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

TOOLKIT #3: LEVERAGE AN EXISTING AGENT NETWORK
PART 1: BUSINESS MODEL DESCRIPTION

By PHB ACADEMY and MICROLEAD



Woman agent in Madagascar
Courtesy of PHB Development

The MasterCard Foundation
PHB Academy towards financial inclusion
UNCDF MICROLEAD

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LIST OF ACRONYMS

API	application programming interface
CAPEX	capital expenditure
CBS	core banking system
CICO	cash-in/cash-out
DFS	digital financial service(s)
DFSP	digital financial service provider
DYA	Diamond Y'ello Account
EDGE	Enhanced Data Rates for GSM Evolution
ETIFT	Ethiopian Inclusive Finance Technology
FI	financial institution
FSP	financial service provider
FTP	file transfer protocol
GPRS	general packet radio services
GSM	Global System (or Standard) for Mobile
HR	human resource(s)
ID	identification
IFC	International Finance Corporation
IT	information technology
KPI	key performance indicator
KYC	know your customer
MFI	microfinance institution
MIS	management information system
MM	mobile money
MNO	mobile network operator
MTN	Mobile Telephone Networks
OPEX	operational expenditure
OTC	over the counter
PC	personal computer
PIN	personal identification number
POS	point of sale
PSP	payment service provider
SMS	short message service
SOFIPE	Société de Financement de la Petite Entreprise
SLA	service level agreement
STK	SIM application toolkit
URL	uniform (or universal) resource locator
USSD	unstructured supplementary service data
VPN	virtual private network

DEFINITIONS

CONCEPTS	DEFINITIONS
AGENCY BANKING	Refers to when clients can transact on their mobile wallet and financial institution account either directly themselves or through assistance from a third party (e.g., agent). Note that deposits (cash-in) and withdrawals (cash-out) require an agent as intermediary. In Toolkits #3 and #4, the type of transactions and the interactions between the mobile money and the bank account are detailed.
ALTERNATIVE DELIVERY CHANNELS (ADCs)	Comprise new distribution channels that have developed over the past 10–15 years: Internet banking services, mobile banking services, agency banking services (as opposed to traditional distribution channels such as brick-and-mortar and automated teller machines).
DIGITAL FINANCIAL SERVICES (DFS)	Refer to financial services provided to clients through alternative distribution channels (e.g., mobile, Internet, agent) that have developed over the past 10–15 years.
DIGITAL FINANCIAL SERVICE PROVIDERS (DFSPs)	Can either be financial institutions or non-bank financial institutions, such as payment service providers, mobile network operators, etc. They offer a broad range of financial services that may be accessed through digital channels and/or over the counter. Usually they recruit their own agent network.
FINANCIAL SERVICE PROVIDERS (FSPs)	Comprise banks, mobile network operators and financial institutions that provide financial services to clients.
MOBILE AS A SERVICE	Refers to financial transactions performed using mobile technologies (e.g., mobile phone, tablet) that impact the account of the financial service provider.
MOBILE FINANCIAL SERVICES (MFS)	Refer to financial services provided to clients through mobile phones and mobile devices (e.g., tablet). The term is gradually being replaced with digital financial services, which is a broader term that also covers other distribution channels.
MOBILE BANKING	Comprises financial transactions performed via mobile technologies by the client him/herself, directly on the client's financial institution account (e.g., account balance check, loan reimbursement). Note that deposits (cash-in) and withdrawals (cash-out) still require an agent as intermediary. In Toolkits #5 and #6, the type of transactions and the interactions between the mobile money and the bank account are detailed.
MOBILE NETWORK OPERATORS (MNOs)	Refer to companies that have a government-issued licence to provide telecommunications services through mobile devices. Mobile penetration rate is measured by the number of SIMs in circulation as a percentage of the total national population.[a]
NON-BANK FINANCIAL INSTITUTIONS (NBFIs)	Comprise microfinance institutions, savings and credit co-operatives and microfinance banks, as opposed to mobile network operators and traditional banks, that provide financial services to clients

CONCEPTS	DEFINITIONS
AGENT	Refers to 'any third party acting on behalf of a bank, mobile network operator or other financial service provider to deal directly with customers.'[a]
CASH-IN/CASH-OUT (CICO)	'Cash-in is the exchange of cash for electronic value (e-money); cash-out is the exchange of electronic value (e-money) for cash.'[a]
ELECTRONIC MONEY (E-MONEY)	Is 'a monetary value represented by a claim on the issuer that is stored in electronic form, including magnetic; issued immediately against delivery of funds of an amount not less than the monetary value issued; and accepted as means of payment by persons or entities other than the issuing institution.'[a]
E-MONEY ISSUERS	Comprise 'banks, financial institutions specialized in payments (or payment institutions), authorized microfinance institutions and other authorized non-financial institutions, which have been authorized by BCEAO [Banque Centrale des Etats de l'Afrique de l'Ouest] as EMEs [e-money establishments]..'[a]
ELECTRONIC WALLETS (E-WALLETs)	Comprise 'electronic accounts that clients can manipulate directly to send payments to other wallets or merchants.'[a]
FLOAT	Is 'the balance of e-money, or physical cash, or money in a bank account that an agent can immediately access to meet customer demands to purchase (cash-in) or sell (cash-out) electronic money.'[a]
KNOW YOUR CUSTOMER (KYC)	Comprises 'a set of due diligence measures undertaken by a financial institution, including policies and procedures, to identify a customer and the motivations behind his/her financial activities. KYC is a key component of anti-money laundering/combating the financing of terrorism efforts.'[a]
OVER-THE-COUNTER (OTC) TRANSACTIONS	'Occur when clients hand cash to or receive cash from agents, who execute transfers electronically on behalf of senders and receivers. In such transactions, clients do not need to have their own e-wallets.'[a]

DEFINITIONS

CONCEPTS	DEFINITIONS
CORE BANKING SYSTEM (CBS)	Is the back-end data processing application/ software for processing all transactions that have occurred during the day and posting updated data on account balances.[b]
ENHANCED DATA RATES FOR GSM EVOLUTION (EDGE)	Is a technology that can provide up to three times the data capacity of general packet radio services. 'EDGE enables the delivery of more demanding mobile services, such as … multimedia messaging, full web browsing and e-mail on the move.'[c]
GENERAL PACKET RADIO SERVICES (GPRS)	Is a broadly deployed wireless data service, which 'enables people to enjoy advanced, feature-rich data services, such as e-mail on the move, multimedia messages, social networking and location-based services.'[d] The data system charges based on volume of data transferred, instead of billing per minute of connection time.
MANAGEMENT INFORMATION SYSTEM (MIS)	Is the entire back-office system, including portfolio management and reporting. It is broader than a core banking system, which is for capturing and processing data. As described by the World Bank, it is a system that helps management make, carry out and control decisions. They 'capture and store data, process data to produce meaningful and relevant reports, and support operations by enforcing defined processes and providing an audit trail.'[e]
MOBILE POINT OF SALE (mPOS)	'Is a smartphone, tablet or dedicated wireless device that performs the functions of a cash register or electronic point of sale terminal.'[f]
POINT OF SALE (POS)	Is a device that interfaces with payment cards to make electronic fund transfers. It is also known as a payment terminal, POS terminal, credit card terminal, or electronic fund transfer at POS terminal.
UNSTRUCTURED SUPPLEMENTARY SERVICE DATA (USSD)	Is a communications service controlled by mobile network operators. It is accessed from any mobile phone by dialling a number that starts with * and ends with #. It opens a session enabling the user to perform transactions such as mobile payments.
VALUE ADDED SERVICE (VAS)	Is 'a popular telecommunications industry term for non-core services of mobile network operators.'[a]

CONCEPTS	DEFINITIONS
VIRTUAL PRIVATE NETWORK (VPN)	Is a network that is constructed using public wires—usually the Internet—to connect to a private network, such as a company's internal network. There are a number of systems that enable the creation of networks using the Internet as the medium for transporting data.
WIDE AREA NETWORK (WAN)	Is a telecommunications network or computer network that extends over a large geographical distance. The Internet is an example of a WAN.

a Raksha Vasudevan with others, 'Market System Assessment of Digital Financial Services in WAEMU,' CGAP Working Paper, pp. xxi–xxiii (Washington DC, CGAP, 2016). Available from http://www.cgap.org/publications/market-system-assessment-digital-financial-services-waemu

b Gartner, 'IT Glossary: Core Banking System.' Available from http://www.gartner.com/it-glossary/core-banking-systems/ (accessed April 2017).

c GSMA, 'EDGE.' Available from http://www.gsma.com/aboutus/gsm-technology/edge (accessed April 2017).

d GSMA, 'GPRS.' Available from http://www.gsma.com/aboutus/gsm-technology/gprs (accessed April 2017).

e Lauren Braniff and Xavier Faz, *Information Systems: A Practical Guide to Implementing Microfinance Information Systems*, p. 2 (Washington DC, CGAP/The World Bank, January 2012).

f Margaret Rouse, 'Definition: mPOS.' Available from http://searchcio.techtarget.com/definition/mPOS-mobile-point-of-sale (accessed April 2017).



Male agent in Madagascar
Courtesy of PHB Development

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INTRODUCTION: OVERVIEW OF THE TOOLKIT PROJECT

Delivery channels have evolved drastically over the past 10 years from traditional delivery channels that were mainly physical locations, such as bank branches or automated teller machines, towards alternative delivery channels, also often called digital channels. The latter encompass Internet banking, mobile banking and agent banking.

In the past, traditional channels could theoretically provide the full range of financial services to clients, whereas alternative delivery channels/digital channels could only provide limited services (cash-in/out in the case of mobile network operators, deposits/withdrawals in the case of financial institutions), balance enquiries, payments and transfers. This vision is less and less accurate as alternative delivery channels/digital channels evolve towards providing a full range of services, from client registration to savings collection through collectors or phones, and even credit scoring and loan requests, disbursements and repayments. Technology is facilitating the development of these new channels. Point of sale devices, mobile phones, tablets and netbooks are now enabling transactions anywhere, anytime. The technology is the means for transactions, whereas alternative delivery channels are the means of distribution. As pointed out in the 2015 International Finance Corporation *Handbook: Alternative Delivery Channels and Technology*, this distinction (technology versus channels) is fundamental.

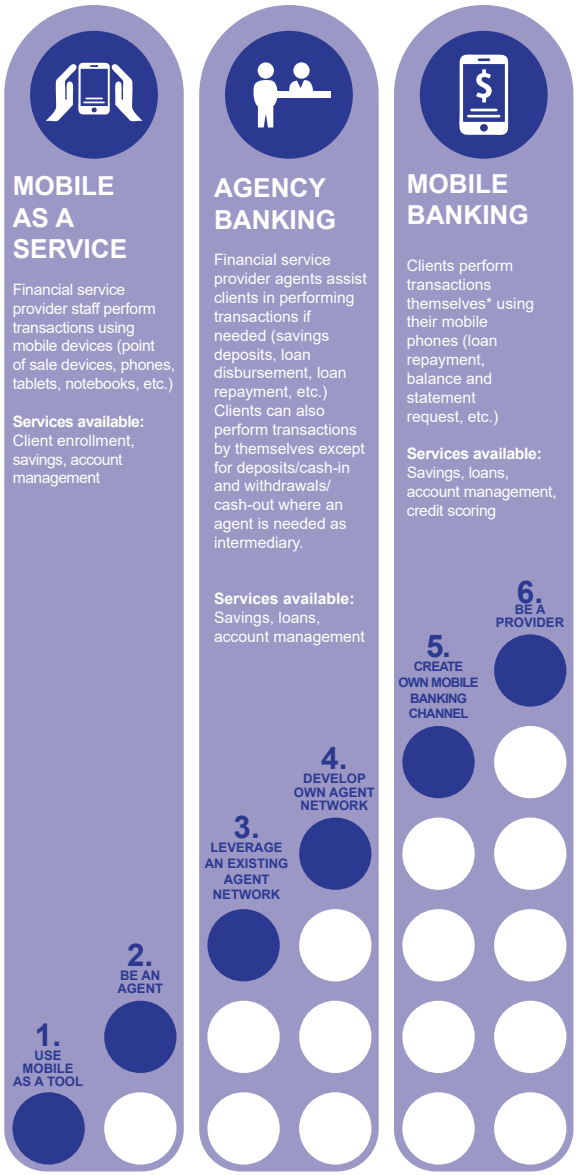
Another fundamental distinction is the critical difference between financial institutions and mobile network operators when it comes to digital finance transactions. Financial institutions 'own' the funds and hence prefer storing value (making money out of intermediation), while mobile network operators 'transact' the funds and hence prefer moving value (making money out of commissions). For the purpose of these toolkits, the authors refer to cash-in/out transactions when discussing mobile network operators and deposit/withdrawal transactions when discussing financial institutions.

MicroLead toolkit project

PHB Academy is supporting MicroLead, a United Nations Capital Development Fund global initiative, in releasing a series of toolkits designed for financial service providers to succeed on their digital journey, with a focus on financial institutions in particular. These toolkits capitalize on and complement existing research, publications and documentation and have been developed based on the experience of MicroLead and PHB with over 100 digital financial service implementations.

Six-step business framework

Six possible business models have been defined for financial service providers eager to go digital (see the figure). The business models are conceived as different steps financial service providers can take on their digital journey. Financial service providers are free to start anywhere in this framework but should be conscious that, the higher up they decide to start in the journey, the greater the efforts to bear.



* Except for cash-in and cash-out transactions performed at agents

The first two business models of this framework consist of using mobile as a service, where basic transactions are performed by staff of the financial service provider using mobile devices. They are described in 'Toolkit #1: Use mobile as a tool' and '#2: Be an agent.' Models 3 and 4 describe agency banking, where agents (of a mobile network operator, payment service provider or financial institution) assist clients with the transactions if needed. Clients can also perform transactions by themselves except for cash-in/out where an agent is needed as intermediary. They are described in 'Toolkit #3: Leverage an existing agent network' and '#4: Develop own agent network.' Models 5 and 6 describe mobile banking, where clients transact directly on their financial institution account, performing the operations themselves using their mobile phones. They are described in 'Toolkit #5: Create own mobile banking channel' and '#6: Be a provider.'



Transactions performed by clients
Courtesy of PHB Development

OVERVIEW OF TOOLKIT 3

This toolkit is the **third** in a series of six toolkits aimed at supporting financial institutions (FIs) to go digital.

It describes the third model that an FI can choose: **to leverage an existing agent network.**

- The FI forms a partnership with a digital financial service provider (DFSP),[1] **providing its own products/services through the DFSP network of agents**.
- Unlike the previous model (to be an agent) in which the products were those of the DFSP and the distribution channel that of the FI, here the products are those of the FI and the channel that of the DFSP.
- This model falls under the agency banking model in which customers can push/pull money from their FI account to their mobile money (MM) account and/or complete over-the-counter (OTC) transactions. OTC transactions are performed with the assistance of an agent.

This toolkit is composed of two main documents:

- This document, 'Part 1: Business model description,' describes the business model and recipe for success. Three international cases—MOSS ICT in Ethiopia, Diamond Bank in Nigeria and Advans in Côte d'Ivoire—illustrate how a payment service provider (PSP) such as MOSS ICT can be a good partner for microfinance institutions (MFIs) in order to successfully offer digital financial services (DFS) to their customers via an agent network. The cases of Advans in Côte d'Ivoire, a greenfield MFI, and Diamond Bank in Nigeria, a microfinance bank, illustrate how to leverage an existing agent network of a mobile network operator (MNO)—in both cases, Mobile Telephone Networks (MTN)—to rapidly expand.
- The document 'Part 2: Case studies' presents the digital journey of UGAFODE Microfinance Limited (hereafter, UGAFODE) in Uganda, a MicroLead partner, that developed a partnership with two of the most prominent MNOs in the country: Airtel and MTN. The partnerships allow UGAFODE to leverage the platform and the agent network of the MNOs to deliver its own products and services. This document also features the case of Société de Financement de la Petite Entreprise (SOFIPE) in Burkina Faso, a MicroLead partner, that just started a partnership with Airtel to leverage the Airtel agent network, after a year and a half of SOFIPE operating as an agent for Airtel Money. Finally, it highlights the case of FINCA Tanzania, which successfully leveraged agents from the three most prominent MNOs in the United Republic of Tanzania, and lessons learned from its four-year experience (2013–2016).

1 Generally, in this context, the digital financial service provider (DFSP) is a mobile network operator (MNO), although it could also be a payment service provider (PSP). MNOs control the mobile telecommunications networks, therefore the PSP must for now negotiate access to the network and the customer with the MNO.



MTN Agent in Côte d'Ivoire
Courtesy of PHB Development

SECTION 1:
EXECUTIVE SUMMARY

Agency banking is when an FI provides its customers with access to their accounts in order for them to be able to perform transactions via an agent network. An FI can develop agency banking in one of two ways: (1) partnering with an MNO or PSP,[2] collectively named DFSPs, and leveraging their network, or (2) developing its own agent network.

In this toolkit, the focus is on an FI partnering with a DFSP that has an existing agent network. In 'Toolkit #4 Develop own agent network,' the focus is on the FI developing its own agent network. It is important to note that these models are not mutually exclusive and that an FI can develop its own network as well as partner with a DFSP, as is the case for FINCA Tanzania[3] that targets different customer segments through different channels.

Benefits of the model

When an FI decides to form a partnership with a DFSP in order to provide its customers with agency banking, the FI is providing a new channel (i.e., an agent network) for its customers to perform transactions such as deposits, withdrawals, account transfers, bill payments and/or balance enquiries. Customers can conduct OTC transactions at agent locations even if they do not have an MM account or they can interact with their FI account, performing push/pull transactions to/from their FI account to their DFSP MM account using a mobile phone. If the latter type of transaction is performed, then there are two accounts involved: an MM account (that of the DFSP) and a bank account (that of the FI).

With the above in mind, it is paramount to understand what an agent is. GSMA defines an agent thus: **'a person or business that is contracted to facilitate transactions for users. The most important of these are cash-in and cash-out.'**[4] Depending on the regulations of the country, an agent can also register new customers or process bill payments on behalf of customers. For every interaction/transaction performed, the agent generally receives a commission.

The motivations for FIs to partner with a DFSP are generally to (1) increase deposit mobilization, (2) remove risks related to operational cash handling, (3) increase operational efficiency and productivity, (4) reduce customer traffic in branches, (5) increase outreach without the traditional investment costs associated with brick-and-mortar branch expansion and associated capital expenditures, and (6) increase brand recognition.[5]

DFSPs enter into such partnerships as they benefit from (1) increased customer numbers, (2) increased active users, (3) increased commission lines for their agents, and (4) added value to their brand.

The main benefits for customers are (1) convenient access to their FI accounts (saving them travel time to the branch and money), (2) decreased risk of cash theft, and (3) ability to build digital transaction history.[6]

2 See section 2 of 'Part 1: Business model' of this toolkit for a description of PSPs.
3 See the box on FINCA Tanzania in 'Part 2: Case studies' of this toolkit.
4 GSMA Mobile Money for the Unbanked, 'Mobile money definitions,' p. 2 (London, July 2010). Available from http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/06/mobilemoneydefinitionsnomarks56.pdf
5 The last of these motivations depends on the commercial contract regarding co-branding and what is/isn't allowed. Depending on the contract, the branding of the FI will be emphasized (or not); alternatively, the branding will only be that of the DFSP.
6 Recording all of a customer's transactions might allow him/her to access new services and/or increased loan amounts, especially if the FI has credit scoring facilities.

Table 1 displays examples of FIs in Africa that have formed partnership with MNOs/PSPs. It demonstrates that FIs in East Africa and West Africa, both Anglophone and Francophone, have successfully engaged in this model.

Table 1: Examples of financial institution partnerships in Africa

Geographical area	Financial institution examples in Africa	MicroLead partners
East Africa	• FINCA Tanzania (with M-Pesa) • UOB Rwanda (with Tigo) • SMEP Kenya (with M-Pesa) • ACSI, ADCSI, DECSI, OCSSCO and Omo in Ethiopia (with M-BIRR) • ACEP and CECAM in Madagascar (with Airtel)	• UGAFODE Uganda (with Airtel and MTN) • MCB Tanzania for VSLAs (with Vodacom) • Equity Bank Tanzania (with all MNOs)
Anglophone West Africa	• Diamond Bank Nigeria (with MTN and Pagatech [PSP])	
Francophone West Africa	• Advans Côte d'Ivoire (with MTN)	• SOFIPE Burkina Faso (with Airtel) • ALIDé Benin (in progress)

Acronyms: ACEP, Agence de Crédit pour l'Entreprise Privée; ACSI, Amhara Credit and Savings Institution; ADCSI, Addis Credit and Saving Institution; ALIDé, Association de Lutte pour la promotion des Initiatives de Développement; CECAM, Caisses d'Épargne et de Crédits Agricoles Mutuels; DECSI, Dedebit Credit and Savings Institution; MCB, Mwanga Community Bank; MNO, mobile network operator; OCSSCO, Oromiya Credit and Saving Share Company; MTN, Mobile Telephone Networks; PSP, payment service provider; SOFIPE, Société de Financement de la Petite Entreprise; UOB, Urwego Opportunity Bank; VSLA, village savings and loans association

An FI often partners with a DFSP in order to provide its customers with some of the benefits of agency banking without the heavy capital investment of rolling out its own agent network. However, by not investing in the development of its own agent network, the FI has less control over the quality of the agent network, which could potentially affect its brand as well as the commissions earned by the agents and fees charged to its customers.



Performing transaction at FINCA agent
Courtesy of PHB Development

SECTION 2:

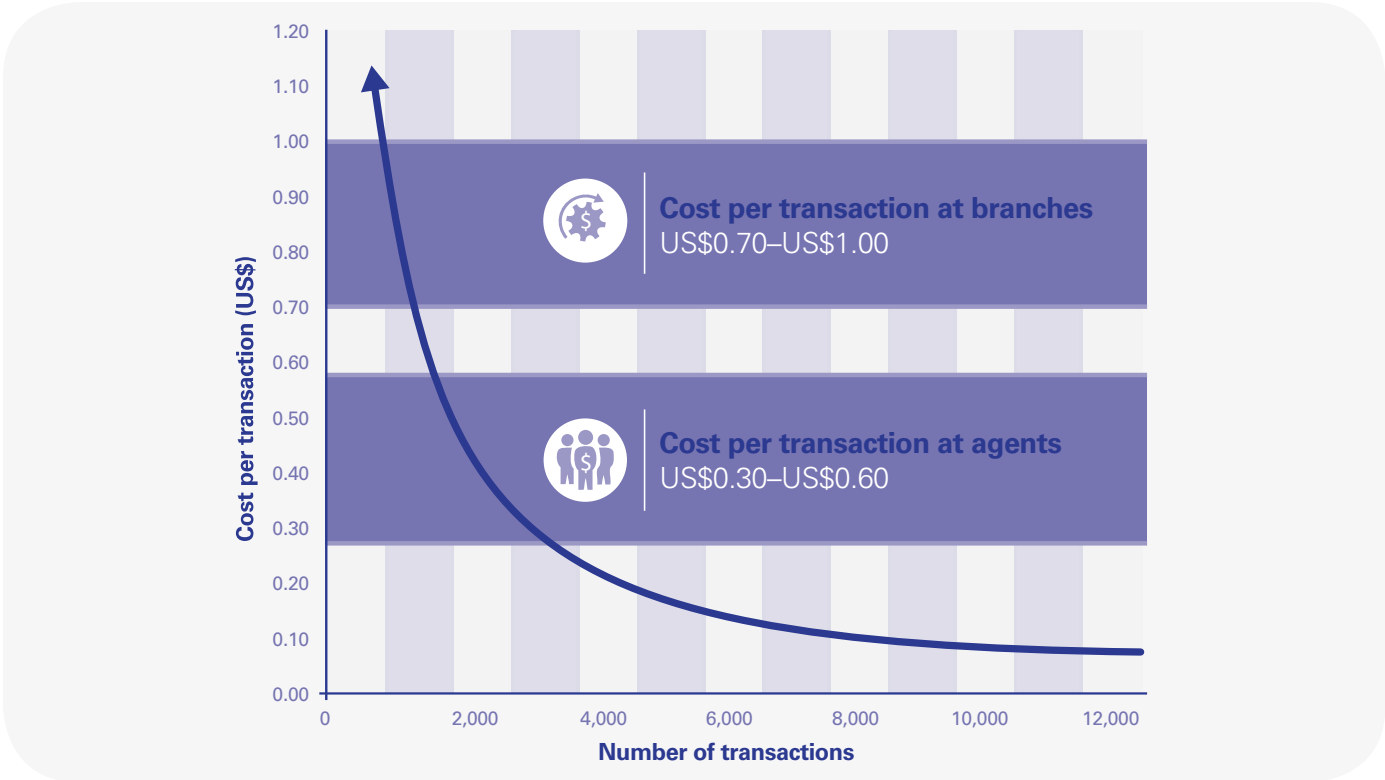
DESCRIPTION OF THE BUSINESS MODEL

Access to financial services has traditionally been associated with urban areas and perceived as restricted to the more affluent population. However, in past decades, FIs have been trying to bridge that gap by offering financial services to the low-income population in both urban and rural areas. Nonetheless, they were geographically limited given the high cost of building and transacting via brick-and-mortar branches (see figure I).

With the expansion of MM to more and more countries[7] as well as the provision of agency banking regulations by central banks, these limitations have started to dissipate and new ways of providing financial services to millions of people have been created.

For many unbanked people, using MM is a first step into the formal financial system. MM has significantly contributed to changing the financial inclusion landscape, particularly in sub-Saharan Africa where 19 markets have more MM accounts than bank accounts.[8] Moreover, as of 2015, there were 411 million registered MM accounts globally, and in December 2015, the industry processed over a billion transactions.[9]

Figure I: Transaction costs at branches and agents (example from Latin American financial institutions)

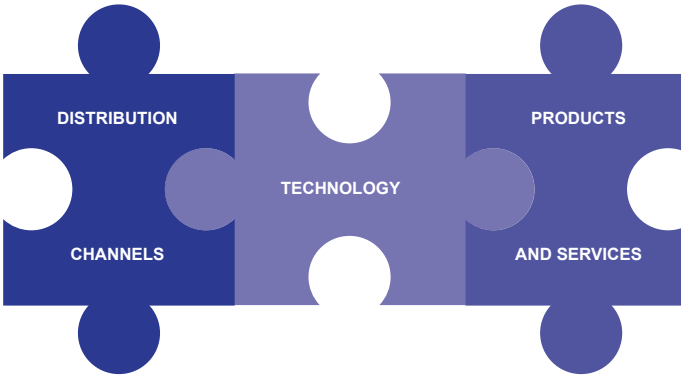


Note: Figure based on figure B1A on page 3 of Xavier Faz and Ted Moser, 'Advancing Financial Inclusion through Use of Market Archetypes,' Focus Note 86 (Washington DC, CGAP, April 2013).
Original sources cited: World Bank (2010); Wireless Intelligence (2011); CGAP Country Notes (2012).

7 As of 2015, MM was available in 93 countries. *Source:* GSMA, *2015 State of the Industry Report on Mobile Money* (London, 2015). Available from http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/04/SOTIR_2015.pdf

8 Ibid.

9 Ibid.



Most FIs understand the opportunities that MM and agency banking present to them but struggle to offer the benefits to their customers due to regulatory (bank-led vs. mobile-led regulation), economic (availability of funds to invest in MM) or operational reasons (product development expertise such as developing the business case and rolling out the service at scale). However, FIs and specifically MFIs are ideally suited to develop new products and services that take advantage of MM and/or OTC operations, as their target customers are the un(der)-banked population.

MNOs were the first to provide MM as a new product line in their service offering, a move that leveraged increasing mobile phone penetration (in the general population), their vast distribution networks (of prepaid airtime agents), brand recognition, investment availability and international human resource (HR) talent pools. However, over the past 10 years, the market has matured significantly. Now, there are also market players that include non-MNO and non-FI providers that are grouped under the umbrella of PSPs.

The following sub-section analyses (1) partnership, particularly the reasons for FIs to partner with DFSPs, types of DFSP partners, and aspects to consider in the partnership agreement; (2) the distribution channel, which is comprised of physical access points, where agents can facilitate the process for FI customers to perform MM and OTC deposits/withdrawals and cash-in/cash-out (CICO) respectively; (3) the technology used to be able to perform transactions; (4) the administration of agency banking activities; (5) the management of operations; and (6) the operating costs to forecast.

Forming a partnership with a digital financial service provider

Why partner?

The motivations for FIs to partner with a DFSP are generally to (1) increase deposit mobilization, (2) remove risks related to operational cash handling, (3) increase operational efficiency and productivity, (4) reduce customer traffic in branches, (5) increase outreach without the traditional investment costs associated with brick-and-mortar branch expansion and associated capital expenditures, and (6) increase brand recognition.[10]

DFSPs enter into such partnerships as they benefit from (1) increased customer numbers, (2) increased active users, (3) increased commission lines for their agents, and (4) added value to their brand.

The main benefits for customers are (1) convenient access to their FI accounts (saving them travel time to the branch and money), (2) decreased risk of cash theft, and (3) ability to build digital transaction history.[11]

Refer to 'Section 3: Diving into the perks' of this business model for more details.

With whom to partner?

An FI can choose to partner with different types of DFSPs:

- An MNO, since usually MNOs have large MM agent networks
- A PSP that has its own payment platform and that may also have an agent network (see table 2 for categories of PSPs)
- A bank or other FI that has already engaged in digital finance and that can provide an existing agent network that the FI can leverage for outreach or depth

10 This motivation depends on the commercial contract regarding co-branding and what is/isn't allowed. Depending on the contract, the branding of the FI will be emphasized (or not); alternatively, the branding will only be that of the DFSP.
11 Recording all of a customer's transactions might allow him/her to access new services and/or increased loan amounts, especially if the FI has credit scoring facilities.

Table 2: Different categories of payment service providers (categorization from PHB Development)

Category	Definition	Details	Examples[a]	Further details
1. Technology aggregators	They are technology-based companies that aggregate MNOs and/or FSPs for B2B transactions	A good example is when a bank wants to offer mobile banking (such as what is described in Toolkit #5), and rather than forming multiple integrations with MNOs and FSPs, it has one integration with an MNO aggregator and one integration with an FSP aggregator	**Interswitch** in Kenya, Nigeria and Uganda **Cellulant** in 10 countries	Sometimes also known as PSPs
2. Agent/Merchant aggregators	They aggregate agents and merchants by doing recruitment, training, branding, etc.	They may also have their own technology platform, which provides added value to those they aggregate and makes it easier for the FIs that integrate with them; they are used for B2C transactions	**Kopo Kopo** in Kenya aggregates merchants for M-Pesa but also provides merchants with a platform **MFS Africa**	
3. Bulk payment providers	They are technology-based companies that aggregate MNOs to allow organizations to make bulk payments across multiple payment platforms with just one integration	They have their own MM platform that they use to integrate with the MNOs as well as the organizations that want to use their services for bulk payments	**Beyonic** in Uganda **Yo Payments** in Uganda	
4. Third party payment providers	They aggregate agents by doing recruitment, training, branding, etc. but also have their own payment platform; clients register with them to use their services	They usually work with an MNO aggregator (such as a technology aggregator) so that customers of any network can connect to their services; they are used for C2C transactions	**Zoona** in Malawi and Zambia **Joni Joni and Wari** in Senegal **SmartMoney** in Uganda and United Republic of Tanzania **Selcom** in United Republic of Tanzania **Pagatech and eTranzact** in Nigeria	They are direct competitors to MNOs that provide MM services
5. Technical service providers	They provide MFIs or banks with their technology platform for MM but do not sign agreements directly with the agents (due to bank-led regulation)		**MOSS ICT** with its brand M-BIRR and **HelloCash** in Ethiopia	

a. This list is illustrative but not exhaustive.
b. GSMA provides the following definitions: An **aggregator** is 'a person or business that is responsible for recruiting new mobile money agents. Often, this role is combined with that of a **masteragent**, and the two terms are sometimes used interchangeably.' A masteragent is 'a person or business that purchases e-money from an MNO wholesale and then resells it to agents, who in turn sell it to users… masteragents are responsible for managing the cash and electronic-value liquidity requirements of a particular group of agents.' *Source:* GSMA Mobile Money for the Unbanked, 'Mobile money definitions,' pp. 2–3 (London, July 2010). Available from http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/06/mobilemoneydefinitionsnomarks56.pdf

Acronyms: B2B, business to business; B2C, business to consumer; C2C, consumer to consumer; FI, financial institution; FSP, financial service provider; MFI, microfinance institution; MM, mobile money; MNO, mobile network operator; PSP, payment service provider

What to consider in a partnership?

Banks and other FIs often partner to leverage an existing DFSP network, rather than develop their own since traditionally they have been high-value, low-volume businesses that do not specialize in managing large-scale distribution networks or high-volume, low-value businesses (as is the case for MM and OTC businesses). However, with the advent of MM and the development of new partnership models, they can now profitably serve customer segments, which they could not before.

Agent networks are critical for the success of any DFS since they are the human interface with which MM customers engage when transacting. However, as a GSMA report notes, they are also probably the most operationally burdensome and costly element of the DFS value chain for the DFSP, costing between 40% and 80% of the revenue generated from the business.[12] For this reason, many FIs prefer to partner with a DFSP that provides a robust agent network.

12 Mireya Almazán and Nicolas Vonthron, 'Mobile money profitability: A digital ecosystem to drive healthy margins' (London, GSMA Mobile Money for the Unbanked, November 2014). Available from http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/11/2014_Mobile-money-profitability-A-digital-ecosystem-to-drive-healthy-margins.pdf

An FI should analyse the DFSPs in its market (both MNOs and PSPs) and choose the DFSP that is strategically more aligned with the objectives of the FI. Issues to consider include the following:

- The FI should **choose a DFSP that is willing to sign a service level agreement (SLA).** The commitment to and the reliability of what the DFSP promises to offer in a memorandum of understanding cannot always be taken at face value, and therefore it is suggested to have both a commercial contract and an SLA. The SLA is different from a contract as its focus is on the performance measurement and service quality agreed upon by both parties. For example, the FI might want to include in the SLA that the service must be operational 99% of the time in any given month, that the DFSP must respond to any query received by the FI in relation to a customer complaint within 3 hours after the request is received, etc. The SLA should specify who provides what level of service to the client (e.g., to address when customers are at agent locations and transactions go wrong, the DFSP should be responsible for setting up and managing a call centre and resolving the issues). The rationale for having a separate SLA document from the contract is that the FI can revise the SLA without having to revise the contract. The contract can just refer to the agreed-upon SLA. For example, the contract might last for 2 years but the SLA may be reviewed quarterly. This set-up reduces the administrative burden of reviewing the contract too frequently.
- The FI should not simply **choose** the largest **DFSP** in terms of number of customers or largest agent network but the one that is **most commonly used by the target customers of the FI.** For example, there might be a DFSP that has made an explicit commitment to reach the bottom of the pyramid or that has a particularly strong presence in the areas where the FI operates.
- The FI should **understand its competitive advantage** (if and why the DFSP needs the FI). Does the FI have a substantial number of customers who can benefit the DFSP? Can the DFSP improve its brand recognition through this partnership? Can the DFSP attain a potential objective of reaching out to the bottom of the pyramid? The FI should leverage its advantage in the negotiation process. It is important to take into account that, in general, the DFSP (as the larger institution) imposes its conditions on the FI. It is up to the FI to accept them or not, though if the FI negotiates too hard, the DFSP may prioritize other partners, which could work as a disadvantage to the digital objectives of the FI.
- The FI should be sure to **partner with a DFSP that has a proven track record** of good agent network management. The FI relies on the DFSP agent network for its customers to be able to perform agency banking transactions, and although the FI is leveraging the DFSP agent network, the customer tends to associate agents with the FI. Therefore, the reputational impact of either bad or good service at agent locations can have a strong negative or positive impact on the FI. Agents who provide good customer service are those who regularly meet liquidity requirements, often have a clean working space, provide timely service and can respond to basic customer questions. These positive behaviour characteristics can be observed by performing mystery shopping visits at several agent locations and by asking the DFSP for its agent liquidity monitoring reports.
- It is important that the FI **conduct a legal review of MM regulations so that it is aware of exclusivity laws** (whether or not a DFSP can require that the agent only offer its services and not sign any agreements with its competitors). Some DFSPs might want to sign an exclusivity clause, which should be seriously questioned by the FI due to the implied limitations of service it represents.
- It is also important that both the FI and the DFSP **understand their value proposition**, including the value proposition of the partnership towards the customer. Without a sustainable and mutually beneficial value proposition for all three parties (FI, DFSP and customer), the partnership/service will not be successful.
- When an FI forms a partnership with a DFSP to allow loan disbursements and repayments via the agent network, it is important to avoid creating float/liquidity constraints for the agent. Therefore, the FI should **look for a DFSP that is willing to put in place a float/liquidity management plan** through which the DFSP/agent is informed by the FI of upcoming loan disbursements or repayments so they can be anticipated. Another complementary way to proceed is to assign customers to a given agent so that the agent can anticipate and more easily monitor cash needs by developing a relationship with the customer.
- An FI should **look for a DFSP with robust internal policies and procedures for reconciliation** to ensure operational efficiency and to avoid fraud. The reconciliation should ideally be automated.
- The FI and DFSP should **discuss risk management and agree on each party's responsibility** for the different elements of the customer experience and journey. Both parties should jointly identify all possible risks that might arise and identify mitigation strategies and responsibilities.

Refer to the Toolbox in this business model for a tool to assess potential partners and a risk management matrix for inspiration (not exhaustive).

Leveraging an agent network

When it comes to the human interface, the FI will partner with a DFSP that already has an agent network in place. The cornerstone of success for agency banking has been the agent network. Agents represent the frontline of DFS as the cash entry and exit points of most DFS transactions.[13] As such, their liquidity management is very important. An agent has to maintain on a daily basis a certain amount of float to ensure transactions. As per CGAP, an agent's float is 'the balance of e-money, or physical cash, or money in a bank account that an agent can immediately access to meet customer demands to purchase (cash in) or sell (cash out) electronic money.[14]

Furthermore, agents also play a pivotal role in customer sensitization and acquisition, as well as provision of first-level customer support.

Transactions performed with agents

Customer registration
Customers of an FI need to register with the DFSP with which the FI has partnered to get an MM account if they want to be able to transact between their FI account and the DFSP MM account using their mobile phone. When customers cannot register, or are not interested in registering with the DFSP, they can complete OTC transactions with an agent without having an MM account.

Depending on local regulations, agents may register customers on behalf of the DFSP in order for customers to get an MM account. Registration generally involves collecting basic know-your-customer (KYC) documentation, such as an identification (ID) with a picture, a signed registration form and sometimes biometrics, and then sending instructions to the DFSP to create an account for the customer. Registration can be completed using a virtual private network (VPN) on a computer or via the agent's phone/tablet/point-of-sale (POS) device. In any case, it requires an Internet-enabled device capable of taking photos of the customer/ID, scanning fingerprints (if applicable), and eventually uploading the signed form and sending it electronically to the DFSP.

At other times when feature phones are used, agents take the basic details and enter them using the drop-down menu on the agent's phone. Paper copies are submitted to the DFSP manually.

Regulatory bodies in some countries have adopted a tiered approach for opening MM accounts, which involves flexible account-opening requirements for low-value, low-risk accounts that are subject to increasing caps and restrictions for higher-value transactions.[15] Where tiered approaches are adopted, such as in Benin, self-registration by customers using their own phone is permitted for accessing basic services and transacting small amounts. For instance, in countries that are members of the Economic Community of West African States, clients can transact up to CFAF200,000 (~US$320)[16] per month without full registration (just requires opening an account without presenting a valid ID). However, customers generally have to visit an agent with the necessary KYC documentation to be allowed to transact larger amounts and maintain higher balances on their MM account.

First-level customer support
Along with customer registration, agents are generally trained by the DFSP to provide first-level customer support by explaining to users how the integrated DFSP-FI MM service works. For cases in which the agent is incapable of answering a customer's question, the agent may call the DFSP or FI customer centre (depending on whether the question has to do with the MM account or the FI account) or provide the DFSP or FI customer centre's telephone number to the customer.

It is also important for agents, beyond having the fee structure on display in their shop, to make sure that customers are aware and understand the nature of the fee structure as well as the mechanics of performing MM transactions, especially when customers are performing their first transactions, and/or customers know they can ask the agent questions directly.

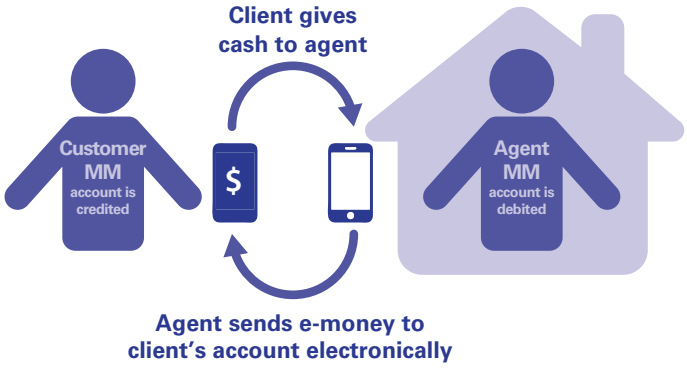
Cash-in/Cash-out – deposit/withdrawal
The main driver behind this form of partnership, whether MM or OTC, is cash-in/deposit and cash-out/withdrawal services provided by agents.[17] The reason is that CICO transactions are still the entry point customers need to transform their physical cash into electronic value and vice versa or to be able to make OTC payments.

Although a number of DFSPs, along with other MM stakeholders, aim to create a cash-lite society with a strong e-value ecosystem where money circulates between electronic accounts, for now cash is still king. Therefore, customers are still required to first transform cash into MM or vice versa to perform their transactions.

An **MM cash-in transaction** (see figure II) is when an agent takes cash from a customer with a registered MM account and credits his/her MM account. From the new balance, the customer can perform transactions on his/her MM account, including pushing funds to his/her FI account for loan reimbursement for example. In terms of accounting, this transaction is debited from the agent's MM account for the same value. It is important to note that, in most cases, the cash-in transaction is free of charge for the customer, while the agent still receives a commission paid by the DFSP.

13 Per the GSMA *2015 State of the Industry Report on Mobile Money,* agents represented 90.5% of the cash-out footprint for MM.
14 Raksha Vasudevan with others, 'Market System Assessment of Digital Financial Services in WAEMU,' CGAP Working Paper, p. xxii (Washington DC, CGAP, 2016). Available from https://www.cgap.org/sites/default/files/Working-Paper-Market-Stystem-Assessment-of-Digital-Financial-Services-in-WAEMU_0.pdf
15 Xavier Faz and Denise Dias, 'A Bold Move Toward Simplifying AML/CFT: Lessons from Mexico,' 19 May 2011. Available from http://www.cgap.org/blog/bold-move-toward-simplifying-amlcft-lessons-mexico
16 CFAF is the currency abbreviation used by the United Nations for CFA francs. Conversion rate CFAF1 = US$0.0016456180 (Source: www.xe.com, 1 January 2017).
17 Faz and Dias, 'A Bold Move Toward Simplifying AML/CFT: Lessons from Mexico.'

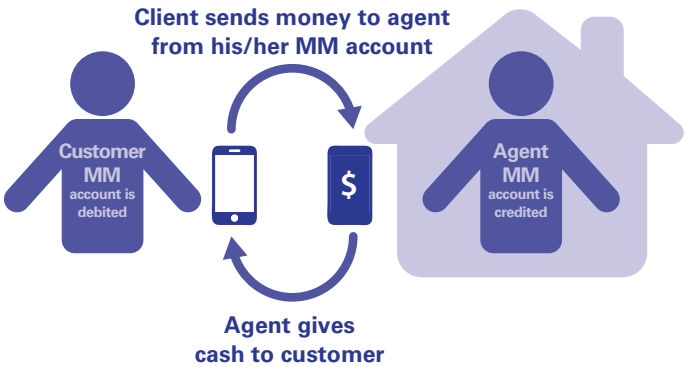
Figure II: Customer cash-in transaction – Agent must have enough e-money



An **OTC deposit/transfer** is when a customer wants to transfer or make a payment to a third party directly through an agent instead of through his/her own MM account. This transaction could be for paying an individual, paying a bill, making a loan repayment to an FI, or depositing into a third party's MM or FI account. The agent informs the customer of the fee for the transaction, takes the cash and makes the transfer to the recipient using the agent's phone. An automated short message service (SMS) message is sent to the customer performing the OTC transaction to confirm the amount sent, the fee charged and, in the case of a transfer, the one-time personal identification number (PIN) for the receiver to cash out the money. Some DFSPs might also send an SMS to the receiver of the OTC transfer, including the amount sent, so that the receiver is notified and able to cash out the money. Alternatively, the sender must inform the receiver verbally.

A **cash-out transaction** (see figure III) is when a customer requests cash from an agent debiting his/her MM account. At the same time, a credit of the same value is made to the agent's MM account. Cash-out transactions are very often accompanied by a withdrawal fee, which is deducted automatically from the customer's MM account. This fee is shared between the DFSP and the agent (commission).

Figure III: Customer cash-out transaction – Agent must have enough cash



An **OTC withdrawal** occurs when a customer receives an SMS/alert that he/she has been sent money (e.g., an FI sends the customer a loan disbursement or an OTC transfer is made). The money is not sent to an MM account and does not require the customer to be a registered user of the DFSP or to have an MM account. It is accessible with a one-time PIN/code (like a Western Union remittance). The customer goes to the agent and presents his/her ID together with the (receiving or remittance) SMS/code and retrieves the cash. Depending on the DFSP and the FI, the fee is charged either to the sender or to both the sender and the receiver at cash pick-up.

Mobile money as a channel for financial institution transactions

Being able to push or pull funds from the customer's FI account to his/her MM account and vice versa in real time from his/her own mobile phone is what makes MM attractive to the customer. These push/pull transactions can include the following:

- **MM account to FI account – deposit or loan repayment**

  The customer pushes funds from his/her MM account to his/her FI account. In this way, the MM account is debited and the FI account is credited. Customers can use this functionality to repay a loan or save in their FI account rather than in their MM account (especially when interest is paid on savings in the FI account).

- **FI account to MM account – withdrawal or loan disbursement**

  The customer pulls funds from his/her FI account to his/her MM account. In this way, the FI account is debited and the MM account is credited. Customers can use this functionality to withdraw proceeds from a loan disbursement or to withdraw part or all of their accumulated savings from their FI account (taking into account transaction limits at agent locations).

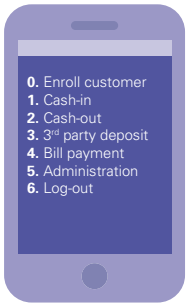
The assumption here is a link between the MM account and the FI account. As will be seen in future toolkits, the integration can be partial or complete. In this case, the client has the option on the MM menu of his/her phone to push or pull money to/from the FI account.

There are other options for the FI to be set up as a merchant payment. They will not be discussed here.

Transactions and technology

Today, DFS are chiefly accessed through the human interface of the agent and the technical interface of the mobile phone (although POS devices are also still used).[18]

Technology is the backbone that enables MM to work. It encompasses the MM platform hardware and software on which the transactions are processed and recorded, as well as the communication channels through which the end user (customer, agent, organizational partner) can initiate, finalize and receive confirmation that the transaction has been completed.



Hardware

To enrol and open MM accounts for customers and perform transactions on their behalf, agents use a web/POS/mobile application on a computer/laptop/smart-or-feature phone/tablet/POS device. Agent devices are generally provided and paid for by the DFSP. Customers who want to benefit from services beyond third party payments and transfers (OTC transactions) need access to a mobile phone.

Front-end technology

The most widespread device used by both agents and customers to transact on their MM accounts/FI accounts for agency banking is their mobile phone (followed by POS device for agents). As discussed in the International Finance Corporation (IFC) *Handbook on Alternative Delivery Channels and Technology*, there are four main types of applications for mobile devices.[19] Communication between the handset and the MM platform is completed through one of the following:

- **Unstructured supplementary service data (USSD)**: IFC provides the following explanation: USSD 'applications are supported by all handsets and involve an interactive session consisting of a twoway exchange of messages between the FSP [financial service provider]'s host system and the mobile phone user via an MNO network. USSD sessions can either be initiated by dialling an MNO-defined USSD short code (for example, *100#) or pushed by the provider to a customer's handset as part of an SMS. Sessions are typically limited both in terms of time and message size, with variations existing from one MNO to another.'[20]

  Most large-scale mobile financial services in developing countries rely on USSD as their primary mechanism for connectivity with customers.[21] USSD messages travel over GSM (Global System [or Standard] for Mobile) signalling channels and are used to query information and trigger services. USSD establishes a real-time session between the mobile handset and the application handling the service. Unlike SMS, USSD exchanges are not stored on the network. USSD was offered by 86% of survey respondents to the GSMA *2014 State of the Industry Report*.[22]

- **SIM application toolkit (STK)**: STK-based interfaces comprise a set of commands programmed onto the user's SIM card. The menu for accessing the commands is embedded in the SIM card and accessible on the phone's menu. STKs communicate using SMS sent by the application directly to the DFSP host system. For example, M-Pesa in Kenya and Etisalat in Nigeria use STK. STK was offered by 34% of survey respondents to the GSMA *2014 State of the Industry Report*.[23]

- **Short message service (SMS)**: SMS is available on basic phones and is an option for DFSPs to offer MM. However, it is not real time, it is not as secure as USSD or STK, and it offers a less intuitive and more challenging user experience. The main challenges for SMS are delays that can occur between receiving and sending SMS and for customers to remember the code to perform a transaction. Nevertheless, the main advantage is that all messages are stored and thus help to keep a trace of transactions, as opposed to USSD, which uses a menu session.

- **Native applications**: IFC explains these applications thus: native applications 'are manually installed on the [smart]phone and run in almost the same way as a computer program installed on a PC [personal computer]. Native apps will depend on the operating system on which the mobile phone runs, for example, Android, iOS or Windows. Native applications can be developed to serve as a user interface for staff, agents or customers. Native applications are also increasingly being used as a replacement for the traditional POS devices, with the evolution of mPOS apps that typically interact with a card reader and/or printer to replicate the functionality of the traditional POS device. Lastly, native apps can run in online or offline mode [if regulation allows for offline transactions] to allow for data capture in areas with little or no connectivity, which is of particular interest to FSPs operating in rural areas beyond the reach of mobile coverage.'[24] However, in some countries (e.g., Ethiopia and Malawi), regulation prohibits offline transactions. There are more generic challenges to native applications, notably that the battery may drain very fast, and unless the device is designed specifically for rural areas, their fragile nature could result in them needing to be replaced often.

18 Michel Hanouch and Gregory Chen, 'Promoting Competition in Mobile Payments: The Role of USSD,' CGAP Brief (Washington DC, CGAP, February 2015). Available from https://www.cgap.org/publications/promoting-competition-mobilepayments-role-ussd
19 IFC, *Handbook: Alternative Delivery Channels and Technology* (n.p., 2015). Available from http://www.ifc.org/wps/wcm/connect/5d99c500477262e89844fd299ede9589/ADC+Handbook+-+2014.pdf?MOD=AJPERES
20 Ibid, p. 19.
21 Hanouch and Chen, 'Promoting Competition in Mobile Payments: The Role of USSD.'
22 GSMA, *2014 State of the Industry Report on Mobile Money.*
23 Ibid.
24 IFC, *Handbook: Alternative Delivery Channels and Technology*, p. 19.

- **Interactive voice response**: Interactive voice response is increasingly offered (24% of survey respondents to the GSMA *2014 State of the Industry Report*[25]), as it can be adapted to numerous local languages/dialects and can help providers target illiterate communities as well as people who are uncomfortable interacting with data services, typically USSD, on a mobile handset.
- **Web applications**: IFC explains these applications this way: 'The last type of application is a mobile website that runs on the browser of a [smartphone] mobile device accessed via a URL [uniform (or universal) resource locator]. Web apps function very much as a standard Internet website, but the size and features are designed to display and interact better on a mobile device than on a traditional website. The main advantage of web apps over native apps is that they work completely cross-platform on all devices with a browser, requiring no installation or intervention to update, as they rely on server-side processing instead of a local, phone-based application. However, web apps operate in online mode only and hence are limited in terms of usability in areas of poor or no connectivity.'[26] Currently web apps are not that widespread, but with increasing smartphone adoption and decreasing data costs, it is expected that web apps will become ever more popular. Currently, PocketMoni by eTranzact and Firstmonie by FirstBank in Nigeria are using them.

Connectivity

There is a range of communication channels available to access mobile financial services:

- 2G/EDGE (Enhanced Data Rates for GSM Evolution) can be used for voice, SMS and USSD. This channel can be used on normal phones/smartphones and tablets with apps converting basic forms into USSD strings (can only transfer text, no photos/signatures/biometrics).
- GPRS (general packet radio services) allows for light data transfer (can transfer very light media files). This channel enables the above functions and can be used on POS devices.
- 3G/4G enables the above functions and can be used on laptops with dongles. This channel allows 3G data transfer of photos/signatures/biometrics to take place.
- Wi-Fi/Satellite connections are available in FI branches and enable all of the above functions, and all types of devices can connect to it.

All of the above enable real-time exchange of data but at very different speeds and with different levels of coverage. The desirability of a certain technology in a given market depends on the quality of its network, compatibility with available handsets, user experience, security, cost and ease of deployment.

25 GSMA, *2014 State of the Industry Report on Mobile Money.*
26 IFC, *Handbook: Alternative Delivery Channels and Technology*, p. 19.



Agent shop Tanzania
Courtesy of PHB Development

Integration between the financial institution's core banking system and the digital financial service provider's system

Introducing agency banking requires integration between the FI core banking system (CBS)/management information system (MIS) and the DFSP MM platform.

The three most common forms of system integration are the following:

- **Web interface**: Though it is not a technical interface, it can be considered a business process interface. The FI sees all transactions on the DFSP web interface in real time and has processes and procedures to export files and import them into its CBS/MIS. This interface is much more manual, but it is also cheap and quick to implement. It is a good option to prototype/pilot a new product while examining the benefits of either FTP or API solutions (see bullets below), which would be used in the longer term. This solution is not recommended for the long run.
- **File transfer protocol (FTP)**: This form of integration describes when all transactions are 'batched' together and sent in one file between platforms. Batching can be programmed to occur multiple times throughout the day, though frequently it happens only once at the end of the day. It is important, if using this method, that the FI implement anti-fraud measures. The reason is that customers may, for instance, try to withdraw from their account at multiple locations knowing that the CBS/MIS is not being updated in real time, and thus they could cumulatively withdraw more than what is in their account. FTP requires integration between the FI and the DFSP interfaces, but since the transfers do not happen in real time, this solution is also not recommended for the long run.
- **Application programming interface (API)**: This approach is real-time transfer integration. As soon as a transaction happens on either the DFSP MM platform or the FI CBS/MIS platform, it is reflected on the other. It is the most efficient and safest type of integration. The only challenges may be of a technical nature (i.e., whether the CBS/MIS of the FI or the MM platform of the DFSP has API capability). If lacking this functionality, the platform must be upgraded, which has budgetary and time implications. With these considerations in mind, it is very important to discuss with the platform vendor all issues before finalizing this solution. Depending on the API specifications of either the DFSP or the FI (and whether adaptations need to be made to one of the party's platforms) and the availability of each party's information technology (IT) teams to work on the integration, the integration can take a few weeks to several months.

Administration of agency banking activities

As discussed previously, in this model the FI has little to no control over the agents. However, it is still important for the FI to ensure proper management of the agency banking channel, as it will allow the FI to tweak its products' features (the FI might need or want to tweak product features such as loan disbursements and repayments to fit with the agency banking model), know how to market the value proposition, segment the market fully, evaluate performance, etc.

Reconciliation of transactions performed by agents of the DFSP on behalf of the FI should be done on a daily basis at least. Depending on the interest, capacities and financial means of the FI and the technical capacities of the DFSP, reconciliation can be done once an hour or several times an hour. For FIs interested in more details, please refer to the IFC *Digital Financial Services and Risk Management Handbook*[27] and the CGAP 'Doing Digital Finance Right' Focus Note.[28]

Some of the functionality to accomplish the above or to retrieve reports on agent performance is on the DFSP MM platform, to which the FI as an enterprise user should have access (the FI should ensure that this access is discussed at the time of contract signing). Other information the FI needs to cross-reference with its own data from its CBS/MIS (i.e., data regarding market segmentation). As such, the FI might want to check with its DFSP partner that online reports of key performance indicators (KPIs) contain the following functionalities and processes:

- Number of active customers (total and per agent, both disaggregated by gender)
- Business activity of DFS (number and value of deposits and withdrawals, disaggregated by gender, number of account-to-account transfers, etc.)
- Customer complaints concerning agents (number, agent name and gender, and customer name and gender)
- Cumulative (and per agent) commissions
- Cumulative fees (as appropriate)
- Transaction failures

Further, the FI should consider what other data points may be of interest, such as age, and demographic breakdown. Refer to the KPI dashboard available in the Toolbox of this business model.

The information should be presented and updated in real time or at least on a daily basis, and it should be possible to export it to Excel for further analysis.

27 IFC, *Digital Financial Services and Risk Management Handbook* (n.p., 2016). Available from https://www.ifc.org/wps/wcm/connect/06c7896a-47e1-40af-8213-af7f2672e68b/Digital+Financial+Services+and+Risk+Management+Handbook.pdf?MOD=AJPERES
28 Katharine McKee, Michelle Kaffenberger and Jamie M. Zimmerman, 'Doing Digital Finance Right: The Case for Stronger Mitigation of Customer Risks,' CGAP Focus Note 103 (Washington DC, CGAP, June 2015). Available from http://www.cgap.org/sites/default/files/Focus-Note-Doing-Digital-Finance-Right-Jun-2015.pdf

Operations management

Agency banking requires staff with the appropriate skills to manage the daily activities of this channel. The FI needs a channel manager at headquarters, who may also be in charge of other activities within the FI. The channel manager creates the list of KPIs for the new channel and reviews the KPI reports, prepares and monitors the overall channel strategy (marketing campaigns, training requirements, expansion strategy, etc.), ensures targets are being met and escalates issues to his/her superiors.

Back-office staff members are mainly in charge of service-level monitoring and reconciliation and settlement with the DFSP, ensuring they get the necessary information to monitor their accounts and KPIs and generate reports. For the accounts, there should be automatic, daily reconciliation between the DFSP account and the FI account, not only to reduce the numbers of suspense transactions but also as a useful tool in early fraud detection.

There should be suitable training for all appropriate staff, especially those who need to know how to use the DFSP platform or to explain the service to customers (e.g., field officers). For field officers, it is suggested that they themselves use the channel to become more aware of questions customers might ask of them. One way to encourage their usage is to pay staff their allowances through the new channel.

FI field officers could also be asked to identify and map the DFSP agents in their catchment area. Field officers or other FI staff could go mystery shopping to see which agents handle customers with care. They could then make a poster with a map of recommended agents with contact details to place in their branches as information for their customers.

A customer service centre should also be set up with a toll-free number that customers can call if they have problems with agents. Existing FI staff, attending the customer service call centre, do not need to be fully dedicated to this position. Another option is to outsource the customer service centre to a professional call centre. In either case, the centre staff should have a list of standard questions and answers and should be trained on how the MM service works.

Operating costs

The principle costs for the new channel can be broken down into HR, IT and marketing and communication. How much the FI invests in each one of these categories depends on the type of partnership formed and how much effort the FI needs to put into the partnership to make it work.

In terms of HR, the personnel that will be needed were just discussed in the sub-section above. As mentioned, these personnel do not need to be exclusively dedicated to the new channel but will need to find time to focus on agency banking tasks, the amount of time being dependent on their positions.

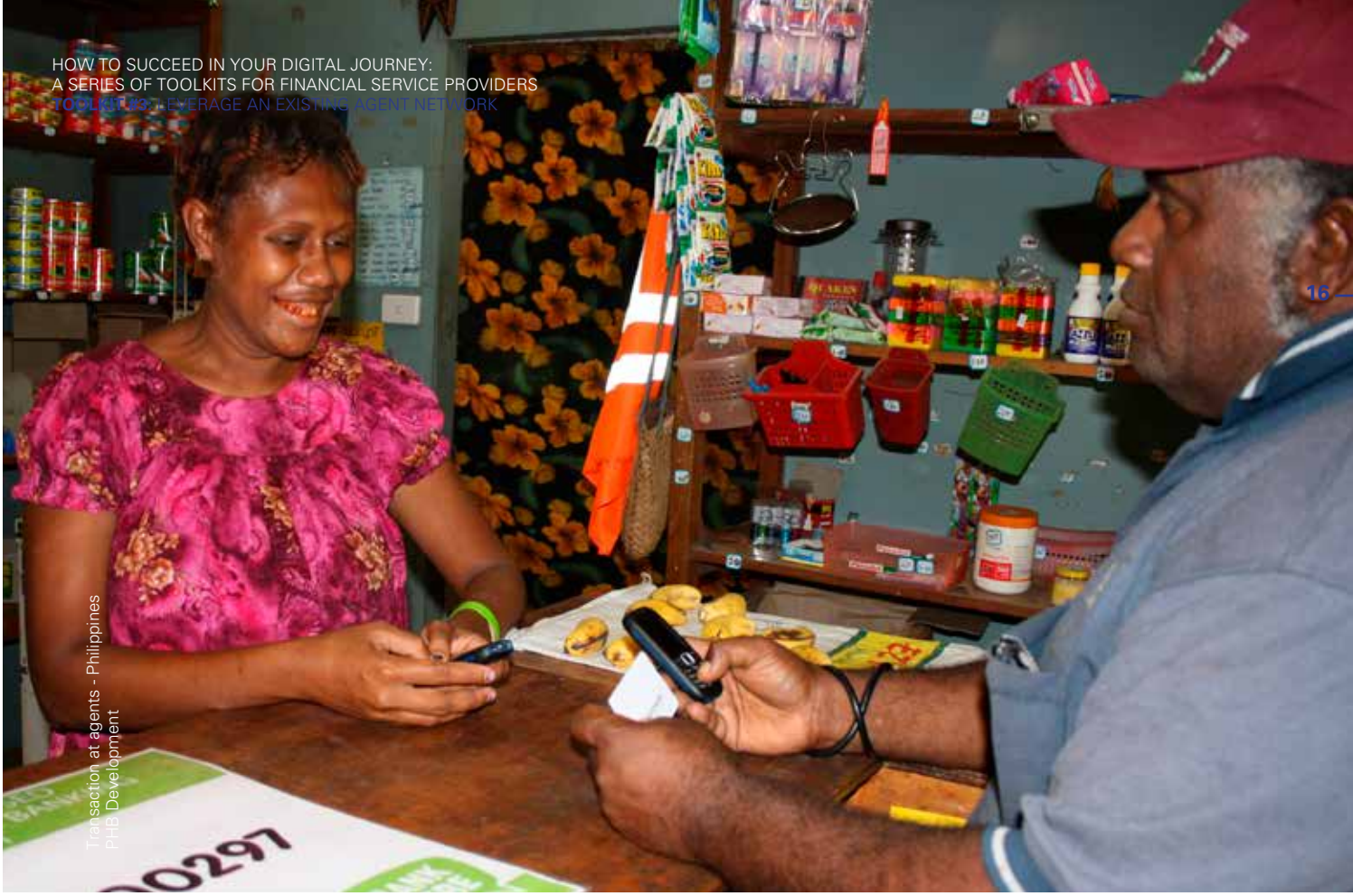
Regarding IT, investments will depend on the type of agreement with the DFSP. For example, does the DFSP provide its platform to the FI, or does the FI have to integrate with the DFSP MM platform? If so, does the FI system support the integration? If not, the FI CBS/MIS needs to be developed or a new CBS/MIS purchased. Integration between the CBS/MIS of the FI and the platform of the DFSP also requires time from IT personnel, and therefore the cost of this bridge will also need to be considered.

Marketing costs will vary depending on the level of marketing the DFSP already performs and the marketing campaign the FI wants to launch. For the FI, marketing of the services provided through the new channel should concentrate on the following:

1. Mechanics of how to use the service
2. Benefits of the service/channel
3. Channel security and consumer protection issues, if there are any problems caused by the agent and/or with the service more generally

Ideally, communication should be multi-media (i.e., radio and print such as posters, newspapers and flyers).

Refer to Section 5 for a budget tool with further details to guide FIs regarding operational and capital expenditures.



Transaction at agents - Philippines
PHB Development

SECTION 3:

DIVING INTO THE PERKS

Perspective of the financial institution

Generally, in this model, FIs are not driven by fees but rather by the potential to mobilize deposits and to improve service offerings.

However, this model does incur fees for customer transactions performed from their FI account to their MM account and vice versa and/or for OTC transactions. These fees generally benefit the DFSP, and a commission is earned by the agent for facilitating the transaction and providing the float. Depending on the business case, the FI may decide to absorb some of these fees or to have the customers pay for them. For examples of how different providers are approaching this issue, refer to the six case studies featured in this toolkit.

FIs that form a partnership with a DFSP generally do so for the following reasons:

(1) Increase deposit mobilization

If FIs do not have enough deposits, then they may have to borrow from commercial banks and/or institutional lenders to increase their loan book, which imposes implicit additional costs. As such, agency banking is seen as an effective channel to increase deposits and thus to increase the amount of capital available to on-lend. Using a readily available network of agents enables FIs to mobilize deposits faster (and more economically) than having to build their own agent network or more branches.

(2) Remove risks related to operational cash handling

When field officers meet customers, they carry a large amount of cash for disbursements and a large amount of cash from collecting repayments/deposits, which carries implicit risks of the field officers stealing the money and/or the field officers being robbed.

(3) Increase operational efficiency and productivity

To reduce the above risk, field officers are often accompanied by security/police at the time of disbursement. Additionally, using cash and pen and paper makes reports slow to compile. MM and other technologies help to improve efficiency and productivity.

(4) Reduce customer traffic in branches

Through more efficient operations, footfall in branches is reduced, which can result in better/faster service for those who do go to the branch.

(5) Increase outreach

Agency banking provides an ideal solution to increase customer numbers without the traditional investment costs associated with brick-and-mortar capital expenditures. Increased outreach in turn has an impact on increasing deposit mobilization.

(6) Increase brand recognition

FIs recognize the potential of alignment, especially if it is with the strongest MM provider in the country, to grow their brand.

FIs can distinguish themselves from competitors and increase their credibility vis-à-vis local community members. In many instances, the MNOs have a strong(er) and better established reputation in the market; when an FI starts offering MM services, customers identify the MNO brand name with the FI, instilling confidence and providing a positive effect on the FI brand. However, as previously noted, this perk depends on the contact signed in terms of branding and whether branding of both the FI and DFSP will be emphasized or not.

Perspective of the digital financial service provider

DFSPs enter into such partnerships for the following reasons:

(1) Increase customer numbers

Most important to DFSPs is an increase in customer numbers as it gives them greater market share.

(2) Increase active users

DFSPs do not just want customers, they want active users. By adding to the services that they offer, they expect that customers will become more active and also more loyal. MNOs use average revenue per user as one of their most important KPIs.

(3) Increase commission lines for their agents

Building a network is a tricky endeavour because the increase in the number of transactions, customers and agents has to be done in synergy. Too many agents, and there will not be enough commissions for each agent, and agents may decide to give up the agency. Too few agents, and the convenience value proposition to the customer is limited. With the above in mind, DFSPs want to ensure the commissions earned by their agents are maximized; adding new services helps to do so.

(4) Add value to their brand

Partnering with an FI has positive brand impact. In most countries, and especially when the sector is in a nascent state, customers can be wary of the safety of their funds in an MM wallet. Partnering with an FI, which is regulated by the central bank, gives an added sense of security to customers. Lastly, by partnering with an FI, DFSPs can show to their customer base that they are developing products and partnerships that meet their needs.

Perspective of the (mutual) customer

It is important that customers understand the benefits of using new channels. With this consideration in mind, the FI should design a training programme, with input from the DFSP, that highlights the following:

1. Benefits of the product/channel/service
2. Mechanics of how to use the channel/service
3. Security of the channel/service (i.e., that MM and the DFSP [in many countries] are regulated by the central bank, and that their e-value is matched on a 1:1 basis with money in a trust account)
4. Contacts to reach when the customer faces any problems (e.g., if the customer is at an agent location and the agent says that he/she will not perform a transaction of a certain value, although the customer has been informed otherwise by the FI, the customer should contact the FI to inform the FI of the issue with the agent; or, if the customer performs a transaction and does not get a confirmation SMS/receipt, the customer should contact the DFSP customer call centre)

Table 3 explains some common customer complaints, including whose responsibility it is to address them and potential mitigation strategies.

Table 3: Common customer complaints

Complaint by actor type	Description	Responsible party	Mitigation strategy
Existing customer cannot get services due to inability to prove his/her identity	Customer is unable to adequately prove his/her identity	FI	FI issues universal IDs, which are used for access to financial services
Customer is charged unauthorized fees by agent	Agent may charge transaction fee that is unauthorized	DFSP	1. DFSP provides full disclosure of all fees 2. FI ensures fee issues are covered in training
There is a lack of agent availability	There is insufficient number/availability of agents in a given geography, resulting in customers incurring travel costs and inconvenience	DFSP	FI and DFSP agree if agents need to be recruited
Agent is unwilling to perform transaction for customer	Agent may be unwilling to perform a transaction because of liquidity management concerns	DFSP	DFSP monitors agent behaviour/compliance
Customer cannot get cash due to agent liquidity	Customer cannot perform cashout transaction because agent does not have sufficient cash on hand to perform the transaction	DFSP	1. DFSP monitors complaints of cash unavailability 2. FI forecasts and manages liquidity of agent network to optimize service for customers
Customer and/or agent cannot access account/menu due to poor connectivity	Due to connectivity issues, customer and/or agent cannot perform transactions	DFSP	FI and DFSP ensure SLA includes KPI regarding downtime

In addition to the in-person training, both the MM agent and the FI field officer/branch should have marketing materials on hand to give to customers.[29]

Communication messages should include the following:

(1) Gain convenience
Customers no longer have to visit a branch to complete transactions, whether they be deposits, withdrawals, balance enquiries, etc., which in turn provides these benefits:

1. Save time (of travelling and queuing in the branch)
2. Save cost (of travelling to the branch)
3. Enjoy 24/7 availability—conduct a transaction anytime of the day or night and not just during branch hours (depending on the agent's hours)

(2) Decrease risk of theft
Carrying cash has implicit risk, especially at time of disbursement. Furthermore, giving customers the opportunity to easily access their account encourages withdrawal of only the amount of cash needed at the time.

(3) Build digital transaction history
Recording all of a customer's transactions might allow him/her to access new services and/or increased loan amounts, especially if the FI has credit scoring facilities. In some instances, there are third party credit scoring entities that specifically look at alternative data sources, such as airtime purchases, rather than purely at banking transactions.

(4) Security information
Customers should understand why it is important for them to remember and protect their PIN and to not share it with anyone.

(5) Customer call centre information
Customers should have contact details and the procedure for grievance redressal, both with the FI and the DFSP.

29 This approach only works with literate customers.

THIS MODEL IS FOR AN FI THAT HAS STRATEGIC OBJECTIVES TO...

- ☑ Gain additional deposits through limited investment
- ☑ Increase outreach
- ☑ Improve operational efficiency
- ☑ Offer services through an innovative channel
- ☑ Remove risks related to operational cash handling
- ☑ Reduce footfall in branches
- ☑ Improve and/or reinforce brand visibility

THIS MODEL IS NOT FOR AN FI IF IT...

- ☒ Wants to have control of its own agent network
- ☒ Has less than US$50,000 to invest (depending on scale of operations)
- ☒ Operates in a regulatory environment that does not support (or is unclear about) leveraging a third party's agent networks
- ☒ Operates in a country where DFSPs are at a nascent stage
- ☒ Has no strong DFSPs in its area of operations
- ☒ Does not have a proactive product development/ marketing department, or its team does not have the right technical competencies and there is no way of providing them with the right training
- ☒ Does not have risk management function or responsibility within the FI to monitor risks that might arise

Box 1: Providing a turnkey platform—The case of MOSS ICT in Ethiopia

MOSS ICT is an Irish/Ethiopian company focused exclusively on the Ethiopian market for the delivery of MM services as a **PSP**. Its mission is to **empower Ethiopian FIs**—banks and MFIs—**to deliver MM services** quickly and reliably to all their individual and business customers **across Ethiopia.**

MOSS ICT provided support and technology to the five largest, government-affiliated MFIs in Ethiopia.[30] Together they launched, in September 2015, the first MM service in Ethiopia, branded M-BIRR. Since the launch, two more MFIs (Afar and Poverty Eradication and Community Empowerment [PEACE]) and one commercial bank (Debub Global Bank) have signed up to join M-BIRR to provide their clients with agency banking/MM services using the MOSS ICT platform.

In 2016, 1.9 million transactions and Br1.5 billion (US$68 million)[31] were transacted with M-BIRR.

As of January 2017, M-BIRR had 700,000 customers, of which 500,000 were recipients of social safety net payments such as those from the Productive Safety Net Programme, International Medical Corps and World Vision, and 200,000 were 'core' customers. Customers can access services from 1,400 branches (of member FIs) or from 2,300 agents.

HOW THE MOSS ICT OPERATIONAL MODEL WORKS

MOSS ICT provides FIs with a **turnkey MM platform**,[32] hosted solutions, and business, marketing and strategy consulting to help deliver a best-of-breed MM solution across Ethiopia.

MOSS ICT offers these services:

- Domestic money transfer
- E-top-up
- Balance and mini-statement
- Cash-in/out agent network
- Loan disbursement and repayment
- Interest-bearing saving account

Furtherore, MOSS ICT provides training and education to FI staff and agents, regulatory support and customer support (call centre).

The MOSS ICT business model works through partnerships with FIs that, by regulation, are the ones that are allowed to deliver financial services in Ethiopia (PSPs cannot deliver financial services directly). Therefore, the FIs with which MOSS ICT partners are responsible for registering customers, providing the M-BIRR services in their branches and signing the commercial agreements with third party agents (generally, convenience stores in their region). However, the agents are branded simply with M-BIRR, and FI customers can transact at any M-BIRR branded agent since the service is interoperable.

FI customers who want to use the M-BIRR services have to either open an M-BIRR account or perform only OTC transactions. They can open an M-BIRR account either at an agent location or at the FI branch. If they open the account at an FI branch, they must provide more KYC documentation but their threshold limits for transactions are higher. They can also open an account first at an agent location and then expand their transaction limits by visiting a branch.

In addition, the FIs set up an independent company called Ethiopian Inclusive Finance Technology (ETIFT), which currently has 26 partners and has two main purposes: (1) it acts as a federator between the M-BIRR participating FIs and MOSS ICT, and (2) it acts as a clearing house for inter-institution transfers. New FIs that sign up with M-BIRR must also join ETIFT. This nationwide interoperability between FIs is unique to M-BIRR and constitutes a strong competitive advantage, especially compared to the banking industry, which does not currently offer interbank transfers, and other MM services provided in Ethiopia.

Finally, MOSS ICT has a commercial agreement with Ethio Telecom, Ethiopia's sole telecom provider, which per regulation cannot provide MM services. Ethio Telecom provides the USSD service to MOSS ICT, as well as housing a MOSS ICT/ETIFT Data Centre,[33] which all MFIs that do not have a CBS use so that the transactions are in real time.

How do clients access the service?

The service is accessible to customers and agents via a mobile phone interface using USSD technology (*818#). However, M-BIRR also allows customers without a mobile phone/M-BIRR account to use the agent/branch network to carry out bill payments and transfers as OTC transactions.

How do FIs access the platform?

FIs at their headquarters and branches can access the MOSS ICT platform through the mobile phone interface or through a secure web service VPN. For now, no FI has integrated with the MOSS ICT platform; FIs access it as a standalone system, though integration options are available. MOSS ICT provides FIs with digital certificates, which allow them to securely (through encryption) access the management console. From the management console, the FI can view or download the following:

- Audit trails and daily analytic, financial and regulatory reports (balance sheets, commissions, statistics), which can be broken down by customer, agent, branch, POS, etc.
- Real-time reconciliation processes (the FI can view the transactions using the secure web service VPN)

30 The original five partner MFIs were Amhara Credit and Savings Institution (ACSI), Addis Credit and Saving Institution (ADCSI), Dedebit Credit and Savings Institution (DECSI), Omo and Oromiya Credit and Saving Share Company (OCSSCO).
31 Br is the currency abbreviation used by the United Nations for the Ethiopian birr. Conversion rate US$1 = Br22.05 (Source: www.xe.com, February 2017).
32 A turnkey MM platform is a ready-to-use platform that can be purchased as if it were 'off the shelf' (from a store).
33 MOSS ICT paid the initial capital expenditure for the Data Centre, though ETIFT pays the operational expenditure.

Box 1: Providing a turnkey platform—The case of MOSS ICT in Ethiopia (continued)

What is the revenue model with the FIs?

The revenue model varies by type of transaction (OTC, non-OTC), but on average an FI and its agents receive ~40% of the transaction fee. ETIFT gets 8%, and the remainder is split between Ethio Telecom and MOSS ICT.

What are the costs for the involved partners?

- MOSS ICT had an initial capital expenditure (CapEx) for the development of its MM platform and servers, hosted in the Ethio Telecom Data Centre. MOSS ICT has ongoing operational expenditure (OpEx) for management of the ecosystem (monitoring agents and day-to-day dealings with the FIs), as well as marketing campaigns.
- ETIFT pays ongoing OpEx for the Data Centre.
- FIs had an initial CapEx for the mobile phones used in their branches for the M-BIRR services (agents must purchase their own phone), and they generally pay OpEx for agent recruitment, training, branding and marketing within their area of operations.

What are the benefits of this partnership model for each actor?

- MOSS ICT: Revenue from transaction fees and commissions from airtime sales
- FIs: Customer acquisition, saving and deposit mobilization, a ready-to-use platform, no CapEx and low OpEx
- Customers: A nationwide solution to access financial services from the convenience of their mobile phone

What is the settlement and rebalancing process?

Each FI that delivers M-BIRR services has a special Payment & Settlement account in a single independent clearing bank, the Commercial Bank of Ethiopia. These accounts are special, as they are owned by each FI but are operated solely by the Clearing House (ETIFT). The MOSS ICT platform calculates daily net liabilities between FIs. The Clearing House operates the account movements when required and asks FIs to replenish their Payment & Settlement accounts when depleted.

The Payment & Settlement system is unique among FIs of Ethiopia. It is the only financial system that allows customers and agents or different FIs to seamlessly interact together nationwide. A customer or agent of 'FI A' may conduct any type of transaction (transfer, withdrawal, deposit, etc.) with customers, agents and branches of 'FI B,' 'C,' 'D,' etc.



M-BIRR agent
Credits : TV advert Youtube

KEY SUCCESS FACTORS FOR MOSS ICT, CHALLENGES AND NEXT STEPS

Key success factors

- It is scalable technology with ability for rapid development
- MFIs do not have a CBS; however, by using a shared data centre, transactions can still be real time and the MFIs can see the transactions by accessing the VPN
- It is trusted by partners, which is vital to meeting regulatory requirements
- It has competitive fees and a pricing business model that meets the needs of all
- Key product is interbank transfer, which is not available elsewhere—M-BIRR can be the glue between urban banks and rural MFIs

Challenges

The biggest challenges that MOSS ICT and its partners are facing are these:

1. Some partner FIs chose to use satellite branches rather than recruit agents, which meant that the FIs kept the commission but reduced the convenience for customers as satellite branch locations were not always open while agents moved from location to location.

2. Changing the consumer mindset: Ethiopia is still a very cash-based society, where only 22% of Ethiopians own an account at a formal FI (without much differentiation between men and women).[34] However, with the passing of the National Financial Inclusion Strategy in February 2017, consolidated financial inclusion activities will be managed by the National Bank of Ethiopia.

3. Agent and consumer (financial) literacy: Only 49% of Ethiopians aged 15 and above are literate.[35] Therefore, there is acknowledgment from the financial sector of the need for the National Financial Inclusion Strategy and financial literacy symposiums to advocate for national financial literacy. This challenge is also relevant for agents, especially when it comes to understanding proper liquidity management.

Next steps

The expansion plan is to grow the agent base to 4,000+ and customers to 1.5 million in 2017. This plan will be achieved by increasing OpEx from both the FIs and MOSS ICT, as well as by working with third party activation companies for agents and customers while concentrating on financial literacy. A number of additional FIs have expressed their intention to join M-BIRR. MOSS ICT expects that another three FIs will have joined M-BIRR by the end of 2017. M-BIRR stakeholders also intend in 2017 to connect international remittances through M-BIRR wallets to allow the Ethiopian diaspora abroad to easily and cost effectively send money to their loved ones back home.

34 Asli Demirguc-Kunt and others, *The Global Findex Database 2014: Measuring Financial Inclusion around the World,* Policy Research Working Paper 7255 (Washington DC, World Bank, April 2015). Available from http://documents.worldbank.org/curated/en/187761468179367706/pdf/WPS7255.pdf

35 United States, Central Intelligence Agency, 'The World Factbook: Ethiopia,' 12 January 2017. Available from https://www.cia.gov/library/publications/the-world-factbook/geos/et.html

Box 2: Leveraging an existing agent network—The case of Diamond Bank in Nigeria





Diamond Bank was founded in December 1990. It is the first Nigerian bank to operate in Francophone West Africa, having branches in Benin, Côte d'Ivoire, Senegal and Togo.

With a mission to 'exceed customer expectations,' Diamond Bank started its digital journey in 2013, when it launched its mobile banking application Diamond Mobile. In August 2014, it introduced the MM service Diamond Y'ello Account (DYA) to the Nigerian market, in partnership with MTN Nigeria. Dr. Alex Otti, CEO of Diamond Bank at the time of launch, said that DYA is 'part of the bank's strategic programme to reach the unbanked population with innovative and easily accessible financial solutions.'[36] Diamond Bank had the 'first mover advantage' as it was the first to launch this kind of service in the Nigerian market.

DIAMOND Y'ELLO ACCOUNT IN A NUTSHELL

Specifically designed to make banking easier for more than 100 million financially excluded Nigerians, one year after launch (2015) DYA had 7 million customers with over ₦1 billion (US$3.2 million)[37] in transaction volume every week. Accessible through an MTN USSD code (*710#), DYA allows customers to perform a wide range of banking transactions. The only requirement is to have a registered MTN line; customers can easily open a DYA, without filling out any forms, from their own device at any time (self-registration).

OBJECTIVES FOR LEVERAGING AN AGENT NETWORK

Leveraging the MTN customer base and agent network allowed Diamond Bank to reach more customers, mostly youth, and promote healthy financial behaviour.

Another objective of Diamond Bank was to financially include more Nigerians and provide a simpler, faster way to transact, therefore reducing the risk and inconvenience of using cash. With over 27,000 DYA agents working across Nigeria and the instant account-opening feature, this new service helped close the gap in servicing remote areas.

SERVICES PROVIDED AND CHANNELS USED

Customers can access DYA through various options:

- DYA agent locations
- Self-service via the mobile menu
- USSD code (*710#)
- DYA mobile app
- Diamond Bank branches
- MTN Connect stores

These services are offered through DYA:

- Cash deposit/withdrawal
- Balance enquiry/Mini-statement
- Account-to-account transfer
- Transfer to third party beneficiary
- Bill payment
- Airtime purchase

For deposit/withdrawal, customers have the option to visit a DYA agent or a Diamond Bank branch, while all other transactions can be performed only through the mobile phone. Other options for deposit are the following:

- Funds transfer via menu at Diamond Online
- Instant transfer through other banks
- Funds transfer via DYA app and Diamond Mobile app

In addition, customers earn interest (2% p.a.) on account balances and bonus airtime each time they use their account.[38] DYA can be also used for disbursement of payments to multiple beneficiaries such as grants, salaries, NGO disbursements, and lottery and gaming win payments.[39] All transactions are done in real time.

There are extra rewards for usage in the form of bonus points that can be redeemed periodically as airtime, SMS, caller tunes and other MTN services.[40]

36 Diamond Bank, 'Diamond Bank, MTN Launch Diamond Yello Account.' Available from http://www.diamondbank.com/diamond-bank-mtn-launch-diamond-yello-account/ (accessed March 2017).
37 ₦ is the currency abbreviation used by the United Nations for the Nigerian naira. Conversion rate ₦1 = US$0.00317713 (*Source:* www.xe.com, 22 February 2017). *Note:* The same conversion rate was used throughout box 2.
38 Diamond Bank, 'Terms and Conditions for the Diamond Y'ello Account.' Available from http://www.diamondbank.com/personal/financialinclusion/diamond-yello-account/terms-conditionsdiamond- yello-account/ (accessed March 2017).
39 Diamond Bank, 'Diamond Y'ello Account.' Available from http://www.diamondbank.com/personal/financial-inclusion/diamond-yello-account/ (accessed March 2017).
40 Diamond Bank, 'Diamond Y'ello FAQS.' Available from http://www.diamondbank.com/faqs/#1461950483545- 1b032daf-8dc0695e-4648 (accessed March 2017).

Box 2: Leveraging an existing agent network—The case of Diamond Bank in Nigeria (continued)

IMPLEMENTATION EFFORTS

The partnership between Diamond Bank and MTN Nigeria to provide MM services started in 2014. The negotiations were initiated by MTN based on its quest for MM service development. It is a strategic partnership, as Nigerian MNOs are not allowed to operate MM services and banks own regulatory approval for services from the Central Bank of Nigeria.

Within the partnership, the role split is as follows: MTN brings technology, an existing customer base and an agent network, while the bank brings funds and manages financial components.

Along with the two main partners, Diamond Bank and MTN, two other technical partners have joined in order to ensure a stable service environment (CWG and Ericsson). The MM platform for DYA is owned by MTN, while the integration with the bank was realized by CWG, as the interacting solutions are majorly financial applications.

OPERATIONAL MODEL

The technical partners are responsible for fixing system errors and technical problems. For example, core network issues are fixed by Ericsson, while banking errors are fixed by CWG. The connectivity between the parties is driven by MTN, while financial transaction reversals are processed by Interswitch and by the Nigeria Inter-Bank Settlement System.

Liquidity management is handled by Diamond Bank, as it responds to the Central Bank of Nigeria for all transactions done on the platform.

Based on the KYC level, accounts are restricted to a certain amount (see KYC levels below, amount restrictions in table 4):

- KYC level 1: Personal details + passport photo
- KYC level 2: Personal details + passport photo + ID card + address verification
- KYC level 3: Personal details + passport photo + valid ID card (i.e., driver licence, Nigerian passport, voter ID or national ID) + address verification

Table 4: Diamond Bank transaction limits by tier and type

Tiers	Bank transaction		Mobile transaction	
	Deposit per transaction (₦)	Cumulative balance (₦)	Maximum single deposit (₦)	Daily transaction limit (₦)
Level 1	20 000 (US$64)	200 000 (US$635)	20 000 (US$64)	30 000 (US$95)
Level 2	50 000 (US$159)	400 000 (US$1,271)	50 000 (US$159)	100 000 (US$318)
Level 3	NO LIMIT	NO LIMIT	100 000 (US$318)	1 000 000 (US$3,177)

COST-BENEFIT ANALYSIS

At the start, the bank was charged a set-up fee, and subsequently it pays transaction fees. The bank earns revenue from various transaction fees that it charges its customers (see table 5).

The major benefit for Diamond Bank is the access to over 60 million MTN customers who can easily also become customers of the bank through the service. Therefore, the bank is able to actualize massive market penetration and cross sell most of its financial products.

Table 5: Diamond Bank transaction fees by type

Transaction type	Cost to customer
DYA to DYA	₦20 (US$0.06)
DYA to Diamond Bank account	₦20 (US$0.06)
Balance enquiry	Free
Mini-statement	Free
Cash deposit	Free
Withdrawal at branch	₦100 (US$0.32)
Withdrawal at agent	₦50 (US$0.16)

KEY SUCCESS FACTORS

- Collaboration between all partners (technical partners, MNO and bank) was the most important success factor
- Extensive understanding of the market was important, implying understanding of customers' behaviour and how they are using their money
- Unique and creative product development, based on a customer-centric approach, was critical
- Bringing the service closer to customers through agents, and therefore creating easy access and increasing service uptake, was vital

CHALLENGES AND LESSONS LEARNED

- Stringent regulations in Nigeria posed one of the biggest challenges
- Collecting regular feedback from customers is critical, as customers' expectations are always changing
- Partnership and collaboration are critical ingredients of success for mobile financial services

NEXT STEPS

In order to address specific needs, reduce costs and increase customer reach, Diamond Bank plans to give all DYA users access to the following additional features:

- Debit card
- Card-less transactions at all Diamond Bank automated teller machines
- Access to micro-credit through DYA

Box 2: Leveraging an existing agent network: The case of Diamond Bank in Nigeria (continued)

KEY FIGURES ON DIAMOND BANK (2015)

- Date of launch: December 1990
- Gross loan portfolio: ₦13.93 trillion (US$44 billion)
- Deposits: ₦18.53 trillion (US$59 billion)
- Assets: ₦28.2 trillion (US$90 billion)
- Number of branches: 268

RESULTS ACHIEVED THROUGH DIAMOND Y'ELLO ACCOUNT (2017)

- Date of launch: August 2014
- Number of clients registered to the channel: 8,597,387
- Number of active clients using the channel: 2,154,096
- Number of depositors: 1,365,184
- Number of deposits: 9,748,701
- Volume of deposits: ₦34 billion (US$108 million)
- Number of active DYA agents: 27,034
- Channel mix:
    - 813,567 transactions at branches (8% of transactions)
    - 9,888,322 transactions via agents (92% of transactions)

Box 3: Leveraging the agent network of MTN—The case of Advans in Côte d'Ivoire

SUMMARY

The Advans Group is an MFI network active in nine countries in Africa and Asia 'seeking to create solutions that respond on the one hand to needs of Micro, Small and Medium-sized Enterprises (MSMEs) and on the other hand to the limited or lack of access to formal financial services.'[41]

Advans Côte d'Ivoire (Advans CI) was created in 2009 as a greenfield MFI targeting entrepreneurs, traders, craftsmen and their families, as well as small and medium enterprises. Advans CI started its digital journey in November 2014. It partnered with MTN to launch a mobile banking service called Advans Mobilité (mobility) enabling wallet-to-bank transfers and leveraging the network of MTN agents in Côte d'Ivoire.



OBJECTIVES

Advans CI decided to develop a partnership with MTN and use its MM agents to do the following:

- Open up a bigger potential market and expand its share of the market
- Allow Advans customers to deposit in their Advans account anywhere and anytime from their MTN MM account
- Enable Advans customers to perform transactions from their mobile phone



SERVICES AND CHANNELS USED

MTN agents offer CICO services. Customers can perform deposits and withdrawals using their mobile phone.

Clients are required to open an MTN Mobile Money or Orange Money account. The MM account and Advans bank account are linked, enabling clients to push and pull money from their MM account/wallet to their Advans account and vice versa. Clients access the service via USSD, dialling *170# for MTN or *144# for Orange.

To deposit in their Advans account, clients can cash in at an agent on their MM account and then push the money to their Advans account via a transfer using the USSD menu. To make a withdrawal from their Advans account, clients pull the money to their MM account and then cash out at an MTN Mobile Money or Orange Money agent.

CICO is free of charge at MTN agents, whereas customers pay a tiered fee (CFAF150–CFAF3,000) for cash-out at Orange agents.

41 Advans Group. Available from http://www.advansgroup.com/en/ (accessed January 2017).

Box 3: Leveraging the agent network of MTN—The case of Advans in Côte d'Ivoire (continued)

SUBSCRIPTION AND CONNECTIVITY PROCESS

In order to benefit from the Advans Mobilité service, clients need to be an Advans customer and to have an MTN line. Clients then simply communicate their MTN number to Advans by visiting the nearest Advans agency.

For each MM transaction (cash-out, transfer), associated fees are automatically collected from the client's MTN Mobile Money account. Some additional fees are collected by Advans when the client's account is credited (transfer from MM account to Advans account).

All transactions made by clients through MTN Mobile Money are credited to their bank account at 4:45 p.m. from Monday to Friday and at 12:30 a.m. on Saturday, for transactions made within the previous 24 hours. By subscribing to Advans CI SMS Info, clients can automatically receive SMS per transaction on a weekly or monthly basis.

The MM wallet and the Advans bank account are linked but not in real time, a set-up that did not require integration between MTN and Advans systems.

KEY FIGURES ON ADVANS CÔTE D'IVOIRE (2016)[43]

- Gross loan portfolio: 41 million
- Deposits: 23.8 million
- Assets (2015): US$44 million[44]
- Number of outstanding loans: 10,000
- Number of deposits: 70,900
- Number of branches: 7

KEY SUCCESS FACTORS

- Market environment was favourable: in 2015, Côte d'Ivoire was home to 6 of the 25 MM initiatives deployed within the West African Economic and Monetary Union
- Number of customers using DFS in Côte d'Ivoire increased from 2.6 million in 2012 to more than 6 million in 2013[42]
- It involved a partnership with one of the biggest MNOs in Africa

42 Susie Lonie, Meritxell Martinez and Rita Oulai, 'Overview of Côte d'Ivoire: Mobile Financial Services Market Data 2013' (Johannesburg, International Finance Corporation and The MasterCard Foundation, n.d.). Available from http://www.ifc.org/wps/wcm/connect/60efa900461a20518634bf9916182e35/ifc_emoney_english.pdf?MOD=AJPERES
43 Advans Group, 'Rapport Annuel, 2015–2016' (n.p., 2016). *Note:* All data cited in these bullets are from this source and for the year 2016 unless otherwise noted. Available from http://www.advansgroup.com/fileadmin/Advans/Annual%20Reports/Advans_Rapport_SA_FR_BATweb.pdf
44 Microfinance Information Exchange, 'Advans – CI,' FY 2015 data accessible through subscription site.

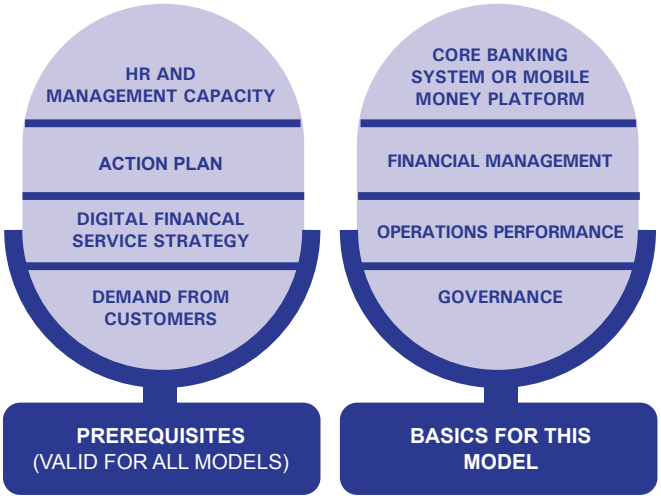
SECTION 4:

INGREDIENTS FOR SUCCESS

What are the prerequisites an FI should meet if considering this business model?

Figure IV provides a snapshot of the prerequisites for this business model, while the accompanying sub-sections and table 6 provide more detail.

Figure IV: Prerequisites for using this model



PREREQUISITES

Demand/Need from customers

Any new product or service should address a customer need to ensure its adoption. In this business model, the opportunity/market assessment, usually linked with the introduction of a new product or service, is a prerequisite to launch agency banking through a partnership. The opportunity/market assessment enables the FI to determine whether there is a market need or not and what specific gaps the FI needs to address to ensure a successful value proposition for its customers. It also enables the FI to choose the best-suited DFSP partner, based on customer preferences.

A strategy and action plan for digital finance[45]

Once the opportunity/market assessment has been performed, the FI needs to define its strategy to go digital. What are the objectives of going digital? What will be the benefits for both the FI and customers? Which products and services will be available through the digital channel? Which customers will be targeted (existing/new, rural/urban, middle-end/low-end, etc.)? How will the new digital channel or product be distributed and pushed (using current staff or extra staff dedicated only to MM/OTC)? Which technology will be used?

The next step, once the strategy is defined, is to create an action plan. An action plan should consider the different steps needed to achieve the strategy and should define, for each activity to be carried out, the person(s) responsible, the deliverables and the deadlines. A list of activities is not enough. A project manager should be in charge of following up on the action plan and ensuring everything is on track. KPIs also need to be defined and require follow-up from the beginning. Mapping potential risks with mitigation strategies is highly recommended.

Partner assessment[46]

Once the previous steps are completed, the FI can start to analyse who would be its best strategic partner to roll out the new channel to its existing and potential customer base. In the analysis, the FI should consider the following:

1. Area of operations, and network and agent coverage of partner
2. Process the DFSP uses to identify, recruit, train, brand and manage its agent network
3. Whether it would interact directly with the DFSP or via a third party, such as an agent aggregator
4. Minimum float levels of agents
5. Platform functionality of DFSP
6. Ability to interface with its CBS (i.e., API, batch processing or web interface)

45 This toolkit provides tools to help in this aspect.
46 This toolkit provides tools to help in this aspect.

Basics to have in place for this model

Table 6: Basics to have in place for this model

Dimension	Prerequisites	Description of the basics needed
Internal capacity	Management	A channel manager needs to be appointed within headquarter staff but does not need to be exclusively dedicated to this work. The channel manager can inform his/her supervisors of activity on a regular basis (e.g., initially through weekly reports that can later evolve to monthly ones).
	Staff of the FI	Time is especially needed by FI staff at launch. On a daily basis, there needs to be a partially dedicated team (e.g., marketing staff, IT staff in charge of system integration and management, back-office staff in charge of service-level monitoring, settlement with the DFSP, KPI monitoring, etc.).
	HR policy and training	Job descriptions need to be adapted/created, and staff involved in the new channel need to be trained (the DFSP can advise in this area, especially if it has completed deployments with other FIs).
Financial capacity	Financial resources	The FI can use its own or external resources.
Operational capacity	Liquidity/Cash management	If the FI is doing OTC loan disbursement, it needs to make an initial deposit with the DFSP to be able to start transacting; if the FI is not doing OTC disbursement, then there should be no need for the FI to have its own e-value float. Daily settlement of float should be done at all branches/headquarters if centralized. The FI should help the DFSP agents plan their liquidity by appointing customers to different agents or providing dates for disbursements to agents in order to anticipate liquidity management.
	OSS/Breakeven	Operational self-sufficiency is greater than 70%.
	Regulation	The FI should have a regular FI licence (there's no need for a special licence for this model) but should check its country's regulations regarding activities that agents can perform and if the agents are required to be exclusive or not.
Technical capacity	Connectivity	The FI needs to have Internet connectivity at its main branch/headquarters.
	MIS	Ideally, the FI should have a CBS/MIS or MM platform to be able to integrate with the DFSP platform. If not, it is possible to still offer the service using the DFSP web interface.
	Interfaces	As well as the FTP/API interface, it is advisable for the FI to have a view of the DFSP platform so that it can reconcile all transactions with those that have happened in its CBS/MIS when transactions have been pushed/pulled by its customers on their handset or OTC at agent locations.
Institutional stability	Quality of portfolio	Portfolio at risk greater than 30 days is less than 5%.
	Governance	The FI should have a stable governance to be able to plan and develop a successful digital transition.

Challenges and risks to anticipate

The FI should anticipate challenges along the path and prepare for them. Table 7 lists the most common challenges experienced by providers that have implemented this solution. The list is not exhaustive, and new risks may arise during the implementation process. Refer to the Toolbox for risk mapping and mitigation strategies. For more depth on risk, refer to IFC *Digital Financial Services and Risk Management Handbook*.[47]

Table 7: Most common challenges with this model

Dimensions	Potential challenges
Marketing and products	Poor understanding of market needs (misaligned value proposition towards the customer)
	Lack of targeted marketing to inform customers of the new services
	High costs of services leading to rejection of services by customers
	Misunderstanding of which fees are charged by the FI and which by the DFSP
Distribution	Risk of losing customers or not gaining any customers due to the following: • Poorly trained customer service staff (on behalf of the DFSP) • Poorly trained FI field officers affecting their ability to inform customers of the new channel and support them during the initial stages • Agent liquidity problems
Technology	Instability of mobile data connectivity (crucial for tablets/phones/POS devices)
	Instability or technical problems with the integration between the FI CBS/MIS and the DFSP MM platform
	Poor reception of SMS confirmations
	Data loss
Operations	Customer fraud
	Provider fraud
Financials	Non-compliance with cash/e-value levels
	Project costs higher than planned or revenues lower than planned
Security risks	Sharing passwords or PINs
	Hacking
	Back-ups

Implementation tools: Are we ready?

Self-readiness assessment tool

Assesses which prerequisites your FI currently meets and which ones still need to be addressed

Click on the icon to download

47 IFC, *Digital Financial Services and Risk Management Handbook.*

SECTION 5:

RECIPE FOR SUCCESS, OR 'HOW TO'

Figure V: Steps to take for successful implementation



This section describes the key activities FIs should perform to implement a DFS project. Key success factors are identified, while practical tips for FIs are provided in side boxes. Useful implementation tools (Excel files) are also provided to assist in the digital journey.

PHB Development and MicroLead defined six different steps for successful DFS implementation, based on 100+ successful implementations across the globe (see also figure V):

1. Opportunity assessment
2. Market entry strategy
3. Development and pilot preparation
4. Pilot
5. Implementation
6. Performance improvement

Throughout the digital journey, seven workstreams should be assessed to ensure all key areas are covered (see also figure VI):

1. Regulation and partnerships
2. Market and products
3. Distribution
4. Technical/IT
5. Internal organization (operations and HR)
6. Financials
7. Project management

Figure VI: Workstreams to assess



STEP 1:

OPPORTUNITY/ MARKET ASSESSMENT

RECOMMENDED DURATION: 2 months

OBJECTIVE	Define whether there is an opportunity for you to seize and decide whether you should go digital: • Assess market readiness for MM/OTC services • Assess customers' needs and pain points to understand how you could address them • Assess the different providers offering DFS in your market • Assess the agent networks in your market • Identify potential business strategies, critical success factors and constraints
KEY ACTIVITIES	Analyse the demand, define your objectives and assess your readiness (see table 8 for more detail and accompanying boxes for more tips)
DECISION	**GO or NO GO?**

Table 8: Opportunity/Market assessment activities and key success factors

Workstream	Activities
Regulation and partnerships	• Note that there is no need for a licence and, in most countries, no need for central bank's approval. • Check your country's regulations regarding activities that agents can perform and if the agents are required to be exclusive or not. • Review agent requirement forms (generally include number of years in business, level of education, turnover, services allowed for agents, etc.) to understand the type of agents available in the market as well as exclusivity laws. • Identify potential partners for the project: which DFSP in your market addresses your needs and compliments your strengths and weaknesses the best, and vice versa?
Market and products	• Carry out market study: understand customers' needs and pain points. Which locations (agents) would make the most sense to pilot with? Which DFSP is the most popular among your customers (focus groups in different areas of FI presence should be able to address this)?
Distribution	• Assess the different agent networks in the market: which DFSPs have created their own agents, which ones use aggregators, which ones have more presence in your area of operation, etc.? • Assess field staff capability to inform current and potential customers of new channels. • Assess headquarters' capability of handling more transactions (ensure you have enough transaction processing capacity/audit control, especially in the finance/ accounts sections). • Assess liquidity of agents, especially if you plan on doing loan disbursements.
Technical/IT	• Assess your Internet connectivity at headquarters. • Assess capacity of internal MIS: can it be integrated with other systems, does it allow for real-time transfer of data, can it create reconciliation reports, etc.?
	Key success factors
Partners	• Develop shortlist of DFSPs and look at their market strategy: positioning, customer value proposition, market expansion strategy, training of agents (how often and content), etc.
Internal organization	• Assess your institutional readiness. • Anticipate impact on your staff (resistance to change): if possible, make staff part of the change from the start.
Financials	• Prepare a macro-budget listing all costs (CapEx and OpEx) and expected revenues, including those derived from operational savings (this exercise helps you to understand all the elements to have in mind to balance the costs with the revenues and calculate the time needed to give you a return on investment).
Project management	• Identify the potential project team (front- and backoffice support, dedicated members, project governance, etc.). • Secure top management awareness and buy-in and create a steering committee.

Checklist of deliverables

- ☑ Developed a short list of potential DFSPs
- ☑ Completed market study report
- ☑ Identified benefits for both customers and your FI
- ☑ Reviewed options for distribution: agent locations
- ☑ Completed software assessment
- ☑ Finished connectivity assessment
- ☑ Completed organization capabilities scan and what-is-needed-to-reach-objectives
- ☑ Developed macro-budget
- ☑ Formalized steering committee and project team

Implementation tools

Budget template
Provides main categories of costs to consider to plan your budget
Click on the icon to download

Project team
Provides template for the project team and steering committee
Click on the icon to download

Partner assesment tool
Provides a grid to assess your potential partners on the key criteria for this type of partnership
Click on the icon to download

STEP 2:

MARKET ENTRY STRATEGY

RECOMMENDED DURATION: 2 months

OBJECTIVE	Define how you will seize this opportunity/Decide how you will go digital: • Select the right DFSP based on your target customers and objectives • Define your market strategy (positioning, targeting, segmentation) • Define your distribution strategy • Plan the overall project • Develop a prototype
KEY ACTIVITIES	SLA, market strategy, distribution strategy, internal strategy, IT plan and project team recruitment (see table 9 for more detail and accompanying boxes for more tips)
DECISION	**Choice of DFSP**

Table 9: Market entry strategy activities and key success factors

Workstream	Activities
Regulation and partnerships	• Inform central bank of new channel as per any introduction of a new product/service. • Negotiate an SLA with potential DFSPs.
Distribution	• Assess agent liquidity levels required by different partners (e.g., this assessment influences if you can provide loan repayments and disbursements). • Develop market expansion strategy (e.g., will you start offering the services in only one or a few areas or nationwide?).
Technical/IT	• If you do not have an MIS or if your MIS is not sophisticated enough to integrate with the third party's MM platform, shortlist the most cost-efficient MIS providers, taking into account their speed-to-market and functional capabilities.
Internal organization	• Determine whether your existing staff is capable of handling the additional new tasks or if new channel-specific staff needs to be hired. • Define change management and business processes required to address new channel. • Adapt/Create job descriptions. • Define rules for cash and e-value management (e.g., how much e-value will you allow a customer to move from his/her account via the agent network in a day?). • Develop a training needs assessment and put in place a training agenda.
	Key success factors
Partners	• Discuss with potential DFSPs the main elements of the future partnership, including an SLA. • Shortlist your partners.
Market and products	• Define your target groups and segment your customers if needed (female/male, low income/middle-upper income, rural/urban, by products, etc.). • Define the range of products and services that will be available through agency banking (customer registration, CICO, etc.). • Define the customer value proposition(s) (there could be more than one for different target segments). • Define potential marketing campaigns with the DFSP (depending on the market positions of both your FI and the DFSP, create joint marketing campaigns).
Financials	• Define detailed business case (revenue and cost streams). • Negotiate fee and commission structure with the potential DFSPs.
Project management	• Plan project as a whole, including the pilot and corresponding resource allocation. • Involve staff in the process (it is important not to underestimate the need for buy-in of staff and the change management required to implement new services).

Implementation tools

Template for action plan: MicroLead and PHB have developed an action plan template that can be used for inspiration. It contains the different categories required for an action plan and provides a non-exhaustive list of activities to carry out for this model.
Click on the icon to download

Checklist of deliverables

- ☑ SLA with potential DFSPs
- ☑ Market strategy: positioning, customer value proposition, service(s) to be offered via agency banking, market expansion strategy, etc.
- ☑ Internal strategy: organization, job descriptions, hiring plan, training needs
- ☑ Technical roadmap in case of a new or adapted MIS being needed
- ☑ Detailed business case
- ☑ Project plan validated by all stakeholders

Tips: Develop a prototype

The products/services will be tested in the market to get user feedback using human-centred design principles. The prototype will not be a fully developed product but will provide a quick, simple and cheap solution to get customer feedback on main functionality, terms and conditions, etc. The testing may involve some manual processes and, as such, will be considered a very limited research market. This testing is NOT the same as a full pilot, which will be done after the product/service has been fully developed. The prototype should test/investigate the following:

1. User interfaces
2. Pricing
3. Marketing/Promotional activities – communication strategies
4. Financial education and literacy messages

The prototype testing should include the following tasks:

1. Ensure the new product/service is launched in a timely manner and administered in line with product specifications
2. Ensure commitments to customers are kept
3. Understand operational processes, and define and design back-end processes for customers
4. Troubleshoot any problems that emerge, including with a particular product feature, with a particular customer, or overall
5. Maintain effective partnership and cooperation with DFSP involved in the testing

STEP 3:

DEVELOPMENT AND PILOT PREPARATION

Once you define the product and sign off for market launch, you and the DFSP work on an agreed-upon pilot plan. The pilot should be used for any final fine-tuning before commercial launch.

RECOMMENDED DURATION: 2–3 months

OBJECTIVE	Sign contract with DFSP and prepare detailed project management process: • Finalize negotiations with DFSP • Finalize the technical integration between your FI system and the DFSP platform • Adapt business operations impacted by the new channel and develop process manual for both MM and OTC • Adapt business operations impacted by the new channel, and develop process manual for the different types of transactions available between the DFSP and your FI • Define and prepare the institutional motivation and capacity to run the pilot
KEY ACTIVITIES	Define marketing and communication strategy with the DFSP, identify locations for pilot, recruit staff, perform user acceptance tests, and develop pricing and incentive structures (see table 10 for more detail and accompanying boxes for more tips)
DECISION	**Launch pilot or not?**

Table 10: Development and pilot preparation activities and key success factors

Workstream	Activities
Distribution	• Identify agent locations for pilot. • Ensure DFSP provides the agents with training if OTC transactions are to take place. • Recruit and train back-office staff who will be managing daily reconciliation and KPI reports, as well as loan/saving officers and other staff members in charge of communicating and explaining the new services to FI customers (the training should take place no more than 2 weeks before the pilot launch so that staff do not forget what they have learned).
Technical/IT	• Purchase and implement MIS if needed. • Integrate your FI system with the DFSP platform. • Perform user acceptance tests.
Internal organization	• Develop or refine business processes impacted by the use of MM/OTC (process manual). • Develop invoicing and accounting procedures at the head office. • Prepare map of risks and mitigation strategies. • Define KPIs and monitoring scheme.
Financials	• Open a bank account at the DFSP bank to deposit the money required to start transactions, if performing OTC loan disbursements/repayments (different DFSPs establish different amounts, but they all need a certain amount so agents can have e-value in their accounts). • Define incentives for your FI staff, mainly loan officers, customer service representatives or others in direct contact with customers (e.g., number of transactions through the new channel, deposits mobilized through the channel, value of loans disbursed, etc., and all should be gender disaggregated so that you can see if you are reaching women targets).
	Key success factors
Regulation and partnerships	• Define and sign the contract:[a] negotiate services, commissions, liquidity management, exclusivity clauses, etc. • Include an SLA that will do the following: 'stipulate the expectations with regards to the services provided and the consequences for both parties in case of non-delivery to the agreed service level standards. Furthermore, the two parties should establish a working committee to address any risks and issues that are identified from the assessment, so as to ensure a smooth implementation.'[b] • Get regulatory approval for piloting (if necessary).
Market and products	• Define service specifications and customer experience. • Refine the branding and communication strategy, and plan for the pilot. • Develop a marketing plan with the DFSP (e.g., co-branding, delivery dates of posters and brochures, promotional gear for launch). • Start with a limited service range (although many FIs offer a wide range of services, you might want to start with the services identified during the market study as being most needed by your customers in order to not overwhelm the DFSP agent network; or, you might want to start with services that are more manageable, such as deposits and withdrawals, and then at a later stage offer loan disbursements and repayments, which are more difficult for agents to manage given the liquidity strains).
Project management	• Get project team up to speed. • Validate pilot implementation plan. • Create a risk management framework. • Have an escalation matrix if issues arise.

Implementation tools

Risk mapping: Provides a list of frequent risks with impact and mitigation for inspiration
Click on the icon to download

KPIs template: Provides suggested KPIs and measurement strategies
Click on the icon to download

Are we ready for pilot to go live?

- ☑ Completed and signed partnership agreement
- ☑ Documented approval of regulator (if necessary)
- ☑ Finalized marketing plan and communication material
- ☑ Identified agent locations for pilot
- ☑ Recruited and/or trained alternative delivery channel team
- ☑ Finalized process specifications
- ☑ Completed IT integrations and user acceptance tests
- ☑ Updated risk management process
- ☑ Completed KPIs and monitoring scheme
- ☑ Revised pricing structure
- ☑ Revised incentive structure
- ☑ Detailed and validated pilot implementation plan

Tips

- Anticipate and do not underestimate the impact on your organization—there will be financial, operational and HR implications
- Do not underestimate the time needed for IT integrations (plan at least 1–2 months, or more if IT teams on either side are very busy)
- Complete user acceptance tests before launch, having customers test the system

a. Typically, a contract is defined as an agreement between two or more parties, especially one that is written and enforceable by law. This legal document outlines services provided, duration, cost, resources, approach, assumptions, etc. An SLA focuses only on the performance measurement and service quality agreed to by both parties, and it may be used as a measurement tool as part of the contract. The rationale for having a separate SLA document from the contract is that the SLA can be revised without having to revise the contract. The contract can just refer to the agreed-upon SLA. For example, the contract might last for 2 years but the SLA may be reviewed quarterly. This set-up reduces the administrative burden of reviewing the contract too frequently.
b. FINCA/The MasterCard Foundation, 'Expanding Access to Finance through Mobile Payments: Lessons Learned for MFI-Mobile Network Operator Partnerships,' Case Study, p. 4 (n.p., June 2015). Available from http://www.finca.org/files/2015/06/FINCA-MasterCard-Case-study-2015.pdf

STEP 4:

PILOT

RECOMMENDED DURATION: 3 months minimum, 6 months ideally

OBJECTIVE	Run pilot and prepare for launch: • Test services and liquidity management, and take corrective actions • Check pilot actuals against expectations (i.e., KPIs) • Monitor and evaluate outcomes of the pilot, and provide feedback on any technology and business issues (including marketing, pricing, sales, processes, etc.) that arose during the pilot to see how they can be addressed • Validate plan for the launch
ACTIVITIES	Test all operational processes in real-life environment, identify outstanding risks and develop corrective actions as needed for improvement (see table 11 for more detail and accompanying boxes for more tips)
DECISION	**GO or NO GO? Readiness to move to national launch**

Table 11: Pilot activities and key success factors

Workstream	Activities
Distribution	• Provide training to the DFSP staff, generally the trainers of agents (it will not be part of the typical DFSP training since it will include the new services offered by your FI). • Provide communication material to staff to publicize/sell the new services. • Brand the agents who will help facilitate these new channels, especially OTC. • Distribute marketing materials to agents about the new services. • Conduct small market research during the middle and end of pilot to gather customer and agent feedback.
Technical/IT	• Test all technical functionalities and monitor performance. • Plan the transition from pilot to full organization (route to market plan).
Financials	• Check on fraudulent behaviour (internal from staff and external from customers and agents). • Ensure proper reconciliation between the DFSP and the FI accounts.
	Key success factors
Regulation and partnerships	• Keep legal authorities informed of the progress (if necessary). • Review pilot results with partners and manage relationships.
Market and products	• Launch communication actions for pilot. • Test services and make adjustments as needed.
Internal organization	• Adapt business processes as needed. • Monitor KPIs on a daily/weekly basis. • Identify improvements needed and implement on the run.
Project management	• Evaluate results of pilot on weekly and/or monthly basis and prepare improvement action plan. • Plan the commercial launch when ready (pilot should take as long as needed to sort out any challenges that arise).

Implementation tools

At this stage, implementation depends on the FI. It becomes difficult to provide generic tools applicable to all FIs. The authors recommend seeking support from consultants for this phase. They will help in designing customized tools.

Are we ready to go live nationally?

Pilot results (regulation conformity)

- ☑ Conducted regular pilot reviews with partner(s)
- ☑ Reviewed communication material
- ☑ Completed internal training material and reviewed results
- ☑ Devised transition plan to permanent organization
- ☑ Reviewed fraud conformity results
- ☑ Followed up on KPIs
- ☑ Evaluated pilot results, and developed and implemented action plan for improvement
- ☑ Developed commercial launch plan
- ☑ Revised business case with multiple year targets
- ☑ Completed backlog of pending actions

Tips

- Start with restricted number of products/services (i.e., deposit and withdrawal)—add loan disbursement/repayment at later stage
- Start with restricted number of agents/branches (who support x number of agents) with different profiles to assess take-up, and then decide on expansion plan (progressive or all branches at once)
- Remember that training of agents and staff is key and can determine the success or failure of the digital project—alternative delivery channel staff needs to master operations and procedures before going live and agents need to be well trained on the new services
- Even if approval of a regulator is not needed to launch, keep the regulator in the loop
- Prepare education plan for customers, offered by the FI, to build trust in the new channel
- Perform weekly and monthly pilot assessments and take corrective actions
- Monitor KPIs and implement changes if needed

STEP 5:

IMPLEMENTATION

OBJECTIVE	Operate the business on a daily basis: • Formally hand over from project team to operations team • Conduct IT stress/capacity test: can the systems handle the predicted load? • Refine business model based on results of the pilot phase • Complete plan for full launch with resource allocation • Check if all preconditions for the launch have been met, and assess all aspects of the service • Coordinate, refine and troubleshoot the scale-up of the commercial launch and monitoring scheme
ACTIVITIES	Implement product expansion, scale up, strengthen, evaluate, hand over and monitor (see table 12 for more detail and accompanying boxes for more tips)

Table 12: Implementation activities and key success factors

Workstream	Activities
Distribution	• Scale up (geographic expansion), and recruit new channel staff for headquarters and/or branches if needed. • Extend training of all staff involved with the service offering. • Provide training to the DFSP staff, generally the trainers of agents (it will not be part of the typical DFSP training since it will include the new services offered by your FI). • Label the agents who will facilitate this service, especially OTC agents.
Technical/IT	• Ensure there are no bugs in the integration between your FI and the DFSP. • Receive regular reports from the DFSP regarding system-related issues (connectivity problems, system being down, SMS messages not being received, etc.).
	Key success factors
Regulation and partnerships	• Share results of pilot with regulator.
Market and products	• Identify new market segments, and expand service offerings over time if desired. • Ensure agents are well branded with FI posters and have communication material to take advantage of cross-selling opportunities if possible.
Internal organization	• Ensure the operations team has taken full ownership of the service(s). • Evaluate the new business processes, and adapt over time (if necessary). • Prepare HR capacity plan with scale-up in mind.
Financials	• Use findings of the pilot to (1) evaluate the business case and (2) confirm or adapt the pricing. • Ensure proper reconciliation between the DFSP and your FI.
Project management	• Ensure project team hands over project to operations team that will manage the product on an ongoing basis. • Continue close monitoring of results.

Implementation tools

At this stage, implementation depends on the FI. It becomes difficult to provide generic tools applicable to all FIs. The authors recommend seeking support from consultants for this phase. They will help in designing customized tools.

Tips

- Even if approval of a regulator is not needed to launch, keep the regulator in the loop
- Start with a restricted number of agents targeting different customer segments to assess take-up and then decide on expansion plan (progressive or all at once)
- Create a feedback loop to regularly (every quarter, every month, etc.) assess results and take corrective actions
- Conduct mystery shopping on a routine basis, as it could be an effective method to monitor actual implementation and identify issues that may be faced by the customers or that could be the source of operational/financial risk

STEP 6:

PERFORMANCE IMPROVEMENT

RECOMMENDED DURATION: After launch, 6 months minimum, 12 months ideally

OBJECTIVE	Improve performance of services launched and build a culture of continuous improvement: • Develop near-term improvement plan • Set up business intelligence to monitor service daily • Implement corrective actions
ACTIVITIES	Conduct assessment including interviews with customers and staff to evaluate perceptions (see table 13 for more detail and accompanying boxes for more tips)

Table 13: Performance improvement activities and key success factors

Workstream	Activities
Distribution	• Align and assess the customer experience of using the agent channel (quantity, quality, localization, performance) through focus groups. • Evaluate compliance with SLA.
Technical/IT	• Evaluate DFSP IT capabilities (loss of data, ease of use, time per transaction, etc.). • Evaluate integration between the systems.
	Key success factors
Market and products	• Align customer segmentation, value proposition and customer journey. • Assess and improve cross-selling strategy (leveraging the agent network).
Internal organization	• Identify efficiency opportunities in internal organization, resources and processes.
Financials	• Evaluate business plan. • Evaluate pricing structure and perceptions by customers. • Evaluate incentive structure.
Project management	• Based on assessments, define quick wins, near-term improvements and mid-term improvements.

Are we ready for continuous improvement?

Revised segmentation, value proposition and customer journey:

- ☑ Assessed experience of customers and channel staff
- ☑ Evaluated integration between your FI system and the DFSP system
- ☑ Revised business plan
- ☑ Pricing validated by customers
- ☑ Incentive structure validated by staff
- ☑ Devised plan for continuous improvement of internal processes



SOFIPE clients
Courtesy of SOFIPE, Burkina Faso

SUMMARY:

THIS IS THE RIGHT MODEL FOR YOU IF…

YOU ARE LOOKING FOR A DIGITAL SOLUTION MEETING THESE CRITERIA (see table 14)…

Table 14: Summary of this model

6–7 months to pilot

POS, Phones, Tablets, Computers

- Integration between the FI MIS and the DFSP systems
- Web interface
- Mobile phones or POS devices at agent locations

US$50,000–US$100,000. In many cases, the primary expense is branding and training of agents as well as the development of new back-office processes, which may require hiring consultants. It may also be necessary to invest in an upgrade of or a new MIS, along with integration expenses with the DFSP system. Other expenses might include market research and incentives for staff.

Customer registration, CICO, deposit/withdrawal, loan disbursement/repayment, bill payment

- Increased deposit mobilization
- Reduced footfall in branches
- Improved customer service (convenience, cost and time)
- Improved operational efficiency
- Added value to brand from co-branding
- Increased outreach

- Agent network that is available and efficient in target areas
- Very liquid agents, if offering loan disbursement
- DFSP with capable agent management and project management staff
- Ability to adapt your own staff to offer services through this new alternative delivery channel and especially to recruit and/or to train field operations staff, marketing staff, new channel management staff, back-office/finance staff and IT staff

…AND YOU'VE CONSIDERED THESE STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (see table 15)

Table 15: Analysis of strengths, weaknesses, opportunities and threats of this model

Strengths	Weaknesses	Opportunities	Threats
It is possible to use existing staff to manage new channel	DFSP manages the agent network	It can improve range of services offered to customers	Platform interconnection failure
Limited investment is required to open new channel	FI usually has little bargaining power in relationship with DFSP in terms of fees and commissions, unless it reaches high volumes	It can offer cross-selling opportunities	Network coverage failure
Model is feasible without interconnection between branches (though it is preferable)	Customer awareness and financial education (mostly rural and illiterate) is needed	It can introduce customers to DFS with limited investment	Customer fraud
Agent management is generally conducted by DFSP	Extensive staff training is needed	It does not preclude FI from conducting agency services itself	Staff fraud
Limited investment in platform is needed, depending on current functionality/capacity, since DFSP may provide access to its web platform to manage transactions			Agent fraud
			Equipment and/or mobile application failure
			Connectivity issues (web and/or mobile)
			Rejection of service by staff (resistance to change)
			Lack of proper liquidity management negatively affecting services
			Image risk (own or via partner DFSP)

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.organd 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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