





USAID Financial Services Implementation Grant Program Learning Network



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CASE STUDY

Expanding Outreach in Malawi: OIBM's Efforts to Launch a Mobile Phone Banking Program

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Abstract

This case study explores the efforts of the Opportunity International Bank of Malawi (OIBM) to implement mobile banking (m-banking) for its microfinance customers. It shares OIBM's experiences, challenges, and lessons learned from the implementation process. Finally, the case study offers recommendations to other MFIs considering launching m-banking services.

About Opportunity International and OIBM

Opportunity International (www.opportunity.org) is a global network of regulated microfinance institutions and non-governmental organizations (NGOs). It was founded in 1971 and now operates in 27 countries on 4 continents, serving over 1.6 million clients worldwide. Opportunity is a global leader in building and operating regulated microfinance institutions in the developing world. It has nearly US\$ 600 million in assets serving poor families with microloans, savings, insurance, and training in Africa, Asia, Eastern Europe, and Latin America. Opportunity has financed more than 3 million micro and small businesses over the last 15 years.

The Opportunity International Bank of Malawi (OIBM) opened its doors as a regulated commercial bank in 2003. Its mission is to provide "high value financial services to meet the needs of the economically marginalized Malawians." By 2008, the bank had nearly 34,000 active loan clients and 195,000 depositors. OIBM has been a pioneer in Malawi in using innovative technologies, such as mobile banks, biometrics, and smart cards to help the poor gain access to financial services.

About SEEP

The SEEP Network (www.seepnetwork.org) is an association of more than 70 international NGOs that support micro and small enterprise development programs around the world. SEEP's mission is to connect microenterprise practitioners in a global learning community. SEEP brings members and other practitioners together in a peer-learning environment to produce practical, innovative solutions to key challenges in the industry. SEEP then disseminates these solutions through training, publications, professional development, and technical assistance.

About the IGP Learning Network

The Implementation Grant Program (IGP) is a competitive grant program coordinated by the United States Agency for Development (USAID)'s Microenterprise Development office that serves as a key mechanism for supporting international and local providers of microfinance and value-chain development efforts. The IGP is designed to push the frontier of innovation in microfinance and enterprise development and provide USAID Missions and the development community with case studies of "good practice." Since the first IGP grants were awarded in 1995, many of these practices have been copied, expanded upon, and/or integrated by USAID Missions and practitioner organizations around the world.

The Financial Services IGP expands access to microfinance services and increases the financial viability of local institutions. The IGP Learning Network, managed by SEEP, brings together the five grantees under the Financial Services IGP to document and share their experiences in learning products. The IGP learning products are written by and for practitioners in the field of financial services. For other learning products in this series, please visit http://seepnetwork.org/pages/FinServicesIGP.aspx.

^{1.} MIX Market website, "OIBM," http://www.mixmarket.org/mfi/oibm. Accessed October 2009.

Glossary of Terms

AML/CFT anti-money laundering and combating the financing of terrorism—due dili-

gence requirements for banks and financial institutions

GPRS general packet radio service—an advanced wireless phone system that sup-

ports internet communication services, such as email and web access

ICT information and communication technologies—a term applied to a broad

range of technologies that record and transmit information, such as com-

puters, radio, television, the internet, and telephones

IVR interactive voice response—a phone technology that allows the user to se-

lect options from a voice menu and interact with the phone system.

KYC know your customer—due diligence requirements for banks and financial

institutions

M-banking banking via mobile phone

MCM mobile channel manager—the technology interface between the messaging

services, such as SMS and USSD, and the bank's portfolio management

system

MNO mobile network operator or telecommunications company

PIN personal identification number

SIM card subscriber identity module—a removable card issued by mobile network op-

erators, which identifies a mobile phone subscriber and can be transferred

from one phone to another

SMS short message service—the mobile phone data transfer system commonly

used in text messaging

Telco abbreviation for "telecommunications or telephone company"

USSD2 unstructured supplementary service data—an interactive message system

similar to SMS (USSD2 allows two-way dialogue between the network and

the user)

Introduction

Mobile phone banking (m-banking) has recently emerged as an exciting new avenue for bringing financial services to the poor, especially those in rural areas. The spread of cellular coverage in developing countries, along with the rapid growth in mobile phone subscribers (including substantial numbers of poor people), has given rise to innovative m-banking programs, such as G-Cash and Smart Money in the Philippines, WIZZIT in South Africa, and M-PESA in Kenya and Tanzania. These programs typically allow users to transfer funds, pay bills, and conduct other financial transactions via their mobile phones. *The Economist* magazine's recent special feature "The Power of Mobile Money" (September 24, 2009) bears witness to the growing interest in mobile-based financial services for the developing world.

M-banking is supported by agent networks—such as mobile phone vendors, airtime sellers, and other merchants—to extend geographic penetration into areas previously unserved by formal financial institutions. Leveraging cellular technology and multiple merchant outlets can increase outreach far beyond any bank's ability to build bricks-and-mortar branches.

Despite the apparent success of some high-profile programs, however, m-banking is still in its infancy and many challenges remain to be overcome. One notable challenge is developing a viable *bank-led* model. The most prevalent m-banking programs in developing countries are run by telecommunications companies, commonly referred to as the "telco-led" model.² It is generally assumed that whoever "owns" the m-banking program will command a higher share of revenue, but there are tradeoffs between these models. Phone companies have the advantage of owning the cellular networks and SIM cards, which gives them greater control over key technology components. They may also have extensive agent networks for m-banking outlets. On the other hand, these companies lack a banking license, so (unlike banks) they cannot offer savings accounts or pay interest, which gives regulated financial institutions advantage in the realm of potential service offerings.

This case study presents the efforts, still in progress, of Opportunity International Bank of Malawi (OIBM) to develop its own m-banking program in Malawi. The country had no telco-led programs when this project began in 2008. As a result, OIBM had to construct a bank-led model in order to offer Malawi's poor people the benefits of access to financial services through m-banking.

At the time of writing, OIBM's program was near launch, but not yet in operation. This study documents some of the challenges faced and solutions developed prior to implementation, which is scheduled for the end of 2009. From this study, the reader should gain a greater understanding of technical and business requirements for an m-banking program, as well as some of the opportunities and risks that are involved.

^{2.} The South African company, WIZZIT, offers an example of a third, "hybrid" model. It is an independent m-banking company that works in partnership with telecommunications companies and banks. However, WIZZIT is a fairly unique case to date. See L. Bångens and B. Söderberg, 2008, "Mobile Banking: Financial Services for the Unbanked?" (Uppsala, Sweden: SPIDER), http://www.spidercenter.org/files/m-banking study.pdf.

About Malawi

Malawi is a small landlocked country of 14.3 million people. One of the world's poorest countries, it is ranked 218 out of 229 in GDP per capita.³ Only 19 percent of adults (about 1.15 million) are currently banked.⁴

One of the greatest challenges in serving this population is lack of access: 85 percent of the population lives in rural areas, with limited transportation and communications infrastructure.⁵ It would be prohibitively expensive to build enough traditional bank branches to achieve widespread coverage, so creative outreach methodologies are needed. Mobile telephones reach more people than any other information and communications technology (ICT) in Malawi, which had nearly 2 million mobile phone subscribers in 2008.⁶

What Is Mobile Phone Banking (M-Banking)?

M-banking uses the mobile phone as a delivery channel for financial information and services. It is important to note that the telco-led model is usually an m-payments rather than an m-banking program. Regulations bar telecommunications companies from offering savings or loan products, so their programs typically focus on helping people to move money quickly and securely. Client funds stored with telco-led programs do not have the same consumer protections as bank savings accounts and generally do not pay interest. These restrictions have led some telcos to look at partnerships with banks.



Typical m-banking offerings allow users to:

- · check their account balances,
- transfer money between accounts,
- send money to other people (P2P),⁷
- pay bills (P2B),
- receive salary or government payments (B2P), and
- · buy airtime.

In developing countries, the message format is usually short message service (SMS) or other text media, such as USSD2, although some m-banking programs, such as Vodafone's "Balance Transfer Service," in Egypt use interactive voice response (IVR). Very few of the handsets in Africa have sophisticated capabilities, such as GPRS (general packet radio service), so internet-based systems are rarely used. Both SMS and USSD are compatible with most basic mobile phones, which is an important consideration for programs that seek to serve poor people.

- 3. CIA, The World Factbook, 2008 estimate, www.cia.gov/library/publications/the-world-factbook/geos/MI.html.
- 4. FinScope Malawi, 2008, www.finscopeafrica.com.
- 5. CIA, The World Factbook, https://www.cia.gov/library/publications/the-world-factbook/geos/mi.html.
- 6. ITU (International Telecommunication Union) website, "ICT-Eye—Free statistics," "2008 mobile cellular subscriptions," www. itu.int/ITU-D/ict/statistics. The 1.8 million subscribers result from a domestic 67.5% CAGR (compound annual growth rate) in the 5-year period, 2003–2008.
- 7. Most P2P transfer options are domestic at present. The barrier to international remittances is generally related to regulatory KYC/AML/CTF issues (know your customer, anti-money laundering, and combating the financing of terrorism, respectively), rather than technical capacity or business potential.

M-banking has evolved into a wider financial platform, called *m-commerce*, in some developed economies, such as Japan and Korea. In addition to banking transactions, people use their phones instead of cash or credit cards to pay for transportation and goods. African economies, however, are still primarily cash-based, so the ability to convert electronic value (or "m-value") into cash easily and conveniently is a critical driver of m-banking success.⁸ This usually entails building an extensive agent network, so that people have convenient access and opportunities to get cash.

OIBM's Decision to Offer M-Banking

M-banking that targets poor and unbanked people is a relatively new phenomenon. Although it is debatable how far down-market some programs reach, money and G-Cash in the Philippines, followed in 2005 with WIZZIT in South Africa. Safaricom subsequently launched M-PESA in Kenya in 2007. M-PESA's rapid increase in users (growing from 20,000 registered users in its first month to over 2 million registered users within a year) led to its expansion into neighboring Tanzania in 2008.

The growth in poverty-focused m-banking is driven by several factors, including:

- the recognition that traditional approaches to banking, such as bricks-and-mortar branches, are cost-prohibitive for extensive rural outreach;
- the apparent success of prominent m-banking programs such as M-PESA; and
- the desire to tap into the large, growing, and lucrative remittances market via the mobile channel.

The pivotal enabler for m-banking, however, is the rapid uptake in cellular coverage and mobile phone penetration in developing countries. As a consequence, the mobile phone has become the first delivery channel to approach national scale in sub-Saharan Africa. *Coverage* measures geographic reach of mobile networks, or the area in which the mobile phone can pick up a signal. *Penetration* indicates the percentage of the population who are subscribers. A number of African countries have 90 percent or better coverage nationwide and others have coverage that is over 50 percent and increasing.¹⁰

African mobile subscribers grew more than 50 percent per year for the period 2001–2006. As a result, the overwhelming majority—over 87%—of all telephone subscribers in Africa are mobile phone subscribers. Figure 1 compares the penetration of fixed line phones to mobile phone in Africa. The chart from ITU (International Telephone Union) shows that mobile telephony is the first ICT to make extensive inroads throughout the region, while fixed connections stayed essentially flat for the decade from 1996 to 2006. (Internet access remains negligible for most of the continent.)¹¹ Penetration in Malawi exceeds 20 percent of the adult population, which may not seem high, but is substantially greater than any other ICT in the country.¹² Mobile phones have truly leapfrogged over the old landline technology in Africa.

^{8.} Bångens and Söderberg, (2008).

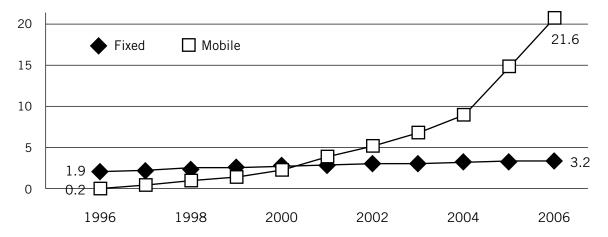
^{9.} See, for example, G. Ivatury and M. Pickens, 2006, "Mobile Phone Banking and Low-Income Customers: Evidence from South Africa" (Washington, DC: CGAP), http://www.cgap.org/gm/document-1.9.2953/mobilephonebanking.pdf, and D. Porteous, 2007, "Just How Transformational Is M-Banking?" (Marshalltown, South Africa: FinMark Trust), http://www.finmark.org.za/documents/transformational_mbanking.pdf

^{10.} ITU, 2007, "Telecommunication/ICT Markets and Trends in Africa" (Geneva: ITU), 8, www.itu.int/ITU-D/ict/statistics/material/af_report07.pdf.

^{11.} See <u>www.internetworldstats.com</u>, which indicates that internet has about 5% penetration for the entire continent. This average masks a wide range of penetration rates, from a low of 0% in Liberia to 27.4% in the small French island of Reunion.

^{12.} Calculated from statistics from CIA, *The World FactBook*, https://www.cia.gov/library/publications/the-world-factbook/geos/mi.html.

Figure 1. Telephone subscribers per 100 inhabitants, Africa 1996–2006



Source: ITU World Telecommunication/ICT Indicators Database, http://www.itu.int/ITU-D/ict/statistics/ict/index.html.

Developing a Plan

In early 2008, Aleksandr-Alain Kalanda, OIBM's chief executive officer (CEO), evaluated the bank's plan to expand outreach through a new m-banking program. Since opening as a greenfield microfinance bank in May 2003, OIBM had grown from zero to nearly 34,000 active borrowers and 195,000 savings clients. The bank's core values of respect and commitment to the poor and its forward-looking use of technology were major contributors to this growth. OIBM had employed various innovative technologies, such as mobile banks, biometric identification, and smart cards, to enable access to financial services. M-banking could build on the bank's existing ICT tools and would be a beneficial complement to OIBM's already strong technology offering.

Kalanda and his team wanted to build on the success of these efforts to further the bank's goal of serving a broad nationwide base of Malawi's poor people. OIBM, therefore, began investigating m-banking as a new avenue for extending outreach into rural areas, home to the majority of Malawians. OIBM observed that many urban residents in Malawi send money home to relatives in rural villages, much like the transfer pattern that powered M-PESA's rapid growth in Kenya. The bank saw an opportunity to use the mobile channel and the bank's delivery systems to provide a more secure way for Malawians to transfer money. OIBM also thought that fees generated from client m-banking transactions could help the bank's revenue stream. As a result, OIBM created a business case for m-banking, which outlined the reasons for undertaking the program, including objectives, opportunities, and risks. M-banking development was incorporated into OIBM's 2008 business plan after receiving the go-ahead from management and the board.

Checklist for M-Banking Development

This checklist covers basic issues that must be explored when considering offering an m-banking service. Please note that it offers key points, but is not an exhaustive list.

Regulatory Issues and Risk Mitigation

- 1. How will "know your customer" (KYC) requirements be satisfied?
- 2. What kind of limitations on number and size of transactions will be placed to meet AML/CTF (anti-money laundering and combating the financing of terrorism) requirements and to mitigate general security risks?
- 3. If considering international remittances, what kind of international regulatory issues need to be addressed? (M-PESA solved this through partnership with Western Union.)
- 4. Are there any telecommunications regulations to be aware of?
- 5. What kind of PIN (personal identification number) and other client security measures will be enacted and how will clients be educated to understand them?
- 6. How will agent liquidity and security be maintained?
- 7. How will bank data integrity be protected and systems outages managed?
- 8. Is there current m-banking competition and what is the risk of new entrants into the market, including other banks and telecommunications companies? Are there partnerships available that could offer technology and marketing resource advantages that you don't have?

Technical

- 1. What is the mobile network operators' technical and systems capacity to handle m-banking and the volume of data flow?
- 2. Does the bank's portfolio management system have the capacity to handle m-banking data flow, and if not, what upgrades will be needed?
- 3. What kind of financial service platform would best serve as an interface between the mobile network operator (MNO) and the bank's back office system? Who would be the best provider for this platform for configuration, implementation, and support?
- 4. What message channel is the best choice for local handset availability, security, and cost (e.g., SMS, USSD, IVR, other)?

Marketing

- 1. Who comprises your target market and what problem(s) can m-banking solve for them?
- 2. What are their current solutions for these problems?
- 3. What is your m-banking value proposition?
- 4. Does your m-banking program offer better value than customers' existing formal or informal alternatives?
- 5. What products are most easily understood for quick uptake?
- 6. Advertising: What message and media outlets would serve best to inform and attract customers and new clients to your m-banking service?
- 7. Consumer handset experience: What languages should be available? What is the most user-friendly menu format for customers?
- 8. Pricing: Should an upfront access fee, monthly service charge, or pay-as-you-go system be used?
- 9. Agents: How will you build out an agent network to increase outreach? Issues to address include agent recruitment, training, technical support, quality control, and compensation.
- 10. Customer support: What kind of help desk and problem resolution services will be offered? What kind of training is required for staff to assist customers?

OIBM then took the following steps to shape the new program.

Step 1: Understand customer needs.

According to Kalanda, understanding clients' needs was the first and most important part of beginning an m-banking program. OIBM used surveys and focus groups to gather client input. Respondents indicated a need for cheaper and more convenient ways to repay loans, make transfers, and pay bills. Specifically, clients desired easier ways to move money and buy airtime, especially on weekends when airtime distributors are closed.

Step 2: Research existing m-banking efforts.

OIBM drew lessons from the Kenyan experience with M-PESA and South Africa's WIZZIT. Bank officers traveled to those countries and spoke with company representatives to understand and experience how m-banking is done. OIBM also reviewed CGAP studies and conducted additional field research. Results indicated m-banking could reduce costs for the bank and customers.

Step 3: Determine a business model.

When it came to this next step, the bank faced a serious challenge, namely the lack of proven bank-led models for poverty-focused m-banking. Most bank-led programs to date focus on serving existing, upscale clients, not on bringing the unbanked into the financial system. By contrast, OIBM wanted to use m-banking to serve its low-income clients and extend outreach to the rural unbanked. OIBM faced many unknowns as a pioneer in creating a poverty-focused, bank-led program, not the least of which was the new technology involved. OIBM's managers consequently recognized that they needed to engage external expertise to improve their chances of success.

Step 4: Assess internal capacity and get outside help if needed.

After realizing that the bank lacked the internal capacity to develop well-defined technical specifications, OIBM's managers turned to the consulting firm Bankable Frontier Associates (BFA) to review their plans and provide technical guidance. OIBM chose this firm because it had considerable experience in designing m-banking models, including in Africa. According to OIBM's CEO, the resulting delay in order to do better preparation resulted in "significant improvements over the bank's original plans and saved the bank money." The consultant's recommendations led to these program changes:

- *Additional revenue-generating offerings*. OIBM had originally planned to implement an SMS informational system and offer just a few simple transactions. However, bank managers learned that they could also sell phone airtime via m-banking, a service that clients needed and that would generate more transaction fees.
- *Revised pricing.* OIBM gained greater understanding of its pricing options, which included 1) charging customers a monthly fee to cover unlimited transactions and 2) charging on a "pay-as-you-go" basis. Although OIBM had done well with the monthly fee approach for other products, the bank opted for the "pay-as-you-go" model for m-banking, similar to most other m-banking schemes worldwide.
- New message channels. Since OIBM was offering transactional m-banking (such as cash withdrawals and fund transfers between OIBM accounts), the bank needed to provide additional security for clients and the bank. At the same time, security needs had to be balanced with the technical capabilities of most local handsets and with cost. GPRS offered greater security, but was not appropriate because few local phones were that high-tech. Voice was too expensive. Therefore, the bank settled on SMS for information-only messages and USSD2 for transactions. These two channels offered OIBM the best solution for security, availability, and affordability.
- Recommended systems interface. BFA helped OIBM management understand the overall m-banking systems architecture and the functional requirements for the mobile channel manager (MCM). The MCM is a server that interfaces with the mobile network operator's SMS and USSD servers and the bank's portfolio management system. It is usually supplied by an external technology vendor, which was the next thing OIBM needed to source.

Step 5: Address technical needs and challenges.

The work with BFA helped clarify the shape of OIBM's m-banking program and provided essential technical specifications, but multiple challenges remained. According to Webster Mbekeani, OIBM's head of mobile banking, "there's a huge technical hurdle that [banks] need to address" when undertaking m-banking. This technical hurdle has three components—the bank's core banking or portfolio management system, the MCM platform, and the MNOs' capacity to handle m-banking:

^{13.} Bångens and Söderberg (2008).

- Bank portfolio management system. The bank's portfolio management system must be able to handle the m-banking data flow and provide sufficient security. OIBM addressed that issue through a systems upgrade, completed in May 2009.
- MCM platform. The bank must identify a good MCM vendor. Mbekeani indicated that selecting an MCM vendor was initially difficult because m-banking is a new application of mobile phone technology. Few platform vendors have a significant track record, pricing varies widely, and the industry has yet to develop a clear standard. One vendor that OIBM looked at had strong technical capacity, but used GPRS technology, which was not appropriate for down-market use in Malawi. Another vendor had experience with SMS m-banking in developing countries, but no experience with USSD. OIBM is currently near agreement with a technology supplier. Mbekeani noted that BFA's assistance was vital in helping the bank "know what questions to ask."
- MNO technical capacity. The local MNOs presented another area of challenge because they too lacked mbanking experience. As Mbekeani explained, the MNOs' primary area of business is voice, not data. The local telecommunications providers did not have the technical expertise for m-banking applications and OIBM's USSD requirements, so the MNOs flew in overseas experts to help with the required channel upgrades. OIBM also needed to negotiate the SMS pricing structure with the MNOs.

Step 6: Build an agent network.

The bank has partnered with two major agricultural supply and general store chains in Malawi and is negotiating an agreement with a third company to use their retail outlets as cash points. These companies have significant nationwide outreach in urban, peri-urban, and rural areas. OIBM had also explored working with gas stations and other vendors, but these outlets tended to be individually owned and managed, which entailed negotiating agreements on a store-by-store basis. OIBM found that working with a centralized corporate structure streamlined the negotiations process and helped with standardizing operating procedures in the stores. Working with larger chains will also establish a national footprint much more quickly. The merchant agents will receive transaction fees and presumably also benefit from OIBM's promotion campaign and increased foot traffic through this program.

Step 7: Secure regulatory approvals.

OIBM learned from previous technology efforts that conversations with regulatory authorities should begin early to address risk concerns and get the requisite approvals. M-banking is such a new industry that most central banks and other government agencies are only now developing regulatory guidelines. Regulators want to ensure that consumers are protected and that the banks and telecommunications companies do not take on excessive or inappropriate risk. Malawi's central bank is currently drafting an m-banking directive to be issued in the near future. This directive will address issues such as limits on transactions, management of float, and whether m-banking in Malawi will require bank involvement (that is, whether a pure telco-led model will be allowed). OIBM is actively engaged in these discussions to encourage a sound and enabling regulatory framework, while concurrently structuring its m-banking program based on feedback from the central bank.

Step 8: Pilot testing and staff training.

OIBM plans to move into this stage by late 2009. Once the MCM is installed, OIBM will first pilot test its m-banking program with staff. This should reveal any "bugs" in the system, as well as indicate its user-friendliness. The bank will then make refinements in response to initial feedback. The pilot will also help the bank develop promotional materials, including FAQs (frequently asked questions), based on the questions that arise during the trial period. The staff's hands-on experience with m-banking will help them assist clients and promote OIBM's program once it is launched, and further training for bank staff will take place in preparation for full roll-out.

Step 9: Promotion and launch.

OIBM will go to full market launch after the pilot test and ensuing revisions are complete. This will involve a marketing campaign using bank staff, posters, leaflets, and other media outlets to promote the program. Certain staff members will be dedicated to educating clients about m-banking, helping them sign up, and teaching them how to use it. OIBM also plans to have a "help desk" to assist clients with problems that might arise and ensure customer satisfaction. OIBM's

marketing manager is considering whether to start the commercial launch in the capital city of Lilongwe and then roll the program out to the rest of the country or to implement a major nationwide launch from the outset. This decision is still under review, for which there is no single "right" answer. Once the m-banking program is established with a few, simple products, the bank plans to add new product options that ongoing market research indicates will benefit clients. In addition to seeking customer feedback after launch, m-banking customer satisfaction and outreach measurement will then be incorporated in the impact assessment studies that OIBM and Opportunity International already conduct, in order to gauge the program's success in providing financial services to the poor and make improvements based on findings.

Changing Landscape

OIBM had originally intended to run its m-banking program through Malawi's two major mobile network operators, TNM and Zain (formerly Celtel). Together these two providers cover nearly all mobile phone users in the country. This "telco-neutral" strategy would allow customers of both companies to sign up for m-banking without changing providers. OIBM invested more than six months in negotiating the necessary upgrades for both operators' USSD servers and the pricing structure for m-banking data usage.

OIBM had draft agreements waiting to be signed with both providers in mid-2009, when the business landscape suddenly changed: Zain—with 68 percent of the Malawian prepaid market— announced that it was launching its own money transfer service, Zap. ¹⁴ Initially, it appeared that Zain might still incorporate OIBM in this m-banking program. However, the bank eventually learned that Zain planned to partner with Western Union to capture the lucrative international remittances market. It looked increasingly unlikely that Zain would still work with OIBM in the immediate future.

At the time of writing, OIBM was restructuring its plans in response to this change. The bank's managers decided to move forward with only TNM for now, while continuing discussions with Zain for potential future partnership. OIBM's m-banking staff developed an alternative telco-neutral solution that allows Zain subscribers to participate without having to buy the other company's SIM cards. Instead, TNM and Zain subscribers will have different codes assigned to them when they use the m-banking service. Zain subscribers will pay a slightly higher fee, but the increased cost will only be about 3 cents more per transaction, a fraction of the cost of a new SIM card. This solution removes a potentially significant barrier to consumer acceptance and retains the program's availability to all mobile phone subscribers in Malawi.

An Emerging Alternative? Telco-Led Partnerships

Zain's change in strategy reveals a major vulnerability of bank-led m-banking: it is highly dependent on the telecommunications partner(s). They must have the technology and technical skills to manage data transfer reliably and securely—critical issues for both clients and the bank, since transmissions failures or security breaches can have profound impact on trust and the ultimate success of the program. The telco partners must also be willing to negotiate a fee structure that allows for attractive customer pricing, while still generating positive returns for the bank and the MNO.

However, OIBM's experience shows that the most important factor might be the risk that the mobile provider will change strategy and launch its own m-banking program. The intended telecommunications partner could become a competitor, as appears to be the case with Zain in Malawi. Another possibility, though, is that the MNO still ends up as a partner, but on different terms. That is, the telecommunications company could "own" the program, but invite the bank to join. Revenues to the bank under this scenario would undoubtedly be less, but there are other potential advantages. The telco-led partnership model might actually end up being to the bank's benefit, in that the MNO takes on the considerable costs of developing the m-banking platform, marketing, and branding. This could expedite a bank's m-banking launch because it can "piggyback" on the MNO's investment.

^{14.} TNM investor.com, "Telecommunications in Malawi," http://www.tnminvestor.com/TelecomsInMalawi.aspx, accessed 19 June 2009.

Lessons Learned

With respect to lessons learned and insights to share with other banks, OIBM leadership emphasized that setting up an m-banking system is "not as easy as it sounds." In addition to understanding client wants and needs, one must also address security and technical issues. Some key lessons that OIBM acquired include these points.

→ Find good technology partners.

Local MNOs may lack expertise in m-banking, so it is important for the bank to educate itself to guide negotiations and specify technical requirements. (The risk of an MNO changing strategy has already been discussed.) The technology-platform vendor should have a good track record in designing and implementing an interface in environments similar to the one in which the bank operates. The bank's back-office system needs to be PIN-enabled and capable of handling the volume and nature of m-banking data. The entire system must be secure and reliable, as delayed, dropped, or erroneous transactions will damage consumer confidence. Bank data integrity must also be protected.

→ Keep it simple.

Kalanda noted the importance of keeping the initial program offerings simple. The emphasis should be on getting things right at the beginning and not frustrating clients, which could damage the bank's reputation and hurt the business. Therefore, the first products that OIBM rolls out will be informational messages (such as account balances), P2P transfers, and airtime purchases. Once the system is established, OIBM planned to add bill payment and merchant purchase options.

→ Have a good marketing plan.

A good marketing plan, including grounded product development, an appropriate pricing structure, a compelling customer value proposition, and attractive marketing message, are essential for drawing the public to the m-banking program.

Build an agent network.

Research on m-banking programs to date indicates that having a widespread agent network for cash-out points is critical to success. OIBM found that working with centrally-owned and managed store chains was much more effective than negotiating with individual merchants. Partnering with larger chains—especially those that target agricultural clientele—will make it easier to achieve rural outreach and national coverage quickly. It is also necessary to develop support systems to train agents, respond to technical issues, and ensure quality service to clients.

⇒ Establish a customer support system.

Mbekeani emphasized the importance of providing strong customer support by having a functioning help desk in place at time of launch. OIBM's preliminary "soft launch" with staff will help train employees, who can then explain the program to clients. Client trust in the system is an essential feature for success.

Encourage proportionate regulation.

Only OIBM clients will be able to participate in its m-banking scheme at present, owing to central bank regulations. OIBM will employ standard bank identification procedures to comply with KYC requirements. OIBM is discussing AML/CTF measures with the Central Bank to ensure that regulations do not "use a hammer to kill an ant," as CEO

Kalanda put it. In other words, typical transaction amounts for OIBM clients are too small to warrant significant controls, so the bank is encouraging the authorities to enact proportionate regulation that does not stifle innovation and outreach.

Consider alternative arrangements.

Starting an m-banking program from scratch is complicated, costly, and time-consuming. As noted in the previous section, telco-led partnerships may mean less revenue, but greater speed and ease for the bank. For example, OIBM's sister organization, Opportunity Kenya, is at the time of writing negotiating an agreement with Safaricom to join M-PESA. The agreement will allow the Kenyan microfinance institution's clients access to all of the usual M-PESA transactions, plus loan disbursements and repayments. Because M-PESA already has the technology platform, extensive agent network, and strong brand recognition, Opportunity Kenya will incur relatively small upfront development costs. Notably, market launch may take place just a few months after the agreement is signed. By comparison, OIBM's process—which, it is important to remember, started before any telecommunications companies offered m-banking in Malawi—will take at least two years from development to launch.

Conclusion

OIBM's managers believe that the bank must offer m-banking to remain competitive. Their goal is to reduce transaction costs, increase revenue, and augment outreach to customers who cannot access OIBM's physical outlets. Their target market includes the unbanked and underbanked of Malawi, most of whom live in rural and peri-urban areas of the country. OIBM hopes that m-banking transactions will generate enough income to subsidize free savings accounts for the poor. If successful, OIBM's m-banking program should be both profitable for the bank and transformational for the people of Malawi. The bank's experience illustrates the challenges of developing a program from scratch and how fluid and subject to change the m-banking industry still is.