative to conventional branch-based banking to the unbanked population through appointed agents facilitated by the MNOs/solution providers”¹
- The central bank has advocated for mobile operators and microfinance organizations to be active partners
- Agents are able to open accounts in accordance with KYC requirements; banks are responsible for agent training and monitoring
- bKash launched in 2011 as a joint-venture between BRAC Bank Ltd. and Money in Motion LLC, USA
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• Way forward
• Appendix
Recommendation C – Simplify KYC Requirements

Summary: Case for Simplified KYC Requirements

**Current Situation**
Current customer onboarding requirements are restrictive, and the rural unbanked are underequipped to open mobile banking accounts

- Mobile banking KYC requirements are same as banking directive
- All customers require proof of permanent of address and date of birth
- Rural workers do not have access to government certified proofs
- Acts as a barrier to entry, with high potential of low customer adoption

**Recommendation**
Simplify KYC requirements - proportionally lower requirements for low-value accounts

- Allow customers to open basic accounts with lower balance and transaction limits without restrictive KYC requirements
- Simplified accounts can be opened with letter of reference from existing users or local person of authority

**Address anti-money laundering (AML) and combating the financing for terrorism (CFT) threats by applying certain risk mitigation tools - transaction and maximum balance limits and reducing the velocity of money movement**

- Low maximum balance requirements (e.g. <US$1000) will ensure that only nominal amounts are deposited
- Low daily transaction limits (e.g. <US$300) a day ensure that nominal amounts can be transferred
- Both these limits are sufficient for rural unbanked who typically maintain low account balance and conduct relatively small transactions
- Allow separate accounts for businesses and SMEs with increased limits and stringent KYC requirements

**Next Steps**
Proposed path forward is to engage policymakers in an in-depth review of KYC requirements

- In order to ensure adoption, policymakers need to create basic mobile bank accounts with relaxed KYC requirements
It is important to strike a balance between financial inclusion and financial integrity goals

**Benefits of Simplified KYC**

- Customer due diligence requirements is a major obstacle to scaling mobile banking
- Lack of identification poses adoption risks. Hence, it’s important to overcome such obstacles by eliminating need for government approved proofs

- 67% of rural households would prefer to save in a “bank” versus 17% in an MFI
- Simplified KYC provides convenient access to financial services which would otherwise be unavailable
- Expanding branches and ATMs to rural locations is a very long term possibility and doesn’t provide an immediate solution

- Even with lower transaction limits, rural population requirements are met

- Transaction and account balance limits mitigates risk of fraud
- Increased savings and loan opportunities as increase in customer base
- Higher fee collection from increased mobile transactions
- Increased scale will make investment in mobile banking more financially viable
- Higher cross-sell opportunities of other financial products and services

“In many countries where the proportion of unbanked people is high, AML/CFT measures often undermine financial inclusion”

- Bjørn S. Aamo, President of Financial Action Task Force (FATF)
Concept of “simplified account” may be modeled on experiences of other countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
<th>Results / Impact</th>
</tr>
</thead>
</table>
| Democratic Republic of Congo| In absence of national ID scheme, DRC government implemented differentiated KYC requirements proportional to account type:  
- Tier 1 account holder (daily transaction limit – US$100) - self-certify identity and DOB  
- Tier 2 account holder (daily transaction limit – US$500) – Need ID proof, and photo | • Registered customers = 2.8m  
• Mobile transactions volume = 1.2m  
• Mobile transaction value = US$30.7m |
| Fiji                        | Central bank and the Financial Intelligence Unit (FIU) permitted use a “referee letter” to verify a customer’s identity. A “suitable referee” (a person who knows the customer) can confirm that the customer is who he or she claims to be, and can verify other personal details (such as the customer’s occupation and residence) | • Introduced by mobile banking in 2010 by Vodafone’s M-Paisa  
• Registered customers = 334,559 (1/3 of population)  
• Mobile transactions volume = 50,839  
• Mobile transaction value = US$4.3m |
| Peru                        | Facilitated mobile banking with simplified KYC regime for basic accounts     | • Introduced by regulation in 2012, Peru is in its nascent stages of rollout  
• Mobile banking transactions (2012): 1m |

**Country**

- **Democratic Republic of Congo:**
  - KYC requirements are implemented in proportion to account limits

- **Fiji:**
  - Facilitated mobile banking with simplified KYC regime for basic accounts

- **Peru:**
  - Facilitated mobile banking with simplified KYC regime for basic accounts

**Description**

- **Central bank and the Financial Intelligence Unit (FIU) permitted use a “referee letter” to verify a customer’s identity.** A “suitable referee” (a person who knows the customer) can confirm that the customer is who he or she claims to be, and can verify other personal details (such as the customer’s occupation and residence)

- **In absence of national ID scheme, DRC government implemented differentiated KYC requirements proportional to account type:**
  - Tier 1 account holder (daily transaction limit – US$100) - self-certify identity and DOB
  - Tier 2 account holder (daily transaction limit – US$500) – Need ID proof, and photo

**Results / Impact**

- **Fiji:**
  - Registered customers = 334,559 (1/3 of population)
  - Mobile transactions volume = 50,839
  - Mobile transaction value = US$4.3m

- **Democratic Republic of Congo:**
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- **Peru:**
  - Introduced by regulation in 2012, Peru is in its nascent stages of rollout
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**Recommendation C – Simplify KYC Requirements**
Agenda

• Executive Summary
• Overview mobile money and financial access
• Current situation in Ethiopia
• Intervention overview
• Recommendation A: Establish multi-stakeholder task force
• Recommendation B: Allow Financial Institution (FI) - Technology Service Provider (TSP) partnership model
• Recommendation C: Simplify KYC requirements
• **Recommendation D: Simplify agent onboarding**
• Recommendation E: Institute and enforce SLA commitments for Ethio Telecom
• Recommendation F: Accelerate government adoption of MFS
• Recommendation G: Coordinate efforts for capacity building
• Way forward
• Appendix
**Summary: Case for Simplified Agent Banking Requirements**

**Current Situation**

Current agent onboarding requirements are overly restrictive

- Robust due diligence process for agents as require letter of incorporation, one year audited financial statements, need to be familiar with AML/CFT directives and require police certification

**Extensive agent network is imperative to successfully reach out to rural unbanked**

- Strong distribution network is key to addressing financial inclusion targets
- Current regulation acts as a barrier to entry for agents who are typically small businesses and may not have the required detailed documents

**Recommendation**

Simplify agent banking requirements – limit registration criteria to application form and ID proof

- Basic onboarding requirements will facilitate an extensive agent network
- Training on AML/CFT continues to be important and should be part of the training/onboarding requirements
- Introduce tiered agents - basic to highly functional – based on range of products and services provided. Address concerns regarding TIN requirement – suggest providing tax holiday initially to have extensive rollout.

**Next Steps**

The proposed path forward is to engage policymakers in considering amendments to agent requirements

- In order to ensure a vast distribution network, policymakers need to further consider relaxing agent banking requirements
- Stating clear mandate for non-exclusivity of agents creates an enabling environment for interoperability and increased competition among players
Peru and Brazil have established vast agent networks by relaxing government requirements

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
<th>Results / Impact</th>
</tr>
</thead>
</table>
| **Brazil:** | Agents don’t require government level authorization to qualify. Online registration process. FIs outsourced agent management to “integrators”. Task include agent recruitment, training, technical support, customer care, and cash management. | - Over 160,000 active agents  
- Agent network present in each of Brazil’s 6,000 municipalities  
- % of population banked (2013) – 60% |
| **Peru:** | Banks neither charge customers for transacting at agents nor allow agents themselves to charge customers. Thus positioning agents as the lowest cost channel.  
**Simple documentation requirements:** Name or company name, location and working hours, mobile banking services to be provided | - Nearly 23,000 agents (pharmacies, grocery stores and other retail establishments)  
- 45 million transactions conducted through agents annually (2010) |
Agenda

• Executive Summary
• Overview mobile money and financial access
• Current situation in Ethiopia
• Intervention overview
• Recommendation A: Establish multi-stakeholder task force
• Recommendation B: Allow Financial Institution (FI) - Technology Service Provider (TSP) partnership model
• Recommendation C: Simplify KYC requirements
• Recommendation D: Simplify agent onboarding
• Recommendation E: Institute and enforce SLA commitments for Ethio Telecom
• Recommendation F: Accelerate government adoption of MFS
• Recommendation G: Coordinate efforts for capacity building
• Way forward
• Appendix
Summary: Case for additional infrastructure regulation to protect MFS providers and consumers

Current Situation: No regulation exists to require Ethio Telecom to provide a standard level of service to MFS providers

- Agreements between MFS providers and Ethio Telecom currently only include the amount of revenue due to Ethio Telecom, be it based on usage or revenue-sharing; there is no mention of the level of service to be provided by Ethio Telecom.
- Without such regulation, there can be no certainty regarding the quality of a service that is vital to the delivery of MFS to end users; further, FIs take on much more risk than necessary and have no recourse in the case that Ethio Telecom services prevent them from providing mobile financial services to their customers.
- Internationally, it has become commonplace to provide service-level agreements in order to protect MFS providers and end consumers, and also to hold mobile network operators to high quality standards.

Recommendation: Introduce additional telecommunications regulation(s), modeled on comparable countries

- Introduce regulation to require the use of SLAs between Ethio Telecom and MFS providers.
- Consider introducing regulations used by other developing countries:
  - The ‘Coverage rate requirement’ requires mobile network operators to provide service to a certain percentage of the geography of the country.
  - The ‘Quality of service regulation’ requires a certain quality standard from mobile network operators.

Next Steps: Consider implications of additional regulations and make amendments as necessary

- Implementation of any or all of these regulations will increase planning security for MFS providers, reduce operational risk, and provide recourse for any inadequate service provided.
- It is recommended that regulation be introduced that requires SLAs be signed between MFS providers and Ethio Telecom, while a coverage rate requirement and a quality of service regulation would be desirable in the future to further enhance the service provided.
Service-level agreements are now commonplace in telecommunications contracts and are considered best practice

**What are service-level agreements (SLAs)?**

- An SLA is a legally-binding agreement between a customer and a service provider which generally details:
  - A description of services to be provided;
  - Service level objectives;
  - Performance measurement metrics with which services provided are measured against promised objectives; and
  - Problem management and termination of agreement.

- It is essentially a promise of services to be provided and recourse if promised levels are not achieved.
- SLAs have been in use since the 1980’s, originally by fixed line telecom operators as part of their contracts with corporate customers. Now, they are standard practice in a wide range of service contracts.

**Benefits of SLAs in Ethiopia for mobile financial services**

<table>
<thead>
<tr>
<th>FIs</th>
<th>Consistency and stability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assurance over the stability, consistency, and quality of service provided by Ethio Telecom reduces the risk to FIs as they have comfort that customers will be able to avail of the service when required which results in more satisfied customers and consequently, repeat customers and new customer acquisition.</td>
</tr>
<tr>
<td></td>
<td>SLAs also offer protection in the case that service provided is inadequate.</td>
</tr>
<tr>
<td>Ethio Telecom</td>
<td>Best practice</td>
</tr>
<tr>
<td></td>
<td>Providing SLAs would put Ethio Telecom on par with international best practices in the telecom industry.</td>
</tr>
<tr>
<td></td>
<td>More consistent and reliable service encourages new customers to participate in the service, which means additional revenues and customers for Ethio Telecom.</td>
</tr>
</tbody>
</table>
In addition to SLAs, some comparable countries have introduced other telecom regulations to ensure coverage and quality.

**Coverage rate requirement**
- This regulation requires mobile network operators to cover a specified percentage of a country’s population or area with operational service.
- Both Indonesia and the Philippines have such coverage rate requirements, which encourage competition among MNOs, and fuel innovation.
- If Ethiopia were to implement such a regulation, they would be on the forefront internationally among developing countries for their ICT regulations, and the implementation of mobile-based services would be greatly facilitated.

**Quality of service regulation**
- This regulation mandates a minimum level of quality in telecommunications services for all MNOs, and is enforced by the telecommunications regulator.
- Many developing countries have instituted this type of regulation, namely Ghana, Haiti, Kenya, Malaysia, Mexico, Nigeria, Pakistan, and Uganda, among others.
- This regulation again encourages competition and innovation, and results in better services to end users and facilitates the implementation of mobile-based services which aid in development.

While the Coverage rate requirement and the Quality of service regulation would facilitate the success of mobile financial services, they are not necessities for its success; therefore, it is recommended that the implementation of similar regulations be considered by the Ethiopian MFS Task Force, however the current priority is to require SLAs between MFS providers and Ethio Telecom.
Agenda

- Executive Summary
- Overview mobile money and financial access
- Current situation in Ethiopia
- Intervention overview
- Recommendation A: Establish multi-stakeholder task force
- Recommendation B: Allow Financial Institution (FI) - Technology Service Provider (TSP) partnership model
- Recommendation C: Simplify KYC requirements
- Recommendation D: Simplify agent onboarding
- Recommendation E: Institute and enforce SLA commitments for Ethio Telecom
- Recommendation F: Accelerate government adoption of MFS
- Recommendation G: Coordinate efforts for capacity building
- Way forward
- Appendix
Summary: Case for accelerating government adoption of MFS

Current Situation

State of the industry and financial inclusion in Ethiopia warrants government intervention to build trust and capacity

- The financial and telecom infrastructure in Ethiopia suffers from limited competition and lack of capacity
- Only 24% of the adult population in Ethiopia has access to a bank account at a formal financial institution
- Government of Ethiopia has piloted electronic disbursements of aid and salaries (ref. next slide).

Recommendation

Accelerating government adoption will provide impetus to MFS and drive financial inclusion

- The revenue share from the high volume and value of government and aid transfers act as a significant business opportunity for financial institutions incentivizing stakeholders to fast track launch and establish widespread operations to grab maximum share of the pie
- Directing state driven benefit transfers to bank accounts instead of cash automatically includes the unbanked in the formal economy and educates customers through experience
- Users in turn learn to use and save through the formal channels building familiarity and trust with financial products and new technology
- Electronic disbursements removes the middlemen and creates large scale savings for the government

Next Steps

Accelerate Government Adoption of MFS

- Increased use of mobile channels for aid disbursements
- MFS as a means for transferring salaries to employees in the public sector
- Introducing MFS as an additional channel for Government run utilities and revenue payments
Government initiatives can support know-how and trust building

G2P Transfers – Benefits or government salaries for financial inclusion

- Directing state driven benefit transfers to bank accounts instead of cash automatically includes the unbanked in the formal economy and educates customers through experience
- In Pakistan, UBL Omni has secured several contracts to make millions of payments on behalf of government and nongovernment agencies, including the Benazir Income Support Program, the government’s flood relief effort, and the World Food Programme

Business Incentives for FIs leading to capacity building

- FIs receive revenue share for facilitating transactions like benefits, remittances, P2P transfers and bill payments
- Government of India’s proposal to pay a 3.14% fee to FIs for delivering G2P payments, creates significant shift in business case for FIs

Recommendation F – Accelerate Government Adoption of MFS
Examples of existing initiatives in Ethiopia which can be accelerated

**Productive Safety Net Program (PSNP) and Kifiya**

- Ethiopian technology provider Kifiya partnered with the World Food Program, the Bill & Melinda Gates Foundation, ACSI, and OCSSCCO to provide electronic disbursements to food insecure populations.
- The platform allowed enabled beneficiaries to receive their payments by electronic deposit in a bank account, providing access to withdrawals as well as the opportunity to save.
- Kifiya is also currently piloting an e-voucher scheme for the collection of food in addition to cash payments.
- In early 2014, the program had 1.8 million participants.

**M-Birr: designing several projects**

- M-Birr has partnered with UNICEF to develop a system to distribute payments to children and the elderly in remote areas.
- In Tigray, M-Birr is working with the government to process social disbursements to the elderly and disabled who are not able to work; the solution uses NFC bracelet technology to assist with personal identification.
- M-Birr has partnered with the government on the cobblestone road construction project, disbursing salaries to all employees using electronic payments.
Agenda

• Executive Summary
• Overview mobile money and financial access
• Current situation in Ethiopia
• Intervention overview
• Recommendation A: Establish multi-stakeholder task force
• Recommendation B: Allow Financial Institution (FI) - Technology Service Provider (TSP) partnership model
• Recommendation C: Simplify KYC requirements
• Recommendation D: Simplify agent onboarding
• Recommendation E: Institute and enforce SLA commitments for Ethio Telecom
• Recommendation F: Accelerate government adoption of MFS
• Recommendation G: Coordinate efforts for capacity building

• Way forward
• Appendix
Recommendation G – Coordinate Efforts for Capacity Building

**Summary:** Case for coordinated efforts to build capacity at FIs and to educate end-users about MFS

**Current Situation**
Most Banks and MFIs in Ethiopia are engaged in efforts to launch mobile banking; Large swathes of the population in the country is still unbanked

- Commercial banks and MFIs are in the process of development or testing MFS
  - Most FIs lack capacity to handle the technology based product
  - MFS requires large initial investment on operations to set up a wide agent network and marketing to educate customers
- Only 24% of the adult population in Ethiopia has access to an FI account at a formal financial institution
  - Lack of awareness drives up customer education and marketing costs
  - Rural households value security and might need trust building efforts for customer adoption

**Recommendation**
Coordinated financial literacy/empowerment initiatives and capacity building programs will drive successful launch and adoption of MFS

- Workshops by government agencies and development partners to educate MFS providers about the technical and operational know-how will provide motivation to drive, implement and manage a transformative technology-based project
- A competitive MFS ecosystem incentivises providers to develop new customised products and spread financial and technological awareness to increase adoption
- TSPs can play a significant role in educating FIs about the benefits and the business case for mobile banking

**Next Steps**
Coordinate efforts to build trust and capacity

- Task force led forums to develop consensus on MFS regulation and operations
- Workshops by development partners to spread awareness at banks and MFIs
- Financial literacy programs to educate rural and previously unbanked users
Workshops and knowledge transfer initiatives by development partners, government and TSPs to drive capacity building

Workshops by Government, NGOs and Development Partners

• MFS providers need to have the know-how and motivation to drive, implement and manage a transformative technology-based project
• DFID and World Bank funded research to introduce M-PESA in Kenya along with Vodafone

Stakeholder collaboration for knowledge transfer

• TSPs can play a significant role in educating FIs about the benefits and the business case for mobile banking
• Bangladesh Bank advocated active role of non-bank partners; Pakistan allowed a flexible range of FI-led partnerships

MFS Financial Literacy Programs

• A competitive MFS ecosystem incentivises providers to spread financial and technological awareness to increase adoption and develop new products
• VISA is developing mobile applications to teach money management skills and support the advancement of financial literacy in Nigeria
Agenda

- Executive Summary
- Overview mobile money and financial access
- Current situation in Ethiopia
- Intervention overview
- Recommendation A: Establish multi-stakeholder task force
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- Recommendation G: Coordinate efforts for capacity building

Way forward

- Appendix
## Proposed Next Steps

<table>
<thead>
<tr>
<th></th>
<th><strong>Focus</strong></th>
<th><strong>Details</strong></th>
<th><strong>Key Stakeholders</strong></th>
</tr>
</thead>
</table>
| A | Establish multi-stakeholder task force                                   | - The government should review the MFS service mandate with the NBE and push for a task-force inclusive of all stakeholders  
- Engage the Task Force for an in-depth review of the model  
- Review and amend clause 2.1 from Circular No. FIS/01/2014  
- Relax the regulatory KYC requirements to ensure inclusion for the poor  
- Consider amendments to agent requirements to enable scaling of MFS  
- Engage policymakers to ensure that the MNO operator delivers reliable and standardized service that ensures a level playing field  
- Increase use of mobile channels for aid disbursements, salary payments to public employees, and for government-owned utilities, taxes, etc.  
- Coordinate efforts to build trust and capacity: forums to develop consensus on MFS operations and regulations, workshops by development partners, financial literacy programs for rural and unbanked users. | - **Office of the Prime Minister**, NBE, Ministry of Finance and Economic Development, Ministry of Communication and IT  
- **Task Force**  
- **Task Force, NBE**  
- **Task Force, NBE, Ministry of Communications and IT**  
- **Prime Minister’s Office, Ministry of Finance and Economic Development**  
- **Prime Minister’s Office, Task Force, Ministry of Capacity Building** |
| B | Allow FI-TSP partnership model                                           | - Office of the Prime Minister, NBE, Ministry of Finance and Economic Development, Ministry of Communication and IT  
- **Task Force** |
| C | Simplify KYC requirements                                                 | - Office of the Prime Minister, NBE  
- **Task Force, NBE** |
| D | Simplify agent onboarding                                                | - Office of the Prime Minister, NBE  
- **Task Force, NBE** |
| E | Institute and enforce SLA commitments for Ethio Telecom                  | - Office of the Prime Minister, NBE  
- **Task Force, NBE** |
| F | Accelerate government adoption of MFS                                    | - Office of the Prime Minister, NBE  
- **Task Force, NBE** |
| G | Coordinate efforts for capacity building                                 | - Office of the Prime Minister, NBE  
- **Task Force, NBE** |
ATA should aim to play an active role in the roll-out of MFS in Ethiopia

Step 1: Decision on role which ATA should play in the process

<table>
<thead>
<tr>
<th>Passive role</th>
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</thead>
<tbody>
<tr>
<td>• Support task force and other stakeholder activities</td>
</tr>
<tr>
<td>• Lobbying for rural population’s interest without official mandate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Active role</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Aim to get active mandate within task force (for example for analytical support)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leading role</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Take leading role in task force</td>
</tr>
</tbody>
</table>

Recommended

Step 2: Integration with RFS strategy

• Analyze fit with broader RFS strategy

• Integrate with RFS strategy, in particular
  • What role can existing/reformed rural FIs play in providing access to rural households through MFS?

Step 3: Fill gaps in existing strategy

• Deep dive on business case:
  • Analyse demand side for mobile financial services in Ethiopia
  • Estimate investment / profitability for FI/TSP-partnership model
  • Analyse cost to end-user to evaluate suitability for financial inclusion

• Deep dive on alternative models (in particular other forms of agent banking)
Agenda

• Executive Summary
• Overview mobile money and financial access
• Current situation in Ethiopia
• Intervention overview
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• Recommendation B: Allow Financial Institution (FI) - Technology Service Provider (TSP) partnership model
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• Recommendation E: Institute and enforce SLA commitments for Ethio Telecom
• Recommendation F: Accelerate government adoption of MFS
• Recommendation G: Coordinate efforts for capacity building
• Way forward
• Appendix
Agenda

MFS Models

Country Case Studies
There exist five potential models for mobile financial services in Ethiopia along the spectrum from FI-led to MNO-led.

<table>
<thead>
<tr>
<th>Type of Model</th>
<th>FI-led</th>
<th>MNO-led</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model Options</strong></td>
<td>Option 1 100% FI-led</td>
<td>Option 5 100% MNO-led</td>
</tr>
<tr>
<td><strong>Description of Model</strong></td>
<td>All responsibility, control, and technology intellectual property are held by the financial institution.</td>
<td>MNOs are able to issue electronic money and host e-wallets in order to facilitate cash transfers, bill payments, airtime top up, etc. but cannot offer credit or savings.</td>
</tr>
<tr>
<td><strong>International comparable models</strong></td>
<td>Ethiopia (planned)</td>
<td>• Easy Paisa (Pakistan) • Dialog (Sri Lanka) • M-PESA (Kenya) • Zaad (Somaliland)</td>
</tr>
<tr>
<td></td>
<td>• bKash (Bangladesh) • MobileMoney (Stanbic - Nigeria) • Money on Mobile (India) • Celpaid (Cote d’Ivoire) • MTN Money (Uganda, Ghana...)</td>
<td></td>
</tr>
</tbody>
</table>
Option 1: 100% Financial institution-led

The model
This model represents a mobile financial services model where all responsibility, control, and technology intellectual property are held by the financial institution. Any partner organizations may have signed agreements with the FI, but the FI maintains accountability.

How many success factors does Option 1 satisfy?

<table>
<thead>
<tr>
<th>Success Factor</th>
<th>Score</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition is enabled</td>
<td>✗</td>
<td>Competition among FIs exists, however there is no competition among other entities who may provide more innovative solutions for customers.</td>
</tr>
<tr>
<td>Stakeholders’ strengths utilized</td>
<td>✗</td>
<td>Financial institutions have no experience in tech solutions, and it is expensive to bring this in-house.</td>
</tr>
<tr>
<td>Access to established networks</td>
<td>✗</td>
<td>FIs only have access to branches they have established, so all rural networks must be built.</td>
</tr>
<tr>
<td>Costs are shared</td>
<td>✗</td>
<td>Costs must be borne 100% by the FI in this model.</td>
</tr>
<tr>
<td>Motivation exists</td>
<td></td>
<td>FIs value large urban populations that are more affluent and easier to reach, and to whom they can offer higher margin products like lucrative loans and more complex financial services. The profits in mobile money come from large volumes, not large margins, so FIs may not be incentivized.</td>
</tr>
<tr>
<td>Savings and credit products</td>
<td>✓</td>
<td>A full suite of services can be offered to customers on the same platform.</td>
</tr>
</tbody>
</table>

CONCLUSION: This model is not recommended for implementation in Ethiopia, as discussed on the following slide.
Fl-run Mobile Money services have failed to gain traction in India and Nigeria

The business case for providing mobile money is not appealing to FIs

- Mobile money requires large investments for customer acquisition, channel development, and compliance, yet the projected returns are not encouraging for rural customers.
- FIs would rather offer lucrative loans or fancy financial services to the more affluent and easier to reach urban population.
- The profits in mobile money, come from large volumes, not large margins leading to a misalignment of incentives.
- FIs do not have the technological wherewithal to handle a product like mobile banking.

India and Nigeria have struggled to reach out to large mobile money subscriber base

- Nigeria and India have the highest number of mobile money providers, 18 and 15 respectively, but this has not transferred into improved uptake.
- The Indian regulator mandated that Mobile Banking be FI-led in the Indian Market. However, owing to poor uptake, the scope was expanded to include ‘for-profit’ entities like TSPs and MNOs to offer m-wallets.
- The financial and telecom regulators in Nigeria are constructively engaging and collaborating with the MNOs and reviewing regulatory framework and agent banking guidelines.

Implications for Ethiopia

- In the current regulatory environment, only licensed financial institutions are allowed to engage in mobile banking and the technology should be transferred to and entirely owned and possessed by FIs.
- The directives from NBE Circular No. FIS/01/2014 that define the relationship between financial institutions and third parties for Mobile and Agent Banking services should be revised to allow third party involvement and reduce Fl investment and risk.
Option 2: Partnership between financial institutions and technology service providers (TSP)

The model
This model represents a partnership between TSPs and financial institutions, whereby responsibility for transaction data, KYC, client information, etc. lies with the FI, but costs related to marketing, distribution networks, agent training, etc. and revenues are shared between the two parties via a signed agreement.

How many success factors does Option 2 satisfy?

<table>
<thead>
<tr>
<th>Success Factor</th>
<th>Score</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition is enabled</td>
<td>✔</td>
<td>Competition is encouraged both among FIs and TSPs; different solutions ultimately provide consumers with choice and help to drive down costs and increase customer service.</td>
</tr>
<tr>
<td>Stakeholders' strengths utilized</td>
<td>✔</td>
<td>This partnership allows FIs to focus on finance and TSP to focus on innovative solutions for FIs.</td>
</tr>
<tr>
<td>Access to established networks</td>
<td>✗</td>
<td>FIs only have access to branches they have established and TSPs likely have no agent networks, so all rural networks must be built.</td>
</tr>
<tr>
<td>Costs are shared</td>
<td>✔</td>
<td>Operating costs are shared between FIs and TSPs, thus reducing the risk to each partner; further, the technology is not required to be owned by the FI resulting in less upfront investment on the FI by sharing this cost with the TSP.</td>
</tr>
<tr>
<td>Motivation exists</td>
<td>✔</td>
<td>TSPs provide additional motivation to target the nascent unbanked market as they understand how to drive revenues from low value, high volume transactions.</td>
</tr>
<tr>
<td>Savings and credit products</td>
<td>✔</td>
<td>A full suite of services can be offered to customers on the same platform.</td>
</tr>
</tbody>
</table>

CONCLUSION: This model is recommended for implementation in Ethiopia, as discussed on the following slide.
bKash has successfully implemented this model in Bangladesh, and to implement the model in Ethiopia, only one regulation requires amendment.

**What is bKash?**
A joint venture between BRAC Bank Ltd., and Money in Motion LLC, USA, in Bangladesh.

**Why was the FI-TSP model chosen?**
- Regulation in Bangladesh calls for an FI-led model but allows partnerships with other organizations; success of bKash is attributed to the successful building of a collaborative ecosystem for mobile payments, including the FI, a tech provider, MNOs, the central bank, agents, and end-users.
- Bangladesh Bank wants competition in the industry: regulation encourages diverse technologies, different agent networks deployed and a range of products available to ensure consumer choice.

**Key lessons for Ethiopia**
- The central bank was proactive in bridging differences between FIs and MNOs in an ‘honest broker’ role.
- By encouraging partnerships and competition in the industry, Bangladesh has realized a significant improvement in financial inclusion, with over 2.2 million mobile accounts opened within 2 years of bKash commencing operations.
- In addition, competition ensures that customers receive the services they want at the lowest fees.

**Implications for Ethiopia**
- Remove clause 2.1 from Circular No. FIS/01/2014.
- No other changes are required for this model to exist in Ethiopia.
  - All agreements with the mobile network operator continue to be with the FI.
  - Data centres and related infrastructures remain with the FI.
  - TSPs continue to be restricted from having database and data centre access.
**Option 3: 3rd party model - Setting up of e-money issuers/payments banks**

**The model**
This model includes mobile financial services owned and operated by third party entities (eg. payment or technology companies, FIs) that are licensed by the central bank to launch e-money services. E-money issuers or payment banks would be allowed to facilitate payment transactions and take deposits, but not extend credit.

**How many success factors does Option 3 satisfy?**

<table>
<thead>
<tr>
<th>Success Factor</th>
<th>Score</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition is enabled</td>
<td>✓</td>
<td>Competition is introduced in the market, which provides a more attractive proposition for customers in terms of quality service and lower transaction fees.</td>
</tr>
<tr>
<td>Stakeholders’ strengths utilized</td>
<td>✓</td>
<td>3rd party providers in this case likely have expertise in the field, or will bring in-house the required skills in order to operate in this sector.</td>
</tr>
<tr>
<td>Access to established networks</td>
<td></td>
<td>3rd parties may or may not have access to established networks, depending on their current operations and existing partnerships.</td>
</tr>
<tr>
<td>Costs are shared</td>
<td>✗</td>
<td>Costs must be borne 100% by the e-money issuer/payment bank in this model.</td>
</tr>
<tr>
<td>Motivation exists</td>
<td>✓</td>
<td>Payment banks have more incentive to target this market as their model is based on high volumes of low cost transactions.</td>
</tr>
<tr>
<td>Savings and credit products</td>
<td>✗</td>
<td>Due to their non-FI status, these entities will only be able to offer bill payments and cash/digital money transfers; they are prevented from providing sophisticated financial services. However, most mobile banking services across the world started with basic transfer and bill payment services, and FI-led services were introduced later.</td>
</tr>
</tbody>
</table>

**CONCLUSION:** This model may be recommended for implementation in Ethiopia, as discussed on the following slide.
MoneyOnMobile is a mobile payments service in India. Ethiopia needs to grant operating license to Bank/Non-bank e-money issuers

<table>
<thead>
<tr>
<th>What is MoneyOnMobile?</th>
<th>It is a company providing 24 X 7 Mobile Payment Services to its Subscribers and Merchants in India</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Key lessons for Ethiopia</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Most services focus on basic products like transfers or payments at launch and a third party is incentivised to bring maximum customers and merchants on board</td>
</tr>
<tr>
<td>• MoneyOnMobile has achieved rapid growth with 95 million subscribers and 35% active users on a limited yet focused set of product offering.</td>
</tr>
<tr>
<td>• An enabling environment that fosters competition would lead to innovation and promote depth of quality and quantity in the payments industry</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Why was the 3rd party model chosen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Although regulation in India (until recently) did not allow non-banks to provide mobile financial services, it does allow semi-closed m-wallet service for the consumer market. MoneyOnMobile tie-ups with leading financial institutions as well as with leading merchants to offer customers comprehensive services that can be used in real time without restrictions on geography, service, time, or mobile service provider.</td>
</tr>
<tr>
<td>• With low uptake of FI-led services the regulator has allowed third party companies including FIs to set up payment and savings only services</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implications for Ethiopia</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The regulator needs to allow third party companies to operate an e-payments service</td>
</tr>
<tr>
<td>• Will introduce competition and innovation and move transactions to the formal sector</td>
</tr>
<tr>
<td>• Serves current need for customers as well as merchants, following which customers can upgrade to FI-led services for sophisticated products</td>
</tr>
</tbody>
</table>
Option 4: Partnership between financial institutions and telecommunications companies

The model

This model represents a partnership between FIs and telecommunications companies, whereby responsibility for transaction data, KYC, client information, etc. lies with the FI, but the service uses existing networks of the MNO and the costs and revenues are shared between the parties via a signed agreement.

<table>
<thead>
<tr>
<th>Success Factor</th>
<th>Score</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition is enabled</td>
<td>☒</td>
<td>Due to the existence of a monopoly MNO provider in Ethiopia, competition is only encouraged among FIs, and innovation is stifled.</td>
</tr>
<tr>
<td>Stakeholders’ strengths utilized</td>
<td>✓</td>
<td>FIs provide expertise in all financial matters while MNOs provide much needed experience and competence with respect to technology.</td>
</tr>
<tr>
<td>Access to established networks</td>
<td>✓</td>
<td>MNO agent networks which are already in place to sell airtime can be leveraged to provide access to MFS. Further, it is easy to educate customers as messages and communications can be pushed to existing mobile subscribers.</td>
</tr>
<tr>
<td>Costs are shared</td>
<td>✓</td>
<td>Development and operational costs are shared by the two parties, reducing the risk to each.</td>
</tr>
<tr>
<td>Motivation exists</td>
<td>✓</td>
<td>MNOs have more incentive to target this market as their model is based on high volumes of low cost transactions.</td>
</tr>
<tr>
<td>Savings and credit products</td>
<td>✓</td>
<td>A full suite of services can be offered to customers on the same platform.</td>
</tr>
</tbody>
</table>

CONCLUSION: This model is not recommended for Ethiopia due to the existence of a monopoly telecom provider.
Option 5: 100% MNO-led

The model
This model represents a mobile financial services model where mobile network operators are able to issue electronic money and host e-wallets in order to facilitate cash transfers, bill payments, airtime top up, etc. No savings or credit products can be offered by MNOs, and they are responsible for KYC, data centres, tech solutions, and so on in this model.

How many success factors does Option 5 satisfy?

<table>
<thead>
<tr>
<th>Success Factor</th>
<th>Score</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition is enabled</td>
<td>✗</td>
<td>Due to the existence of a monopoly MNO provider in Ethiopia, competition and innovation are stifled.</td>
</tr>
<tr>
<td>Stakeholders’ strengths utilized</td>
<td>✗</td>
<td>MNOs bring only tech and telecom experience to the table; they lack financial competence and capability.</td>
</tr>
<tr>
<td>Access to established networks</td>
<td>✓</td>
<td>MNO agent networks which are already in place to sell airtime can be leveraged to provide access to MFS. Further, it is easy to educate customers as messages and communications can be pushed to existing mobile subscribers.</td>
</tr>
<tr>
<td>Costs are shared</td>
<td>✗</td>
<td>Costs must be borne 100% by the MNO in this model, increasing the risks inherent in the investment.</td>
</tr>
<tr>
<td>Motivation exists</td>
<td>✓</td>
<td>MNOs have more incentive to target this market as their model is based on high volumes of low cost transactions.</td>
</tr>
<tr>
<td>Savings and credit products</td>
<td>✗</td>
<td>Due to their non-FI status, MNOs will only be able to offer bill payments and cash/digital money transfers; they are prevented from providing sophisticated financial services.</td>
</tr>
</tbody>
</table>

CONCLUSION: This model is not recommended for Ethiopia due to the existence of a monopoly telecom provider.
Agenda

MFS Models

Country Case Studies
CASE STUDY: Bangladesh (bKash)

Background information

Demographics (2013)

- Rural population [%] – 70.6%
- Mobile phone penetration – 67.1 per 100 people
- GDP per capita – $829 (in current USD)
- Literacy rate – 56.8%

Model

- bKash launched in 2011
  - A joint-venture between BRAC Bank Ltd. and Money in Motion LLC, USA
  - Service is delivered via the Fundamo platform which is now owned by VISA
  - Agents are sourced from MNO partners, BRAC bank, and independently
  - bKash has now partnered with all four MNOs in Bangladesh, giving them access to all mobile users
  - Services offered include payments in/out, transferring inward remittances, P2P transfers, bill payment, B2P disbursements, and government disbursements.
  - Based on USSD interface
  - No fees for deposits and low fees for withdrawals (1.85% of the amount withdrawn) and transfers (flat fee of BDT 2, equivalent to USD $0.02)

Regulation

- Only FI-led models are allowed to operate, which “offers an alternative to conventional branch-based banking to the unbanked population through appointed agents facilitated by the MNOs/solution providers”
- The central bank has advocated for mobile operators and microfinance organizations to be active partners
- FIs can make any arrangements they like with partners/agents, but must submit copies of the agreements and Service Level Agreements to the central bank for approval
- FIs must be the custodians of all deposits
- FIs are responsible for KYC requirements
- FIs must pay interest on deposits in mobile accounts
- FIs bear all liability for actions of agents/partners
CASE STUDY: Bangladesh (bKash)
An FI-TSP partnership became the fastest growing mobile financial services in Bangladesh

ISSUE

• Only 40% of adults in Bangladesh had bank accounts in 2011
• 23% of Bangladeshi have no access to financial services, formal or informal, in 2011
• Rurally, 25% of the population has no access to formal or informal financial services

OUTCOME & KEY LESSONS

OUTCOME

• In March 2012, bKash had almost 250,000 registered clients and over 5,000 agents
• A 2013 GSMA report suggests that bKash may now have 2 million registered users and the IFC found that bKash had over 40,000 agents (“one agent in every two villages) by early 2013, illustrating significant growth year over year
• Cumulative transactions total USD14.8 million in April 2013

KEY LESSONS

• bKash’s fast, early growth was in part catalyzed by pro-active intermediation by Bangladesh Bank with the MNOs and BRAC Bank Ltd.: Central bank as the ‘honest broker’
• Success of bKash is attributed to the successful building of a collaborative ecosystem for mobile payments, including the FI, a tech provider, MNOs, the central bank, agents, and end-users
• bKash sales team focus on education and training sessions, in order to acquire users but also with a focus on contributing to the nation’s socio-economic development

APPROACH

• Bangladesh Bank (central bank) wanted to develop mobile financial services as a commercially viable, safe, and competitive banking channel
• Bangladesh Bank also wants competition; they would like to see diverse technologies used, different agent networks deployed and a range of products available to ensure consumer choice
• Agents are able to open accounts in accordance with KYC requirements; FIs are responsible for agent training and monitoring
bKash is an FI-led model with partnerships with all MNOs in Bangladesh; bKash has built an ecosystem for mobile financial services.
CASE STUDY: Brazil

The government adopted an iterative process going from FI-led approach to a more open approach in 2013

ISSUE

- Only 45% of population (215 million) have bank accounts (2009) hence financial inclusion is a government-level goal
- Mobile penetration: 78% (2008)

APPROACH

- Regulators adopted a wait-and-see approach, evolving its policies along the way
- Objective by central bank is to create lightest possible mechanism in terms of regulatory burden
- Evolved from an FI-led model to a more open approach. In May 2013, issued directive to allow non-banks to issue e-money (MNOs, digital wallet providers, card companies and merchant acquirers)
- Over 160,000 active agents. Agents don’t require regulatory approval
- Banks outsourced agent management to “integrators”. Task include agent recruitment, training, technical support, customer care, and cash management
- Interoperability is a set future priority

OUTCOME & KEY LESSONS

OUTCOME

- Mobile banking users - 2m in March 2013
  - Mobile commerce transaction value 2009 – US$100m
  - Mobile commerce transaction value 2013 – US$600m. Expected to reach US$1.8 billion by 2018
  - % banked 2009 – 45%
  - % banked 2013 – 60%
- Agent network present in each of Brazil’s 6,000 municipalities (largest agent network in the world)
- Major MNOs have partnered with card payment companies (Mastercard) and banks (Caixa)

KEY LESSONS

- Took Brazil over seven years of dialogue between market players, government ministries and international institutions to reach is currently regulatory state
- Vast agent network allows extensive customer reach
- Strong government support for financial inclusion and an enabling regulatory framework fostered consumer adoption and encouraged innovation
CASE STUDY: Brazil

Illustration

Current Model

Regulators

Banks (partner with MNOs)

MNOs (partner with banks, technology and card payment companies)

Agent Network

Customers

Customers

Customers

Customers
CASE STUDY: Brazil
Application to Ethiopian context

MODEL THAT CAN BE IMPLEMENTED TO ETHIOPIA

Banks/ TSPs

Agent Network

Customer Customer Customer Customer

OPPORTUNITIES (WHY APPLICABLE IN ETHIOPIA?)

- Large network of agents – Agents don’t require government level authorization to qualify. Online registration process
- Overcomes issue of poor infrastructure in rural areas and is easily scalable
- Private players are investing considerably in mobile technology as government is backing push towards mobile payment
- Outsource agent management to third party enabling banks focus on their core business

CHALLENGES (WHY NOT APPLICABLE IN ETHIOPIA?)

- Lack of innovation: Limited engagement of TSPs curbs the time and money invested in innovative mobile solutions
- Regulation: Current regulation doesn’t allow for non-bank players
- Urban population: 86% of the Brazilian population is urban
- 135% mobile penetration – Brazil is fourth largest mobile market in the world
CASE STUDY: Democratic Republic of Congo
DRC adopted an inclusive engagement process for mobile banking regulations

ISSUE

- **Poor outreach** of financial services as only 4% of a population of 66.6 million people have a bank account and 1% used a formal account to save money
- Mobile penetration is low at 33% (2013)
- Large geographic area and infrastructure gaps makes traditional brick-and-mortar approach to banking difficult

OUTCOME & KEY LESSONS

OUTCOME

- Key stats related to mobile banking (Dec 2013):
  - Registered customers = 2.8 million
  - Registered agents = 32,681
  - Mobile transactions volume = 1.2 million
  - Mobile transaction value = US$30.7 million

KEY LESSONS

- **Comprehensive initiative by Government** – engaged various stakeholders in creating an enabling regulatory environment
- **Established diverse task-force** to understand opportunities and challenges related to banking and to ensure transparency and enforceability
- Iterative process – hosts *regular meetings* with stakeholders to maintain open dialogue
- **Differentiated KYC requirements** by account type

APPROACH

DRC adopted an MNO-led model in December 2011

- Governor Mulongo established Mobile Banking Task Force Committee (CMTF) in March 2011 to develop regulation
- Task force included representatives from financial and telecom sector, including the Ministry of Finance and Telecom, Congolese Banking Association, MNOs and financial institutions. GSMA and Alliance for Financial Inclusion (AFI) also participated
- Governor gave task force 10 months to create directive
- Modelled solution after Philippines and Kenya

Due Diligence

- Tier 1 account holder¹ – Self-certifies identity and DOB
- Tier 2 account holder² – Needs ID proof, photo and application form

Notes: 1) Daily transaction limit = US$100  2) Daily transaction limit = US$500
Source: GSMA
CASE STUDY: Democratic Republic of Congo

Current Model

Regulators

MNOs (Airtel, Vodacom, Millicom)

Agent Network

Customers

Customers

Customers

Customers
CASE STUDY: Democratic Republic of Congo
Application to Ethiopian context

MODEL THAT CAN BE IMPLEMENTED TO ETHIOPIA

- Ethio Telecom
  - Agent Network
    - Customers

OPPORTUNITIES (WHY APPLICABLE IN ETHIOPIA?)

- **Demographics** – Similar to Ethiopia in terms of low mobile penetration and literacy levels, dispersed population
- **Enabling economic environment** – low potential for brick-and-mortar to provide financial inclusion, healthy GDP growth and improving telecom infrastructure signal strong potential for mobile money; similar to Ethiopia
- **Lack of national ID system** (similar to Ethiopia) – hence relaxed KYC requirements

CHALLENGES (WHY NOT APPLICABLE IN ETHIOPIA?)

- **Regulatory challenges**: Current scope of regulations is limited and requires overhaul
- **MNO-led model**: Ethiopia prefers FI-led model
- **Dedicated task force**: Need a central body that is dedicated to mobile banking services and digital financial inclusion
CASE STUDY: India

Background information

Demographics
- 68% rural population
- 71% mobile phone penetration
- $1499 GDP per capita
- 63% Literacy rate

Model
- Mobile banking services are bank led, MNO operators allowed to run mobile wallets with restrictions
- Transaction costs to end user
- Incentives for FI, MNO, agent, and tech provider
- Other branch-less models

Regulatory
- Financial system and mobile banking service regulated by Reserve Bank of India (central bank)
- Government role:
  - 100% Foreign ownership of telecom players allowed
  - Foreign ownership in Banking is allowed but new entry is restricted by license requirement from central bank
CASE STUDY: India
MFS identified as a priority initiative to achieve financial inclusion

**ISSUE**

- In 2007, only 27% of farmer households had access to formal sources of credit. 51.4% of households are excluded from formal/informal sources
- Certain regions and social groups having acute financial exclusion
- 6% of villages with bank branches. 33,000 rural bank branches in 630,000 villages

**OUTCOME**

- Unique mobile subscribers: 350 to 550 million
- National ID numbers issued: 510 million
- Bank account holders: 589 million
- Number of mobile banking customers: 22 million
- Evidently, the large mobile subscriber base has not been leveraged for financial inclusion

**APPROACH**

- Committee on Financial Inclusion formed in 2007 which came up with recommendations for improved financial inclusion
- The Reserve Bank issued the first set of guidelines on mobile banking in October 2008, to facilitate funds transfer from one bank account to another bank account, both for personal remittances and purchase of goods and services.
- Mobile money labeled as a banking product, MNOs required to partner with a bank to provide the service.
- All transactions should originate from one bank account and terminate in another bank account
- FI-led seen as a long term solution, customers might start off with money transfers and bill payments but move up to more complex savings and investment products

**KEY LESSONS**

- Criticism of the FI-led model
  - The business case for mobile money services in remote rural areas is not appealing to banks; banks value large urban populations that are more affluent and easier to reach
  - Mobile operators, on the other hand, don’t offer lucrative loans or financial services; the profits in mobile money come from large volumes, not large margins
  - **Recommendation** – Setting up Payments Banks, which can offer payments and remittances but not loans

- Customer Enrolment
  - Mobile number registration without visiting the bank
  - Uniform process for all banks
  - Simplified and standardized process for M-PIN generation

- Technical issues
  - Implementation of common USSD gateway for mobile banking
  - Facilitation by the MNO for banks to offer secure mobile banking to their customers through SIM Tool Kit (STK) application on SIM card
CASE STUDY: Kenya (M-PESA and M-SHWARI)

Background information

Demographics (2013)
- % Rural – 75.2%
- Mobile phone penetration – 70.6 per 100 people
- GDP per capita – $994 (in current USD)
- Literacy rate – 87.4%

Model
- MNO-led (gov’t owns 35% of Safaricom)
- M-PESA not attached to a bank account; M-SHWARI provides banking services
- Transaction costs to end user (in USD):
  - Tiered system based on amount sent/withdrawn, where and to whom (registered user/non-reg.)
  - Withdraw 100ETB – 0.06 - 0.17ETB
  - Send 100ETB – 0.06ETB
- Incentives for FI, MNO, agent, and tech provider:
  - In 2013, increased the commissions on deposits and reduced those on withdrawals to encourage saving
- M-PESA is just one of several mobile money solutions offered in Kenya, but holds the highest market share
- Uses network of Safaricom retail agents

Regulatory
- Regulatory policy for mobile money transfer services did not exist prior to M-PESA; Safaricom worked with central bank of Kenya to design regulations
- Central bank of Kenya allowed telecom operators to offer these services without requirement for a bank partnership
  - M-PESA operates outside the traditional banking regulatory environment; M-SHWARI does not
- Few restrictions on foreign investment, foreign ownership (capped at 40% of Kenyan listed companies), and repatriation of profits or capital
- Max transaction amount per day: ~USD1,600¹
- Max amount per transaction: ~USD800²

¹Ksh140,000  ²Ksh70,000
CASE STUDY: Kenya (M-PESA and M-SHWARI)
The first successful mobile money service in Sub-Saharan Africa

ISSUE

• Pre-2007, Kenya had low access to financial services: 27% of the population had access to the formal sector and 39% didn’t use any form of financial services, formal or informal\(^1\)

• National money transfer is very common in Kenya, and cost effective methods were not available; prior to M-PESA, cash was often sent with a traveler to be hand delivered

OUTCOME & KEY LESSONS

OUTCOME

• At the end of 2013, 11.6 million active M-PESA users and 2.4 million active M-SHWARI users

• Deposits are USD $21M and loan balances are USD$9.3M

• Deposit accounts at CBA have grown from 35,000 to over 5M

• More than 78,000 agents across Kenya

• In 2006, only 27.4% of the Kenyan population had access to formal financial services; by 2013, this number was 66.8%\(^1\)

• Rural access to financial services: 2006 – 24.6%, 2013 – 59.6%

KEY LESSONS

Regulatory:

• Safaricom worked with regulators - central bank of Kenya was involved in the development from inception

• KYC requirements were relaxed so that only national ID cards and mobile phone numbers to open an M-PESA and M-SHWARI account.

• Liberalisation of telecom industry to encourage competition

• Few restrictions on foreign ownership

Operational:

• Agent network development and exclusivity

• Agent incentives and liquidity management

• Marketing and communication strategy to build brand

• Customer education (fin. literacy)

APPROACH

• Safaricom launched M-PESA in 2007 to facilitate ‘sending money home’ and making payments.
  • Users can deposit, withdraw, transfer, pay bills, purchase airtime, and transfer to a bank account
  • Must present original ID to open account and for each transaction (3 way ID: SIM, ID, PIN for all transactions)

• M-SHWARI launched in 2012 by Commercial Bank of Africa which sits on top of M-PESA
  • Access to interest-bearing savings accounts
  • Account opening is initiated remotely by the customer and fulfilled electronically by CBA
  • Leveraged Kenya’s national ID program to reduce cost of KYC
  • Loans provided only after 6 months of Safaricom use and are based on past use of Safaricom services; to apply, there are no fees or paperwork, simply enter the short code to obtain your eligible loan amount
  • Loan disbursement and repayments can be made through M-PESA

\(^1\) FinAccess2013
CASE STUDY: Kenya (M-PESA and M-SHWARI)

Illustration

Safaricom represents both the telecom service provider and the tech provider in the MNO-led model.

As no regulation in this field existed prior to M-PESA, Safaricom worked closely with regulators to ensure the best model was created for the country. Safaricom manages the agent network via a third-party.
CASE STUDY: Nigeria

Background information

Demographics
- 49.2% rural population
- 73.3% mobile phone penetration
- $3010 GDP per capita
- 61.3% Literacy rate

Model
- 18 Mobile money operators licensed thus far
- The Regulatory Framework (2009) for Mobile Money provides for 3 models – FI-led, Non FI-led and Bank Focused
- MNOs excluded from leading any of the models due to fears in the area of regulation, prudential supervision, monetary policy and above all, the complexity of the Nigerian economy
- MNOs assigned the role of
  - Provision of telecommunication network infrastructure
  - Ensuring that a secure communication path is implemented
  - Making available its network based on criteria which are transparent and generally applicable to all MMOs without discriminatory practices
  - Ensuring that its subscribers are free to use any mobile payments system of their choice
- MNOs excluded from
  - Receiving deposits from the public except in respect of prepaid air time billing of their subscribers
  - Allowing the use of the prepaid airtime value loaded by their subscribers for the purpose of payment or transfer of monetary value

Regulatory
- Financial system and mobile banking service are regulated by Central Bank of Nigeria
- Regulation aimed at providing an enabling environment for mobile payments services in providing financial access to unbanked and reducing cash dominance
- Regulation specifies minimum technical and business requirements for various participants
- Regulation outlines broad guidelines for implementation of all processes and flows of mobile payments transactions from initiation to completion.
CASE STUDY: Nigeria
Review of regulatory framework launched to enable extensive agent network and subscriber base

**ISSUE**
- In 2008, only 21% of the adult population was banked
- Reasons for financial exclusion
  - Product complexity (including KYC requirement)
  - Cost of financial service
  - Distance to financial service outlets

**APPROACH**
- FI-led model adopted, not 100% bank-focused
- MNOs excluded from leading any of the models for fears in the area of regulation, prudential supervision, monetary policy and above all, the complexity of the Nigerian economy

**Reasons for excluding MNOs**
- Anti-competition - MNOs may have undue advantage through either blocking out the other players in the industry or overpricing its network access
- Mobile Payments Traffic Prioritization - Ability for an MNO to prioritize its own mobile payments system traffic would limit confidence in the new Mobile Payments initiative
- Systemic Risk Reduction - Large volume of transactions might introduce systemic risk. CBN has little or no control over MNOs
- Reconciliation issues - Only Banks have the wherewithal and experience in these areas

**OUTCOME**
- 18 Mobile Money Operators licensed thus far
- Total number of Subscribers - 9,989,297
- Total number of Agents enrolled - 67,494
- Total volume of Transactions - over 11m
- Total value of Transactions - over N105bn ~ $0.65bn

**CHALLENGES**
- Inadequate capital outlay on the part of the MMOs
- Basic infrastructural challenges – power, telecommunications network etc.
- Lack of awareness/customer education which has slowed down the adoption rate
- Lack of wide-spread agent network.
- Interoperability and inter connectivity yet to be fully achieved among all networks

**KEY LESSONS**
- Joint Technical Committee, collaboration between MNOs
- National Deposit Insurance – safety for subscribers
- Review of regulatory framework
  - Easing of KYC (National Identity management)
  - Agents in rural areas (Use of postal service)
- Interbank settlement system for interoperability
- Enhance Financial Innovation and Access (EFInA) is the CBN development partner
CASE STUDY: Pakistan

Despite following a FI-led approach, Pakistan has created an enabling business environment for mobile banking players

ISSUE

- **Poor outreach** of financial services with less than 2,500 branches for 105 million rural population (42,000 inhabitants per branch)
- Only 16 million bank accounts for total population of 170 million (2010)
- Financial inclusion an **important objective** of 2005-2010 Strategic Plan

APPROACH

- State Bank of Pakistan (SBP) implemented a FI-led approach in 2008
  - FI-led model where FI has to be SBP licensed
  - Pakistan Telecommunication Authority and SBP signed MoU to establish framework for mobile banking interoperability
  - Established National Consultative Group – task force dedicated to mobile banking. Includes banks, mobile operators, and technology service providers
  - Launched Nationwide Financial Literacy Programme to boost awareness of financial services
- **Operations**
  - Financial services include cash-in, cash-out transactions, fund transfer, bill payments, insurance and loan services

OUTCOME & KEY LESSONS

OUTCOME

- Key stats related to mobile banking:
  - Total number of agents = 42,000 (2013)
  - 2 million mobile accounts have opened since 2008
  - Mobile transactions volume since 2008 = 194 million
  - Mobile transaction value since 2008 = ~US$8 billion
- Total branch network increased to 11,600 (of which 94% are real-time connected)
- Despite impressive growth, only 9% of population has mobile accounts. Expected to increase to 35% by 2020

KEY LESSONS

- **Comprehensive initiative by Government** - stated clear, concise and detailed regulations
- **Regulatory changes in 2011** – updated regulations as per business needs. Replaced expensive requirement of biometric fingerprint with digital photo
- Despite being FI-led, offered **significant flexibility** to both MNOs and banks
- **Full scope of financial services** offered – services included loan disbursements and bill payments
- SBP has a clear target of encouraging interoperability
- **Established consultative body** to address challenges related to mobile banking and develop proposals for policy actions
CASE STUDY: Pakistan

**MODEL 1**  
*One-To-One*

- **Banks**
- **MNO**
- **Dedicated Agent Network**
- **Customer**

Bank offers mobile banking account *either through an MNO or via a agent network*. Example, Tameer Bank offers the EasyPaisa Mobile Wallet to Telenor mobile users.

**MODEL 2**  
*One-To-Many*

- **Banks**
- **Any Mobile Phone Account***
- **Independent Agent Network**
- **Customer**

Bank *bears advertising and marketing expenses and relies on its own branch network for product distribution*. Example, United Bank Limited (UBL) offers its Orion through this model.

**MODEL 3**  
*Many-To-Many*

- **Multiple Banks**
- **Multiple MNOs**
- **Multiple Agent Networks**
- **Customer**

Involves a central transaction processing system (i.e. switch) that provides **total interoperability**, allowing multiple banks to offer services via multiple agent networks and multiple MNOs. The switch must be controlled by a bank, an agent or a subsidiary of a group of banks.

*Provided that the customer's particular MNO can provide an SMS pipe with adequate speed for processing transactions*
CASE STUDY: Pakistan
Application to Ethiopian context

MODEL THAT CAN BE IMPLEMENTED TO ETHIOPIA

- Ethio Telecom
  - Banks/ TSPs
    - Agent Network
      - Customers
      - Customers
      - Customers

OPPORTUNITIES (WHY APPLICABLE IN ETHIOPIA?)

- **Fi-led model** to ensure that financial services are provided by financial institutions
- **Demographics** - Ethiopia has smaller population than Pakistan which can make the application of this model easier
- Regulations are still in nascent stages – Ethiopia can take a more **constructive approach**, providing **clearer guidance**
- **Overcomes** issue of **poor infrastructure** in rural areas and is easily **scalable**

CHALLENGES (WHY NOT APPLICABLE IN ETHIOPIA?)

- **Regulatory challenges**: Current scope of regulations is limited and requires overhaul
- **Presence of multiple MNOs**:  
  - Pakistan has five major MNOs  
  - Easypaisa, most successful mobile solution, established by Telenor (MNO) acquiring 51% stake in Tameer Bank
- **Dedicated task force**: Need a central body that is dedicated to mobile banking and digital financial inclusion
CASE STUDY: Peru

Background information

Demographics (2013)

- % Rural – 22.1%
- Mobile phone penetration – 98.1 per 100 people
- GDP per capita – $6,660 (in current USD)
- Literacy rate – 89.6%

Current Banking Environment

- Peruvian banks have developed a robust network of retail agents outside their networks of branches
- Banks do not charge customers for transacting at agents (and do not allow agents themselves to charge customers either), thus positioning agents as the lowest cost channel
- Agents are able to open basic bank accounts on behalf of banks
- Simplified accounts were introduced by legislation in 2011: contain relaxed KYC requirements, maximum monthly balance of USD$600, daily transaction limit of USD$300

Key Lessons

- The cooperation among agencies shaped e-money legislation and demonstrated that inter-agency collaboration is able to produce a well-rounded outcome
- Simplified KYC and AML regulations on low-value, simplified accounts can enable the participation of additional customers and agents in the system
- Regulating the non-exclusivity of agents creates an enabling environment for interoperability and increased competition among players
- The creation of a new legal entity licensed by the regulator further encourages competition and may increase the speed with which financial inclusion goals are achieved
CASE STUDY: Peru
A leader in mobile financial service regulation in Latin America

ISSUE
• In 2011, only 30% of Peruvians had bank accounts
• Peru is a signatory on the Maya Declaration, which is focused on unlocking the social and economic potential of the unbanked, one commitment of which is the creation of an enabling environment for new technology to increase access to and lower the cost of financial services
• With high mobile phone penetration and low financial service penetration, Peru was well poised for success with mobile financial services; however, banks were more focused on improving and increasing services for their existing customers rather than the unbanked

APPROACH
• In January 2013, the Peruvian government passed the Electronic Money Law (Ley de Dinero Electronico) with the unbanked front of mind
• The legislation allows both banks and non-banks to issue electronic money, and regulators hope that the bill will encourage innovative alliances and relationships between the banking and private sectors
• Superintendencia de Banca, Seguros y AFP (“SBS”), the regulator for the financial system, fostered an ongoing dialogue with the Ministry of Economy and Finance, the telecommunications agency, the Central Reserve Bank of Peru, and the Ministry for Development and Social Inclusion

REGULATION
THE REGULATIONS INCLUDED:
• A clear definition of e-money, drafted after careful consideration with the private sector to distinguish between deposits and e-money (only banks can provide deposit accounts)
• The creation of a new and specialized legal entity for e-money issuers under license from the financial sector authority
• Supporting a market-driven approach for a greater competitive environment
  • Regulators realized that permitting the participation of mobile operators provided a greater potential to accelerate the incorporation of the poor into an efficient payment service system
• A proportionate risk-based approach to effectively deal with AML concerns while promoting financial inclusion
  • i.e., simplified KYC on low-value instruments
• Safeguarding account holders’ funds by requiring all e-money issuers to hold the equivalent to the value of customer funds in a trust account
• A flexible and simplified approach to consumer protection rules, which avoids placing unnecessary burdens on providers
• Enabling banks and non-banks to create their own network of agents or use an existing network from a competitor, thus permitting shared networks
• While not mandated, Peru has stated the interoperability of mobile payments instruments as a key principle and objective
CASE STUDY: Peru

E-money license holders can only deal in e-money, NOT deposits, a clear distinction in the legislation; only banks can accept deposits.
CASE STUDY: Philippines
Background information

Demographics (2013)

- % Rural – 50.6%
- Mobile phone penetration – 104.5 per 100 people
- GDP per capita – $2,765 (in current USD)
- Literacy rate – 95.4%

The Landscape in the Philippines

The Philippines is the texting capital of the world, so trust in mobile phone technology is established
- Sizeable domestic and international remittance flows demonstrate demand for financial services
- Bangko Sentral ng Philippnes ("BSP") passed progressive regulations enabling mobile operators to offer e-money and agents to provide cash in/out
- Widespread and reliable network coverage
- However, uptake for mobile financial services has been less than desired over the past decade

Models

- SMART Money, launched in 2001
  - SMART Communications in partnership with Banco de Oro
  - Now partnered with 14 banks, and users can link their wallet to their bank account
  - FI-led model
  - Uses SIM toolkit (STK)
  - Buy airtime, send/receive domestic and international transfers via mobile, pay for goods using a physical card
  - Users can activate accounts remotely and process transfers and topups, but must visit a SMART centre for other functions (KYC reasons)
  - Daily max transactions of USD$1,020; withdrawal max of USD$612

- GCASH, launched in 2004
  - Globe Telecom
  - MNO-led model where customers have no direct contractual relationship with a FI
  - SMS-based
  - Buy airtime, send/receive domestic and international transfers, pay for goods using just a mobile phone (i.e., cashless and cardless)
  - Users can register anytime from anywhere; KYC requirements are fulfilled electronically
  - Relies largely on network of non-bank agents for cash in/out
  - Limits are USD$840/day, USD$2,400/month
CASE STUDY: Philippines

Allows for innovative FI-led models, however has underperformed due to agent restrictions

**ISSUE**

- The Philippines had **low access to financial services**: 26% of the population had access to the formal sector
- Large disparity between the urban and rural populations with respect to use of financial services
- **Money transfers** are very common in the Philippines, and their value is equal to approximately 10% of GDP

**OUTCOME & KEY LESSONS**

**OUTCOME**

- By 2014, there were **12 million registered mobile money users**, however, **less than 600,000 of them were active** in any given 90 day period
- Nearly **22,000 branchless banking accounts** have been opened
- More than **15,000 agents** across the country, exclusive of 2 million airtime sellers
- In 2011, only 26% of Filipino adults had a deposit account
- **Uptake of mobile money has been less than desired**

**KEY LESSONS**

*Challenges to be Overcome:*

- Cumbersome registration processes for cash in/out points
- Difficult to process group registrations for networks of merchants
- Bottleneck created by required government-provided AML/KYC training for non-bank agents

*Regulation to enable favorable environment (passed in 2009):*

- Delineated mobile money from deposit-taking (formalized regulation on electronic money)
- BSP enabled non-banks to offer mobile money services.
- Used the ‘test and learn’ approach to regulation: permitted operator pilots, learned from them, passed regulations accordingly
- Allow licensed Remittance Agents to perform cash in/out.
- Simplification of KYC requirements

**APPROACH**

- Individual agents require a Remittance License to become a mobile money agent. This involves submission of paperwork as well as attending a 1-day AMLA training seminar – something particularly difficult for smaller prospective agents
- Pawn shops have the most extensive physical presence of agents, and process ~29 million transactions each year
- The country’s 650 rural banks also have a large physical network and with cooperative banks are the most accessible banking institutions for low-income individuals
- Funds stored in e-wallets are not deposits, they are not interest-bearing
SMART Money is a FI-led model, while GCASH is an MNO-led model.