

HOW TO SUCCEED IN YOUR DIGITAL JOURNEY: A SERIES OF TOOLKITS FOR FINANCIAL SERVICE PROVIDERS

TOOLKIT #4: DEVELOP OWN AGENT NETWORK

PART 2: CASE STUDIES

- NBS BANK, MALAWI
- CEC, CAMEROON
- MICROCRED, SENEGAL*

By PHB ACADEMY and MICROLEAD



CEC Cameroon staff using a mobile banking device
Courtesy of Eric Kenkolla

*Microcred is not a MicroLead partner but received support from The MasterCard Foundation

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LIST OF ACRONYMS

ADC	alternative delivery channel	MFI	microfinance institution
ANM	Agent Network Manager	MIS	management information system
ANO	Agent Network Officer	MK	Malawi kwacha*
ATM	automated teller machine	MNO	mobile network operator
CapEx	capital expenditures	OpEx	operational expenditures
CBS	core banking system	PIN	personal identification number
CEC	Caisse d'Épargne et de Crédit du Cameroun	POS	point of sale
CFAF	CFA franc*	RBM	Reserve Bank of Malawi
FI	financial institution	SMS	short message service
GPRS	general packet radio services	UNCDF	United Nations Capital Development Fund
IT	information technology	US\$	United States dollar*
KPI	key performance indicator	USSD	unstructured supplementary service data
KYC	know your customer		

* Currency symbols: UNCDF uses the currency symbol 'US\$' for the United States dollar, 'MK' for the Malawi kwacha and 'CFAF' for the CFA (Communauté financière africaine) franc, which is the legal tender in Cameroon and Senegal (discussed in these case studies) as well in a number of other countries.

OVERVIEW OF TOOLKIT 4

This toolkit is the **fourth** in a series of six toolkits aimed at supporting financial service providers to go digital.

This toolkit describes the fourth model that a financial institution can choose: **to develop its own (proprietary) agent network**. In this model, a financial institution identifies, recruits, trains, brands and manages its own network of third-party agents through which to distribute its financial products and services. The fact that it is the financial institution that handles all of these agent-related responsibilities is a key difference from Model 3 (Leveraging an existing agent network), in which the digital financial service provider (mobile network operator or payment service provider) recruits, trains and manages the agent network and the financial institution leverages it. Another key difference between Models 3 and 4 is that, in Model 3, the agent facilitates mobile money operations while, in Model 4, the agent facilitates operations directly on a financial institution account. Most often there is no e-money involved in Model 4.

This toolkit is composed of two documents:

- The document 'Part 1: Business model description' describes the business model and recipe for success. International examples from Equity Bank in Kenya and FINCA in the United Republic of Tanzania and Democratic Republic of the Congo illustrate how to successfully implement this model.
- This document, 'Part 2: Case studies,' describes the detailed

cases of NBS Bank in Malawi and Microcred in Senegal, which have developed their own network of agents, and highlights the case of Caisse d'Épargne et de Crédit in Cameroon, which is in the process of implementing its own network of roving and fixed agents.

In this toolkit, the authors make a clear difference between financial service providers (FSPs) and financial institutions (FIs; banks or non-banks).

FIs are a form of FSP. FSPs are broader and cover FIs, mobile network operators and payment service providers.

When the term 'FI' is used in this toolkit, the authors refer specifically to financial institutions and non-bank financial institutions but NOT to mobile network operators and payment service providers.

While in many cases an FI would offer both agency banking and mobile banking, the authors have assumed for this toolkit **that the FI will only build its own agent network and that the interaction with clients will be over the counter** with the agent using a mobile/point-of-sale/web interface for conducting the transaction on behalf of the FI client.

The authors refer to fixed agents in this toolkit most often (as opposed to roving agents).

Mobile banking operations will be covered in 'Toolkit #5: Create own mobile banking channel' and 'Toolkit #6: Be a provider.'



Clients of CEC Cameroon performing transactions with agent
Courtesy of CEC Cameroon

EXECUTIVE SUMMARY

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NBS Bank (hereafter, just 'NBS') in Malawi offers a prolific case study for any financial institution (FI) interested in developing its own agent network: not only does the case reveal the many different steps and measures that an FI needs to take to integrate agency banking services into its current operations and offerings, but it also underlines how long and challenging the path to success can be, regardless of how eager or prepared the institution.

NBS was one of the 'first movers' in Malawi to embark on the alternative delivery channel (ADC) journey back in 2012. The underlying motive was simple and was revealed in a 2008 FinScope study:¹ there was huge potential for FIs to include rural and low-income populations in the formal financial ecosystem of Malawi.

But growing its customer base to include rural unbanked populations did not come easily for this leading commercial bank. Significant adjustment and tailoring was necessary to meet the needs of these remote, poor customers. Though NBS first piloted its agency channel called Bank Pafupi (meaning 'close by' in the local language) in 2012, the Bank did not decide to roll it out until three years later—in 2015. Faced with operational challenges, NBS rightfully understood that engaging in a national roll-out before fixing existing problems would only hinder client trust and future usage.

NBS took advantage of this time to surround itself with resourceful corporate, technical and financial partners and enablers to fill gaps and plan for the future. With the technical assistance of Women's World Banking and MicroLead, a United Nations Capital Development Fund (UNCDF) programme, NBS refined the value proposition and addressed technical deficiencies. NBS worked with its partners to design a specific savings product that fit the particular channel, the Pafupi Savings Account.

In order for NBS to implement the agency banking channel, key operational and management changes were required, such as the facilitation of training of trainers' sessions, the development of a mobile platform integrated with the existing core banking

system (CBS), and the establishment of a sales team and key performance indicators (KPIs). Building capacity to grow its agent network is a daily effort for NBS that focuses on several key axes: uplifting value proposition, careful selection, efficient training, close monitoring and soft liquidity management.

Now, two years after the roll-out, the NBS agent network comprises 315 agents, both individual and corporate, and serves more than 85,000 customers who have enrolled for the Pafupi Savings product (data as of 31 March 2017). The Pafupi package (Bank Pafupi and Pafupi Savings) can be considered a success for NBS and has contributed greatly in the progress towards financial inclusion in Malawi. Going to agents became the preferred way to save (compared to keeping money at home or using village savings groups). And, with 86% of Pafupi clients being previously unbanked, NBS clearly deepened its market presence with a whole new and unsaturated segment, which augurs sustained growth rates for the near future. However, uptake among women and rural² populations (30% and 34%, respectively)—the original targets of Pafupi—still needs to be enhanced in order to meet the original objectives established at project inception (48% and 51%, respectively). NBS is currently tackling this issue through the implementation of operational and mind-set changes to develop a culture of field work. Please explore the next several sections to learn more about the journey, approach, achievements and lessons learned by NBS.

This publication also briefly shares the experience of Caisse d'Épargne et de Crédit (CEC), a medium-size institution with 50,000 clients in Cameroon. CEC was one of the first microfinance institutions (MFIs) in Cameroon to develop its own network of agents, having done so in 2015. The pilot phase just ended, and now CEC is scaling up—already counting 80 roving agents as of the end of 2016 and preparing to introduce fixed agents in 2017. CEC also developed its own technical platform, using Internet-based technology, and equipped agents with smartphones with Bluetooth printers. For now, the transactions available with an agent are account-openings, deposits and withdrawals; bill payments and loan repayments will soon be available. Please refer to the second case study to read more about the experience of CEC.

¹ Jason Agar, Hiten Savani and Laura Thompson, 'FinScope Malawi 2008,' report for FinMark Trust (Lilongwe, Kadale Consultants, April 2009). Available from <http://www.finmark.org.za/wp-content/uploads/2016/08/FS-Malawi-2008-Report.pdf>

² The definition of 'rural' has recently been changed by the Reserve Bank of Malawi to include both rural and semi-urban populations.

Finally, this document presents a third case study: the digital path followed by Microcred in Senegal to develop its own agent network. Microcred is not a MicroLead partner, though it did receive financial support from The MasterCard Foundation. Microcred is a large microfinance bank (like NBS in Malawi) with ~230,000 clients and ~40 branches and has managed to recruit 520 agents in three years (2014–2017). Microcred also developed a proprietary technology platform and equipped its agents with biometric devices that they can plug into computers to perform transactions. Microcred Senegal is part of Microcred Holding, and the experience of Microcred Senegal should benefit fellow subsidiaries. Millions have been invested in the new channels and considerable human resources have been devoted. Operations have been deeply impacted and transformed for Microcred to go digital. Lessons learned in terms of searching for the right sustainable business model and staying focused on the core business can benefit other FIs. Please see the third case study to learn more about the experience of Microcred Senegal.

These three case studies highlight an institution's point of view when developing an agent network. They shed light on the intense efforts required—from an operational, managerial and budgetary perspective—to successfully complete such a project. Building on learnings from these three cases, FIs willing to go down the agency banking path should be aware of the time and work that this business model implies. Please refer to Part 1 of this toolkit for more details on what to expect along the path.



CASE STUDY OF NBS BANK IN MALAWI— JOURNEY AND OBJECTIVES

NBS Bank developed Pafupi, meaning ‘close by,’ to remove barriers to banking for people in rural areas, especially for women. Pafupi is the Bank’s way of unlocking the huge potential of low-income and unbanked populations.

NBS BANK AT A GLANCE

NBS is a leading commercial bank providing a wide range of financial services to individuals, small and medium businesses, large corporations and public institutions. It is ranked fourth among 11 commercial banks in Malawi, with over 448,000 clients. In terms of women and rural clientele, borrowers are 20% women and 31% rural while depositors are 30% women and 50% rural (data as of 31 March 2017).

Founded in 1964 as a building society, it became a full-fledged bank in 2004, following the issuance of a banking licence by the Reserve Bank of Malawi (RBM), the national banking regulator. It now holds total capital of US\$137 million.

NBS has developed the largest retail footprint in the country with 32 branches (service centres), 65 active automated teller machines (ATMs) and 315 agents in its network, as of 31 March 2017 (see map 1 for its country presence). NBS offers a full suite of products and services including savings accounts, credit products, foreign currency deposit accounts, trade finance products, Visa cards, ATM cards, foreign exchange facilities, and value-added services including bill payments and Internet and short message service (SMS) banking (see table 1 for more details about NBS).

NBS was one the ‘first movers’ in the area of ADCs in Malawi when developing Bank Pafupi (meaning ‘close by’ in the local language) in 2012. NBS developed Pafupi to remove barriers to banking for people in rural areas, especially for women.

Map 1: NBS Bank branch network



Table 1: NBS Bank overview

Regulatory status	Banking licence under RBM
Length of operations	Since 1964
Geographical coverage	All three regions in Malawi (Northern, Central and Southern)
Products	<ul style="list-style-type: none"> NBS offers a comprehensive range of commercial products NBS has a savings product (Pafupi Savings) especially designed for and offered to low-income and rural people NBS offers small loans for small and medium enterprise development
Number of clients	448,000 (data as of 31 March 2017)
Loan portfolio (US\$)	53,000,000 (data as of 31 March 2017)
Average loan size (US\$)	~7000
Number of staff/volunteers	729

OBJECTIVES OF GOING DIGITAL

The objectives of NBS in setting up an agency banking channel was first and foremost to grow its customer base, by developing a **tailored offer to reach the unbanked segment in Malawi**. As a 2008 FinScope study revealed, 81% of the Malawian population was unbanked at the time.³ These results made significant noise in the Malawian financial sector, uncovering great potential for financial actors to **tap into the low-income segment**. Indeed, two major recommendations that came out of the study were these:

- Engage banks in designing more suitable savings products: Malawi was described as a nation of savers, with people mostly saving at home rather than at the bank, suggesting there was plenty of unmet demand for accessible savings products.
- Encourage banks to seek out these economically active but unbanked people, based on high levels of informal product usage.

NBS took the lead in exploring this opportunity, identifying different profiles with potential—such as low-income entrepreneurs, rural subsistence farmers and cooperative farmers—and conducting in-depth focus groups and interviews.

However, it was clear to NBS that it could not just downscale its regular offering but rather had to find **a custom way to address specific needs of the unbanked, especially women and rural populations**. Consumer insights from a Women's World Banking study of the barriers to reaching these segments had strong implications for the design of the solution.⁴

³ In 2008, 19% of Malawians were using banking products, 26% of Malawians were using other formal and informal services and 55% of adults were managing their lives without using any kind of financial product (formal or informal). Source: Agar, Savani and Thompson, 'FinScope Malawi 2008.'

⁴ Women's World Bank, 'Pafupi Pilot Assessment: Road Map to Profitability' (New York, May 2015).

These barriers included the following:

- Physical barriers: It was difficult for people, particularly in rural areas, to physically access bank branches, as they were located dozens of kilometres away.
- Psychological barriers: People with no access to banking services were convinced that the banking sector was not meant for them. This feeling that 'banking is for the elite' was strongly linked to economic and educational levels, as many of these people were nevertheless qualified to access the service (in terms of financial requirements).

By designing a tailored offer to reach the unbanked segment in Malawi, NBS intended to double its customer base in four years from project inception.

THE DIGITAL JOURNEY

As the saying goes, Rome was not built in a day. Coherent agency and mobile banking solutions specific to NBS took more than four years to take shape, develop and implement.

NBS started its journey towards digitization in 2011. At the time, the objective was to develop **an agency banking network** to increase the footprint of NBS (points of representation) to be able to reach out to rural customers who had to travel long distances to access existing branches. In the quest to serve these rural populations, the agent network was considered a judicious approach, substituting brick-and-mortar branches that would not have been financially viable.

The first step taken by NBS was to learn from a more developed market in this area. A team of senior managers went on an **exploratory trip to Kenya** (hosted by KCB) to better understand the ins and outs of agency banking there.

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NBS then needed to obtain **approval from RBM**. At the time, RBM was also getting familiar with agency banking and was on the verge of drafting guidelines on how to implement the business model in Malawi. These guidelines were published in early 2012,⁵ just before approval for NBS was granted.

With regulatory approval in hand, NBS launched a **pilot for Bank Pafupi** (the agent network) in 2012 with six agents able to facilitate financial transactions (conducting cash-in and cash-out, checking balances and obtaining mini-statements). As the pilot developed, a number of challenges arose (human-resource and system related), which hindered further development of the ADC project. The scope of the pilot was reduced to one sole region (Southern) to more specifically understand how these human-resource and system challenges could be addressed.

To move forward, NBS entered into a **partnership with Women's World Banking** in 2013. On the one hand, Women's World Banking provided technical assistance to address the issues faced with the agency channel. On the other hand, the two organizations worked together to develop a savings product that could fit the specificities of rural populations, especially women.

In-depth customer research was conducted to inform the development of the savings product, and the concept was shaped in 2014. Key questions for the project team were how unbanked rural women were currently saving and what they would expect from a bank like NBS. The market study gave NBS a valuable foundation to understand how to enable women to transact nearby through agents in fixed locations.

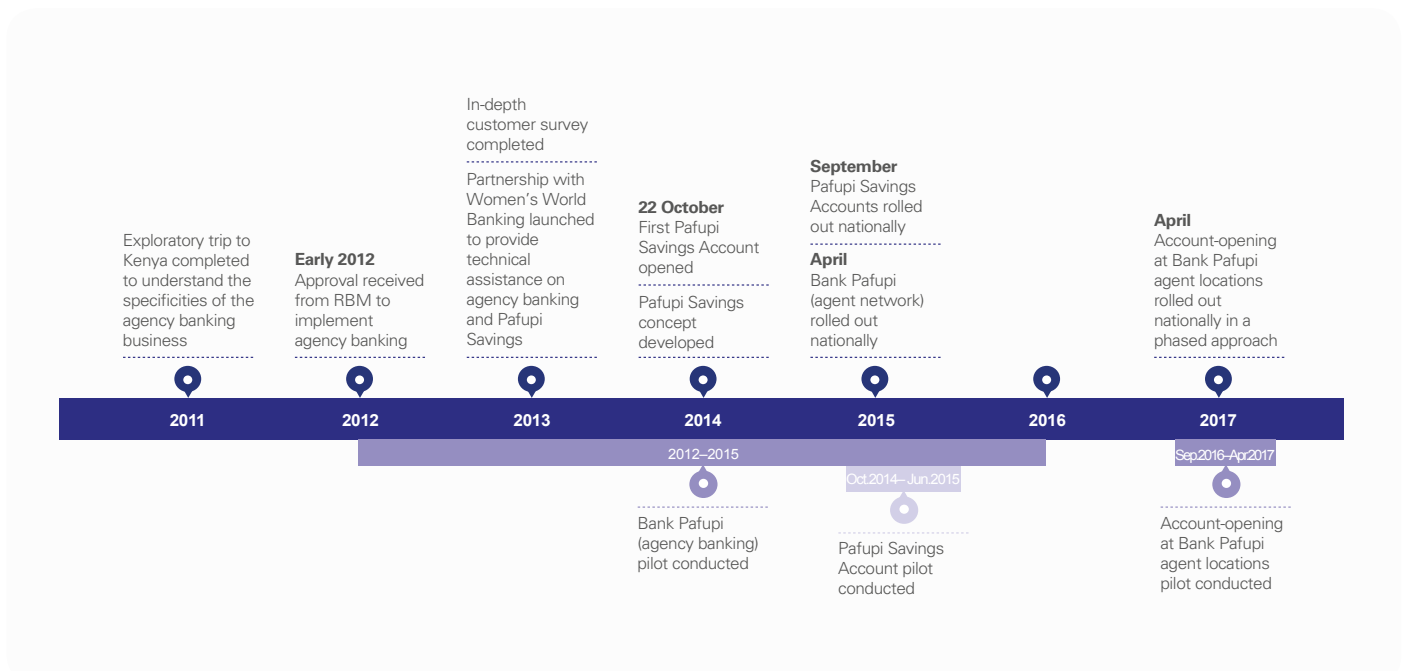
While the agency banking channel was still in pilot phase, NBS conducted a **pilot for Pafupi Savings**—the savings product offered through the channel—in seven branches for a period of eight months (from October 2014 to June 2015) in order to test the product, operating model and marketing strategies. This pilot received high ratings from customers. The product reached its target among low-income customers, where the value proposition resonated strongly.

The **national roll-out of the agent network took place in April 2015 and of Pafupi Savings in September of the same year**, after NBS reviewed the product's features to make sure they fit the particular channel.⁶ NBS recruited 29 sales agents called **Bwenzi La Pafupi** (meaning 'close friend' in the local language) who were in charge of selling the savings product (i.e., recruiting and registering clients) in the field. In addition, NBS informed and trained all service centres around the country about the channel and the product.

While these two components of the ADC project were growing strong, NBS decided in 2016 to enable **account-opening of Pafupi Savings at the Bank Pafupi agent's location**. NBS piloted it with 12 agents from September 2016 to April 2017, and the Bank is now rolling it out nationally (NBS envisions engaging 50 more Bank Pafupi agents in account-opening of Pafupi Savings by the end of the second quarter of 2017). As for the network of Bank Pafupi agents overall, the **number of agents is growing weekly across the country, now reaching 315**.

Figure 1 summarizes the digital journey taken by NBS.

Figure 1: NBS Bank digital journey



⁵ Malawi, *Financial Services Act (Act No. 26 of 2010) Financial Services (Agency Banking) Regulations, 2012*, of 30 November 2012.

⁶ This topic will be detailed in the section on Key influencing factors and lessons learned, in which the challenges experienced and the mitigation strategies deployed are discussed.

CASE STUDY OF NBS BANK IN MALAWI— APPROACH TO IMPLEMENTING DIGITAL FINANCIAL SERVICES

REGULATION AND PARTNERSHIPS

Partnerships

In order to develop its agency banking solution, NBS received valuable support from two expert organizations: Women's World Banking and the UNCDF programme MicroLead.

Women's World Banking provided three years of **on-the-ground technical guidance** for developing the agency channel. Through its onsite Resident Advisor and team of consultants, Women's World Banking supported NBS on a large scope of activities ranging from research, product concept development, business casing, pilot assessment, and staff training for both Bank Pafupi and Pafupi Savings. Women's World Banking provided assistance in many steps of the process, in particular with the following:

- Understanding demand in rural areas, with a special focus on women
- Organizing an exposure visit to Kenya for the NBS management team
- Developing the Pafupi Savings product concept
- Setting up the agency channel's teams and processes
- More recently, helping establish the new commission structure to offer a higher value proposition to agents

MicroLead has been pushing for greater access to savings products in rural areas in many African countries and saw a great opportunity to achieve its mission and objectives in Malawi by partnering with NBS. Support from MicroLead mostly consisted of **funding to enable the development of the solution**.

Beyond these two institutional partners, NBS liaised with corporate partners that have a potentially large footprint through numerous outlets that NBS can use to distribute its products. The first partnership NBS established, in 2012, was with the Malawi Posts Corporation, which counts 171 outlets across the country. NBS has since engaged with two MFIs and a chain store, which has 90 shops across the country, and is in discussion with a money remittance organization.⁷

Regulation

Although the agency banking business model does not require specific licensing authorization from the regulator (as seen in 'Part 1: Business model description' of this toolkit), **NBS needed to receive approval from RBM** to pursue these activities. RBM specifically requested to receive regular information on the agent network, especially regarding the number of agents recruited and their location.⁸

⁷ NBS does not have partnerships with mobile network operators (MNOs) with regard to agency banking—NBS does not use the agent networks of the MNOs, but it is in agreement to enable push-and-pull transactions from the bank account to the mobile wallet.

⁸ This information is provided in quarterly reporting; it is part of a comprehensive report (covering most of the operational activities of NBS) that is submitted to RBM every quarter.

8 PRODUCTS AND SERVICES

Pafupi Savings Account

The **Pafupi Savings Account** is a savings account that targets low-income individuals—particularly women and those living in rural areas—with a vision to save. It gives customers *Mtima Myaa* (meaning ‘peace of mind’ in the local language) because it is close to them, helping them save and grow their money.

Characteristics

- **It is close to you:** Customers have easy access through small shops near where they live.
- **No amount is too small:** Customers can save any amount starting at MK 200 (US\$0.28).⁹
- **It is affordable:** There is no monthly fee and the minimum balance is as low as MK 500 (US\$0.69), in order to be accessible to target customers.
- **It is smart:** Money grows because it earns interest.

Account-opening

The account is usually **opened via mobile phone and through direct marketing** (a sales team on the ground to recruit clients); however, agents are now trained and allowed to perform client registration. To open an account, the sales team or the agent captures client information through a mobile application and proceeds to registration directly on the mobile phone.¹⁰

Identification requirements are kept to a minimum, with any valid identification being accepted (e.g., voter registration card, letter from a District Commissioner, religious leader or traditional chief). Client data is instantly transmitted to the Pafupi Management System (especially created for that purpose) and to the CBS. The account is automatically activated. Once the administrative procedures are finalized and the account-opening fees of MK 1,100 (US\$1.51) and the minimum balance of MK 500 (US\$0.69) are paid, the client receives a starter pack with his/her account number, a debit card and a personal identification number (PIN). It takes no more than 10 minutes to get the Pafupi Savings Account opened. Once the process is completed, **it can be used anywhere: at agents, service centres and ATMs (as it grants access to an ATM card).**

Bank Pafupi

Bwenzi La Pafupi sales team

The **sales team of 86 Bwenzi La Pafupi** has been working hand-in-hand with the agents to increase Pafupi Savings uptake and usage (data as of 31 March 2017).

Bwenzi La Pafupi are typically **field staff** affiliated with the service centres. A typical day of a Bwenzi La Pafupi team member can be described as follows:

- In the morning, go to the service centre to take a pile of starter packs and enquire about the specific area assigned for the day.
- During the day, explore the assigned area and meet and greet potential customers.
- In the evening, go back to the service centre to complete reconciliation (deposit the money received against the number of accounts opened) and return remaining starter packs.



The Bwenzi La Pafupi sales team is to be phased out in August 2017. Thirty of them (the higher performers) will remain as Agent Network Officers (ANOs). Sales efforts previously handled by Bwenzi La Pafupi will be taken over by the agent network and the ANOs.

⁹ Conversion rate: MK 1 = US\$0.00137556 (Source: www.xe.com, 19 May 2017). Note: This rate is used throughout this case study when United States dollar equivalents are provided for Malawi kwacha.

¹⁰ Agents not yet equipped with a mobile phone need to fill out a physical application form to be sent to the service centre. When the agent reaches a sufficient number of applications, he/she sends them for processing at a service centre.



Client transacting with NBS Bank agent in Malawi
Courtesy of Women's World Banking

Agent network

The agent network is branded **Bank Pafupi**. NBS partners with various businesspeople in different locations who offer financial services on behalf of NBS from their agent float accounts. These agents stay in their shop all day, performing banking services in parallel with their usual business transactions (e.g., selling soap, bread, drinks).

Banking services offered through Bank Pafupi are basic digital financial service transactions, such as these:

- Deposits (see figure II for the process)
- Withdrawals (see figure III for the process)
- Account information
- Customer service (i.e., answering client enquiries)
- Pafupi Savings account-opening

To ensure **security of transactions** at the agent's location, all transactions are authorized using a PIN code to be entered by the customer. In addition, for each transaction performed, the customer is given a receipt from the point of sale or is sent a text message if the transaction is phone-initiated.

Agents invest their own funds into the agency banking business. Because it is important that their funds and devices be protected, NBS provides appropriate training to develop awareness of how to care for the machines and keep them safe as their own equipment.

To avoid fraud and reduce the risk of robbery, NBS has fixed **transaction limits**:

- Withdrawal limit: MK 15,000 (US\$21)
- Deposit limit: MK 30,000 (US\$41)

However, NBS has recently decided to raise these limits to MK 40,000 (US\$55) for both transaction types due to inflation and some customers' requests for a higher transaction range.

As of 31 March 2017, the agent network is composed of 315 agents (with approximately 51% urban and 49% rural and semi-urban), spread across all three regions of Malawi (Northern, Central and Southern). Over the long run, the objective of NBS is less to have many agents than to have quality agents. NBS is aiming to close 2017 by contracting 400 agents. But while NBS works to reach the 400-agent threshold, it will continue to focus on managing and monitoring quality of its agents. **The goal of NBS is to achieve a rate of 80% active agents at 30 days**, from the current 49% active agents at 90 days.

Opening of Pafupi Savings Account at the agent's location

From September 2016 to April 2017, **NBS piloted account-opening of the Pafupi Savings Account directly at the agent's location with 12 agents**. Starting in April 2017, NBS began rolling out this feature across the country using a phased approach (i.e., starting with agents who have a high school education, high transaction volumes and important business activity, before progressively extending it to all agents).

The major advantage of account-opening at the agent's location is that agents are able to conduct better follow-up on prospective clients: many clients need time to think before signing up for the product. While the Bwenzi La Pafupi team can have difficulty (re)locating prospective clients they meet, agents operate at fixed locations near potential clients and see them several times per week as they come into their shop to buy their day-to-day groceries. Agents are in a good position to remind prospective clients to consider signing up or to bring missing documents to complete the application. Another advantage that was revealed from the pilot is that enrolments by agents have a significantly higher percentage of women clients, compared to enrolments by the Bwenzi La Pafupi sales team. The 12 agents in the account-opening pilot opened 53% of the accounts of women customers (data as of 31 March 2017).

10 **Figure II:** Deposit at a Bank Pafupi agent

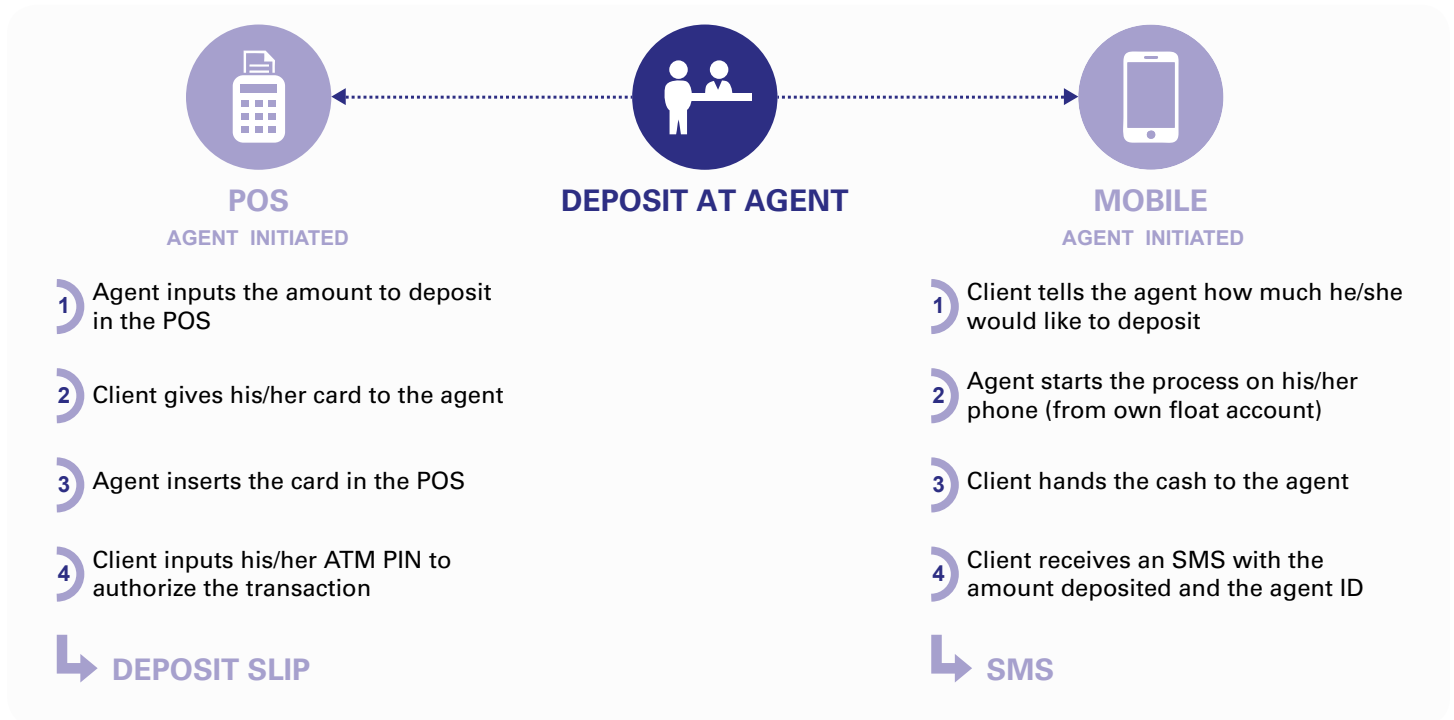
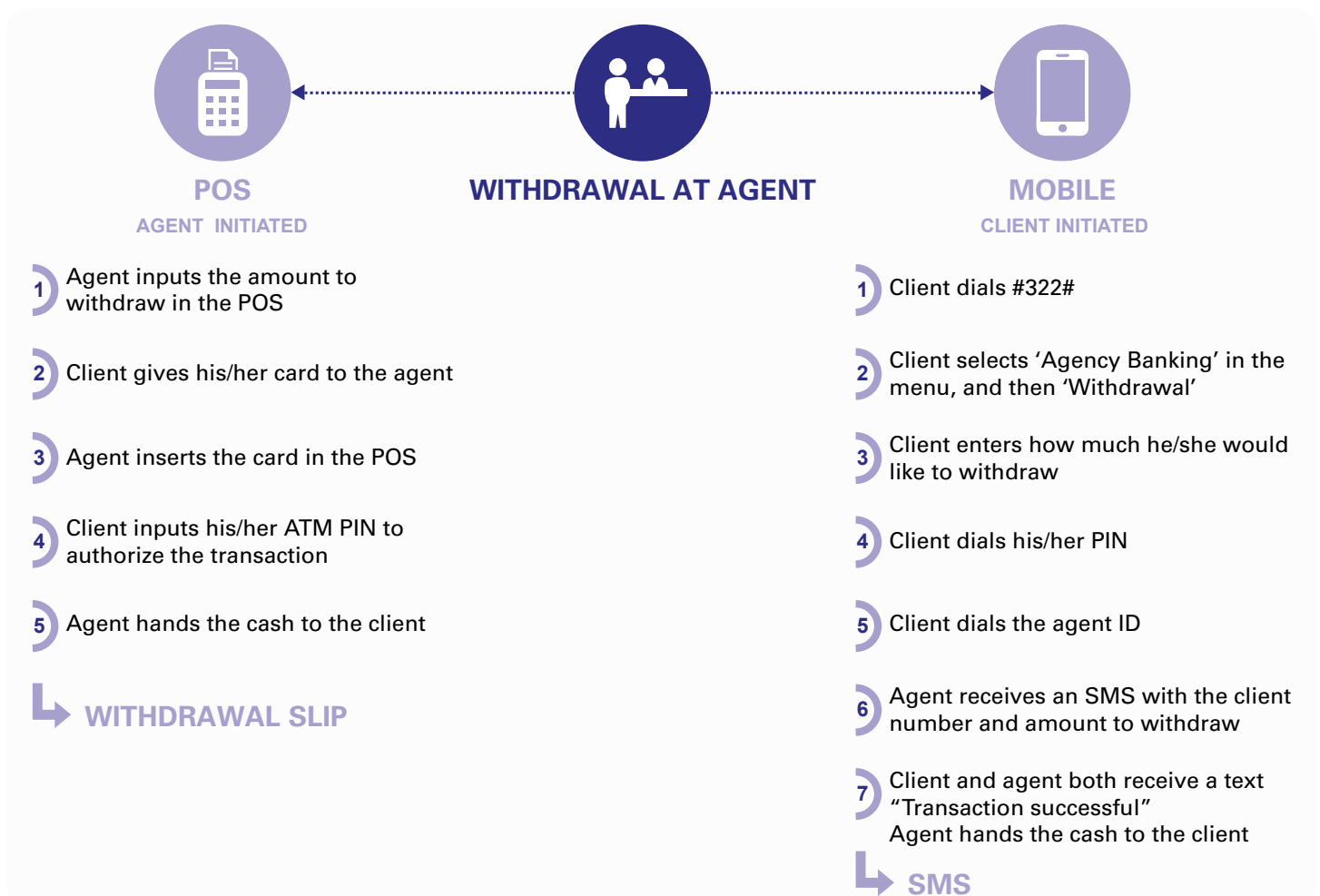


Figure III: Withdrawal at a Bank Pafupi agent



Technology solutions

Devices used for Bank Pafupi



Basic mobile phones: All agents are provided with a basic phone connected to the mobile banking platform, branded EazyMobile, for phone-based transactions. These phones cost around US\$30 each.



Smartphones: Smartphones are also connected to the mobile banking platform EazyMobile for phone-based transactions. However, they can also perform client registration and account-opening manipulations since they have the account-opening application. For now, these phones are only provided to agents that are doing account-opening. Eventually, when NBS completes the phased national roll-out of account-opening at the agent's location, these phones will be distributed to all agents. They cost less than US\$150 each.

For clients to access services through basic or smartphones, they first need to register on EazyMobile. Clients then have access to the whole range of mobile banking services (e.g., they can pay for television and utilities, buy airtime and make transfers from one account to another account). Mobile phone transactions amount to approximately 30% of total Bank Pafupi transactions.



Normal point-of-sale (POS) devices: Since most people are not registered on the mobile banking platform EazyMobile, they can use their ATM card at the agent's location to make a card-based transaction (provided the agent has a POS device, which is not always the case). POS devices cost US\$500–US\$600 each.

Bank Pafupi now has 160,000 customers registered on the EazyMobile platform (among 448,000 total NBS customers). Agents perform a total of 23,000 transactions per month, of which 70% are made via a POS device and 30% via a mobile phone (data as of 31 March 2017).

Mobile phones are essentially used by agents in rural areas, while a combination of mobile phones and POS devices (where connectivity is available) are used by agents in urban areas.

As demonstrated by the respective costs above, **the mobile solution is much more cost effective** than the POS. Hence,

NBS intends to **progressively shift towards phone-based transactions**. As a result, NBS needs to aggressively market EazyMobile to increase the number of registrations. Unfortunately, the EazyMobile monthly subscription fee of MK 500 (US\$0.69) is deterring some clients from registering.

Technology platforms

EazyMobile, the mobile banking platform

NBS developed a stand-alone system (i.e., EazyMobile) to **enable transactions to happen in real time**, working on an unstructured supplementary service data (USSD) platform. Transactions are performed from EazyMobile, which automatically transfers the information to the CBS.

Customers can register either by going to any NBS service centre or by self-registering by dialling *322*99#. Once registered, customers can transact on their account but also use their account to access value-added services by dialling *322#.

Pafupi Mobile application

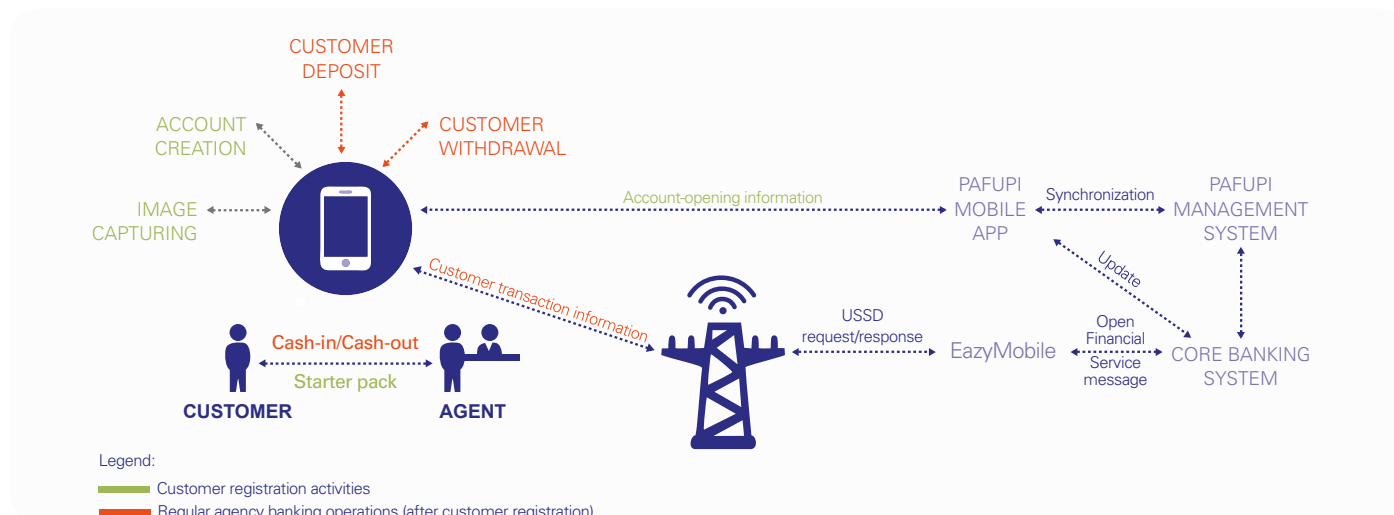
Besides EazyMobile, which is a purely **transactional USSD platform**, NBS also created an Android Pafupi Mobile application for account-opening by agents. When opening an account, Pafupi customers are automatically registered for EazyMobile Lite, a feature which allows them to access the Bank Pafupi menu on their own phone for withdrawals and deposits only (not the full package of services) while at the agent's location. If they want to access a broader range of services (utility payments, phone transfers, etc.), they have to register by themselves by dialling *322*99# and are charged MK 500 (US\$0.69) at the end of the month.

Account management system

Apart from the CBS (Temenos T24), EazyMobile interacts (for account-opening only) with an internally created account management system, called Pafupi Management System. This system was developed to create the accounts and the starter packs, assigning starter packs to a sales person/agent, and to process the information received from the smartphone (Pafupi Mobile application) and transfer it to the CBS.

All technology solutions (except T24) were developed in house. See figure IV for a picture of how these solutions interact.

12 Figure IV: System architecture of Bank Pafupi



Smartphone application

EazySmart is the matching application that allows access to EazyMobile using any smartphone. As of 31 March 2017, this application was still under development.

Agent value proposition

The agent value proposition includes financial returns (fixed commissions earned with deposits and withdrawals) and non-financial benefits (see table 2 for more specifics on the value proposition).

DISTRIBUTION CHANNELS

Agent network management

The NBS agent network is composed of both individual agents and corporate partners' agents/outlets. In the case of the corporate agents/outlets, network management falls under the supervision of the corporate partner. Supervision on the side of NBS consists of liaising with the partner's head office and conducting occasional visits to make sure everything is running smoothly.

However, this section is focused on how NBS manages its own individual agents.

When building capacity to grow its own agent network, NBS focused on several key aspects:

- Agent value proposition
- Agent selection
- Agent training
- Agent monitoring
- Liquidity management

Table 2: NBS Bank agent value proposition—Financial and non-financial benefits

FINANCIAL RETURNS
<ul style="list-style-type: none"> • Fixed commission of MK 87.5 (US\$0.12) for withdrawals • Fixed commission of MK 37.5 (US\$0.05) for deposits
NON-FINANCIAL RETURNS
<ul style="list-style-type: none"> • Association with the NBS Bank brand • Differentiation from competitors in the area • Increased visibility • Improved foot traffic and cross-selling opportunities

NBS is currently working on revising this value proposition as many agents were found to be unsatisfied with the offer. Agents tend to value financial returns while neglecting indirect financial benefits. For that reason, the financial revenue structure as described in table 2 was not considered rewarding enough by many agents, who ended up favouring their usual business affairs over banking services. In addition, when comparing the commission structure of NBS to the ones implemented by other banks, NBS was not competitive. The distorted agent value proposition was a considerable challenge for NBS, but it is now in the process of being improved.



Client performing transaction on agent phone - NBS Bank Malawi
Courtesy of Women's World Banking

Agent selection and recruitment

NBS formed a team of five centrally located Agent Network Managers (ANMs), in charge of selecting and recruiting agents. The goal is to expand and restructure the team to 30 members, largely based at the various service centres, when the Bwenzi La Pafupi team is phased out in August 2017. Each ANM is responsible for an assigned area, and besides selecting and recruiting agents there, each ANM is also in charge of agents' training and monitoring.

When selecting and recruiting agents, ANMs have to ensure certain criteria are met. Some of these criteria/requirements were provided by regulatory guidelines from RBM, such as these:

- Potential agent must be in a proper shop (no mobile agents).
- Potential agent needs proper identification documents (business registration)/has to be known by the regulator as a business operator.
- Potential agent's business has to meet anti-money laundering requirements.
- Potential agent should pursue adequate know-your-customer (KYC) requirements.

Other selection criteria were established by NBS itself. For a businessperson to be considered as a potential agent, he/she has to demonstrate compliance with these NBS policies:

- Potential agent has a proper business in place that would not compromise the image of NBS (reputation implications).
- Potential agent is well located (agent shop must be visible).
- Potential agent maintains the interior of his/her shop well and has sufficient stock (agent shop must be well organized and properly merchandised; in other words, the potential agent needs to demonstrate that his/her business is healthy and serious).
- Potential agent keeps proper records of all of his/her transactions.

To ensure consistent quality of agents, NBS set up a standardized selection process. Selection first consists of a market scan, or a pre-scoping, to select the five best potential people in an area (see figure V), with support from recruitment scorecards for cross-verification purposes (see table 3). Once the ANM has scored the potential agents, he/she can classify them from 1 to 5 and approach them.

14 **Figure V:** Standardization of the selection process by NBS Bank for consistent quality of agents



Table 3: NBS Bank agent recruitment—Example of a recruitment scorecard

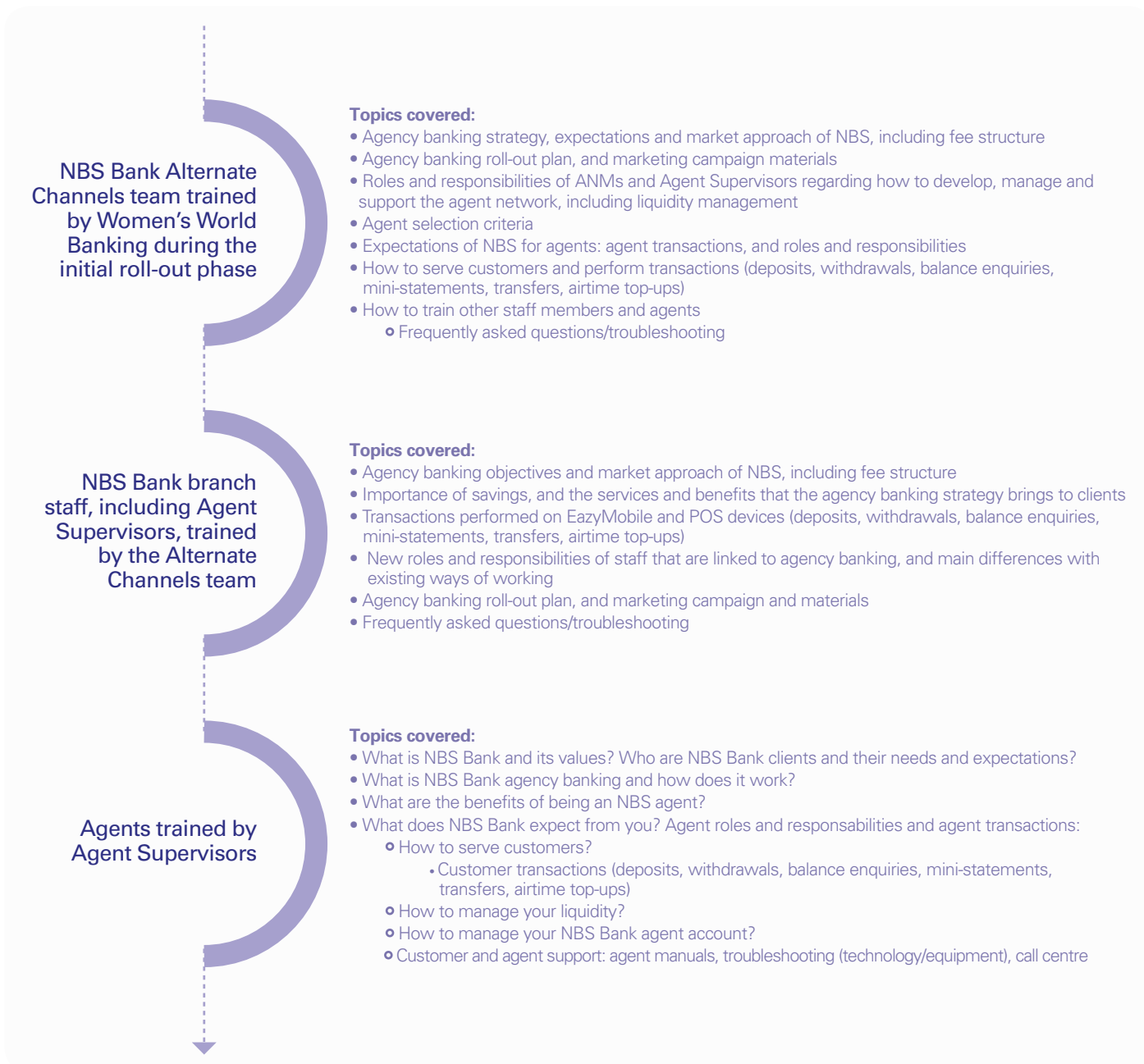
AGENT SCORECARD							
	Agent name (fill in agent name)						
	Parameters	1	2	3	4	5	Score
1	Location of shop	Any other location	Close to branch bank	Near 4 or 5	Highway/ Main road	Trading area/ Market place	4
2	Type of business	Any other store	Boutique or similar high-value store	Second-hand clothes store, plastic sales shop	Pharmacy, mobile phone shop	Grocery shop, supermarket, stationery store or any similar store	3
3	Interior of shop and stock	Interior poorly maintained with poor stock	Interior poorly maintained but average stock	Average stock	Interior well maintained but poor stock	Interior well maintained and well stocked	5
4	Cash value of each transaction (MK)	< 100 or > 1000	100–200	At least 200	200–500	500–800	4
TOTAL							16
Visited by	(fill in ANM name)	Other information:					
Time							
Date							
Location							

Agent training

To ensure quality of service delivery, all agents are trained by NBS on how to use the digital tools provided (either a basic phone or smartphone and, if applicable, a POS device) and to handle customers' requests in a courteous and efficient manner.

The NBS training programme for the national roll-out of Pafupi Savings has been designed to follow a training of trainers' approach, as illustrated in figure VI.

Figure VI: Training of trainers' approach utilized by NBS Bank



To complete their training, NBS originally provided all agents with two crucial tools:

- **The Agency Banking Manual** is a short illustrative guide to help agents manipulate the transactional mobile phones for the Bank Pafupi operations. It provides guidance on how to log in, handle cash deposits, view last transactions, re-set the PIN and perform cash withdrawals. The Manual not only provides written instructions on the processes but also screenshots for ease of understanding.

- **The Agents Handbook** is a comprehensive manual aimed at guiding agents in providing daily agency services. Contents include an introduction to NBS and agency banking, customer service guidelines (regarding customer service culture and principles, do's and don'ts and dress code), complaint management, risk management, agency banking operations (transaction documentation, transaction management and daily procedures), bookkeeping procedures, POS device operations (how to set up, navigate and transact with the device) and finally NBS contact points.

Today, NBS **still provides the Agency Banking Manual but no longer offers the Handbook**. It was a heavy and costly guide that was not being used by the agents. The focus has shifted to intensified monitoring and **on-the-job coaching** to help agents overcome any issues they may encounter.

Agent monitoring

ANMs are also in charge of monitoring agents, relying on both on-site visits (weekly field visits)¹¹ and off-site supervision through daily transaction records (see table 4 for an example) and liquidity/float balance reports. ANMs perform ad-hoc visits as well, using registered customer complaints to decide which agents to mystery shop.

Table 4: NBS Bank agent monitoring—Example of a daily transaction record

Daily Bank Pafupi transaction summary		From 29-Jan-15 to 29-Jan-15			
Agent account	Agent name	Deposit amount (MK)	Withdrawal amount (MK)	Deposit transactions	Withdrawal transactions
00XXXXXX0017	Big Tafa	0	60 225	0	12
00XXXXXX0015	Chipoka	0	17 000	0	2
00XXXXXX0005	Dauda	1 000	30 000	1	3
00XXXXXX0020	E-Kwacha	38	38	1	1
00XXXXXX0011	E-Kwacha Chilomoni	7 000	3 000	1	1

Liquidity management

What NBS recommends to its agents is to have a fair split of e-money (money in the float account) and cash. For example, if an agent decides to start the agency business with MK 100,000 (US\$138), he/she would have MK 50,000 (US\$69) in the float account and MK 50,000 in cash for withdrawal. The amount depends on each agent's capacity.

If a client wants to withdraw MK 10,000 (US\$14), the agent takes that amount out of his/her MK 50,000 (US\$69) in cash. The phone or POS device (connected to the system) debits the client's account and credits the agent's float account. The agent's cash has decreased but his/her e-money in the float account has increased.

The reverse happens in the case of a deposit: the agent receives some cash, and the system debits the agent's float account and credits the client's bank account.

To NBS, face-to-face interaction and relationship-building with the agents represent a very important component of agent monitoring. That is why ANOs not only spend time to work with agents on solving problems but also to hold simple meet-and-greets with them. NBS established the following KPIs to support the monitoring and evaluation of agents' performance:

- Deposit mobilization (how much NBS is getting through the agency channel)
- Average number of transactions per agent per day
- Total number of agents (expansion of the agency channel)
- Other qualitative KPIs such as customer service

Each agent has access to a service where he/she can deposit/withdraw the money. Agents can either (1) visit the service centre to deposit cash in the case of no e-value, or withdraw in the case of no cash; or (2) in partnership with a mobile network operator (MNO), push or pull funds from bank account to wallet. There are no super dealers yet.

As far as account-opening is concerned, for the 12 agents who were part of the pilot, they are given a certain number of starter packs in stock that they have to sell. The agent pays for these packs through a settlement account; every time an account is activated, it deducts MK 1,100 (US\$2) from the settlement/agent account.

INTERNAL ORGANIZATION

For NBS to implement the agency banking channel, key operation and management changes were required: in particular, implementing training sessions at all levels, developing and integrating a mobile platform with the existing CBS, setting up a sales team and KPIs for the channel, and facilitating collaboration across all bank departments (see table 5 for a breakdown of the changes).

¹¹ The goal of the agency banking team is to visit each agent at least once per month. ANMs make field visits each week, but they do not visit each agent every week.

Table 5: Summary of internal changes at NBS Bank

Area	Changes
Organizational structure	<ul style="list-style-type: none"> <u>Agent Network Managers</u>: Hiring and training of five ANMs in charge of selecting, recruiting, training (from initial training and on-the-job coaching to refresher training), monitoring and managing agents; ANMs will expand to a team of 30, adopt a more field-based structure in August 2017 (as the Bwenzi La Pafupi sales team is phased out), and also open accounts in village groups <u>Service Centre Managers</u>: Making Service Centre Managers responsible to the agent network and Alternate Channels Manager and the Products Manager <u>Bwenzi La Pafupi sales team</u>: Establishment and training of a team of 86 agents (29 during pilot phase) on account features and benefits, account processes, Bank Pafupi, sales and promotional techniques <u>Alternate Channels team at head office</u>: Hiring one Alternate Channels Officer, who looks after efforts by ANMs to recruit, train and monitor agents and also assists in training of newly recruited ANMs
Internal processes and standards	<ul style="list-style-type: none"> Formulation of KPIs and sales targets for sales agents and for branches (e.g., sales agents are responsible for opening 50 accounts per week, of which 30 need to be women customers) Introduction of branch scorecards to count new Pafupi customers and deposit volumes, so channel could become part of core business Creation of new processes, including in-field account-opening for instance Revision of process maps with new procedures
Training	<ul style="list-style-type: none"> Design of training toolkit Facilitation of training-of-trainers' sessions with product, agency banking and training teams to allow replication of training inputs throughout NBS Training of all staff (at head office and branches, with field sale staff and agents) in various areas, such as acquiring and educating customers, communicating with women customers, conducting transactions and managing sales teams to achieve targets
Internal/Cross-team coordination	<ul style="list-style-type: none"> Establishment of high-level Pafupi working group, in charge of issue resolution, with heads of departments from across NBS Integration of ICT team as part of the core product team so ICT team understands the IT changes required and meets shared objectives^a
ICT ^a	<ul style="list-style-type: none"> Internal development of the following: <ul style="list-style-type: none"> Mobile banking platform Mobile application Account management system System adjustment of CBS to communicate efficiently with the new technology platforms and workflow Equipment of sales team and agents with required tools (phones, POS devices)
Marketing	<ul style="list-style-type: none"> Development of marketing techniques: <ul style="list-style-type: none"> Production of stockpile of starter packs with cards/PINs Creation of logo and tagline for Pafupi Involvement of key influencers (village leaders) to raise awareness Advertisement on community radio Organization of market stands Design of brochures and posters Design of agent signage Design of referral cards

^a ICT, information and communication technology



Agent performing transaction on his mobile phone at NBS Bank Malawi
Courtesy of Women's World Banking

FINANCIALS

CapEx and OpEx

Setting up the agent network has been a costly venture for NBS. Buying the equipment and paying for staff salaries and marketing materials have been the main expenses incurred so far.

Tables 6 and 7 display the list of capital expenditures (i.e., 'CapEx') and operational expenditures (i.e., 'OpEx') of the Bank Pafupi and Pafupi Savings roll-out.

Table 6: CapEx for the development of Bank Pafupi and Pafupi Savings

Details	Total amount from 2012 to 2016 (MK)	Total amount from 2012 to 2016 (US\$)
Phones for Bwenzi La Pafupi	99 128 571	136 357
Mobile phones for EazyMobile agents		
POS devices for strategic agents		
Additional resources for product management team		
Starter packs (cards, PINs, carriers, referral cards)—charged to customer on cost-recovery basis		
Development of in-house technology		
Other		

Table 7: OpEx for the development of Bank Pafupi and Pafupi Savings

Cost category	Details	Total amount from 2012 to 2016 (MK)	Total amount from 2012 to 2016 (US\$)
Human resources	Bwenzi La Pafupi salaries and incentives	95 419 321	131 255
	ANO salaries		
	Alternate Channel Support Officer at head office		
	Other		
Marketing	Above-the-line marketing: radio	151 639 405	208 589
	Below-the-line marketing: market activations		
	Promotional materials		
	Sales team branding (T-shirts, bags, pouches)		
	Agent materials		
	Marketing (Bank Pafupi signage and marketing materials)		
	Other		
Training and travels	Training and recruitment	20 115 325	27 670
	Key influencers, other travel		
	Travels costs for agency banking staff		
	Other		

The total budget for the Bank Pafupi and Pafupi Savings national roll-out amounts to **MK 366,302,622 (US\$503,871)**, of which MK 67,500,000 (US\$92,850) was funded by UNCDF-MicroLead. NBS has not reached breakeven yet for this project.

Yet, NBS is hoping that, over time, these expenditures will generate considerable savings, as the cost of serving a client at a service centre is indeed higher than the cost incurred at an agent's location.

CASE STUDY OF NBS BANK IN MALAWI—ACHIEVEMENTS

The Pafupi package represents a success for NBS Bank as well as a contributor to significant progress towards financial inclusion in Malawi. However, up-take among women and rural populations—the original targets—still requires improvement.

FULFILMENT OF OBJECTIVES FOR DIGITAL FINANCE

As a result of the Pafupi project, NBS gained new customer insights, developed new products and delivery channels and tapped into a new market (see table 8).

Table 8: NBS Bank digital finance objectives and achievements

Original objective	NBS Bank achievements
Reach the unbanked segment	The designed solution is very attractive for rural people: after the pilot, it was found that 86% of the 85,594 total Pafupi clients were previously unbanked => Contributing to financial inclusion.
Find a custom way to address the unbanked's specific needs	<p>The Pafupi package is a success for NBS, answering specific market needs.</p> <p>Clients from the pilot phase reported reallocating savings from other places (formal and informal), citing the benefits of Pafupi Savings compared to other savings mechanisms => Pafupi is the new preferred way to save => Changing behaviours.</p> <p>By developing Bank Pafupi and Pafupi Savings, NBS developed a tailored solution that does the following:</p> <ul style="list-style-type: none"> • Brings the bank to the community • Offers convenience and security • Helps clients save
Increase the number of women with a savings account	<p>NBS managed to raise the level of awareness about financial services among women and within rural populations, and made great progress towards demystifying banks for the poor.</p> <p>However, the percentage of Pafupi Savings Accounts that are held by women and rural clients is still low (data as of 31 March 2017):</p> <ul style="list-style-type: none"> • Women 30% • Rural 34%

Legend: Green: target reached; Orange: target partially reached

PAFUPI RESULTS (DATA AS OF 31 MARCH 2017)

- Pafupi accounts: 85,594
- Total deposits in Pafupi accounts: MK 725,500,000 (US\$996,143)
- Average account balance: MK 8,476 (US\$12)
- Percentage women: 30% | Percentage rural/semi-urban: 34%
- Branches: 32 | Bank Pafupi agents: 315
- Bwenzi La Pafupi sales team members: 86

ADOPTION AND USE OF DIGITAL FINANCIAL SERVICE CHANNEL

Figures VII–IX capture adoption and usage of the NBS agent network and products.

A growing agent network

The concept was well received by agents. In addition to a new source of revenues, agents look for other benefits such as increased traffic in their shop. As NBS is advertising aggressively to induce demand, account-opening at the agent's location is also creating demand for transactions over time.

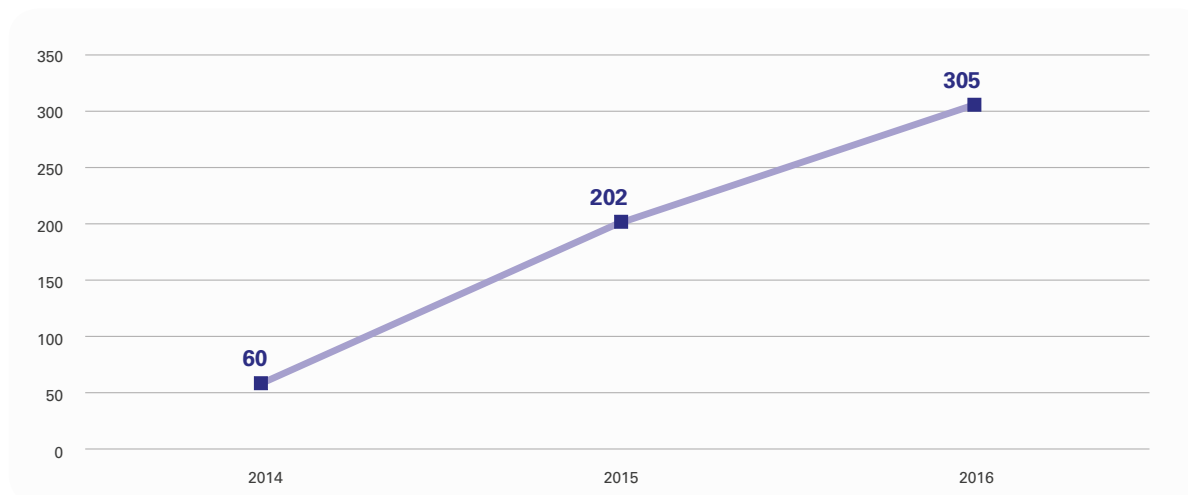
NBS has 315 agents (305 at the end of 2016) and is attracting more and more agents every day. NBS intends to close 2017 by increasing this number to 400.

A growing number of transactions

At the beginning of the project, NBS was recording just over one transaction per day per agent. This number picked up to nine in 2016, but it decreased to six transactions per day per agent in Q1 2017 as new agent recruits were added to the team. However, some agents are out-performing others—for example, those who have been operating for a long time or those with a prolific, well-located business are reaching more than 100 transactions per day.

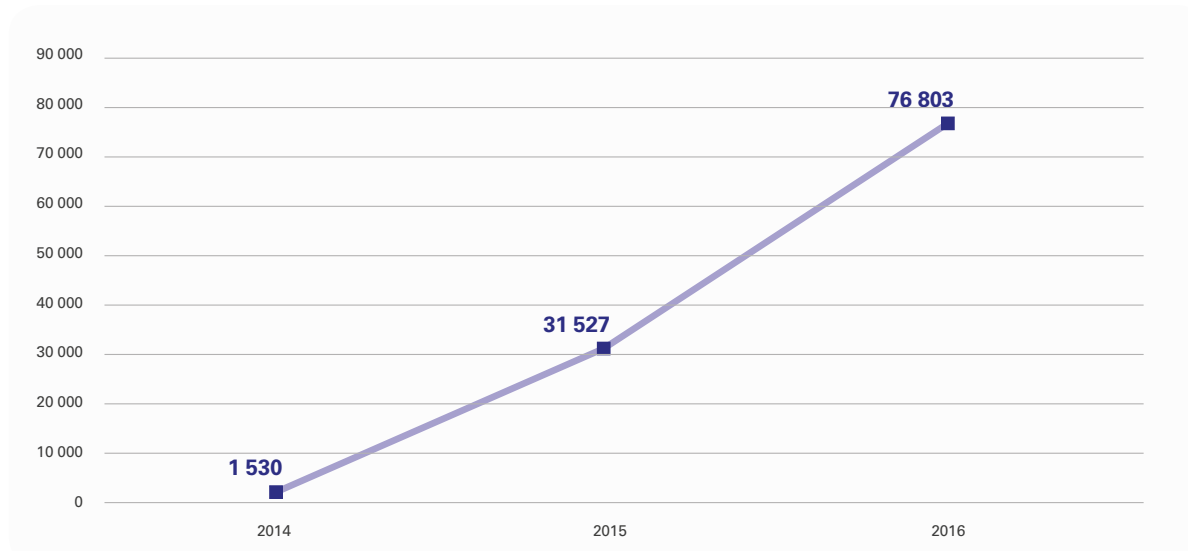
It is anticipated that when the agent network stabilizes, the average will improve due to awareness levels. Opening more accounts will also be a way to increase the number of daily transactions (deposits and withdrawals). The objective is to reach an average of 15 transactions per day per agent.

Figure VII: Agent network growth at NBS Bank



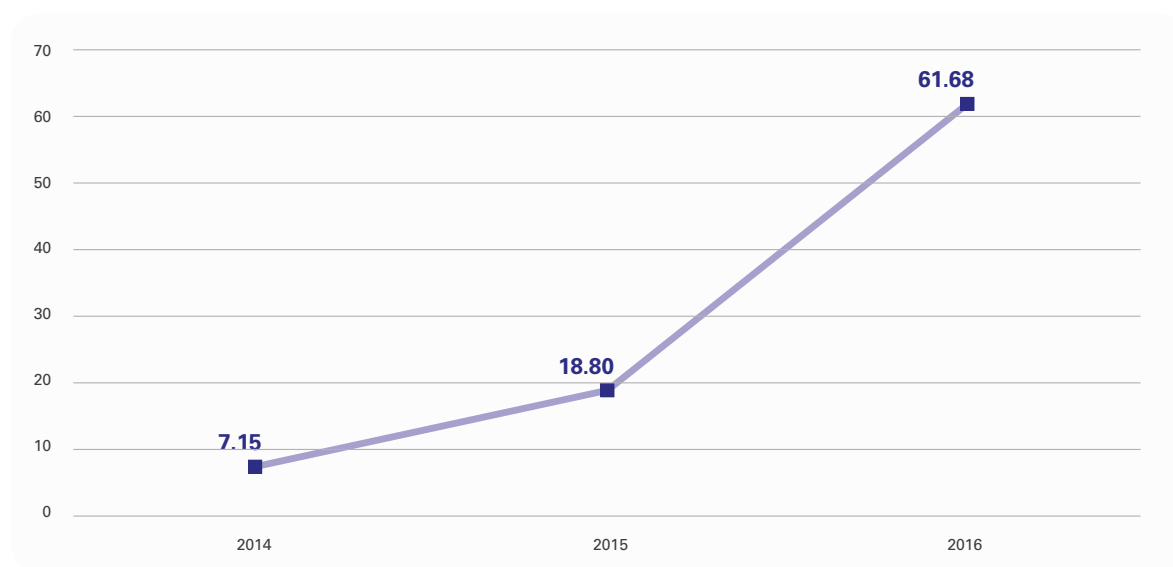
A growing number of clients

Figure VIII: Pafupi Savings Account uptake



22 Increasing savings

Figure IX: Pafupi Savings Account deposit growth (MK million)



COST/BENEFIT ANALYSIS

When NBS was just starting to implement its agent network, the cost/benefit analysis of Pafupi was based on projections. The first version of the business model, built in 2014, envisioned

four different scenarios for Bank Pafupi and Pafupi Savings, as shown in table 9.

Table 9: Pafupi business case scenarios

Scenario	Assumptions
Base case – Current trend	<ul style="list-style-type: none"> Average account balance of MK 4,200 (US\$6), with increase to MK 8,400 (US\$12) by end of period Three new accounts opened per day by sales team Fifty percent of accounts with balances > MK 200 (US\$0.27)
Scenario 1 (S1) – Higher balances	<ul style="list-style-type: none"> Average account balance of MK 5,200 (US\$7), with increase to MK 10,500 (US\$14) by end of period No change to other assumptions
Scenario 2 (S2) – S1 and higher number of accounts	<ul style="list-style-type: none"> Five new accounts per day by sales team and agents No change to other assumptions
Scenario 3 (S3) – S2 and higher number of active accounts	<ul style="list-style-type: none"> Average account balance of MK 6,500 (US\$9), with increase to MK 13,000 (US\$18) by end of period Five new accounts per day by sales team and agents Sixty-five percent of accounts with balances > MK 200 (US\$0.27)

For each of these scenarios, the breakeven point and the date of return on investment differ.

At current trend, the business case projected that NBS would reach the breakeven point at the end of 2016. Yet, the return on investment was not planned before 2020 (see figures X and XI). However, when using more ambitious scenarios, return on investment was projected to be reached by 2018.

Unfortunately, despite significant achievements, NBS has fallen short of reaching projected numbers of accounts and deposit volumes in the early years (2015 and 2016). Not meeting the objectives further delays reaching profitability. However, the business plan clearly shows that there is a path to profitability if certain business outcomes are achieved.

Figure X: Net profit per year (MK million) without grants and external assistance for NBS Bank

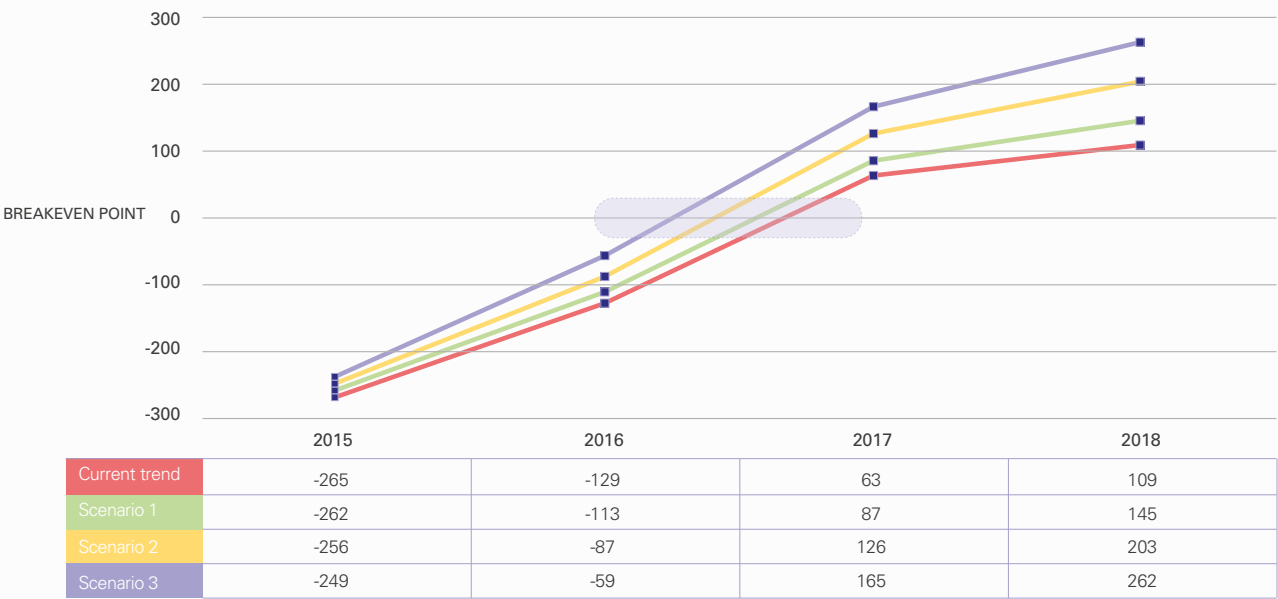
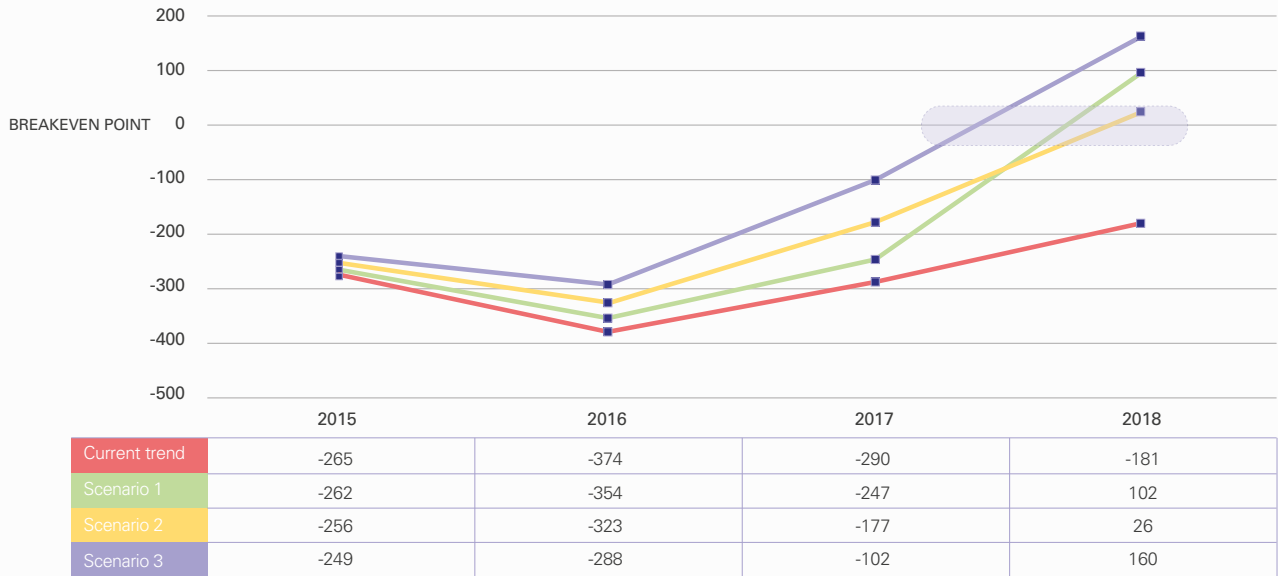


Figure XI: Cumulative net profit (MK million) with grant funds for NBS Bank



— 24 BENEFITS FOR NBS BANK

Market deepening

For a full-fledged bank such as NBS, developing Bank Pafupi was a way to reach out to the informal and unbanked sector. Going to agents became the preferred way to save (compared to keeping money at home or using village savings groups). And, with 86% of Pafupi clients being previously unbanked, NBS clearly deepened its market presence to a whole new and unsaturated segment, which augurs sustained growth rates for the near future.

Operational savings in the long run

Though implementing the agent network has been a costly venture, it will allow NBS to experience some savings in the long run through expansion to new locations at very low cost. Although NBS did not engage in a detailed business analysis, agents are widely considered to be significantly more cost effective than brick-and-mortar branches. An agent is similar to a teller, but an agent has his/her own physical premise. For a teller, a bank has to pay for salary, medical expenses, pension, education fund and other expenses; in comparison, for an agent network, expenses for the bank only consist of commissions, plus salary and monitoring expenses for ANOs managing several agents. As the agent uses his/her own physical premise, the bank does not have to bear the costs associated with it (electricity, rent, etc.).

Increased savings activity

Deposits in Pafupi Savings Accounts have been on the rise since their creation. As of 31 March 2017, NBS collected a total of MK 725 million (US\$996,990) in deposits from Pafupi customers, who previously were mainly saving informally at home and/or in savings groups.

Offering the bank at the customers' doorstep has triggered more regular deposits. Pafupi has increased formal savings activity, as demonstrated by the fact that 86% of Pafupi clients were previously unbanked but now have the ability to make deposits in a formal account that is accessible near where they live.

Competitive advantage

Bank Pafupi is a unique offering in Malawi: customers are not aware of other banks with agents.

BENEFITS FOR CLIENTS

"It's the simplest way... In the past, it was very difficult to save money in the bank. Now everyone can."

Pafupi Savings client

"The bank closes at 3:00 whereas the agent stays open much later, so we can still get money."

Pafupi Savings client



Source: Quotes from Pafupi pilot assessment conducted in May 2015 by Women's World Banking, during focus groups in urban and rural areas

At the time of the pilot assessment, conducted by Women's World Banking in May 2015, over 50% of transactions were completed at agent's locations. Clients reported various benefits of using agents, including savings in transportation costs, proximity, longer operating hours, no queues and ease of use (e.g., some clients reported that they could send their children to transact when they themselves were too busy to visit).

Savings in transportation costs

Bank Pafupi is less expensive for clients: it used to cost around US\$8 for a rural person to access a financial service (taking into account poor road infrastructure, recurrent rain and limited transportation network). The NBS approach to implementing an agent network closer to where people actually live decreases these costs for clients. Table 10 summarizes this and other benefits, as well as some issues with the Pafupi package.

Table 10: Benefits for clients of NBS Bank

	<ul style="list-style-type: none">• Having a bank at their doorstep• Opening an account quickly, with ATM automatically activated• Earning interest with Pafupi Savings Account• Transacting small amounts• Avoiding queues• Enjoying longer opening hours (agents stay open longer than bank branches)
	<ul style="list-style-type: none">• Experiencing delays (in worst case, denials) when agents favour their regular business activities over agency banking services• Facing lack of liquidity at agents (agents often lack cash to facilitate withdrawals)• Suffering from lack of active agents in some areas• Running into Pafupi account balance and transaction limits

BENEFITS FOR AGENTS

Bank Pafupi presents many benefits for agents as well. Feedback collected from agents confirms that the agency business adds value as it drives more clients into the shop (increased traffic), which can result in cross-selling opportunities. In addition, the signage for agency banking also improves the visibility of the shop. Besides these indirect benefits, agents receive direct financial benefits in the form of commissions, which increase their revenues.

SUMMARY OF BENEFITS

Table 11 summarizes benefits for all stakeholders involved.

Table 11: Summary of benefits for NBS Bank, clients and agents

Benefits for NBS Bank	Benefits for clients	Benefit for agents
<ul style="list-style-type: none">• Offers way to reach out to informal sector• Is cost effective (compared to brick-and-mortar branches)• Increases savings activity (monthly or quarterly deposits)• Offers competitive advantage (unique offering for clients)	<ul style="list-style-type: none">• Feels more comfortable transacting with agents, who allow small amounts• Ensures money is in a safe place (bank)• Eliminates barriers to saving at a bank• Offers access to services close by (in neighbourhood)• Is less expensive than using a bank (savings on transportation costs)	<ul style="list-style-type: none">• Provides more revenues with commission• Offers cross-selling opportunities• Increases traffic

CASE STUDY OF NBS BANK IN MALAWI— KEY INFLUENCING FACTORS AND LESSONS LEARNED

The experience of NBS illustrates that the journey to agency banking needs to be carefully planned and tested—planned through appropriate support and resources (financial, technical, managerial, etc.) and tested through regular small and concise pilots. A successful implementation of agency banking is not one built in stone but is rather a work in progress with continuous improvements.

ANALYSIS OF READINESS

Readiness at time of digital financial service engagement

Figure XII summarizes the institution's readiness at the time of designing Bank Pafupi and Pafupi Savings, including the following:

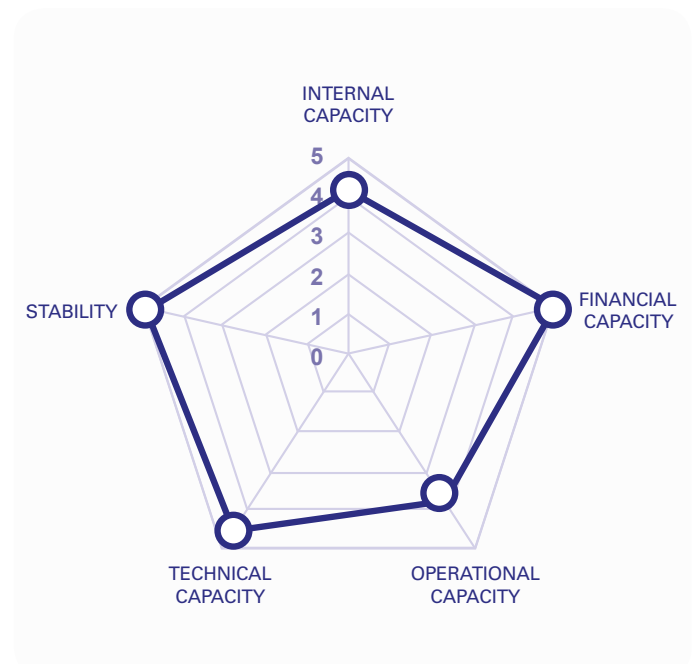
- Internal capacity (management, staff capacity, and human resource policy and training)
- Financial capacity (resources to pursue the business model)
- Operational capacity (liquidity/cash management, sustainability and regulatory compliance)
- Technical capacity (connectivity, management information system [MIS] and interfaces)
- Stability (portfolio at risk and governance)

At the time of engagement, NBS was in a very good position to develop its ADC project. The project was strongly supported by management and partner organizations, which planned and implemented the required changes in the organizational structure, set up new policies and processes, and designed an effective training plan from head office staff to field officers. The project was fuelled by adequate financial resources, coming from a

combination of the institution's own resources as well as external resources, and it was supported by a competent technology development backbone, through an internal team with the ability to develop information technology (IT) solutions in-house.

However, some key elements an FI needs to consider with this model were lacking back in 2012: although NBS was on the verge of implementing an agency channel based on general packet radio services (GPRS) technology, there was no offline strategy as part of the risk management plan. Liquidity management policies were initially weak (relying on service centres only—no super dealers), which later led to considerable challenges for operational management. NBS is now trying to resolve liquidity management issues, for example with the implementation of push-and-pull services in partnership with MNOs.

Figure XII: Readiness of NBS Bank at time of digital financial service engagement



Note: The assessment of financial capacity did not take into account financial self-sustainability as these data could not be obtained.

Meeting recommended prerequisites

All dimensions are further described in table 12.

Table 12: NBS Bank compliance with recommended prerequisites for Business model #4

Dimension	Prerequisite	Prerequisite description ^a	NBS status
Internal capacity	Management	A channel manager or ANM (at senior management level) needs to be recruited/ appointed within headquarter staff and should be exclusively dedicated to building/managing the agent network. The channel manager should inform his/her supervisors of channel activity on a regular basis (e.g., initially through weekly reports that can later evolve to monthly ones).	<ul style="list-style-type: none"> The management of NBS has been involved since day one in building the ADC by going on an exposure visit to Kenya and supporting the project in front of the board through different phases. NBS set up a high-level Pafupi working group, in charge of issue resolution, with heads of departments from across NBS.
	Staff capacity	<ul style="list-style-type: none"> The FI must identify how many agents it needs at the time of launch and have a roll-out plan for recruiting agents. It is important to have a detailed process to identify, recruit, train, brand and manage the agent network. At launch, and on a daily basis, there needs to be a dedicated agent team, including the following: marketing staff, IT staff (in charge of system integration and management) and back-office staff in charge of service-level monitoring, settlement with agents, KPI monitoring, etc. The FI needs a channel manager/ANM at headquarter level but also staff in charge of managing agents at branch level. The FI should ensure that internal auditors start to measure and record agent-related activities specifically. 	<ul style="list-style-type: none"> The internal structure was modified to fit the introduction of the new channel, including channel managers and officers at the head office as well as agent network supervisors. Staff capacity was anticipated for pilot and roll-out. Processes were redefined so that responsibilities would be clear among the different staff. Because of the integration of the ICT team into the core product team, the ICT team was able to better understand the IT changes required and how to meet shared objectives.^b There was a tendency to underestimate the human resource efforts required at the ANM level as well as at the back-office level (especially regarding the production of starter packs).
	Human resource policy and training	Someone with agent experience should be recruited as ANM since it is a full-time position. Job descriptions need to be adapted/created, and staff involved in the new channel need to be trained. Depending on the business model selected, there may be a need for training super-dealer staff.	<ul style="list-style-type: none"> Training-of-trainers' sessions with product, agency banking and training teams allowed replication of training inputs throughout NBS. Training of all staff (at head office and branches, with field sale staff and agents) in various topics, such as acquiring and educating customers, communicating with women customers, conducting transactions and managing sales teams to achieve targets was held.
Financial capacity	Financial self-sustainability/ Breakeven	The FI should be financially self-sustainable (FSS >100%) to engage in this model. ^c	n/a

Legend: Green: prerequisite met; Orange: prerequisite partially met; Red: prerequisite not met; White: no data available for evaluation

Dimension	Prerequisite	Prerequisite description ^a	NBS status
Financial capacity (cont.)	Financial resources	The FI should use its own resources, complemented with external resources. The FI should plan to spend at least US\$250,000 for developing its agent network, though that number can easily go up to US\$1,000,000 depending on the model chosen.	NBS used a combination of its own and external financial resources from the UNCDF-MicroLead programme (for marketing and training costs only). NBS carefully planned its spending against future profits in detailed (scenario-based) financial projections to identify when it would reach the breakeven point. However, NBS started this project when going through financial difficulties, which made the board more reluctant to approve spending.
Operational capacity	Liquidity/Cash management	<ul style="list-style-type: none"> The FI is solely responsible for liquidity management (in the eyes of the client). Potentially, if working with a super dealer, the FI may provide initial cash liquidity (for withdrawals). For independent agents, the FI should have a clear liquidity plan, especially for loan disbursements. Daily reconciliation should be done at all branches/agents and audited at headquarters. An agent liquidity manager should be nominated at the FI and interact with agent representatives or the super dealer. Liquidity management should be automated, not manual. 	<ul style="list-style-type: none"> NBS is responsible for liquidity management. Agents are trained on liquidity management, but NBS still experiences some challenges—in particular, a lack of agent motivation to invest capital in the agency business, which translates into cash constraints for transactions. Rebalancing is also difficult. NBS developed push-and-pull services to help agents better manage their liquidity. Currently, there are no super dealers because the size of the agency business does not justify it. But, as it grows, NBS will propose to the biggest and more liquid agents to become super dealers. There is no specific resource to manage liquidity at agents; rather, the ANM takes care of it.
	Operational self-sufficiency/Breakeven	Operational self-sufficiency should be greater than 100%—ideally, around 120%–130%. ^c The FI should not engage in developing its own agent network when it is still trying to reach its equilibrium.	Operational self-sufficiency is 82%.
	Regulation	<ul style="list-style-type: none"> The FI should have a regular FI licence. There may or may not be a need to have a specific agent/distribution licence for this model. At minimum, the FI should have authorization from the central bank to have its own agents. There is, however, a definite need for the FI to follow agent regulation set by the central bank, including the policy for recruiting and managing agents, which will largely focus on agent KYC requirements. It is important to check regulation in the country regarding activities that agents can perform (i.e., loan applications) and if agents are required to be exclusive or not. Informing the central bank of plans and seeking approval is recommended (and compulsory depending on regulation). 	NBS has a banking licence, and it is in touch with the regulator regarding all activities related to agency banking.

Legend: Green: prerequisite met; Orange: prerequisite partially met; Red: prerequisite not met; White: no data available for evaluation

Dimension	Prerequisite	Prerequisite description ^a	NBS status
Technical capacity	Connectivity	Agents need to have in-network connectivity, ideally within a VPN. ^d The FI should develop an offline strategy as part of the risk management plan.	NBS equipped the sales team and agents with required tools (phones, POS devices) connected to the Internet. Agents were given GPRS-based data cards, but there was no offline strategy as part of the risk management plan.
	MIS	<ul style="list-style-type: none"> Ideally, the FI should have a CBS/MIS that includes modules for agent management, card management, call centre and SMS. Depending on the business model and platform functionality, the FI might want/need to invest in new hardware and software. Transactions should be in real time and not batches to avoid issues. 	<ul style="list-style-type: none"> Transactions are in real time. NBS has a high-performing MIS (Temenos T24). System adjustments were made to the CBS to allow integration with the new technology platform developed for agency banking.
	Interfaces	The FI must be able to reconcile all transactions carried out by its agents on a daily basis with those that have happened in its CBS/MIS. The FI should integrate its CBS with the technical platform of its provider in real time.	<ul style="list-style-type: none"> There was internal development of the following: <ul style="list-style-type: none"> Mobile banking platform Mobile application Account management system All interfaces interact with each other.
Stability	Quality of portfolio	For MFIs, the portfolio at risk greater than 30 days should be less than 5%. For banks, the capital adequacy ratio should be more than 8%.	In 2012, the capital adequacy ratio of NBS was 14%.
	Governance	<ul style="list-style-type: none"> The FI should have stable governance to be able to plan and roll out an agent network. The board should support the project fully. 	NBS never faced any governance crisis. The structure is well governed.

Legend: Green: prerequisite met; Orange: prerequisite partially met; Red: prerequisite not met; White: no data available for evaluation

^a These prerequisites come from 'Part 1: Business model description' of this toolkit.

^b ICT, information and communication technology

^c The measures of operational self-sufficiency (OSS) and financial self-sustainability (FSS) are closely related but are not the same. OSS is used to assess how far an FI has come in covering its operating expenses with its operating income. The formula to calculate it is operating income / total operating expenses. In contrast, FSS is used to assess whether an FI has earned enough revenues to cover all costs: operating expenses, financing costs, provisions for loan losses, and cost of capital. The formula is operating income / (operating expenses + financing costs + loan loss provisions + cost of capital).

^d VPN, virtual private network

KEY INFLUENCING FACTORS

Understanding that a tailored approach was needed to demystify banking services

As highlighted by the 2008 FinScope survey, which triggered the idea of addressing the 80% of people without access to banking services in Malawi,¹² there were psychological barriers for people to use commercial banks like NBS. By developing a specific and tailored channel and working with local businesspeople, with whom potential clients conduct their daily transactions, NBS progressively gained the trust

of clients who gradually found it easier to trust and use the banking platform. NBS also worked on raising awareness levels in terms of savings and other financial services offered by NBS.

Better understanding the realities of this model through international exposure

The NBS product team and executive leadership team took part in a learning exchange. The group visited Kenya to learn about the opportunities and challenges in developing agent networks.

¹² Agar, Savani and Thompson, 'FinScope Malawi 2008.'

The visit mainly focused on building the agent network, developing innovative mobile products and creating strategic partnerships with MNOs for expansion. This visit to Kenya taught NBS that the agency banking model works and is scalable. According to management, other takeaways were these:

- Understanding the importance of a reliable technology platform for agency banking
- Using mobile solutions for transactions at agent outlets
- Knowing how to build a value proposition for agents
- Exploring the marketing of the channel to attract and instil trust by customers in the channel

Thanks to the exposure visit, the motivation of NBS to explore mobile-based solutions grew stronger, with a better understanding of agent network management (recruitment and monitoring of agents, roles and responsibilities of agency banking team, etc.) and an understanding of the role for agents in opening accounts. This motivation and improved understanding led the institution to advocate successfully for regulatory support to enable mobile solutions.

Understanding that sustainability and scale of agency banking will take time

FIIs too often expect mobile solutions to quickly reach scale and sustainability, which puts a lot of pressure on teams. In the case of NBS, a strong business case was developed to assert that financial profits would not be instantly reached. With support from Women's World Banking, the team developed a financial model for the Pafupi product and the agency channel to determine profitability. As shown in above sections, the model showed that the proposition would not break even before 2017 and would not achieve return on investment before 2018 (at the soonest).

Other factors also contributed to making this initiative a success, including these:

- **Having a dominant position in the market with a nationwide footprint** (largest branch and ATM network in Malawi) **and being the first mover to digital**
- **Having strong commitment and support** from the board and senior management to introduce the new product during a period of financial uncertainty and economic difficulties for the country
- **Having clear vision and growth objectives** (the ambitious strategic growth objective was to deploy a tailored approach to double the customer base in four years after the project's launch)

CHALLENGES EXPERIENCED AND MITIGATION STRATEGIES DEPLOYED

Agent-related challenges

Over the course of the project, the institution faced many issues related to agent network management. Some were overcome, but others are still being addressed.

- **Agents were dissatisfied by the value proposition** of mobile banking, which resulted in limited willingness to leverage capital and increase the number of clients.

☞ *Not-appealing-enough commission structure*

Agents are businesspeople who need liquidity to conduct their affairs. Implementing this business model means they have to put some capital aside to enable deposit and withdrawal transactions. Hence, the gross margin made in agency banking has to be competitive against their other businesses (e.g., selling soap, sugar, bread). Agents need to be convinced to move their business capital to agency banking. However, at the outset, many agents did not consider the commission structure appealing enough. Although agents shared (during consultant visits) that indirect benefits were a driving force (increased traffic at the shop, improved client trust, greater cross-selling opportunities, etc.), agents were mostly looking for direct financial benefits. Yet, those financial benefits were not motivating enough. Because of the weak value proposition, agents ended up not putting enough money aside to ensure the success of the agency business.

This issue is now being addressed with the development of a new commission structure: instead of offering a fixed commission of MK 87.5 (US\$0.12) for withdrawals and MK 37.5 (US\$0.05) for deposits,¹³ NBS is contemplating introducing a variable commission structure, which will depend on the amount of the transaction being performed. Namely, the higher the amount of the transaction, the higher the commission will be. The objective is to motivate agents to invest adequate capital so that service denials can be reduced. Repercussions on clients are intended to be low, as this new commission structure was designed in a way that customers will end up paying a similar fee for the most frequent transaction amounts.¹⁴ The new commission structure, which aligns with what competitors in the market are offering, will soon be applied.

¹³ For a withdrawal, the client is charged MK 150 (US\$0.21), of which MK 87.5 (US\$0.12) goes to the agent and MK 63.5 (US\$0.09) goes to NBS. Deposits are free for clients but agents receive a MK 37.5 (US\$0.05) commission from NBS.

¹⁴ The average withdrawal amount is approximately MK 5,000 (US\$7), while the average deposit amount is around MK 7,000 (US\$10).

Flawed communication around the value proposition

Another problem that contributed to agents being dissatisfied with the value proposition at the outset was that the benefits were not properly communicated and explained to them. The main reason was that ANMs, in charge of attracting and recruiting agents, did not really understand themselves the benefits that agents could gain from agency banking.

Considering that agency banking was new to most agents, they needed to acquire a clear comprehension of what it entailed and what they could gain from it (on top of financial benefits). As demonstrated in other markets, this understanding is often key to on-boarding agents.

To address this challenge, besides reviewing the commission structure, NBS continuously worked on training its teams involved in agent network management so that the Bank could provide the right message to get agents on board.

In addition, with Pafupi gaining more and more ground (i.e., growing demand), agents may now start valuing indirect benefits, by seeing increased traffic in their shop.

- **There lacked a uniform and market-based approach to selecting agents.**

When starting the project, the NBS team in charge of agent network management did not plan for a uniform approach to selecting agents, which made recruiting agents difficult. On the one hand, there was an overlap of team members in the same market/geographical area, as ANMs were not assigned to specific territories. On the other hand, there was a limited number of potential agents who met the tight requirements set by NBS; thus, identifying these agents without a proper system in place proved challenging. NBS realized that it had to loosen some of the requirements it put in place to build a more prosperous agent network. For example, in the beginning, an agent was required to have US\$600 in liquidity, which was too high for most prospective agents. NBS reduced that requirement to US\$100 (minimum required for all agents), allowing it to recruit more agents between 2015 and 2016.

To clarify and homogenize the agent selection procedure, NBS, with the support of Women World's Banking, designed a standardized process to recruit agents. This process, shown earlier in figure V, serves as a guide for ANMs to identify, approach and select potential agents.

Product-related challenges

- **Although they were the intended targets of Pafupi, women customers proved hard to reach.**

The financial inclusion agenda of NBS and its partners (Women's World Banking and MicroLead) was to focus on low-income women, by helping them to open bank accounts and save. This objective was based on initial customer research from Women's World Banking, which revealed the following characteristics of women in Malawi:

- Serve a unique role as household financial managers
- Face strong financial pressure and actively save using informal means
- Face barriers to accessing banks (emotional and physical distance, cost, lack of formal identification, low financial literacy)
- Perceive banks as aspirational but out of reach

Although women were the primary target of Bank Pafupi, the project did not succeed in its objective of reaching 48% women—it only reached 30%. NBS realized that women can be hard to reach without specific targeting efforts. They usually make decisions upon consulting their husband. More often than not, the male spouse ends up opening the account in his name rather than in his wife's. Ensuring the future success of Pafupi Savings will imply finding solutions for NBS to continuously increase the representation of women among the client base, and behavioural research may be a useful tool to help NBS unlock this challenge.

- **Some of the product features decreased customer satisfaction.**

During informal customer satisfaction surveys (focus-group discussions during the pilot assessment) and ANM surprise visits to agents, NBS realized that high-end customers (those transacting with relatively large amounts) do not favour the agency channel because of the low transaction limits set on deposits (MK 30,000, or US\$41) and on withdrawals (MK 15,000, or US\$21); they prefer to go directly to the branch or service centre. In order to overcome this challenge, ceilings have been raised to MK 40,000 (US\$55) for both transaction types, based on average transaction values.

NBS had to make further refinements of the Pafupi Savings product, by dropping two features that were designed at the very initial stages but proved unsuccessful: the one-time PIN codes and the referral cards. The Pafupi Savings Accounts' starter packs included, in addition to the card, some one-time PIN codes to be able perform transactions at an agent's location even without having a personal phone.¹⁵ But after completing an assessment of the product, NBS realized that these codes were costly to produce and to use, and few customer were actually using them—most of them were just using cards. As for the referral cards (a promotional incentive for customers to enrol relatives), NBS realized that it was not effective and that it had been difficult for staff to keep track of the referees.

¹⁵ Each code could be used to transact only once.

- **Marketing techniques were not always appropriate, resulting in low customer awareness and understanding.**

From early lessons of the pilot, NBS learned that the marketing techniques used were not always the most appropriate/impactful. Indeed, the pilot was only based on below-the-line marketing activities: to address the low-income market, NBS thought that community communication channels (e.g., community radio) would be the most appropriate when, in fact, people react much more to national communication channels (e.g., national radio). The desired impact of the marketing campaign was thus not achieved, with persistently low awareness levels and limited uptake.

Besides proving ineffective in raising awareness, the marketing techniques used did not trigger customer understanding either. It was difficult for people to understand that what they usually do at the bank could now be done at a shop close to them—the same shop to which they normally go to buy groceries. Potential customers have frequently expressed doubts in the system.

To overcome this challenge, NBS needs to continue making significant efforts to enhance customer awareness and understanding of savings and financial services, particularly (branchless) banking services.

NBS witnessed significant growth in its activities as an indirect benefit of a national campaign aimed at increasing market uptake (a campaign designed by the Government, the central bank and other financial sector stakeholders). Raising government officials' awareness of the importance of financial inclusion can help FIs gain some traction for their activities (e.g., ADCs) to increase financial education and awareness, positively impacting the activities of the FIs indirectly.

Human resource issues

- **There were difficulties to produce and activate the starter packs in time to meet customer demand.**

NBS faced human resource constraints related to the production of starter packs, which are given to customers when opening a Pafupi Savings Account. These packs are produced in-house at the head office before being sold to customers. During the production phase, bank staff needs to link an ATM card to an account in the system, before doing the packaging and sending them to the service centres.

In the early days, the existing human resources at NBS could not handle the level of demand. The ADC department had to write a formal request to the board to be able to recruit additional staff to assist with the production and marketing of the starter packs. Four additional staff were recruited to help overcome this challenge.

- **Retaining ANMs was an issue.**

ANMs are hired on a temporary basis and do not have a permanent contract, which prevents them from staying for the long-term, and they generally end up taking a permanent position elsewhere. This situation represents a considerable loss for the institution, as all the training provided and the skills developed along the way are lost, and it is one of the reasons why the team of ANMs is so small.

System issues

- **There were system development issues.**

Setting up the agent network required the development of a first-hand technology system that would fit into the existing operations of NBS. The development was done in-house, with developers that were new to the solution. These developers had to go through several iterations to fill the gaps and find the perfect technology solution. For example, in the beginning, the system could not execute transaction denials. Cash-in transactions were authorized even though the agent's float account was empty. Now, when the agent's float account is depleted, the transaction is denied. These kinds of system issues needed to be solved before the agent network went live, which explains why the pilot phase was spread out over three years.

- **There were connectivity issues.**

NBS is using an Internet-based system. Yet, the Internet infrastructure in Malawi is problematic. The network is not up to international standards. Using a GPRS-based platform proved difficult because the Internet connection does not remain stable. NBS cannot quantify how many transactions have been impacted as a result of connectivity issues, as agents do not track this indicator. However, it might be useful to track the number of transactions impacted, as a high number could potentially instigate some action from telecom operators and regulators.

Compared to the beginning of operations, several adjustments were made, but it is still not enough to entirely overcome the issue. NBS is hopeful that, as more stakeholders enter the market, infrastructure will keep on improving.

LESSONS LEARNED

The experience of NBS with its Pafupi package offers interesting lessons for other commercial banks and FIs that wish to reach rural and low-income segments. Below are some of the critical lessons learned to drive product development and uptake.

1. Learn from small, concise pilots.

- One of the most important cautions for an FI implementing a change like agency banking is not to rush into things and to take the time to get things right. By implementing several pilots over the course of three years, NBS was able to identify bottlenecks and find ways to address them. When it ran into issues with the Pafupi Savings pilot, NBS even considered reducing the scope of the pilot to one sole region (Southern) to more specifically understand how system and human resource challenges that arose could be addressed.
- An FI that is piloting this model needs to know what works or does not work and why, and it should make this assessment before going to scale so it does not impact people's trust if there are complications. Keeping a small scope and taking determined actions at first is the key to growing strong.

2. Build a strong relationship with the agent network.

- In this model, agents are the face of the FI to clients; in a way, agents are the ambassadors of the FI. This business model will only succeed if agents are providing quality service to FI clients, are treating them well and serving them quickly. If not, the ANM needs to be aware of it in order to prevent agents from jeopardizing the credibility of the FI. Regular examination of customer complaints and problems that agents experience can be a great help in this area.

3. Ensure quality of technology.

- At the planning stage, it is necessary to build in sufficient time for testing and resolving problems.
- Frequent service denials cause loss of trust and damage the brand.

- IT challenges can significantly delay the pilot launch.
- Technological challenges require a dedicated support officer for product success.

4. Keep in mind that successful introduction of new products and channels implies the use of change management techniques.

The experience of NBS proves the following:

- **Hierarchy and responsibilities:** Accountability of sales force management at the branch level and greater oversight at the head office level is key to reaching targets and addressing performance challenges. With the engagement of the head office at NBS, the number of accounts opened improved from 3 accounts per day per salesperson to 5.
- **Key performance indicators:** It is important to set clear KPIs, but it is just as important to agree on their definitions.
- **Information sharing:** An internal coordination system must be installed through a high-level working group and coordination across the institution. This system proved effective in addressing bottlenecks and troubleshooting in the case of NBS.
- **Internal capacity:** Product awareness and training at all levels is crucial for the success of product roll-out.

5. Implement targeted sales and marketing approaches.

- **Targeted sales:** Setting targets for the sales team generates a high level of commitment to reach more customers. In parallel, having the right staff to drive sales is important: not everyone can be an effective salesperson => Identifying champions within the team is critical for the success of operations. Once identified, these salespeople need to receive specific training on how to address the target market (i.e., women and those living in rural areas who have low awareness levels of savings and branchless banking services). Indeed, people in that target market require more explanation and education, in plain language of the vernacular, than usual customers.
- **Marketing:** Finding the right marketing techniques matters. Energy should be focused on the most effective tactics to drive account growth during roll-out. For example, NBS learned that community-based marketing was not the most effective technique to reach women and rural communities. It needed to be embedded with finan-

cial education messages and national media. NBS realized that radio has the potential to reach a greater proportion of Malawians. One survey revealed that 62% of the population uses the radio as a source of information.¹⁶ Newspapers are less useful, as they are mostly read in urban areas such as cities and district towns. Modern media facilities such as Internet and SMS seem to be an even less effective vehicle for financial education as 3.8% and 3.9% regularly use such facilities, respectively.¹⁷

6. Consider that expertise can be gained through partnerships with technical organizations.

- NBS gained valuable insights from visiting and learning from other institutions in different markets.
- With support from MicroLead and Women's World Banking, NBS had access to greater expertise and knowledgeable consultants. In particular, an experienced Resident Advisor was a valuable resource in the complex Pafupi project. The Resident Advisor helped with implementing standardized agency banking recruitment and monitoring guidelines. She also supervised product development, staff training and process improvements.

7. Remember that it is important to engage regulators.

- Working closely with regulators might help an FI solve issues that are hindering the business. For example, KYC procedures were a hassle for low-income women at the outset of the NBS project. These women lack the two forms of identification required by law to open a formal bank account (passport or driver's licence). NBS engaged the regulator to waive these restrictions, allowing for the use of a more widely owned document among rural women: the voter identification card.
- Now NBS is trying to solve another client issue with the regulator. As previously mentioned, Pafupi Savings transaction limits with agents are restricting customers from saving larger amounts and discouraging account usage. NBS has been actively seeking approval from RBM to increase balance limits for the Pafupi Savings Account from MK 50,000 to MK 200,000 (US\$69 to US\$275) to meet demand from high-performing savers. It is still being scrutinized at the central-bank level.

THE WAY FORWARD FOR NBS BANK

In the near future, NBS aims to continue expanding the scope and quality/performance of the Bank Pafupi agent network and the Pafupi Savings product through various action points:

- **Increase the number of agents:** To expand the number of access points for Pafupi Savings customers, NBS is forming partnerships with MNOs (Airtel and Telekom Networks Malawi) to expand its Bank Pafupi agent network. By increasing the number of agents, NBS may reduce service denials. The MNO agents are easier to work with because they already have a good understanding of the agency concept. Besides having a larger agent network available, NBS also benefits from the integration of a bank-to-wallet solution, allowing people to complete push-and-pull transactions from their bank account to their wallet.
- **Increase account uptake:** To increase uptake of accounts, NBS is forming partnerships, engaging key influencers to support awareness-raising, and targeting lead segments such as cooperative farmers. Account-opening at the agent's location will also hopefully facilitate account uptake. Thus, NBS will keep empowering agents to open Pafupi Savings Accounts.
- **Capture more deposits by seeking RBM approval to increase account balance limits:** As Pafupi Savings is a simplified-KYC account, it has account balance limits as stipulated by RBM. At the policy level, NBS is actively seeking approval from RBM to increase account balance limits on Pafupi Savings as current limits are restrictive and do not align with the savings capacity of the target market.
- **Increase women's uptake of the account with targeted activities and incentives for sales agents to reach women:** In order to reach more unbanked women, NBS will focus on targeted outreach to savings groups, cooperatives and other groups of women in order to conduct sales presentations. When women gather, there is an opportunity to go beyond the sales pitch and introduce financial education in more depth, giving these groups an understanding of the product, its benefits, how interest works, how to transact on the account and how to handle their ATM card and PIN code. In addition, the sales force will be incentivized for the extra effort required to win women clients: MK 350 (US\$0.48) will be awarded for each new female client versus MK 250 (US\$0.34) for each new male client.
- **Form new partnerships:** In 2016, with support from UNCDF-MicroLead, NBS conducted a pilot to provide informal groups belonging to a local MFI (CUMO Microfinance Limited) with access to a basket of financial services including the Pafupi Savings product and the Bank Pafupi agent network. NBS would like to expand the partnership with CUMO as well as engage with more MFIs (e.g., CARE and World Vision) and village savings and loans associations to promote the NBS group proposition to their customers.

¹⁶ Ephraim W. Chirwa and Peter M. Mvula, *Malawi: Baseline Financial Literacy and Consumer Protection Household Survey*, final report for Reserve Bank of Malawi (Zomba, Malawi, Wadonda Consult, August 2014).

¹⁷ Ibid

CASE STUDY OF CEC IN CAMEROON—CREATING ITS OWN AGENT NETWORK

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Caisse d'Épargne et de Crédit du Cameroun (CEC) was one of the first MFIs in Cameroon to develop its own agent network, having done so in 2015. The pilot phase just ended, and now CEC is scaling it up. Transactions available at agents are account-openings, deposits and withdrawals. Bill payments and loan repayments should follow shortly.

This case study illustrates how a medium-size institution (30,000–60,000 customers) like CEC can find innovative solutions to offer proximity banking services to its customers.

Digital model in a nutshell

CEC implemented branchless banking **by creating a network of contracted mobile field agents**. CEC created a hybrid model, incorporating characteristics of Business model #1: Use mobile as a tool (e.g., having mobile agents) while leaning towards the present Business model #4: Develop own agent network, with advanced operational, technical and supervisory systems for efficient operations. Mobile agents were a first step, to serve urban areas, for CEC on its digital path. Fixed agents will be introduced in 2017 to cover rural areas.

The infrastructure in place is specific to CEC and does not depend on an MNO. CEC created its own Internet-based platform, instead of using USSD technology from an MNO. Each mobile agent visits his/her area of operation and collects savings from customers on a daily basis, after registering them on a CEC-supplied terminal. The data supplied are transmitted to the branch server using data connectivity. At the end of the day, reconciliations are performed that confirm the amounts to be paid in cash by the mobile agents.

Objectives for developing its own agent network

- **Gain operational efficiency:** securing funds, limiting fraud and saving time for mobile agents
- **Reduce cost of operations**
- Decongest tellers in branches (by serving customers in the field)
- Gain a competitive advantage (among more than 400 MFIs in Cameroon) with an innovative approach
- Boost customer account-openings and monthly collection volume

Channels, tools and technology

CEC is using the following:

1. **A network of 80 of its own agents** exclusively dedicated to savings collection in the field:
 - Transactions authorized with agents include account-openings, deposits and withdrawals. Bill payments and loan repayments will be available soon.
 - Agents are self-employed, paid according to savings collected (1.5% of the amount collected).
 - Each agent is attached to a branch, and each branch covers a maximum area of 25–50 km. There is no cap on the number of mobile agents per branch.
2. **SMS banking**, in order to inform customers of the balance on their account.
3. **Android smartphones** with Bluetooth printers, used by mobile agents:
 - Transactions are now done in real time, since the centralized MIS was implemented.
4. **A rented central server**, due to human and financial issues:
 - Data processing is outsourced via the rental of a dedicated large-capacity server (exclusively reserved for CEC).
 - Monitoring tools are used to monitor in real time what happens on the server.
5. **M-PERFECT** software from CAGECFI, enabling operations over the Internet (with secure connectivity via a virtual private network).

Digital journey

CEC followed four steps on its digital journey:

1. **Research phase and peer-learning trips:** CEC carried out research, tests and optimizations between 2013 and 2016; participated in MicroLead peer-learning workshops in Rwanda in 2014, Uganda in 2015 and Ghana in 2016; and received training on agent network management in Senegal in 2015.
2. **Internal development of a proprietary platform and an Android application**, coupled with an online web server from which CEC collects information on saving operations in the field: The platform is synchronized with the different servers of its branches.

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3. **A 6-month pilot phase** from April to September 2015 with four mobile agents, conducted with the support of MicroLead (technical and financial partner): Both POS devices and smartphones were tested. Results were satisfactory for both options, though smartphones were a lot cheaper; thus, CEC decided to go with smartphones.¹⁸
4. **Roll-out finalized in July 2016**, with training, equipment and deployment of 80 agents.

Cost/Benefit analysis

1. A branch must make commissions of at least CFAF 120,000 (US\$203)¹⁹ to support the minimum expenses related to the platform and agents (one branch is responsible for several agents).
2. The direct monthly charge for all transactions per agent is CFAF 8,000 (US\$14).
3. Customers pay a monthly commission calculated on the monthly amount saved: CFAF 500 (US\$0.85) if monthly savings are below CFAF 16,500 (US\$28) or 3% if savings are above CFAF 16,500.
4. Commissions are split as such: 1.5% for the agent and 1.5% for CEC.

RESULTS ACHIEVED

- Initial expectations exceeded: CEC had planned with MicroLead to set up a digital platform and 25 field agents by the end of 2016—CEC enrolled 80 agents
- Secured funds: Reduced losses due to fraud from CFAF 30 million to CFAF 10 million
- Increased amounts saved over time, providing proof of customer trust
- Improved customer portfolio management with SMS banking
- Time saved for collection agents (more time dedicated to credit transactions)
- Number of transactions: currently evaluating results

Key success factors

- Exchange trips: Trips to Rwanda, Uganda, Ghana and Senegal enabled CEC to discover other solutions while identifying challenges, pitfalls and lessons learned.
- Significant research efforts.
- Institutional support (from the board of directors) and the formation of a project team.
- Institutional capacity-building (by MicroLead), including the digital finance project, and technical assistance received from BASIX and Pamiga.
- Flexibility by CEC: The project was initially conceived in collaboration with MNOs, but MNOs were not interested. The technical solution is thus only based on SIM cards and secure Internet connection.
- Reliable technology solutions and flexible suppliers.
- Availability and stability of electricity in areas of operations.



Client of CEC Cameroon performing transaction with agent
Courtesy of CEC Cameroon

¹⁸ The cost of a POS device equals the price of three smartphones coupled with printers.

¹⁹ Conversion rate: CFAF 1 = US\$0.00169386 (Source: www.xe.com, 17 May 2017). Note: This rate is used throughout this case study when United States dollar equivalents are provided for CFA francs unless otherwise noted.

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Challenges and lessons learned

- CEC started with a decentralized platform in which each branch had its own server and consolidation was done at headquarters. The issue was the lack of real-time transactions, forcing CEC to migrate to a centralized MIS.
- There is an absence of regulation on digital finance for MFIs in Cameroon. The regulator has only allowed FIs to issue e-money. Regulation is needed in order to increase the options for FIs to go digital.
- Limited connectivity in some areas forced CEC to use multiple SIM-card phones to switch from one MNO network to another, depending on connectivity.
- The quality of data connections is low; delays or interruptions of 10–15 minutes slow down collection of savings in the field by mobile agents.
- There was resistance by staff. Some mobile agents, who previously did not declare all the money they collected manually (in other words, agents who were committing fraud), negatively reacted to the introduction of technology. CEC decided to focus on regularly sending savings balances by SMS to customers, improving the control system and authorizing transactions in proportion to the financial guarantee deposited by each agent.
- Regular training of agents (currently, once per semester for field agents) has continuously proved to be fundamental to success.

Next steps

CEC plans include the following:

1. Improvement of agent network
 - Creation of **Agent Supervisor** positions, in charge of improving control of agents in the field (comparison of balances and training of agents and clients), in order to improve agent network management
 - Introduction of fixed agents in rural areas (2017)
 - Reduction in the number of brick-and-mortar branches and increase in the number of mobile and fixed agents
2. Integration of Visa cards
3. Expansion of product and service offer
 - Addition of loan repayment to the service offer in 2017
 - Development of **bill payment** (electricity, water, tuition) service from CEC accounts

KEY FIGURES

- Status: Member cooperative
- Loan portfolio (2015): CFAF 2,900,679,322 (US\$4.9 million)
- Savings portfolio (2016): CFAF 4,196,066,739 (US\$7.1 million)
- Number of borrowers (2015): 33,165
- Number of savers (2015): 51,636
- Portfolio at risk greater than 30 days (2016): 12.51%
- Branches: 10

MyCash cec cameroun

SECURITE, DISPONIBILITE ET FLEXIBILITE POUR VOTRE EPARGNE
SECURITY, AVAILABILITY ET FLEXIBILITY FOR YOUR SAVINGS

NOS AGENTS A VOTRE SERVICE
Ouverture de comptes
Dépôts sur comptes
retraits sur comptes
Transfert d'argent

OUR AGENTS AT YOUR SERVICE
Account Opening
Cash In
Cash Out
Money Transfer

CEC My Cash promotional flyer
Courtesy of CEC Cameroon

233 429 589 mycash@ceccameroun.com

Le bonheur de demain se prépare aujourd'hui

See the following article for further reading on CEC: UNCDF, 'MicroLead supports Digital Financial Services in Cameroon,' 12 December 2016. Available from <http://www.uncdf.org/article/175/microlead-supports-digital-financial-services-in-cameroon>

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Summary

Microcred Senegal began operations in 2007. It is part of Microcred Holding, which operates in 10 countries in Africa and Asia with 877 agencies and points of service. Microcred Senegal is the second largest MFI in Senegal in terms of credit portfolio and third in terms of savings.²⁰

With funding from the International Finance Corporation and The MasterCard Foundation, Microcred Senegal launched an agent/branchless banking pilot in 2014. The model uses a biometric platform and allows clients to make deposits, withdrawals and account-to-account transfers at any of the 520-plus Microcred agent locations simply by using their fingerprints. The pilot started with

24 agents, most of whom were small shop owners and also were already mobile money or over-the-counter agents in order to ensure sufficient liquidity. Participating agents can be recognized by their Baobab-brand signage.

Each of the 38 Microcred branches manages agents (Microcred calls the agents 'correspondents') in its area of operations, visiting agents on a frequent basis. Microcred has implemented a model without e-money: agents perform transactions from their own Microcred bank accounts. In this way, the money flows and stays within the Microcred system. All agents have a Microcred account for the purpose of float management and are therefore known to the MFI. In fact, agents often are Microcred clients who have decided to become Microcred agents.

Since there is no e-money involved in this model, there was no need to receive authorization from BCEAO (Banque Centrale des Etats de l'Afrique de l'Ouest) to pilot this agent model.

By the end of 2016 (two years after launch), agency banking represented 30% of transactions at Microcred Senegal (the rest being performed at branches) and 45% of clients were enrolled for agency banking.

Objectives for the creation of an agent network

Microcred is a traditional MFI that started with physical branches (currently 38 branches in Senegal) and then ran into the limits of the brick-and-mortar model: high costs to open a branch, competitors with larger branch networks (e.g., Crédit Mutuel du Sénégal has more than 210 branches), mostly urban clients, and more focus on credit and not enough on savings.

To expand financial inclusion, Microcred decided to focus on the development of the digital approach and in particular on the use of mobile phones to get closer to customers, especially those located in remote areas.

Microcred chose to create a network of correspondents for these main reasons:

- Increase geographical coverage while limiting costs of new branches
- Increase outreach to rural areas
- Decongest branches



Baobab agent
Courtesy of Microcred Senegal

²⁰ According to the Microfinance Department of Senegal, the ranking in terms of gross loan portfolio is the following: Crédit Mutuel du Sénégal, Microcred and Alliance de Credit et d'Épargne pour la Production. In terms of savings, Microcred is third behind Crédit Mutuel du Sénégal and Pamecas (2015 data).

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To develop its own agent network, named Baobab, Microcred Holding is using a combination of the following:

- Proprietary platform independent of any MNO: An **Android mobile application** runs on tablets, leverages technology (mobile, biometric, SMS, GPS [global positioning system], OCR [optical character recognition]) and focuses on user experience (extremely intuitive user interfaces, operation of application at low bandwidth, save-and-continue-later option). To create its platform, Microcred collaborated with global technology company Software Group. Specifically, the web-based platform was designed and is owned by Microcred and was custom developed by Software Group. Microcred dedicated three full-time designers to the project. A **customer-centric sign-up experience** is intended to create customer value that, beyond a simple customer focus, generates more sustainable business value. Account-opening is a 6-step process that lasts less than five minutes, made possible by the smart use of technology (see the section on account-opening in this case study for more details).
- A **basic account offer**, opened remotely in less than five minutes.²¹

Services offered and channels used

Through its Baobab agent network, Microcred offers clients the following:

- Collection of client information for account creation (account-opening is finalized at headquarters after validation of information collected by agents)
- Deposits
- Cash withdrawals
- Cash transfers
- Loan repayments
- Money transfers from one account to another
- Bill payments
- Automatic loan renewals (for clients with active loans)
- Nano loans (small emergency loans that are disbursed instantly and require a minimum amount of information)²²

All the transactions are conducted through biometric devices and laptops connected to the Microcred system. During the design phase of the model, the research and development team focused on creating specific tablets with fingerprint-reading/specific POS devices. However, Microcred finally opted for the SecuGen Hamster fingerprint reader that can be connected via USB to any computer or Android device (phone, tablet). In fact, the outlay required for the development of specific tablets/devices would not have been appropriate in terms of investment.

Baobab IT platform and main components

Microcred Holding has a single banking software (Temenos). The internal IT platform for Baobab uses cloud services to run, secure and manage all the applications for agents, branch managers and clients. Specific components of the platform are activated based on the country and the status of the user, whether a client or an agent.



In Senegal, Microcred started with a web-browser application, which used fingerprints, and mobile devices (mobile phones, computers). Microcred does not provide its agents with equipment apart from the fingerprint reader. Agents use their own computer and their own Internet connection. The cash register application is installed on their device. Everything runs on a web or Android base; there is no MNO and no USSD involved in the process. The application only works in online mode (no offline).

In addition, the institution developed a tablet application named Baobab Pulse, used for customer acquisition by loan officers. On top of that, an Android application for mobile banking was rolled out to a limited number of customers; it is not fully deployed.

²¹ Louis-Olivier Favot, 'Remote sign up makes opening an account a breeze,' 8 January 2016. Available from <https://medium.com/Microcred-on-a-mission/remote-sign-up-makes-opening-an-account-a-breeze-6a48ea4c1629>

²² Azalea Carisch, 'Une réponse supplémentaire pour les besoins de nos clients : le crédit Taka, un mini-crédit à impact maximal,' 11 January 2017. Available from <https://medium.com/microcred-on-a-mission-fr/une-r%C3%A9ponse-suppl%C3%A9mentaire-pour-les-besoins-de-nos-clients-le-cr%C3%A9dit-taka-un-mini-cr%C3%A9dit-3382a4d3191a>

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Agent network (traditional agents)

Aside from dealing with their own business, 'traditional agents' (called correspondents) guide customers as a host. They learn professional sales techniques to be more efficient. Microcred devotes significant attention 'to treat their agents as partners, investing in their knowledge and equipping them with intuitive applications that empower them.'²³

A few traditional agents are equipped with the tablet application Baobab Pulse for customer acquisition in Madagascar but not in Senegal. **Baobab Pulse** is a mobile application that runs on tablets and was initially used by sales agents (staff dedicated to client acquisition only) to allow for remote opening of a secure bank account. The steps are simple:

- Meet potential customers and take their fingerprints
- Create an electronic contract to open an account, a contract that the customer signs on the tablet

The process takes less than five minutes and 'provides new clients with a positive and promising financial services experience.'²⁴

²³ Microcred, 'Microcred élargit son réseau Baobab,' 11 September 2016. Available from <http://www.Microcredgroup.com/fr/actualites/Microcred-elargit-son-reseau-baobab/c/64-102-484#on>

²⁴ Microcred, 'Microcred remporte l'award de la "meilleure banque de détail africaine,"' 11 April 2016. Available from <http://www.microcredgroup.com/fr/actualites/microcred-remporte-l-award-de-la-meilleure-banque-de-detail-africaine/c/64-102-480>

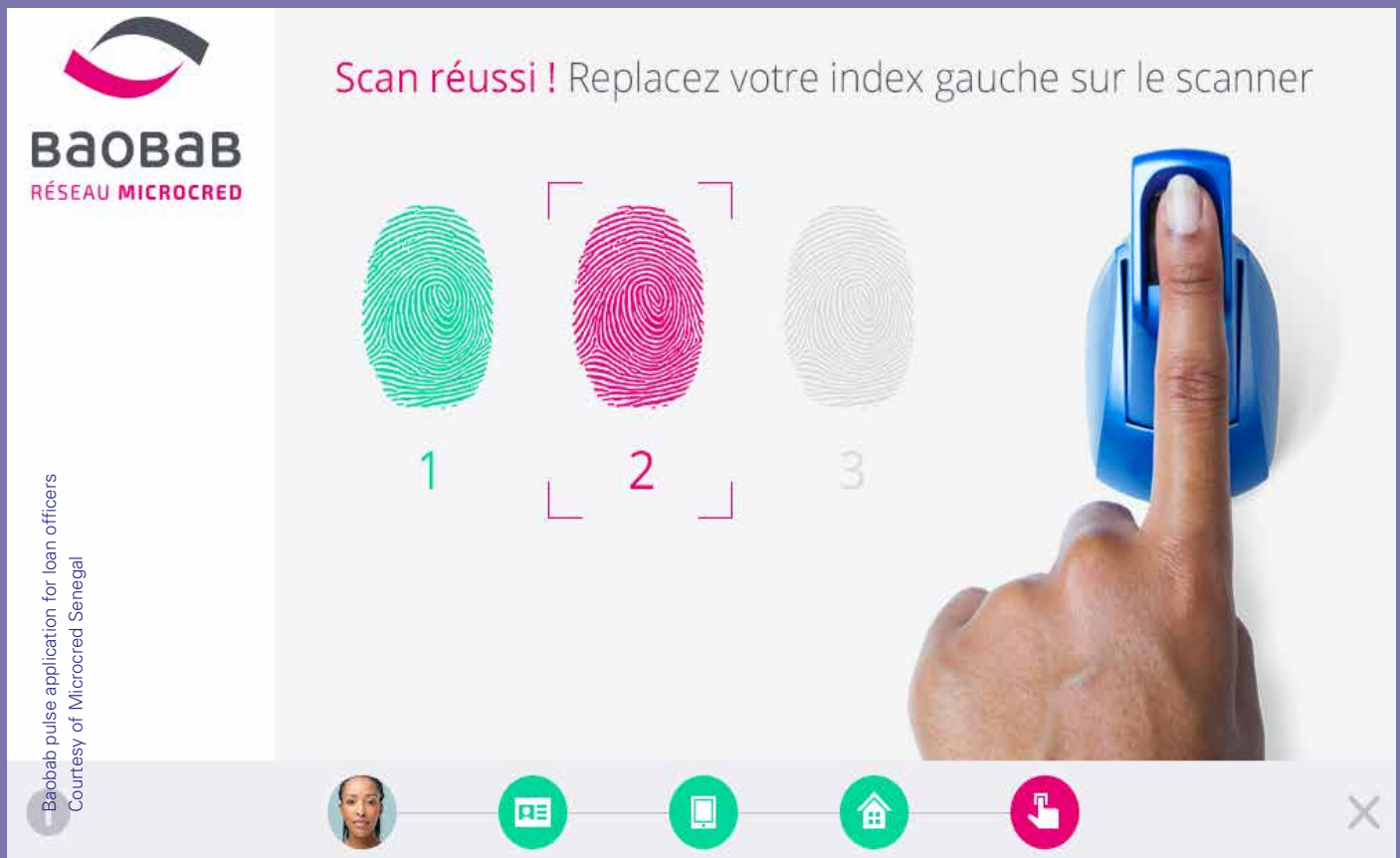
Implementation efforts

Implementing its own agent network required the following:

1. Redefinition of the institution's overall strategy
2. Presentation of the project for suggestions (not approval) to supervisory authorities/regulators and later presentation of pilot results to the same
3. Acquisition of a computer platform to support the new delivery channel
4. Strengthening of the centralized IT department in charge of support
5. Establishment of a new department dedicated to agent network management: definition of procedures, recruitment, training, agent follow-up, etc.
6. Update of risk mapping and audit process/fraud prevention
7. Strengthening of marketing efforts and development of a customer relationship centre
8. Mobilization of resources and experts (consultants, technical assistance from Microcred Holding, etc.) to define new adapted products for the new channel

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A new marketing strategy was also implemented:

- Adoption of a new graphic charter to accompany the change of strategy (refreshed logo, new colours, new name for the corresponding network [Baobab], etc.)
- Establishment of a call centre
- Organization of field campaigns (animation booths with correspondents, caravan, etc.)
- Communication by agents with clients to inform them of the new account and channel

Model in action

Account-opening

The 6-step, 5-minute (or less) account-opening process is made possible by the smart use of technology:

- **Step 1:** Customer takes a selfie with the agent's tablet.
- **Step 2:** Agent takes a photo of the customer's identification card. Through OCR (optical character recognition) technology, identification card information is extracted and automatically populates the customer form fields. This feature avoids manual entries and potential errors.

- **Step 3:** Customer's mobile phone number is confirmed with an OTP (one-time password) sent via SMS, which the agent checks right after it is received on the customer's mobile phone.
- **Step 4:** Customer's fingerprints are captured with a biometric device. The fingerprint scans are extremely important because they allow the client to be identified and to perform transactions with the Microcred agent network.
- **Step 5:** Customer can review account contract policies and approve them by signing electronically with his/her fingerprints.
- **Step 6:** Account is opened in real time after verification from headquarters, and customer receives a congratulatory SMS with his/her account number. To comply with regulations, the balance of the account created is capped and restricted in terms of transaction amounts, depending on the channel to access funds.

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The tablet is available for Microcred mobile agents who are dedicated to opening these accounts. The accounts are immediately active.

Agent network management

All Baobab agents are recruited and monitored by Microcred branches. The Baobab agents are recruited according to several criteria, such as their experience, location, and technical and financial capacities. They sign an automatically renewable contract with Microcred for a period of one year and open a Microcred account. Each agent receives marketing materials for their shop and a biometric device. Then the agent receives training to use the Baobab platform.

To date, Microcred Holding has more than 500 agents and 30 people dedicated to agent network management (both Agent Supervisors and Area Managers). Agent Supervisors are focused solely on the recruitment, training, technical assistance and support of their agents. They are attached to a Microcred branch, and their number varies depending on the type of branch and the type of agents. There are currently 25 Agent Supervisors. At the regional level, five Area Managers supervise and support the Agent Supervisors. Their role is to ensure that all the rules and processes are well followed throughout the network. Moreover, a call centre is available for all agents in case they cannot reach their Supervisors/Managers.

Float and liquidity management

From their own computer, each agent has access to a secure platform to perform all transactions. Since it is his/her own Microcred bank account and his/her own money, the agent manages float on his/her own, performing transactions from his/her account to client accounts. Agents have no information on the transaction flow or volume to expect.

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Results achieved and cost/benefit analysis

Agency banking was quickly adopted by Microcred customers. Yet, after two to three years, it reached a threshold and Microcred felt the need to add new products to the new channel (it started only with deposits and withdrawals).

A partnership with The MasterCard Foundation allowed Microcred to develop new digital products including bill payments, automatic loan renewals, nano loans, 'account to cash' and 'pay as you go' for solar lamps. These Baobab products increased the monthly number of transactions per agent and thereby improved the viability of the network.

CapEx

The main investment costs at the start related to IT, human resources and technical assistance. Microcred received US\$12 million from The MasterCard Foundation for three of its subsidiaries to implement digital finance.

Table 13 lists the investments Microcred Holding has made in terms of CapEx for agency banking in Senegal. So far, Microcred Holding has launched agency banking with its subsidiaries in Senegal and Madagascar, so its investment is benefiting these countries for the time being. However, the hope is that these investments can be leveraged for the other eight subsidiaries of Microcred in Africa and Asia to achieve lower costs.

Table 13: CapEx costs for Microcred Senegal

ITEM	2014	2015	2016	2017
Channel development, incl. technology (CFAF)	293 811 668 (US\$596 438)	876 793 451 (US\$1 481 781)	696 888 717 (US\$1 177 742)	661 204 656 (US\$1 077 764)
Product development, incl. technology (CFAF)	349 775 951 (US\$710 045)	1 043 801 416 (US\$1 764 024)	829 629 487 (US\$1 402 074)	787 148 400 (US\$1 283 052)
Institution transformation and training (CFAF)	617 937 076 (US\$1 254 412)	1 844 049 933 (US\$3 116 444)	1 465 678 848 (US\$2 476 997)	1 267 709 058 (US\$2 066 366)
Customer service development (CFAF)	784 889 940 (US\$1 593 327)	2 342 271 577 (US\$3 958 439)	1 961 502 969 (US\$3 314 940)	1 978 132 791 (US\$3 224 356)
Programme management, evaluation and monitoring (CFAF)	233 183 530 (US\$473 363)	433 485 248 (US\$732 590)	290 703 743 (US\$491 289)	344 377 425 (US\$561 335)
TOTAL (CFAF)	2 279 598 165 (US\$4 627 584)	6 802 784 424 (US\$11 496 706)	5 506 786 565 (US\$9 306 469)	5 382 949 755 (US\$8 774 208)

Conversion rates: CapEx amounts were originally provided in Euros, which were converted to CFA francs using the fixed conversion rate of 1 = CFAF 655.957 for 2014–2017 (Source: www.xe.com). Once converted to CFA francs, United States dollar equivalents were provided using the average conversion rate for each relevant year: CFAF 1 = US\$0.00203 for 2014, CFAF 1 = US\$0.00169 for 2015 and 2016, and CFAF 1 = US\$0.00163 for 2017 (Source: www.oanda.com).

OpEx

Annual recurring costs (marketing, human resources, agent commissions) amounted to the following:

- 2014: CFAF 1.3 billion (US\$2.2 million)
- 2015: CFAF 1.0 billion (US\$1.7 million)

Commissions to agents represent 25% of recurring costs. To make the value proposition attractive to agents in a competitive market like Senegal, where there are many over-the-counter services, Microcred decided to pay generous commissions to agents.

Revenues

Revenues for Microcred come from fees that clients have to pay on transactions performed through agents. Cash-in and cash-out were initially subsidized by Microcred to entice clients to adopt the system; however, to achieve profitability and sustainability, Microcred changed its policy in 2016 and now charges customers. The amount was based on cost of transportation and estimated time that customers spent to previously visit a branch instead of an agent to perform a transaction. This change initially resulted in a drop in the number of customers.

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Breakeven

Microcred Senegal has not yet reached breakeven. The investment was made by Microcred Holding as a whole, considering that it would benefit other subsidiaries in the mid- to long-term.

Key success factors

The following factors were identified as contributors to the success of Microcred Senegal in developing its own agent network:

1. Strong existing MFI with resources to handle the change

- Microcred Senegal had a strong market presence and brand image prior to starting the agent network.
- Microcred Senegal had strong operations, skilled staff and mastery of the microfinance business prior to starting the agent network.
- As the Head of the Project Management Office at Microcred said, 'We had a strong & robust MFI on all aspects, reaching a market threshold, and needed the agent network to grow further. It could not have been possible if we had faced any operational/financial/risk problem. Significant change in operations cannot be made if the institution is weak because it can ruin the trust of customers and the institution'.²⁵

2. Strong support from Microcred Holding and internalization of capabilities

- Microcred Senegal benefited from support by Microcred Holding and teams at the Holding level. For example, the internal team for innovation and technology grew from 4 to 80+ staff in five years.
- Microcred Senegal benefited from centralized competencies (i.e., IT, IT platform, information system). At Microcred, anything designed/piloted locally in a subsidiary benefits the whole group and is to be replicated in all subsidiaries.

3. Dedicated risk management team as well as strong internal control processes and audit

Microcred also had the opportunity to benefit from a partnership with The MasterCard Foundation and funding from the International Finance Corporation, which facilitated implementation of this business model.

Challenges and lessons learned

Building and running the agent network was not the most difficult task for Microcred as it relied on an existing network of branches to supervise agents. However, there were a few obstacles that Microcred had to overcome:

- **Building and adapting a sustainable business model:** In the words of a Microcred official, 'You cannot and you must not launch a network of correspondents without real business value for both the institution and the agents. In fact, wishing to decongest branches is not enough'.²⁶
- **Timing:** Microcred took too much time between (a) the launch of the agent network with a value proposition for customer acquisition and (b) the launch of a product and service offering that generated increased traffic and repeated usage/engagement (to make the ecosystem dynamic, attractive and financially viable).
- **Staying focused on its core business:** In Senegal, competition is stiff for bill payments and cash transfers (there are already many successful players involved, including Wari that is the clear market leader). The differentiating value added by Microcred is credit expertise. The institution is currently working on the development of an automated nano-loan offer to create a competitive advantage, leveraging its core strengths.

Next steps

Microcred Senegal is not the only Microcred subsidiary that developed its own agent network: Microcred Madagascar also developed a network of correspondents, mostly for loan repayments. Agents are not in charge of savings mobilization. The model is currently experiencing challenges as a new regulation now prevents banks from managing their own agents. In addition, Microcred is about to launch agency banking in Côte d'Ivoire.

Apart from the geographical expansion of its agency banking model to other subsidiaries, Microcred plans to do the following:

1. Continue to automate processes to reduce costs and especially to reduce processing times in order to improve customer satisfaction:
 - Customer acquisition with Pulse application
 - Electronic credit file dematerialization
 - Mobile tracking application
 - Automated credit scoring, which is already available for nano loans and loan renewals

²⁵ Yoann Guirimand, Head of Project Management Office, Microcred Holding, personal communication with author, 10 May 2017.

²⁶ Ibid.

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The first three elements involve continuous improvement and therefore imply strong research and development.

2. Focus on the development of products and services with 'differentiating' value for Microcred
 - No priority on payments and transfers in a market that is already extremely competitive like Senegal
 - Further development of the offer of (automated) credit and savings, which are Microcred strengths, particularly automated credit scoring with third-party partners (websites, data aggregators, etc.), new credit offers, and specific savings (group, rural) by taking advantage of scoring technology
3. Expand the network in Senegal, especially via dedicated correspondents, and deploy it in the other Microcred Holding countries

Key figures on Microcred Senegal (April 2017)²⁷

- Date of launch: September 2007
- Gross loan portfolio: CFAF 62 billion (US\$105 million)²⁸
- Deposits: CFAF 39 billion (US\$66 million)
- Number of clients: 230,834
- Number of active loans: 49,216
- Number of branches and outlets: 40
- Number of agents: 520+
- Number of employees (year-end): 667

Results achieved through technology in Senegal (2016)²⁹

- Number of customers (year-end): 215,459
- Number of loan disbursements (monthly average): 57,681
- Volume of active loans (monthly average): CFAF 79 billion (US\$134 million)
- Number of loan defaults (write-off): 1,239
- Average portfolio at risk ratio (portfolio at risk greater than 30 days/outstanding portfolio): 1.07%
- Number of agents (year-end): 540
- Number of Baobab accounts opened in the field through Pulse (year-end): 14,721

- Percentage of transactions cash-in, remaining is cash-out (monthly average): 71%
- Percentage of transactions at agents, remaining is at branches (monthly average): 29%
- Percentage of Microcred clients enrolled for agency banking: 45%
- Number of deposit accounts (year-end): 307,982
- Volume of savings (year-end): CFAF 30 billion (US\$51 million)

Sources

- ☞ Carisch, Azalea. Une réponse supplémentaire pour les besoins de nos clients : le crédit Taka, un mini-crédit à impact maximal, 11 January 2017. Available from <https://medium.com/Microcred-on-a-mission-fr/une-r%C3%A9ponse-suppl%C3%A9mentaire-pour-les-besoins-de-nos-clients-le-cr%C3%A9dit-taka-un-mini-cr%C3%A9dit-3382a4d3191a>
- ☞ ——.Microcred is Supercharging its Loan Officers (and Productivity) with the Baobab Portfolio app, 22 December 2016. Available from <https://www.linkedin.com/pulse/microcred-supercharging-its-loan-officers-baobab-app-azalea-carisch>
- ☞ Carisch, Azalea with Louis Bidou. Microcred stimule ses gestionnaires de portefeuille (et sa productivité) avec l'appli Baobab Portefeuille, 21 December 2016. Available from <https://medium.com/Microcred-on-a-mission-fr/Microcred-stimule-ses-gestionnaires-de-portefeuille-et-sa-productiv%C3%A9-avec-lappli-baobab-89d1ec847f03>
- ☞ Favot, Louis-Olivier. Remote sign up makes opening an account a breeze, 8 January 2016. Available from <https://medium.com/Microcred-on-a-mission/remot-sign-up-makes-opening-an-account-a-breeze-6a48ea4c1629>
- ☞ Microcred. Microcred élargit son réseau Baobab, 11 September 2016. Available from <http://www.microcredgroup.com/fr/actualites/microcred-elargit-son-reseau-baobab/c/64-102-484#on>
- ☞ ——.Microcred mise sur la technologie pour assurer l'excellence de ses services, 25 March 2016. Available from <http://www.microcredgroup.com/fr/actualites/Microcred-mise-sur-la-technologie-pour-assurer-l-excellence-de-ses-services/c/64-102-387#on>
- ☞ ——.Microcred remporte l'award de la «meilleure banque de détail africaine», 11 April 2016. Available from <http://www.microcredgroup.com/fr/actualites/microcred-remporte-l-award-de-la-meilleure-banque-de-detail-africaine/c/64-102-480>
- ☞ ——.Ouverture d'un compte Baobab sur le terrain, 10 June 2016. Available from <http://www.microcredgroup.com/fr/actualites/ouverture-d-un-compte-baobab-sur-le-terrain/c/64-102-416#on>

²⁷ Ibid.

²⁸ Conversion rate: CFAF 1 = US\$0.00169 (Source: www.oanda.com, average rate for 2016). Note: This same rate was used for the following bullets regarding key figures and results: Deposits, Volume of active loans and Volume of savings.

²⁹ Data provided by Microcred

ANNEX I: MALAWIAN CONTEXT

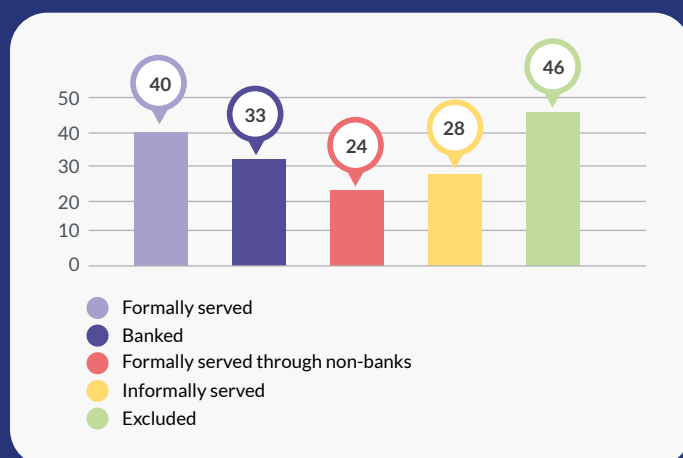
— 46

Financial inclusion

According to a 2014 FinScope customer survey,³⁰ financial inclusion in Malawi is low, with almost one out of two people not using any financial product/service to manage their financial life. Yet, the situation is slowly improving, with 54% of people now having access to some sort of financial service (compared to 45% in 2008), including 40% formally served.³¹ People tend to use a combination of services (banking services, informal services like burial societies, other formal [non-bank] services) to meet their financial needs (see figure I.I).

These financial services are provided by a wide range of FIs: banks, regulated under the Banking Act (1989) and supervised by RBM; non-bank MFIs, under several legal forms and ownership structures; member-owned or member-based organizations, such as financial co-operatives or savings and credit cooperatives; and, informal financial service providers, including individual moneylenders (e.g., *Katapila*).

Figure I.I: Financial inclusion countrywide, 2014 (% of those aged 18+)



Source: FinScope Malawi, 'FinScope Consumer Survey 2014' (Johannesburg, FinMark Trust, 2014).

Telecom sector

Mobile phone access is at 56%, although only 36% of the population owns a mobile phone³² (see figure I.II for more on MNOs in the country). There is an urban-rural bias in mobile phone ownership with 71% of those living in a city owning a mobile, compared to only 29% of those living in a rural area, while almost 40% of Malawians have multiple SIM cards.³³

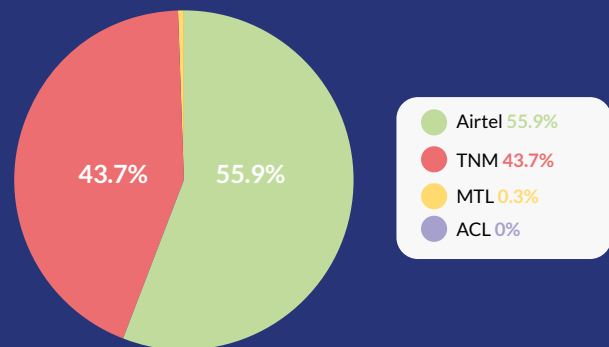
30 FinScope Malawi, 'FinScope Consumer Survey 2014' (Johannesburg, FinMark Trust, 2014).

31 Ibid.

32 Malawi, National Statistical Office/Malawi Communications Regulatory Authority, *Survey on Access and Usage of ICT Services in Malawi* (Kampala, 2014).

33 Ibid.

Figure I.II: Market share of mobile network operators, 2015 (% of subscribers)



Acronyms: ACL, Access Communications Limited; MTL, Malawi Telecommunications Limited; TNM, Telekom Networks Malawi

Source: Malawi, National Statistical Office/Malawi Communications Regulatory Authority, *Survey on Access and Usage of ICT Services in Malawi* (Kampala, 2014).

Digital financial service initiatives

Mobile money in Malawi was launched in early 2012. Both the mobile money market and the regulatory environment for that market have rapidly undergone considerable development.³⁴ Six MNOs are involved in mobile money (see figure I.III), although the market is largely dominated by Airtel Money and Telekom Networks Malawi Mpamba.

About 20% of the population is aware of mobile money,³⁵ but just under 8% actually use it.³⁶ Digital financial service opportunities in Malawi include government-to-person payments and merchant payments via mobile money and debit card at POS.

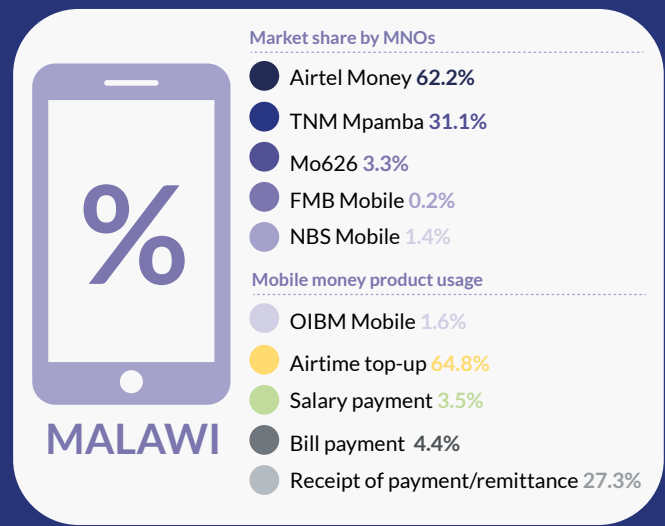
34 Jonathan Greenacre, Louise Malady and Ross Buckley, *The Regulation of Mobile Money in Malawi: Project Report* (n.p., UNCDF, March 2014).

35 FinScope Malawi, 'FinScope Consumer Survey 2014.'

36 Malawi, National Statistical Office/Malawi Communications Regulatory Authority, *Survey on Access and Usage of ICT Services in Malawi*.

ANNEX I: MALAWIAN CONTEXT (CONTINUED)

Figure I.III: Mobile network operators and mobile money product usage



Acronyms: FMB, First Merchant Bank; OIBM, Opportunity International Bank Malawi; TNM, Telekom Networks Malawi

Source: Malawi, National Statistical Office/Malawi Communications Regulatory Authority, *Survey on Access and Usage of ICT Services in Malawi*, pp. 12 and 14 (Kampala, 2014).

Regulation of mobile financial services

E-Money Regulations (2014) replaced the existing Guidelines for Mobile Payment Systems (2011). These regulations govern all digital payment operations, including requirements for entities involved in the issuing and storing of funds and operating the payment systems for transferring e-money.

As per regulation, no agent exclusivity is permitted. However, in medium and small trading centres and villages, it is difficult to find many enterprises with sufficient liquidity to become agents. In this scenario, MNOs and banks must target the same one or two enterprises as their agent(s).

ABOUT MICROLEAD

MicroLead, a UNCDF global initiative which challenges financial service providers to develop, pilot and scale deposit services for low income, rural populations, particularly women, was initiated in 2008 with support from the Bill & Melinda Gates Foundation and expanded in 2011 with support from The MasterCard Foundation and LIFT Myanmar. It contributes to the UN's Sustainable Development Goals, particularly SDG 1 (end poverty), SDG 2 (end hunger, achieve food security and promote sustainable agriculture) and SDG 5 (achieve gender equality and economic empowerment of women), as well as the Addis-Abeba Financing for Development Agenda (domestic resource mobilization).

MicroLead works with a variety of FSPs and Technical Service Providers (TSPs) to reach into previously untapped rural markets with demand-driven, responsibly priced products offered via alternative delivery channels such as rural agents, mobile phones, roving agents, point of sales devices and informal group linkages. The products are offered in conjunction with financial education so that customers not only have access but actually use quality services.

With a specific emphasis on savings, women, rural markets, and technology, MicroLead is a performance-based programme that supports partnerships which build the capacity of financial institutions to pilot and roll out sustainable financial services, particularly savings. As UNCDF rolls out the next phase of MicroLead, it will continue to focus on facilitating innovative partnerships that encourage FSPs to reach into rural remote populations, build on existing digital financial infrastructure and emphasize customer-centric product design.

For more information, please visit www.uncdf.org/microlead. Follow UNCDF MicroLead on Twitter at @UNCDFMicroLead.

ABOUT PHB ACADEMY

PHB Academy provides training and coaching aimed at improving financial inclusion. We focus on increasing the take-up and usage of digital financial services (DFS). PHB Academy offers training and coaching face-to-face and online, as well as in blended format (a mix of face-to-face and e-learning). Workshops and programmes can be custom-designed and tailored to our clients' specific needs. The design of our programmes is based on the latest insights in adult learning and executive coaching. We change behaviour by doing more than just transferring technical knowledge. We focus on the development of the practical skills and positive attitudes that managers and field staff need to design, manage and deliver DFS in a sustainable manner. Experiential learning methods and a focus on self-management are key to our success. Our offer is available to financial institutions, mobile network operators, remittances & payment providers and development agencies that pursue financial inclusion through innovative delivery channels.

PHB Academy is the Training & Development Practice of PHB Development, a specialist consulting firm with operations across the world. Since 2006, PHB Development has been committed to increasing financial inclusion in underserved markets. PHB has helped its clients develop viable financial services and delivery channels throughout more than 100 projects.

For more information, please visit <http://phbdevelopment.com/>. Follow PHB at @PHBDevelopment on Twitter.

ABOUT UNCDF

UNCDF is the UN's capital investment agency for the world's 48 least developed countries. With its capital mandate and instruments, UNCDF offers "last mile" finance models that unlock public and private resources, especially at the domestic level, to reduce poverty and support local economic development. UNCDF's financing models work through two channels: financial inclusion that expands the opportunities for individuals, households, and small businesses to participate in the local economy, providing them with the tools they need to climb out of poverty and manage their financial lives; and by showing how localized investments — through fiscal decentralization, innovative municipal finance, and structured project finance — can drive public and private funding that underpins local economic expansion and sustainable development. By strengthening how finance works for poor people at the household, small enterprise, and local infrastructure levels, UNCDF contributes to SDG1 on eradicating poverty and SDG 17 on the means of implementation. By identifying those market segments where innovative financing models can have transformational impact in helping to reach the last mile and address exclusion and inequalities of access, UNCDF contributes to a number of different SDGs.

For more information, please visit www.uncdf.org and sign up for our Newsletter at <http://uncdf.org/en/content/subscribe-our-newsletter>. Follow UNCDF at @UNCDF on Twitter and Facebook.

ABOUT THE MASTERCARD FOUNDATION

The MasterCard Foundation works with visionary organizations to provide greater access to education, skills training and financial services for people living in poverty, primarily in Africa. As one of the largest private foundations its work is guided by its mission to advance learning and promote financial inclusion to create an inclusive and equitable world. Based in Toronto, Canada, its independence was established by MasterCard when the Foundation was created in 2006.

For more information and to sign up for the Foundation's newsletter, please visit www.mastercardfdn.org. Follow the Foundation at @MastercardFdn on Twitter.



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