

# EUROPEAN DIALOGUE

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**EUROPEAN MICROFINANCE AWARD 2018**

**Financial Inclusion through Technology**

**Digital Pathways in  
Financial Inclusion**

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EUROPEAN  
MICROFINANCE  
PLATFORM

NETWORKING WITH THE SOUTH



# FOREWORD



We're living through arguably the most dynamic period in modern history. The personal computer as we know it is less than 40 years old. The mobile phone and Internet are both barely in their mid-twenties. And the smartphone, perhaps the item with the single greatest transformative potential for the world's poor, is – appropriately enough – a fast-changing and unpredictable teenager. What technology has done for the lives of richer consumers in the developed world may be nothing to what it can do for the financially excluded. “Any sufficiently advanced technology is indistinguishable from magic”, wrote Arthur C. Clarke. How true.

In the financial inclusion sector, whether this magic lives only in conference presentations or consultants' slide decks, or is 'real', depends on a most vital link in the chain. Between the developer or engineer on the one end, and the end-user at the other, is the financial institution which can adopt a broad range of approaches to how to use the magic of technology to better serve its clients – reducing costs, increasing efficiency, spreading financial literacy, and most of all offering products and services that are of genuine benefit for those who need them the most.

The European Microfinance Award 2018 highlighted the ways financial services providers can integrate new technological opportunities into how they serve their

clients. It sought to highlight technology-enabled services that are improving access to finance for low income and financially excluded clients. By recognising those that do it best, it hopes to promote those financial providers that offer innovative products and services capable of responding to users' needs for trust, speed, low cost, security, usability, and transparency, and become standard-setters for other players in the market.

This publication features the winner, finalists and semi-finalists of the 2018 Award. The top-ten applicants selected as semi-finalists represent a fast-moving landscape, which will likely bear little resemblance several years from now. Nevertheless, they are paving the way for how advances in technology can be adopted by financial services providers who serve the excluded, and will enable other providers, as well as innovators, entrepreneurs, engineers, developers and investors, to follow suit.

The European Microfinance Award process is long and rigorous. It takes months of preparation by the e-MFP team to put together the application forms and material. It takes months more for the team and Selection Committee adjudicators to go through an intensive evaluation process that eventually leads to a list of semi-finalists and three finalists, from which the High Jury selects the winner.

We would like to express our admiration and thanks to the Award consultants Lucia Spaggiari and Chiara Pescatori from MFR, our colleagues at InFiNe.lu, Luxembourg's Directorate for Development Cooperation and Humanitarian Affairs within the Ministry of Foreign and European Affairs, all the members of the Selection Committee and the High Jury. Thank you to the entire e-MFP Secretariat, which works tirelessly to put together and oversee the entire Award process each year. And finally, thanks to all 27 applicants - we wish you very well in the future.

**Christoph Pausch,**  
e-MFP Executive Secretary



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# THE PROMISES (AND PITFALLS) OF TECHNOLOGY

Microfinance has typically been a costly and human-intensive process. The remoteness of clients, and the need for the ‘human touch’ in providing financial services to excluded populations means microfinance is expensive to do well, and limited in how it can expand to certain segments who need it the most. As well as being costly, manual processes are also vulnerable to errors and fraud, requiring a balance to be struck between providing high quality services on the one hand, and sustainably expanding to underserved and remote segments on the other.



This landscape is changing quickly. Recent years have seen the acceleration of technology as a driver for facilitating communication, expanding enormously the access and exchange of information, and interconnecting instantly people and services beyond geographic, cultural and language boundaries. Relatively cheap, transformational technology solutions have been made available for a growing number of users worldwide, including women and the poor. As just one example, the adoption of mobile money as an alternative to cash in developing countries, especially in Sub-Saharan Africa<sup>1</sup>, has immense potential to expand financial inclusion, a trend

made possible through massive increases in connectivity and access: Internet usage in Africa overall is increasing 20% per annum, has doubled in a year in Benin, Sierra Leone, Niger, and Mozambique, and increased an astonishing six-fold in Mali since January 2017<sup>2</sup>.

The key relationship between financial inclusion and the technology that enables it is increasingly well recognised. The Group of Twenty (G20) has acknowledged this synergy as an instrument to bring together the world economy in an innovative, interconnected and inclusive way. The United Nations

has made clear that technology is a crucial element of achieving the Sustainable Development Goals (SDGs): in 2012, the UN Conference on Sustainable Development (“Rio+20”) called for identifying technology facilitation mechanisms in order to eradicate poverty and reorient current unsustainable development trajectories from 2015 to 2030, highlighting that affordable technological solutions have to be developed and disseminated widely in the next fifteen years. In 2017, Member States agreed that the May 2017 High-level Political Forum on Sustainable Development (HLPF), entitled *Harnessing Science,*

<sup>1</sup> GSMA State of the Industry Report on Mobile Money, Decade Edition: 2006-2016

<sup>2</sup> Global Digital Report 2018, We Are Social, <https://digitalreport.wearesocial.com/>

## Technology's threat to MFIs – Digitise or Die

*(Adapted from Graham Wright's Keynote Address at European Microfinance Week 2018)*

Many MFIs are still using the basic model of *group lending* in an age when agile FinTechs are offering tailored products, delivered quicker and more conveniently. At best, most MFIs are digitising their disbursement and collections processes and using or establishing mobile money agent networks to recover their loans. This is not enough.

On the horizon and entering their market are a wide array of FinTechs offering personalised services, offering flexible financial tools that reflect low and middle-income consumers' mental models and money management strategies. These FinTechs manage their credit risk using sophisticated data analytics and are often backed by deep pockets in Silicon Valley and elsewhere. Also, we should not forget the superplatforms that are gradually expanding their reach.

Two years ago, 400,000 people were negatively listed in Kenya. Micro-Save worked with one of the Credit Reference Bureaus to analyse the problem. In March 2018 there were 2.7 million people negatively listed for unpaid digital credit loans, of which 1 million had defaulted on loans of less than \$10. By May 2018, 3.6 million people – 13% of the adult population of Kenya – were negatively listed. So, the *digital credit revolution sweeping Africa is clearly reducing credit discipline*.

But it is also increasingly serving small businesses, and offering the flexibility that clients crave and are unable to get from traditional MFIs and banks. About a third of loans in Kenya are now used for business purposes according to the CGAP telephone survey<sup>4</sup>.

There is the threat of a yawning 'digital divide', and with it the demise of many MFIs unwilling or unable to make the transformation to operate in the digital world. FinTechs are building their customer base from urban and peri-urban areas with the connectivity, the smartphones and the ability to buy data packages – they are serving the high value customers. MFIs are left trying to serve rural areas with poor connectivity, no smartphones and unable to afford data packages. They are being left to serve the low value customers.

This could spell the demise of hundreds of MFIs into which we collectively have invested time, energy, passion and (in some important cases) money. This could spell the demise of financial services for the rural poor – because the business case is so difficult ... particularly compared to the diverse, low-cost opportunities to serve the higher value, connected urban market. This could spell the demise of years of progress towards financial and social inclusion.

MFIs must embrace digital transformation. MFIs must harness the power of their legacy of experience and relationships. MFIs must work with FinTechs to deliver personalised, digitally enabled services. And MFIs must ensure their staff and agents provide the human touch and assistance that so many still seek.



*Technology and Innovation to achieve the Sustainable Development Goals, would focus on "Science, Technology and Innovation for a Changing World - Focus on SDGs 1, 2, 3, 5, 9, and 14"<sup>3</sup>. There is no doubt: the use of technology as a facilitator of progress in low-income populations is at the top of global policy-makers' agenda.*

These policy-makers understand that technology promises financial inclusion to more and more people. But technology-enabled financial services and solutions remain relatively nascent. However, a growing number of financial service providers across the world have started using a wide range of digital solutions to facilitate service delivery, collect and monitor clients' performance data, and measure outcomes. Technology is changing the way of doing business, and its opportunities can attract new entrants into the financial inclusion sector that are disrupting and re-shaping the *status quo* into the next era of financial inclusion.

<sup>3</sup> UN Sustainable Development Knowledge Platform, <https://sustainabledevelopment.un.org/TFM/STIForum2017#2017sti>

<sup>4</sup> <https://www.cgap.org/sites/default/files/publications/Working-Paper-A-Digital-Credit-Revolution-Oct-2018.pdf>



It is crucial to take on the digital financial inclusion challenge as a means to an end, not just an end in itself – for the three main reasons outlined in Graham Wright's keynote:

- First, technology poses risks to traditional microfinance providers with outdated and inflexible microfinance models.
- Second, emerging digital credit models that offer immediacy and convenience also risk a contagion of automated blacklisting of clients.
- And third, the emerging 'digital divide', caused by a demise of MFIs unable to adapt, risks allowing FinTechs to take (peri-) urban high-value customers while leaving MFIs with low-value, rural areas, preventing cross-subsidisation by MFIs, and keeping low-income groups excluded from the latest technology innovations – a feedback loop that can negate all the opportunity that technology promises for poor and excluded populations.

So digital financial inclusion is a means to an end, while also an opportunity – as well as a challenge. Technology-enabled services and solutions are already proving how access to financial services could be enhanced for traditionally excluded groups such as women, the poor, the young, the elderly, farmers, small and medium enterprises (SMEs) and other underserved customer segments. It is not enough to develop technology by itself, though. It is crucial to take on the digital financial inclusion challenge as a means to reduce costs,



broaden and deepen the scale of outreach to achieve universal financial inclusion, and realise technology's promise in the context of *responsible* finance, which, with its twin focus on client protection and the social mission of financial inclusion, takes on even greater urgency with entrance of new actors and the rapid growth of financial digital services.

The landscape of digital and technology-enabled financial service providers is extremely wide, and a variety of service providers are now active players within the microfinance ecosystem. Traditional MFIs, NGOs, cooperatives, commercial banks, local development banks, leasing firms, insurance companies, mobile money providers, FinTech companies, Mobile Network Operators (MNOs) and Money Transfer Organisations (MTOs) are all implementing technology solutions

in different ways and levels of sophistication. New categories of financial service providers (FSPs) can respond to users' needs for trust, speed, low-cost, security, usability, and transparency, while becoming standard-setters for others to replicate.

Furthermore, technology-enabled services are increasingly the result of partnerships between different, specialised providers, driven by the interoperability of many new technology-led services, and the particular specialisms, for example in credit assessment, software or hardware design, that delivery requires. The result is that the opportunities and challenges around serving the base of the pyramid do not have a single accountability centre, but instead become a shared responsibility and opportunity alike.

# THE EUROPEAN MICROFINANCE AWARD 2018

In 2018, the Award highlighted the role of technology in advancing financial inclusion, showing how technology-enabled services and solutions can help financial services providers such as microfinance institutions increase outreach to low-income and vulnerable segments. The 2018 Award invited applications from financial services providers (FSPs) that use technology innovations to expand outreach, broaden product offerings, improve the client experience, and increase operating efficiency, all guided by an unwavering focus on socially responsible finance.

To do this, the Award sought to illuminate how technology-enabled services are improving access to finance for low income and financially excluded clients. By recognising those that do it best, it hopes to promote those financial providers that offer innovative products and services capable of responding to users' needs for trust, speed, low cost, security, usability, and transparency, and become standard-setters for other players in the market.

## Award Eligibility

Eligible applicants were organisations active in the financial inclusion sector who use technology-enabled solutions to increase outreach of quality financial services to financially excluded segments. The technology had to focus on socially responsible

## A landscape of technology solutions

Examples of technology-enabled solutions include one or more of:

- **Technology-enabled credit:** credit services delivered to clients using a digital channel (mobile operator network, USSD, e-wallet, internet, applications, credit/debit card, ATM) or digital process (e.g. technology solutions applied to marketing, origination, creditworthiness analysis, loan approval, loan disbursement, loan monitoring, loan payment, loan recovery).
- **Technology-enabled savings:** saving services delivered to clients using a digital channel (mobile operator network, USSD, e-wallet, internet, applications, credit/debit card, ATM) or digital process (e.g. technology solutions applied to marketing, account opening, saving deposit, saving withdrawal, account closing).
- **Technology-enabled insurance:** insurance services delivered to clients using a digital channel (mobile operator network, USSD, e-wallet, internet, applications, credit/debit card, ATM) or a digital process (e.g. technology solutions applied to marketing, subscription, premium payment, claim submission, claim settlement, contract termination).
- **Technology-enabled payment and transfer:** payment and transfer services (national and international), including services provided in partnership with other organisations, delivered to clients using a technology digital channel (e.g. mobile network operator, USSD, e-wallet, internet, applications, credit/debit card, ATM).
- **Technology-enabled delivery solutions:** technology solutions introduced on the institutional – rather than the client-facing – side, that increase outreach and efficiency of the delivery of financial services (e.g. smartphone or tablet applications for loan officers in the field; ID verification technologies such as biometrics; innovations in client data management) that have a direct impact on service delivery to clients.
- **Technology-enabled non-financial services:** non-financial services delivered to clients using digital channels.



finance for low income, vulnerable and excluded groups.

Eligible institutions had to be based and operate in a Least Developed Country, Low Income Country, Lower Middle Income Country or an Upper Middle Income Country as defined by the Development Assistance Committee (DAC) for ODA Recipients<sup>5</sup>. In addition, every applicant had to be supported in writing by an e-MFP member.

Various types of organisations were eligible, including MFIs (all legal forms), NGOs, cooperatives, commercial banks, local development

banks, leasing firms, insurance companies, FinTech companies, mobile money providers, mobile network operators and money transfer organisations, that provide financial services to retail clients (including SME).

### Selection Process

The application process for the European Microfinance Award 2018 received applications from 27 organisations from 22 countries, representing virtually all regions of the low-income world: Cape Verde, Colombia, Ivory Coast, Dominican

Republic, El Salvador, Guatemala, Haiti, Honduras, India, Kazakhstan, Kenya, Kosovo, Malawi, Nepal, Pakistan, Philippines, Rwanda, Senegal, Tanzania, Turkey, Yemen and Zambia. The organisations themselves were diverse too, comprising a mix of traditional microfinance providers as well as new entrants, including 8 non-bank financial institution (NBF) MFIs, 4 FinTech companies, 4 microfinance banks, 4 NGOs, 3 commercial banks, one cooperative, one agent network aggregator, one credit bureau and one mutual fund.

<sup>5</sup> [http://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/DAC\\_List\\_ODA\\_Recipients2018to2020\\_flows\\_En.pdf](http://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/DAC_List_ODA_Recipients2018to2020_flows_En.pdf)

## THE AWARD SELECTION PROCESS

The selection of applicants comprised three phases: a Preselection Phase in which applicants were preselected on the basis of the eligibility criteria, a sound financial performance and the project presented for the Award; a Selection Phase where the

preselected applicants were evaluated by the Award Selection Committee to select the semi-finalists and the three finalists; and a Final Phase in which the High Jury selected the winner from the three finalists. A list of the members of the Selection Committee

and High Jury can be found on page 40.

The table on page 13 provides the list of the 10 semi-finalists that emerged after the deliberations of the Award Selection Committee.

### 27 APPLICATIONS FROM 22 COUNTRIES

#### Preselection Phase

Committee composed of the e-MFP and InFiNe.lu Secretariats and the Award consultants

- Eligibility criteria
- Sound financial and social performance
- Meaningful and significant technology initiatives



### PRESELECTED APPLICANTS

#### Selection Phase

Committee composed of e-MFP and InFiNe.lu members



### 10 SEMI-FINALISTS



### 3 FINALISTS

#### Final Phase

High Jury



**WINNER**



#### SEMI-FINALISTS, FINALISTS AND WINNER OF THE EUROPEAN MICROFINANCE AWARD

Institution	Country	Category
Advans Côte d'Ivoire	Ivory Coast	Winner
ESAF Small Finance Bank	India	Finalist
KMF	Kazakhstan	Finalist
Banco de Ahorro y Crédito ADOPEM	Dominican Republic	Semi-finalist
First Merchant Bank	Malawi	Semi-finalist
Fundación Microfinanciera Hermandad de Honduras, OPDF	Honduras	Semi-finalist
KKB Kredi Kayit Burosu A.S.	Turkey	Semi-finalist
Musoni Microfinance Ltd.	Kenya	Semi-finalist
National Microfinance Foundation	Yemen	Semi-finalist
Prabhu Management Pvt. Ltd	Nepal	Semi-finalist

# FINANCIAL INCLUSION THROUGH TECHNOLOGY



The ten semi-finalists provide a fascinating look at a rapidly evolving landscape of technology initiatives among a variety of different players. At the broadest level, **there are three main categories of technology-led interventions** among this group:



- **Increasing Institutional Efficiency and Improving the Client Experience** – institutions implementing back office or client-facing solutions that reduce costs and time of operations;
- **Offering Digital Financial Services** – institutions offering solutions for clients to use new and better services, more conveniently and securely; and
- **Responding to Specific Challenges** – institutions that, because of particular contexts in which they operate, mitigate the challenges of that context by implementing a technology solution.

It is important to note that many if not most of the semi-finalists' initiatives in fact cut across different categories – they may introduce systems on either the institutional or client side that increase the efficiency and utility of existing delivery of financial services, they may introduce financial services especially designed to leverage the opportunities that clients' access to technology offers, and they may do either while responding to a particular context. As a result, the three categories should not be seen as distinct silos, but as general areas of focus.

## 1

# INCREASING INSTITUTIONAL EFFICIENCY & IMPROVING THE CLIENT EXPERIENCE



In the broadest sense, financial institutions serving the financially excluded can introduce technology initiatives in two ways – on the one hand, those that improve the value of and access to existing services for clients, or increase institutional efficiency; on the other, introducing digital financial services that are really inseparable from the technology that delivers them. This section presents examples of the first category.

**KMF**, one of the Award finalists, is a non-bank financial institution in Kazakhstan, established in 1997 by the Kazakhstan Loan Fund NGO and then transformed into a microcredit organisation in 2006. KMF operates in one of the most sparsely populated regions of the world, beset by unstable telecommunications networks in the remote areas where almost half the population lives. KMF offers credit services (individual and group methodology) to micro, small and agri-businesses, as well as financial literacy trainings on family budget management and business management.



In response to the particular challenges of transportation and communication in this difficult context, KMF introduced in 2014 an in-house developed software package called Mobile Expert. Mobile Expert was first used only for credit officers ('credit experts'), but since 2017 new functions have been added, including scheduling of the credit expert's work – a scheduling system for the writing of credit applications – and supporting the new mobile credit committee, mobile claims department and mobile credit inspector (in pilot).

Mobile Expert was developed for the credit department employees primarily to reduce the time from the start of processing to the issuance of a loan, to simplify the procedure for loan application, and to reduce the time for making a decision on a loan. The expanded features, notably the scheduling system for loan officers have focused not just on increasing branch efficiency, but also on improving the quality of customer service. New features



## KMF, Kazakhstan



KMF operates in Kazakhstan, one of the most sparsely populated regions of the world, beset by unstable telecommunications networks in the remote areas where almost half the population lives. KMF's Award initiative is a technology solution implemented since 2014 with internal resources, called 'Mobile Expert'. 'Mobile Expert' uses software developed in-house, and which is tailored to KMF's needs and not depending on third-party software providers. The software runs on tablet

devices, directly connected to KMF's core banking system through the internet, for real time processing of loans in the field (at clients' premises and at KMF sale points). The menu of functions is comprehensive, covering all the steps of the loan management process. Loan officers, as well as loan recovery, management and internal control teams, are equipped with these tablets to schedule the loan officers' work, capture loan applications, make loan approval decisions, monitor and recover late



loans, and conduct internal control visits in the field – the last of which remains in pilot stage.

KMF's technology initiative has significantly improved the efficiency of KMF's operations. By reducing the time to collect loan applications, make a loan decision and issue the loan (by a factor of 2.5x) the Mobile Expert software has improved the quality of clients' service and boosted branches' productivity (clients per loan officer grew from 108 to 130 in the two years before the Award), and enabled fast growth and broader outreach. Technology has been accelerating this growth, which remains sustainable thanks to the sound internal controls and the expansion in underserved areas.



for the claims departments allow the flexible reallocation of staff, increasing their mobility (as they can take their tablets into the field) and speed up information collection and improve recovery. Likewise, Mobile Expert's support for controllers increases mobility of the control and oversight functions, allowing controllers to travel easily between remote offices without paperwork, with real-time upload of data to the system.

As of 2018, Mobile Expert was already used by all front office employees, and has increased loan officer productivity, with a 2.5-fold reduction in loan processing time, and corresponding increases in loan issuance. KMF's loan products have reached a broad spectrum of clients, many in particularly remote areas, that can benefit the most: 62% are female, 66% rural, 30% work in agriculture, 12% are below 25 years, 10% have per capita income below the national minimum living wage and 53% have no credit history at the credit bureau.

By contrast, sparse population density is rarely a challenge in India, where **ESAF Small Finance Bank (ESAF SFB)** is based, but outreach to rural communities is. India is experiencing a spectacular penetration of mobile phones with 85% of the population having a subscription; nevertheless Internet outreach is still moderate (29%) due to limited connectivity and poor reliability of the network, especially in rural areas – exacerbated by low digital literacy. Despite advances, more than half of the population, in particular women and those in rural areas, remain excluded from the formal financial sector. Microfinance clients have traditionally been served by labour-intensive hard paper documentation, and technological fixes too often involve a prohibitive level of distrust. Nevertheless, technological solutions are emerging, catalysed by more widespread use of biometric authentications and enhanced use of tablet technology.

ESAF SFB, one of the Award finalists, epitomises more than any other a holistic, top-to-bottom approach to integrating technology solutions. The bank has used emergent technology to deliver a broader range of financial services which included elimination of paper-based processes, moving completely to digital customer onboarding, accepting electronic applications, digital processes to manage customer financial training, credit appraisal, in-field verification, mandatory customer identity and address proof verification using electronic Know Your



Customer (e-KYC) based on biometric Aadhaar Card (a widely available government-issued and biometric based identity number) records, straight through processing of applications and accounts opening, cashless disbursement and paperless repayment collections.

Previously, ESAF SFB's field staff would carry loan applications and client profile forms in hard copies, filled in by hand in the field, leading to widespread data entry errors at a later stage. Furthermore, operational risk mitigation processes were all paper-based. To compound this, these bulky forms in hard copy were scanned using a printer, and a centrally located team of over 100 people would convert the data manually to electronic form.

Stemming from these inefficient, paper-based processes, ESAF SFB's digital solution involves use of an Internet-connected tablet by field officers, capable of biometric identity verification (via iris scanning) of applicants. Initially, a QR code in the Aadhaar Card (a widely available government-issued and biometric based Identity number) is scanned to fetch the data and auto-populate the form. Also, the loan officer can now scan these documents and take pictures of the customers on the tablet for record. Client details are automatically transmitted for credit bureau verification, anti-money laundering verification, de-duplication and business rules verification, all of which runs on automated processes.

Successful loan applicants are given training, and a supervisor, equipped with a tablet with photo and geo-tagging capabilities, who conducts house verification and undertakes group checking. All loan and savings account opening documents are pre-filled from the system for printing



and obtaining the clients' signatures. Disbursements are scheduled wherein funds are transferred to savings account and customers are given ATM cards to withdraw money in convenient tranches from any ATM.

Similarly, loan repayment collections happen on a tablet, which has eliminated the time-consuming process of taking long printouts of demand sheets and delayed credit to customers account. Now the demand is available on the tablet for viewing and verification and repayments are credited instantaneously to clients' accounts.

**Fundación Microfinanciera Hermandad de Honduras (HDH)** is another example of an MFI with a technology initiative that straddles the increasing of institutional efficiency while also improving the client experience. HDH is a non-bank financial institution in Honduras, established in 2004, which has responded to low financial inclusion in rural areas by introducing three technology solutions which reach all HDH's clients: a tablet system to digitise field data entry (HDH MOVIL), mobile banking for clients

to perform some operations (HDH MOVILCEL), and an agent network to repay loans and deposit savings (HDH PUNTO FACIL).

Within HDH MOVIL, loan officers enter client information and loan applications in the field (including pictures and geo-localisation) using tablets directly connected to the core banking system. Since the introduction of HDH MOVIL, there has been an increase in productivity and faster service to clients (less waiting time, less transport time and cost) thanks to the complete information collected upfront, the reduced paper work and the agile loan analysis and decision making process. The average number of disbursements has increased by 20% since adaption, and revenues increased by 60% in the year following the adoption of HDH MOVIL, and by 15% over the next two years.

Through HDH MOVILCEL, an Android-based mobile banking service is available for clients to consult their balance, submit loan applications, buy airtime, search for branches,

# ESAF Small Finance Bank, India



ESAF Small Finance Bank (ESAF SFB) is an Indian MFI that is leveraging the rapid expansion of mobile phone and smartphone penetration in India to digitise a wide range of its lending processes. ESAF SFB seeks to service a broad segment of clients from very poor and low-income self-employed entrepreneurs and farmers, to middle and high-income individuals. ESAF SFB's initiative is notable for the breadth of digitalisation within its lending service, in particular: customer onboarding, electronic applications, customer financial training, credit appraisal, in-field verification, mandatory customer identity and address proof verification using e-KYC, accounts opening, cashless disburse-

ment and paperless repayment collections. Field officers are now equipped with Internet-connected tablets, capable of scanning biometric identity (using the iris) of applicants and QR codes in the Aadhaar Card. All customers are also geo-tagged. The entire loan and savings account opening documents are prefilled and generated from the system for printout and obtaining clients' signatures. Loan repayment is recorded on tablets and immediately reported on the customer account.

ESAF SFB's technology initiative has already reached over 2.3 million clients - over 90% of its total client base. The various back office and



client-facing digital solutions have helped ESAF SFB improve customer experience, staff productivity and ease of operations significantly. Compared to a typical turnaround time of 15-30 days, 96% of customers are now given loans within 3 days. It has given a significant competitive edge to ESAF SFB field staff while also reducing the manual labour associated with the task of carrying a bagful of documents, manually filling these, scanning, arranging cash for disbursement etc. Improved customer experience has also meant that it has become very easy for them to meet business targets on expansion and growth. Furthermore, operational risk, credit risks and compliance risks have been reduced: the strengthened backend controls leave less room for manual mistakes, and the segregated maker-checker mechanisms improve the internal controls.



recommend other clients, receive notifications, and review financial education contents. It is a 24/7 service that can be connected from any area of the country with cellular or Wi-Fi connectivity, and has reduced transactions costs, with particular benefits for low-income clients in rural areas without access to the same branch network as urban clients. These rural clients – who are 84% of the client base – can also, however, repay loans, deposit savings and receive remittances close to their premises and free of charge through a network of agents, HDH PUNTO FACIL, with the HDH application installed on their POS machines.

**Banco de Ahorro y Crédito ADOPEM (ADOPEM)** has implemented Atamovil – software that connects loan officers’ smartphone devices to the core banking system. The technology enables paperless portfolio management on the field: loan officers use the smartphones to define their daily field visits, enter client data and location, enter loan application data, monitor loan repayments and consult any type of client data real time. Atamovil is used to process all loan products offered by ADOPEM, which range from business loans, to agriculture, housing and other loans. Atamovil has enabled significant efficiency gains, including loan application times reduced from 5 days to 1, higher loan officer productivity, and future errors in data collection.

**KMF, ESAF SFB, ADOPEM** and **HDH** are just four examples of organisations presenting mostly or in part an institution-side focus in a technology initiative, but they’re not alone among the semi-finalists. **Musoni Microfinance Ltd** (see page 26) in Kenya has also introduced a digital field App, produced in-house by its sister organisation Musoni Systems, which can be used online and offline, for client or group registration and KYC, and initiating loan requests remotely.



## Fundación Microfinanciera Hermandad de Honduras, Honduras



Fundación Microfinanciera Hermandad de Honduras (HDH), is a non-bank financial institution which has responded to low financial inclusion in rural areas by introducing three technology solutions which reach all HDH's clients: a tablet system to digitise the field data entry (HDH MOVIL), mobile banking for clients to perform some operations (HDH MOVILCEL), and agent network to repay

loans and deposit savings (HDH PUNTO FACIL).

Within this initiative, HDH loan officers enter client information and loan applications in the field (including pictures and geo-localisation) using tablets directly connected to the core banking system. In addition, a mobile banking service (Android) is available for clients to consult their balance,

submit loan applications, buy airtime and review financial education contents. Clients can also repay loans, deposit savings and receive remittances close to their premises and free of charge through a network of agents with the HDH application installed on their Point of Service machines.



# Banco de Ahorro y Crédito ADOPEM, Dominican Republic



Banco de Ahorro y Crédito ADOPEM (ADOPEM) is a Bank in the Dominican Republic (DR), which has introduced a system for loan officers to use smartphones to enter loan applications and monitor loan repayments on the field (Atamovil). Additionally, ADOPEM has introduced a service to help clients adopt mobile banking to pay bills and buy airtime (T-PAGO).



There is low access to financial services in rural areas of the DR, where 20% of the population lives. There are pockets of over-indebtedness in urban areas, often related to the growing consumer lending market. The mobile cellular subscription rate is intermediate (61%) while the share of individuals using Internet is relatively high (81%).

ADOPEM uses 3G connection to enable its smartphone devices to act as terminals of its core banking system, removing the paper burden from the loan officers who reach remote areas by travelling on poor roads. To implement this, ADOPEM has adopted Atamovil – software that connects smartphone devices to the



core banking system. The technology enables paperless portfolio management on the field: loan officers use the smartphones to define their daily field visits, enter client data and location, enter loan application data, monitor loan repayments and consult any type of client data real time. Atamovil is used to process all loan products offered by ADOPEM, which range from business loans, to agriculture, housing and other loans. In addition to Atamovil, ADOPEM also offers T-PAGO to its mostly MSME clients, a mobile banking application linked to client bank accounts for bill payments.

## 2

## OFFERING DIGITAL FINANCIAL SERVICES



Within the microfinance/financial inclusion sector, there has been a welcome pivot towards demand-side, client-centric approaches in recent years, a response to supply-driven products and interventions that conform more to the ambitions and imaginations of donors and consultants than the actual needs of clients. As seen in the previous section, technology allows a remarkable, growing landscape of institution-side solutions to improve efficiency, reduce fraud, lower costs, and free up time for staff and management to actually serve clients as well as to improve the clients' experience through mobile banking and agent networks. But some of the most innovative technology solutions are those that directly introduce digital financial services to clients, typically leveraging the immense twin opportunities of falling smartphone costs, and increasing mobile internet connectivity in remote areas.

### Technology-enabled credit

As in the broader microfinance sector, credit is the product with the highest demand, the greatest profitability for

providers, and the lowest barriers to entry. Almost all of the ten semi-finalists offered some form of technology-enabled credit; the following are profiles of some of them.

The 800,000 small cocoa farmers in Ivory Coast contribute to up to 10% of the country's GDP, and many are clients of **Advans Côte d'Ivoire (Advans CI)**, the winner of the 2018 Award. The cocoa sector is vital for the economy, yet 72% of farmers are below the national poverty line. Less than 10% of the small cocoa farmers in Ivory Coast have an account at a financial institution, due to the poor infrastructure in rural areas, the geographic scattering of producers and the unforeseeable seasonal and macroeconomic factors that can negatively impact them. The low financial inclusion of farmers obliges cooperatives to pay their member farmers in cash, limiting the transparency and traceability of payments and exposing farmers to the risk of violent robberies. In addition, the lack of formal accounts to manage the budget and household finance does not help mitigating farmers' vulnerability to unforeseen events.

Since 2015 Advans CI has offered a digital saving and payment solution to cocoa farmers and cooperatives (value chain approach) including an Advans account linked to an MTN mobile money account, wallet-to-bank and bank-to-wallet transfer services. Producers' cooperatives make digital payments to the farmers for their crop revenue. Farmers in rural areas can withdraw or deposit funds on their Advans accounts through local MTN mobile money agents, or make other digital payments and transfers. Advans CI also successfully negotiated free MTN transfers between mobile wallets and Advans accounts for their farmer clients – a pioneering initiative in the Ivory Coast. Since 2017, small digital school loans have also been available: farmers apply for a loan on their mobile, get automatically assessed via an algorithm

## Advans Côte d'Ivoire, Ivory Coast



Advans Côte d'Ivoire (Advans CI) is a non-bank financial institution in the Ivory Coast which offers payment, saving and credit services enabled by an Advans account linked to a MTN mobile money account. Advans CI has responded to traceability and safety issues faced by cooperatives paying cocoa farmers – who contribute 10% of national GDP – as

well as low school enrolment due to lack of regular cash-flow among farmers, by offering its digital savings and payment solution with free wallet-to-bank and bank-to-wallet transfer services, enabling producers' cooperatives to make digital payments to farmers for their crop revenue. Since 2017, Advans CI has provided small digital school loans,

based on an algorithm reflecting farmers' cash-flows.

As of April 2018, Advans CI's digital credit and savings initiative had 14,418 dedicated savings accounts, and 243 active digital school loans. Advans CI's plans to capitalise on the current branchless banking solution in order to accelerate financial inclusion for farmers through scaling up the digitisation of crop payments for farmers; rolling out the solution in several value chains; developing a full range of tailor-made products and services for farmers, including micro-insurance, loans and savings plans; improving clients' financial literacy to encourage them to save through proper training of Advans staff and agents; and further developing alternative delivery channels and digital finance services for farmers, including agency banking and mobile financial services.





based on their savings and previous financial history, and, if eligible, receive their loan through a digital transfer. The loan is repaid in three months' time, with the crop revenue. Financial inclusion field agents are also deployed by Advance CI to raise awareness on savings and assist farmers in the villages with the use of the USSD phone menu (four visits per year). Advans CI was supported by CGAP to deploy the digital saving solution and study the feasibility of the digital school loan.

By end-2021 Advans CI envisions that 120,000 farmers in Ivory Coast will have opened a saving account and will be paid for their crop proceeds directly on their account, reducing the risk of misuse of their revenues or theft; 20,000 farmers will also have subscribed to life and/or health insurance; 15,000 will have access to digital automatic loans on the USSD menu to better manage key projects; and all these clients will be served through adapted delivery channels, including mobile banking and agency banking, so as to facilitate their daily banking operations.

**Musoni Microfinance Ltd** is a non-bank financial institution founded in 2010 in Kenya which has developed a mobile-enabled agricultural product for its clients, called Kilimo Booster, with digital application, cash flow analysis and credit scoring, and an e-wallet for loan application, disbursements, payment, balance enquiries. Connectivity in Kenya is growing fast with 81% of the population using mobile phones and 26% having access to the Internet. Mobile money payments are widespread with 61% of the adult population in 2016 having active digital stored-value accounts. Mobile money lending solutions in Kenya, such as M-Shwari, are also slowly gaining traction. However, they have not reached critical scale in small business finance. As a result, marketplace lending is currently providing solutions rather to the banked and 'under-banked' than to totally unbanked businesses or informal micro-enterprises.

The technological financial exclusion is more visible in the agricultural value chain financing, where smallholder farmers have limited access to credit. Access to finance for small-scale farmers is inherently challenging due to remoteness of outreach, high collateral requirements and risky perception of the sector. Nevertheless, smallholders still need capital and financial resources to buy inputs, and invest in equipment, storage facilities, animal stock and



necessary services for intensification of crop production, and new technology solutions are demonstrating their impact on the provision of capital to smallholder farmers.

During development of this initiative, different smallholder farmer segments expressed several common needs: a repayment schedule that fits with their farming cycle, ways to diversify their farming activities; and ways to overcome agricultural shocks like disease or pests as quickly as possible.

As groups or as individuals, clients can apply for a Kilimo Booster loan in the field, without ever having to enter a branch, via a Digital Field Application (DFA). With the DFA, a loan officer meets with clients, captures the information required for Musoni to verify his/her identity and make credit decisions, and initiates loan requests remotely for approval by the branch-based credit committee.

When farmers' loans are approved, funds are disbursed to their digital wallet using mobile money, which can be cashed out at a mobile money agent or used to pay for inputs at their nearest agrovet dealers. Finally, Kilimo Booster includes a cash-flow calculator. This standardises the recording of the types of crops and expected cash flows, which then determine a custom payment schedule that better matches farmers' cash needs. A parametric modelling technique that quantifies the cost of inputs, revenues from selling the produce, and harvest yields by using a set of inputs such as land size, crop seasonality, use of fertiliser, type of seeds or quality of soil, is used to analyse farmer crop cycles and resulting cash flows.

## Musoni Microfinance Ltd, Kenya



Musoni Microfinance Ltd is a Kenyan MFI that in 2014 launched the Kilimo (agriculture in Swahili) Booster loan, a mobile-enabled agricultural product that allows smallholder farmers to access working capital, invest in assets, diversify and add value to their enterprises, and gain financial and business skills. The Kilimo Booster has an embedded cash-flow calculator, built on a parametric modelling technique, that considers a wide range of factors (e.g. cost of inputs, revenues from selling the produce, harvest yields, crop seasonality, use

of fertiliser, type of seeds, quality of soil, etc.), to analyse farmer crop cycles and produce a customised cashflow. The credit score leverages both internal and alternative data sources to assign a score to the credit. The loan term is flexible and has a customisable grace period (from one month to six months) based on a farmer's seasonal cashflow. The loan disbursement is done directly to the farmer e-wallet via mobile money, allowing the end-user to cash out the money at any agent kiosk or pay directly at the nearest agrovet dealer.

Since 2017 Musoni introduced a USSD platform, which allows the smallholder farmers to quickly and easily self-onboard, apply for a loan and access their loan information (e.g. loan balance or statement by sending a text-based query via their mobile phone). The USSD application is also available for nano/emergency loans (M-Wepesi). A call centre is available for complaints or questions, and Musoni also offers financial literacy and good agricultural practices training as well as market linkage for smallholder farmers. As of 2017, Musoni had reached over 27,000 out of its 40,000 clients with its technology initiative.



## Technology-enabled savings

Several Award applicants offered technology solutions to enable clients to more easily save money and access those savings. **Advans CI's** initiative, as described above, involves digital savings and payments solutions to cocoa farmers and cooperatives. Farmers in rural areas can save on their Advans accounts through local MTN mobile money agents, or make other digital payments and transfers. **ESAF SFB** has increased clients' access to convenient savings by offering ATM cards, and making loan disbursements directly into clients' savings accounts – an innovation in India where account ownership until recently was extremely low, and where dormancy remains a significant issue even after massive government initiatives to roll out basic accounts. The promotion of accounts and use of ATMs – becoming far more prevalent across the country – is a strong example of clients being 'nudged' into adaption of new behaviours that promote savings and increase security.

**First Merchant Bank (FMB)** in Malawi, established in 1995, serves over 630,000 clients in one of the world's least-developed regions, with heavy dependence on agriculture (83.5% rural population) and high prevalence of HIV/AIDS. Only 20% of the adult population is banked, while MNOs reach 28% of the national population. FMB's approach combines savings and payments, facilitating social cash transfers from government and international donors via mobile wallets, PIN-enabled cards and with access in remote areas made possible through mobile vans equipped with POS devices to disburse payments, which can also be retained on the mobile wallet and accessed at the client's convenience via bank agents, ATMs or mobile money

agents. FMB has supplemented this initiative with strong financial education efforts on how to use bankcards securely.

As of 2018, almost all FMB's active loan clients had been reached by this initiative (10,200 out of a 10,400 loan client base), and all of them are rural, 75% are female and 60% are under 25 years old, illustrating the success of outreach to vulnerable groups who can benefit the most. Furthermore, there is high uptake of the service, with an average of 25 transactions per user per annum, with a small average transaction size of only €3.40.

## Technology-enabled payments

Other 2018 Award applicants also offer technology solutions that facilitate clients' sending and receiving of funds, especially via the use of mobile wallets that sit upon a strong agent network infrastructure. Besides FMB's social cash transfer facility introduced above, **Advans CI's** solution of saving and credit services enabled by an Advans account linked to a MTN mobile money account means cocoa farmers and cooperatives can take advantage of a wallet-to-bank and bank-to-wallet transfer service, so farmers can be digitally and efficiently paid for their crop revenues by their cooperatives, and farmers can save and remit beyond that.

**ADOPEM's** Atamovil initiative works alongside a mobile banking application, T-PAGO, linked to clients' bank accounts for clients to pay bills and buy airtime. ADOPEM offers a broad range of loan products, covering agriculture, housing, and MSME business loans. Its largely-MSME client base is 67% female and 41% rural. T-PAGO has enabled these small businesses to more efficiently receive and send funds to and from suppliers and customers; as of 2017 it had reached half of ADOPEM's 389,000 clients.

**Prabhu Management Pvt. Ltd. (Prabhu)** is another semi-finalist that has focused even more on the payments potential that digital financial services can offer clients. Prabhu is a company in Nepal which operates as an Agent Network Aggregator, providing cloud-based core banking solutions, payments system in partnership with Prabhu Money Transfer for clients of rural cooperatives as well as various other services, including mobile airtime, internet connectivity and TV, via more than 3,800 sales points across the country.

# First Merchant Bank, Malawi



First Merchant Bank offers social cash transfers to mobile banking accounts and mobile wallet through card and pin, mobile van, agents. The bank partners with the government and donor agencies to deliver social cash transfers to the rural poor population of the Balaka district. The government funds are channelled to the bank; the bank reaches rural villages with mobile vans and opens bank

accounts and mobile money accounts for the beneficiaries, where the social payments are transferred monthly.

The beneficiaries receive a card and PIN to withdraw their social payment using the POS machine of the bank mobile van (going to the villages on scheduled days every month). The social payments can also be cashed-out at bank ATMs, bank agents or

MTN and Airtel agents (FMB is the trust account bank of MTN and Airtel). Beneficiaries can use their accounts to perform bank-to-wallet and wallet-to-bank operations, save, transfer money and pay bills. Almost all FMB's loan clients are reached by this program, with 25 transactions taking place per client per year, with an average transaction size of €3.40.

## Leveraging Technology through Non-Financial Services

Just as in the topics of previous European Microfinance Awards, such as Microfinance & Access to Education, and Microfinance for Housing, the best financial products or services introduced to address a challenge are often supported by **non-financial services** as well. Some examples of these include:

**Advans CI** has financial inclusion agents trained to provide digital financial education to its farmer clients. These agents make four visits per year per farmer, most of whom have very basic use of their mobile and little knowledge of data protection, or important security practices such as keeping a PIN code secret. This training is given by Advans CI field agents directly at farmers' homes in the villages. Advans CI also provides training for cooperatives on how to better manage the loans they disburse to their members. The training is a half-day session conducted by Advans loan officers and is given to all cooperative clients.

**ESAF SFB** also invests heavily in training, with financial literacy sessions reaching over 200,000 customers each year. These cover the need for, and good practice in, savings, long term financial planning, and ways to mitigate emergency shocks such as health or life insurance.

**HDH's** Android-based mobile banking service, HDH MOVILCEL, also includes financial education contents

in the App, a strong example of using an innovative new platform, especially appealing to younger clients, to consult their balance, submit loan applications, buy airtime and review financial education contents.

**FMB** has supplemented its initiative with detailed financial education on how to use bankcards securely – an important step in transitioning clients previously accustomed mainly to cash to the protection of their money in other ways.

Adapting to the considerable distances and difficult access to its remote clients, **KMF** has used YouTube to provide lessons on management of household finances to clients and non-clients since 2013. These lessons are available on KMF's official YouTube channel and cover family budgeting, accounting fundamentals, loan agreements, and clients' and the institution's rights and obligations.

Finally, **Musoni** facilitates markets for smallholder farmers through its partnerships with wholesale purchasers who sign off-take agreements (between a producer and a buyer to purchase or sell portions of the producer's future production) with Musoni's smallholder farmers. Musoni also offers financial literacy and good agricultural practices training.

The great majority of Nepal's population (79%) is located in rural areas and access to financial services in those areas is particularly challenging. Despite financial access increasing over the last few years, most FSPs are primarily operating in urban or semiurban areas where geographical access is fairly simple compared to the rest of the country. Most transactions are still carried out in cash and most FSPs, including rural cooperatives (which make up the large part of Nepal's financial infrastructure) still lack a fully functioning core banking system to track and record their transactions.

In 2015, Prabhu Management partnered with Prabhu Technologies to develop a cloud-based core banking solution (CBS) for holding the cooperative member accounts.

The cooperative CBS is offered as a shared service "PAAS Module" i.e. the cooperatives pay a fee to use a percentage of total storage space to host their member accounts in the cloud. The members of the cooperatives are offered Rupaiya-branded debit cards linked to their savings account at the respective cooperative. The customers can access their accounts with cooperatives, or at ATM or other Check-In/Check-Out points linked with Rupaiya switch. The CBS is integrated with ePrabhu – a payment gateway for rural customers through an agent network of 3400 rural financial cooperatives as agents. These rural customers can pay via mobile POS, utilities and bill payments, including airtime, internet, TV, electricity, travel, insurance, education or entertainment, from their mobile App or over the counter via the agent network.

## Partnerships In Technology

The development and rollout of technology is usually beyond the core expertise of financial institutions, and as a result, almost all top-ten applicants rely on partnerships with other organisations – from mobile network operators to software developers to donors. **Advans CI** works with various partners such as MNOs Orange and MTN – the latter of which negotiated that transfers between mobile wallets and Advans accounts should be free for clients, the first time this had happened in Ivory Coast. First, MTN provided Advans with a short code enabling Advans CI to implement its own Mobile Banking Menu where rural customers can check their balance and carry out transactions from their Advans account to another Advans account. This channel (the Bank-to-Bank) is used by cooperatives to pay part of the farmers' crops directly on their savings accounts. Next, Advans CI offered the farmers a wallet-to-bank and bank-to-wallet transfer service in partnership with MTN, enabling farmers in remote areas to access these accounts directly from their mobile phones and withdraw or deposit money directly at the closest MTN Money cash point. MTN trained and equipped Advans CI financial inclusion agents so they can open MTN Money wallets for farmers at the same time as they open their Advans account. Advans CI also offers a withdrawal card offered in partnership with SGBCI from the Société Générale Group. Thanks to this debit card, Advans CI's clients can withdraw cash in any of the ATMs of the banks that are part of GIM-UEMOA (the interbank payment organisation of the West African Economic and Monetary Union) in the country. Finally, Advans CI received support from CGAP, both in funding to implement the mobile banking solution, and also TA from CGAP's digital finance team, including support for a feasibility study and technical implementation of the digital school loan.

Similarly, **FMB** in Malawi also has partnerships with Telecoms companies MTN and Airtel allowing push and pull functionality between bank account and mobile money e-Wallets. This makes the solution a 'turnkey'

payment solution that is versatile and promotes the use of electronic money to further financial inclusion. Through the partnership, FMB can leverage the MNOs' vast 3000+ e-Kwacha agent network for transactions. The Bank is currently partnering also with the Ministry of Gender, Children and Social Welfare with funding from Irish Aid, to provide the social cash transfers disbursed directly to mobile wallets with PIN-enabled bankcards and mobile vans to rural areas.

**Musoni** in Kenya works with multiple partners. These include Grameen Foundation, via the Feed the Future Partnering for Innovation, a USAID-funded program to improve food security in emerging markets. Grameen's Human Centred Design approach supported Musoni in designing a product tailored to meet smallholder farmers' needs. They also supported Musoni in building the cash-flow calculator that has standardised the assessment of smallholder farmers' cash flows.

Musoni has also partnered with: the MasterCard Fund for Rural Prosperity which supported the MFI in scaling and marketing agricultural innovations for smallholder farmers; Safaricom, which since 2010 has provided Musoni with the mobile money platform through which Musoni is able to disburse loans, receive payments and build client credit profile; MSC (MicroSave), which helped Musoni build its credit scoring model; and Musoni's sister company Musoni System for the core banking solution. Musoni also has several value chain partners to help smallholder farmers access new markets, including input suppliers, aggregators, and extension service providers.

Finally, **Prabhu** in Nepal works with Prabhu Bank Ltd; Prabhu Insurance Ltd; Prabhu Money Transfer Pvt Ltd (one of the largest domestic/international remittance services providers, licensed by the Central Bank); and RuPaiya Switch, a payments solution provider that includes integration into the cloud-based core banking solution the chip-based RuPaiya Card for clients.

# Prabhu Management Pvt. Ltd., Nepal



Prabhu Management Pvt Ltd operates in Nepal as an agent network for Prabhu Money Transfer to provide remittance services to rural customers through a network of rural financial cooperatives. Since 2015, Prabhu Management partnered with Prabhu Technologies to develop low cost (\$20 per month) cloud-based core banking solutions (CBS) for financial rural cooperatives. The cooperative pays a percentage-based fee for the storage space they are using to host their member accounts on the cloud (PAAS Module). The members of the cooperatives are offered debit cards, branded 'Rupaiya', and linked to their savings account at the respective cooperative. The customers can access their accounts with cooperatives at ATM or at other payment points linked with Rupaiya Switch. In addition, Prabhu management also offers a web-based over the counter (OTC) module payment gateway called



"ePrabhu" to the cooperatives to offer additional services (like mPOS, bill payment, airtime, internet, TV, electricity, travel, insurance, education, entertainment) to rural clients.

1.2 million transactions took place via the ePrabhu gateway in 2017, up from 732,000 a year earlier. Approximately half of these are in the \$1-5 range.

## 3

## RESPONDING TO SPECIFIC CHALLENGES



Sometimes the introduction of a technology solution is driven by the availability and cost effectiveness of new hardware or software, allowing a financial institution to invest in innovation at either the back end or on the client-facing side, increasing operational efficiency or improving the client experience with either advances in existing delivery models, or introduction of new digital products and services. The previous two sections have illustrated how the Award semi-finalists are doing this.

In other cases, however, a technology initiative within an institution may be a response to externalities – a specific context or demand. **National Microfinance Foundation (NMF)** in Yemen, and **KKB Kredi Kayit Burosu A.S. (KKB)** in Turkey are examples of this.

Yemen has been in a state of civil war for years now, which – beyond the appalling human cost, has led to rolling liquidity crises, and several banks discontinuing their operations. Only 6.4% of the adult population has a bank account, and further, the poorly functioning infrastructure and security crisis hampers basic communication and

movements. Only 20% of the population uses the Internet, and SMS is an expensive means of communication for microfinance operators. National Microfinance Foundation has responded to this challenging context by migrating to the global VoIP and messaging platform WhatsApp to enable operations within the organisation.

National Microfinance Foundation has integrated WhatsApp into its management information system, meaning that after new clients add a particular contact number to their smartphone contacts lists, the management information system sends automatic reports to clients, as well as portfolio information to loan officers, branch managers and senior managers.

NMF's clients are 80% rural, 40% female, and suffering from dire health, sanitation and security conditions. With an average loan balance of only €31, ensuring continuity of credit facilities via this unorthodox use of a messaging platform provides much needed, if very basic, financial services access in an extraordinarily difficult context. Moreover, the usage of this free system facilitates low-cost communication, maintenance of client relationships via text chat, and maintaining institutional resilience in an economic humanitarian crisis without transportation, mail, reliable power or security.

**KKB Kredi Kayit Burosu A.S.** is Turkey's credit bureau, which has centralised the country's agricultural loans assessment system with granular agronomic data available to seven financial institutions, to better support over 80,000 end-users – primarily farmers – as of 2017.

KKB's system is called TARDES, and is a response to the prohibitive costs of collecting and analysing agronomic data by either farmers or the financial institutions that serve them, costs which act as a deterrent to financial institutions wishing to develop agrifinance products. In this



# National Microfinance Foundation, Yemen



National Microfinance Foundation (NMF) is a Yemeni NGO-MFI that has responded to the immense operational challenges due to the state of war in the country and ongoing liquidity crises by implementing a WhatsApp-based communication and *de facto* management information system, facilitating both communication of loan information to clients and employees' portfolio management.

NMF uses WhatsApp to address the disruption of communications in the war-torn provinces and conflict

zones. It requests new clients to add the Foundation among their mobile contacts upon joining. The MIS is set up to send automatic reports via WhatsApp to clients (loan information, balance confirmation, marketing), loan officers (clients' repayments), branch managers (portfolio and loan officers' performance indicators) and top managers (PAR, productivity and branches' performance). WhatsApp is also used by loan officers and the internal audit team to communicate with clients as needed.

WhatsApp messages are end-to-end encrypted and visible to the sender and receiver only. The information flowing from the system or the internal auditor to the clients without the loan officer intermediation increases transparency and discourages potential fraudulent behaviours (observed patterns: loan officers asking clients to repay earlier than due, not informing clients about payments received by guarantors). WhatsApp is also available to receive client complaints.



sense, KKB acts as a supra-sector wholesaler of agronomic data, leveraging economies of scale to reduce costs and increase access to this invaluable data to the medium and smallholder farmers who depend on it. The system was introduced by the Frankfurt School (via a project of the European Bank for Reconstruction and Development (EBRD)) in 2010, and handed over to KKB in 2013. The cost of the system is covered by charging a subscription model, per-application fee to the financial institution clients.

TARDES has reduced over-indebtedness thanks to the accurate cash-flow analysis and the information about additional loans. There is a well-established mechanism to receive the feedback of client financial institutions, as KKB relationship managers address requests and complaints in a customised way. User financial institutions have to comply with the internal control measures required by the regulator to ensure a responsible treatment of end-clients.

End-user farmers have benefited from an increase in agri-financing (there has been an annual increase of aggregated agriculture portfolios of 19.5% in the four years after the introduction of TARDES), as well as an increase in competition among lenders and improved service quality. For the financial institutions themselves, the increases in agri-lending business opportunities is a result of the lower costs and complexity of agriculture loan assessment because they can access the agronomic data via TARDES without the need to build duplicative and expensive agri-finance assessment mechanisms within each institution. Credit risk has reduced as well, due to more accurate analysis of repayment capacity, with non-performing loans decreased from 3.6% to 2.7% since the introduction of the initiative.

## KKB Kredi Kayıt Burosı A.S., Turkey



Agriculture accounts for 20% of the labour force in Turkey, the seventh biggest agricultural country in the world in terms of output. However, medium and smallholder farmers are under-financed by private financial institutions due to the high complexity of loan assessment, lack of hard collateral and high operational costs. To address this under-financing of farmers, the Turkish credit bureau KKB runs a centralised agricultural loan assessment system (TARDES) to mutualise the investment needed to manage the risks and costs of

agro-lending and make it available to several financial institutions. Accurate agronomic data on costs, yields and prices of more than 257 agricultural products and production methods are collected every year in all provinces by a team of experienced agronomists. The data are then uploaded to the system and run in the background of the agriculture loan assessment "engine". The application calculates agricultural revenues, costs and net income based on the background data, the credit bureau indebtedness data and the information provided by

the applicant, providing loan limits, maturity and repayment schedule options (17 loan types are available for various working capital, investment and the consumption needs of the farmers). The system's functions and interface, including parameters, calculation methods, questionnaires for clients, and details of agriculture products can all be customised by each financial institution.

# FACTORS FOR SUCCESS



The ten semi-finalists that are profiled within this paper present as many differences as they do similarities. They range from large banks such as ESAF SFB down to MFIs with a small loan client base, such as FMB. They reach client segments from MSMEs (ADOPEM) to cocoa farmers (Advans CI). And they offer solutions ranging from in-house tablet software (KMF) to aggregated agronomic data on subscription service for financial institutions (KKB).

Despite this, it is possible to extract factors for success that cut across such a heterogeneous group of initiatives and organisations.

First, as outlined in more detail in the box on page 30, **partnerships** are indispensable to any MFI seeking to introduce a new technology. MFIs cannot leave the serving of excluded segments to new FinTech entrants,

but must harness their legacy of experience and relationships with low-income segments, credit assessment, and understanding clients' needs, and work with FinTechs to deliver personalised, digitally enabled services, while retaining the human touch and assistance that remains crucial to providing the right financial services and support to vulnerable people.

Second, and a clear reflection of lessons learned in the microfinance sector more broadly over the last decade – technology-enabled products and services will only be sustainable for an institution if they are actually **matched to clients' needs** – and not what donors, consultants or board directors assume are those needs. Investing in market research, focus groups or phone surveys is important, as is starting from the first position of *what do our clients need*

*and what does our institution need in order to better provide it?*

Third, **responsible practices** should be included in the institutional strategy of the FSPs and incorporated in their policies, and the support of an organisation's senior management has been proven successful in generating or even improving the impact of financial inclusion through technology. When assessing client protection, FSPs must balance not just the accessibility of the financial services, but also the communication channels in place, the complaint resolution mechanisms and the transparency of those services. The applicants profiled within this paper had varying client protection standards and contexts within which to apply them, but all had some processes in place that contributed to the success of their technology-led program.

One of the main takeaways from the 2018 Award is that traditional microfinance organisations need to be vigilant, especially when working with new-entrant partner organisations that don't have experience serving vulnerable populations. On the other hand, involving these new actors is an opportunity for the sector to increase outreach and financial inclusion. Moreover, the changing scenario could help also to identify gaps in current client protection standards and ultimately improve the quality of technology-enabled financial services.

Fourth, all the profiled applicants understood the key importance of **training**. This applies to institution-

side initiatives (an investment in tablets for loan officers, or a new core banking solution is not just wasteful, but indeed deleterious if it is rolled out without training to ensure it can be profitably used) and perhaps even more so to client-facing products and services. Pushing vulnerable clients with low numeracy and financial literacy to technology solutions that confuse, intimidate and ultimately alienate them, without first preparing them with financial education or other training, will not serve either the institution or the client.

Finally, introducing technology is a journey – a **process**. In almost all cases profiled here, the technology initiative was not a greenfield institution, but involved an iterative introduction of new solutions, replacing traditional and inefficient methods. This means there will be some trial-and-error involved, and not everything will succeed. However,



careful planning and piloting of new initiatives can mitigate the costs of failure. Over-ambition – trying to change everything at once – risks doing everything badly, and nothing well. Too little ambition – a culture of inertia – risks obsolescence: failing to

compete with new entrants, and/or being left with only low-value clients. Successful initiatives will always involve long-term planning, not losing sight of mission, and using fancy new technology as a means to an end, and not an end in itself.





## ABOUT THE EUROPEAN MICROFINANCE AWARD



The European Microfinance Award is a prestigious annual award with €100,000 for the winner and €10,000 for the runners-up, which attracts applications from organisations active in financial services around the world that are innovating in a particular area of financial inclusion. The Award was launched in 2005 by the Luxembourg Ministry of Foreign and European Affairs – Directorate for Development Cooperation and Humanitarian Affairs, and is jointly organised by the Luxembourg Ministry of Foreign and European Affairs, the European Microfinance Platform (e-MFP) and the Inclusive Fi-

nance Network Luxembourg, in cooperation with the European Investment Bank. It serves two parallel goals: rewarding excellence, and collecting and disseminating the most relevant practices for replication by others.

Previous editions addressed the following subjects:

- **2017, Microfinance for Housing**

How can MFIs respond to the complex housing needs of low income and vulnerable populations, helping them access better quality residential housing?



- **Winner:** Cooperativa

Tosepantomin, for its holistic housing programme serving rural communities and promoting environmental responsibility.

- **2016, Microfinance and Access to Education**

How can MFIs increase access to education for children, or provide skills training for youth and adults to enhance their employment and self-employment opportunities?

**Winner:** Kashf Foundation (Pakistan), for its programme to serve low-cost private schools.

- **2015, Microfinance in Post-disaster, Post-conflict Areas & Fragile States**

What can MFIs do in order to operate in exceptionally difficult environments and circumstances,



helping increase the resilience of the affected communities?

**Winner:** Crédit Rural de Guinée S.A (Guinea), for its innovative response to the Ebola outbreak in Guinea

- **2014, Microfinance and the Environment**  
Is it possible to integrate environmental governance into the DNA of MFIs and promote initiatives to improve environmental sustainability?  
**Winner:** Kompanion (Kyrgyzstan), for its Pasture Land Management Training Initiative
- **2012, Microfinance for Food Security**  
Which microfinance initiatives contribute to improving food production and distribution conditions in developing countries?  
**Winner:** ASKI (The Philippines), for serving smallholder farmers and fostering effective market linkages
- **2010, Value Chain Finance**  
What are the outstanding microfinance initiatives in productive value chain schemes?  
**Winner:** Harbu (Ethiopia), for an initiative financing a soybean value chain
- **2008, Socially Responsible Microfinance**  
What innovative initiatives can MFIs undertake to promote, measure and increase the social performance of their activities?  
**Winner:** Buusaa Gonofaa (Ethiopia), for the development of its client assessment system
- **2006, Innovation for Outreach**  
What are breakthrough initiatives within microfinance that deepen or broaden rural outreach?  
**Winner:** The Zakoura Foundation (Morocco), for its programme on rural tourism

## High Jury Members

### PRESIDENT

Mr. Romain Schneider, Minister for Development Cooperation and Humanitarian Affairs

### MEMBERS

**Mrs. Essma Ben Hamida**, Co-Founder of Enda Tamweel, CEO of Enda inter-arabe, Schwab social entrepreneur

**Mrs. Renée Chao Beroff**, General Manager, PAMIGA

**Mr. Olivier Edelman**, Head of Microfinance Unit, European Investment Bank

**Mr. Ofelio Julián Hernández**, Chairman, Cooperativa de Ahorro y Préstamo Tosepantomin

**Mr. Michel Maquil**, Chairman, Inclusive Finance Network Luxembourg

**Mr. Graham Wright**, Founder and Group Managing Director, MSC (MicroSave)

## Selection Committee Members

Organisation	Representative
Appui au Développement Autonome (ADA)	Arnaud de Lavalette
BNP Paribas	Alexandre Nayme
Consultative Group to Advance the Poor (CGAP)	Nadine Chehade / Antoine Navarro
European Investment Bank (EIB)	Hannah Siedek
Consultant	Micol Guarneri
International Labour Organization (ILO)	Pranav Prashad
Luxembourg For Finance (LFF)	Robert JARVIS
MFI Analytics	Yasser El Jasouli
Oikocredit	Vincent van Dugteren
OpenCBS	Alexis Lebel
PAMIGA	Jacinta Maiyo
PCES	Tim Niepel
PricewaterhouseCoopers (PwC)	Prasanta Mandal
Social Performance Task Force (SPTF)	Laura Foose / Cara Forster
Suricate Solutions SA	Jean Louis Perrier
The Luxembourg Finance Labelling Agency (LuxFLAG)	Sachin S. Vankalas
United Nations Capital Development Fund (UNCDF)	Ahmed Dermish
University of Luxembourg	Prof. Dr. Dirk Zetzsche





# ORGANISERS OF THE EUROPEAN MICROFINANCE AWARD

## Luxembourg Ministry of Foreign and European Affairs

Directorate for Development Cooperation and Humanitarian Affairs

<https://cooperation.gouvernement.lu>

The inclusive finance sector has been actively supported by Luxembourg's Directorate for Development Cooperation and Humanitarian Affairs of the Ministry of Foreign and European Affairs over the last 20 years. The Ministry works closely with civil society stakeholders and networks specialised in microfinance to fund conceptual innovation, research and the development of new tools as well as political action in national and international fora, by focusing particularly on integrating the most vulnerable into the financial inclusion sector. Long-term commitment and strategic support have led to Luxembourg being globally recognised as a centre for financial inclusion.



## The European Microfinance Platform

[www.e-mfp.eu](http://www.e-mfp.eu)

The European Microfinance Platform (e-MFP) is the leading network of European organisations and individuals active in the financial inclusion sector in developing countries. It numbers over 130 members from all geographic regions and specialisations of the microfinance community, including consultants & support service providers, investors, FSPs, multilateral & national development agencies, NGOs and researchers.

Up to two billion people remain financially excluded. To address this, the Platform seeks to promote co-operation, dialogue and innovation among these diverse stakeholders working in developing countries. e-MFP fosters activities which increase global access to affordable, quality sustainable and inclusive financial services for the un(der)banked by driving knowledge-sharing, partnership development and innovation.



## Inclusive Finance Network Luxembourg

[www.InFiNe.lu](http://www.InFiNe.lu)

The Inclusive Finance Network Luxembourg Asbl (InFiNe.lu) was created in March 2014 and is supported by the Luxembourg Ministry of Foreign and European Affairs – Directorate for Development Cooperation and Humanitarian Affairs. The uniqueness of InFiNe.lu is to bring together key stakeholders from the public, private and civil society sector in Luxembourg around the common objective of promoting financial inclusion. The network includes 32 members. InFiNe.lu aims to develop knowledge and expertise by stimulating exchange and collaboration amongst its members and capitalises on Luxembourg's leading position in the financial and development sectors.



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