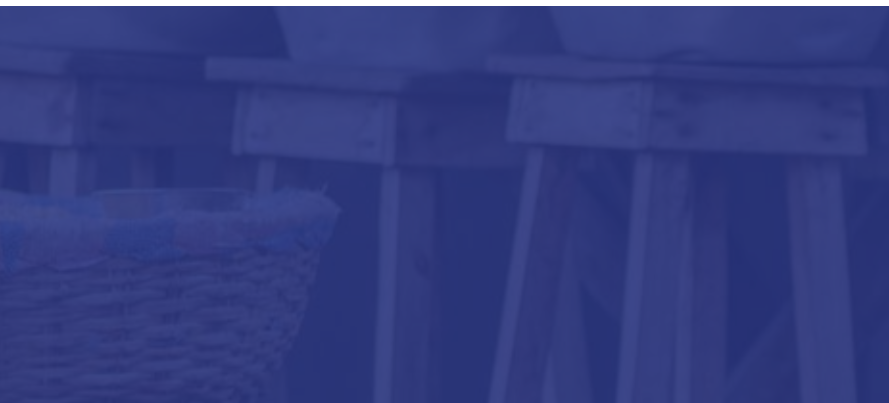




Unlocking Public and Private
Finance for the Poor



FIVE YEARS OF MARKET DEVELOPMENT IN **BENIN, SENEGAL AND ZAMBIA** (2015–2019)

ACKNOWLEDGEMENTS

This publication is the result of a team effort and representative of the partnership spirit and approach that has guided the MM4P programme at UNCDF and the Mastercard Foundation. The editorial committee was composed of Anne Duijnhouwer, Bery Kandji, François Coupienne, Malingose Kambandu, Moira Favrichon, Nandini Harihareswara and Sabine Mensah. On behalf of the team and as the coordinator of the report, I would like to thank everyone who kindly contributed to its writing and making.

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Thank you!
By Karima Wardak, UNCDF Knowledge and
Communication Senior Associate for MM4P



TABLE OF CONTENTS

Foreword	04	PART 3 –	
Acronyms	05	Lessons learned	
		3.1 Critical success factors	32
		3.2 Key lessons for the next phase	33
PART 1 –		PART 4 –	
What has changed in people’s lives		Building the next digital economy	
with the growth of digital finance?		success stories	
1.1. User stories	06	4.1 Our new approach	36
Recognizing time is (mobile) money	06	4.2 Tool to track the development of	
Finding a different path (from		inclusive digital economies	36
migration) as an agent	09	4.3 Workstreams and instruments	38
Transformation and multiplication:			
Removing collateral from lending			
requirements	10		
1.2 Growing from start-up to expansion	12	Conclusion	38
PART 2 –			
Our role in the market			
2.1 Our approach	14		
2.2 The markets and our activities at a glance	16		
2.3 Our activities and projects	19		
Customers	20		
PAMECAS – Providing digital loans to			
women and youth with no collateral	21		
Ecobank – Demystifying the bank	21		
Agent networks and distribution	22		
Kazang – Building a third-party agent			
network	23		
Providers	24		
La Banque Agricole – Offering a			
digital wallet to smallholder farmers ...	25		
Enabling policy and regulation	26		
Bank of Zambia – Automating data			
on digital finance	27		
Ecosystem development	28		
goMediCAL – Leveraging mobile			
money for broader development			
outcomes	31		

FOREWORD

Double-digit growth of digital financial services with a market-systems approach.

The partnership between UNCDF and Mastercard Foundation was born in 2014 out of a shared concern that developing countries that needed digital finance the most were succeeding in it the least. The success of M-Pesa in Kenya had been undeniable, reaching millions of citizens within five years and changing the way low-income people moved and managed money. But this success seemed difficult, if not impossible, to replicate in other markets, particularly in smaller and poorer ones. Despite its attraction, digital finance to advance financial inclusion was clearly not easy to implement and the Kenya model did not represent a viable pathway to success for every country.

The Mastercard Foundation and UNCDF formed a partnership to replicate and scale a model that had found success in the Pacific region: taking a market development approach to increasing digital financial inclusion. Through the partnership, UNCDF was able to expand the Mobile Money for the Poor programme (MM4P) and test frameworks created across the world in markets that were not yet “on the map”. After scoping a number of Least Developed Countries, we chose to work in three countries in West and Southern Africa – Benin, Senegal and Zambia – all with very low rates of usage for digital finance services (DFS).

As we entered these markets, the tensions and frictions among stakeholders were palpable. Benin, Senegal and Zambia, for example, all had in common a siloed, non-collaborative domestic financial market. The divergence of views and

fears of encroachment were hindering the emergence of an ecosystem that could 1) simply experience growth, and 2) provide services to vulnerable population segments that needed them more than others, such as youth, women and smallholder farmers. Moreover, regulators were looking for inroads to engage with the private sector and manage the changes brought about by financial innovations and fintechs.

The MM4P programme was designed to provide a mixture of technical, financial and policy support to policymakers, regulators, banks, microfinance institutions, mobile network operators, distributors and everyday users of digital finance. Now, five years later, the DFS ecosystem is in place and the active number of DFS users has risen far beyond our expectations. Benin has seen DFS usage rates increase from 2% to 40%, Senegal from 13% to 29%, and Zambia from 4% to 44%. Look behind those numbers and you will find the stories of millions of customers as well as the stories of providers who changed their perspective, and found success, by going rural or offering new and better services to women and youth.

This publication brings to the fore the voices of those customers and the stakeholders with whom we engaged. Their views offer insight into how the market development approach we took contributed to the growth of each market. We hope that you will find the story of our journey, and the analysis of what we learned, useful for your own work in international development, be it in digital finance or other areas. It is a story about how investment in a long-term team on the ground in three markets has contributed significantly to the growth of digital financial inclusion. This is important because we believe digital finance is a building block of inclusive digital economies that can help individuals improve the quality of their lives and fuel the growth of the businesses to hire Africa’s burgeoning population of talented and ambitious young people.

Mark Wensley,
M. Wensley

François Coupienne,
F. Coupienne



ACRONYMS

ALIDé	Association de Lutte pour la promotion des Initiatives de Développement
BCEAO	Banque Centrale des Etats de l’Afrique de l’Ouest
BoZ	Bank of Zambia
CAURIE MF	Caisse Autonome pour le Renforcement des Initiatives Economiques par la Microfinance
DFS	digital financial service(s)
HCD	human-centred design
MFI	microfinance institution
MM4P	Mobile Money for the Poor
MNO	mobile network operator
MSMEs	micro-, small- and medium-sized enterprises
MTN	Mobile Telephone Networks
OTC	over the counter
PAMECAS	Partenariat pour la Mobilisation de l’Épargne et du Crédit Au Sénégal
UNCDF	UN Capital Development Fund
UNHCR	Office of the UN High Commissioner for Refugees
USSD	unstructured supplementary service data
Zanaco	Zambia National Commercial Bank

PART 1 — WHAT HAS CHANGED IN PEOPLE'S LIVES WITH THE GROWTH OF DIGITAL FINANCE?

1.1 USER STORIES

Recognizing time is (mobile) money

Back in 2017, time was a luxury that Pierrette Folly could barely afford.¹ Managing her grocery stall in Cotonou, the capital of Benin, required long, hard hours. Moreover, Pierrette had to travel twice a month to the northern part of the country, where all of her suppliers were based, hiding cash in her clothes so that she could pay for her purchases. The journey typically took several days, during which her regular customers in Cotonou shopped elsewhere. In addition, because of her periodic absences, Pierrette had to keep all of her merchandise inside her home compound. All of these hassles were eating away her profits.

However, in 2018, Pierrette experienced a major change in her life and business. She started using her mobile phone to place her orders and pay her suppliers, who shipped the goods upon receipt of payment. As a result, she was able to save precious time and money. Pierrette invested what she previously spent to travel to northern Benin to expand her business (for instance, she started selling charcoal), moved her children to a better school and bought a plot of land where she is going to build a warehouse. Today, the most telling testimony of Pierrette's success is her shop. Once hidden behind the walls of her home compound, the stalls have been moved outside. They now display a growing variety of colourful cereals. She sees it as a symbol of a virtuous cycle triggered by the technology that she started using a few years earlier. Today, Pierrette comfortably navigates different digital platforms, juggles mobile money and social media to boost her business, and seizes the opportunities that a quickly expanding digital ecosystem in Benin is presenting to bold and dynamic female entrepreneurs like her.

The change in Pierrette's life and business was triggered by a wider range of services being offered in Benin—mainly, in her case, by Mobile Telephone Networks (MTN, a mobile network operator [MNO]) and Association de Lutte pour la promotion des Initiatives de Développement (ALIDé, a microfinance institution [MFI]) of which Pierrette had been a client for 10 years. ALIDé launched a service in 2017 that allowed borrowers to repay their loan by phone. The service was the result of a partnership that ALIDé had forged with MTN, with UNCDF support. For the first time, Pierrette saw her mobile money account as a game-changer. She no longer needed to go to an overcrowded ALIDé branch to make a repayment, which saved her time and money. As the usage of mobile money was taking off across Benin, she also realized that her mobile wallet with MTN could help her avoid the periodic, yet costly and time-consuming, travel up north. In the beginning, her suppliers were sceptical of replacing face-to-face transactions with mobile money transfers. After all, they would eventually have to cash out, and local mobile money agents suffered from a chronic shortage of liquidity. Nevertheless, as migrants to the coast used mobile money more and more to send money back home, a digital payment ecosystem began to emerge in the area. Once Pierrette and her suppliers were able to transact comfortably with each other, they agreed to use WhatsApp to place orders more efficiently.

Even as Pierrette continues to rely on ALIDé for her financial needs, she wishes for greater integration of microfinance and digital money, as well as a more frictionless financial ecosystem in general (e.g., digital credit and other products that help her address her financial goals). In Benin, her wish is shared by many others.

We partnered with both ALIDé and MTN to address key market constraints and strengthen usage of financial services in Benin.² We worked with MTN to leverage human-centred design (HCD) methodologies (focus groups and immersions) to improve the customer journey and increase adoption in the country's main cities and capital, Cotonou, but also in more remote areas. Furthermore, we supported ALIDé in the technical integrations required for a sustainable partnership with MTN for second-generation digital finance products and services, benefiting customers like Pierrette.

¹ Interview by Gianluca Lazzolino and Karima Wardak, Cotonou, September 2019.

² See, for example, this article in which we describe our work in Benin: <https://www.uncdf.org/article/4978/bank-to-wallet-services-what-can-be-learned-from-a-pilot-project-in-benin>.



Finding a different path (from migration) as an agent

In 2015, Elhadji Birane Gaye was 19 and struggling to find work in his village of Keur Gaye in the outskirts of Nioro Du Rip, a town in southwestern Senegal.³ Besides helping his father in a local Qur'an school, Birane's only option was to follow in his brothers' footsteps and migrate elsewhere, as three quarters of young men from his village had already done.

Yet, today, his life is changed. Birane facilitates the receipt of remittances and the transfer of money in the Nioro Du Rip area. In the beginning, he was perceived as too inexperienced to be entrusted with inbound remittances and money transfers, but he gradually built a reputation for being diligent in handling other people's money. This growing level of trust led to an increase in his customer base. When thinking back to the strides he made over the past four years, Birane summarizes his journey with two words: trust and respect. It is the trust that his community placed in him and the respect that he earned within his community and family. Unlike many of his peers who left the village, Birane earns enough living in the village to take care of his younger brother's school fees and pay for medical bills. For Birane, the best testimony of his success is the outfit for *Tabaski*, a religious celebration, that he bought for his father. "When he wears it and goes around the village," Birane says, "people know that it's my gift to him. He's proud, and I'm happy."

Behind the radical change in Birane's life, there is an interplay of two factors: the widespread penetration

of mobile phones in his area, on the one hand, and a broader range of sophisticated financial services being offered on the other. They have proven to be the optimal fuel to boost the grassroots' ingenuity that Birane embodies. His ingenuity began to be revealed back in 2015 when he invented his own job by selling airtime that he received from his brothers to other villagers. From there, he first became an agent for a local businessperson and then, in 2017, became his own boss when he discovered InTouch (an aggregator of payment platforms).

It all started with our call for proposals to develop a network of agents in rural areas of Senegal in order to address service gaps.⁴ We supported InTouch with the objective of expanding its agent aggregation business to strategic remote areas of Senegal, such as the one where Birane lives. First, we helped InTouch design a strategy for rural agent acquisition. We placed particular emphasis on the recruitment of youth and female agents. Next, we provided financial and technical support to InTouch in order to operationalize the strategy in rural areas. In parallel, we organized a national-level working group for digital finance in Senegal—the goals of the working group were to facilitate dialogue among digital finance stakeholders (particularly between public- and private-sector actors), advocate for and share best practices (drawn from our own global experiences as well as others in the country and region), and ultimately advance financial inclusion. The working group provided a useful platform to InTouch to build new partnerships and channel more business to rural agents, such as Birane.

³ Interview by Bery Kandji and Gianluca Lazzolino, Dakar, September 2019.

⁴ See, for example, this article in which we describe our work in Senegal: <https://www.uncdf.org/article/5084/is-the-agent-aggregator-model-the-solution-for-rural-areas>.

Transformation and multiplication: Removing collateral from lending requirements

Before she began to use mobile money in 2014, Elase Mwale was stuck in a purely cash economy, like the overwhelming majority of Zambians.⁵ Until then, when Elase wanted to send money from her home in Lusaka back to her village in northern Zambia, she had to give an envelope full of cash to a bus driver and hope a family member would be able to receive it 10 hours later; there was no guarantee of delivery. She wanted to save but was worried about the safety of keeping cash in the house. If she wanted extra money to buy something, she had to ask her husband for the cash.

Following the advice of a friend, Elase registered for a mobile wallet, which she used for both sending money to her relatives and saving money. After six months, she had enough to buy a mobile money booth in Misisi, an area to the south of Lusaka's Central Business District. The location was good and the business went well, to the point that she was able to invest in two more booths. Elase joined the ranks of the many micro-, small- and medium-sized enterprises (MSMEs) that are the backbone of the urban economy in Zambia.

However, like other MSMEs, one particular problem kept hampering the growth of Elase's business: liquidity management. Namely, Elase was often short of cash and struggled to manage the balance of cash and electronic float to serve both people who wanted to withdraw from their mobile money account (cash out) and those who needed to top up their mobile money

(cash in). When she ran out of money, she had to close her booth, get on a bus, travel to a Service Centre 30 minutes away and return with the extra funds. On top of the cost of the bus fare, Elase found that she lost customers, who moved on to work with another agent in the meantime. Without access to capital, she could not grow her business. Without more business, she could not grow capital. Elase was stuck.

Around this time, Elase was approached by an agent of FINCA, an MFI that had been working with us to develop a transaction-history-based loan product for agents. Based on the number and size of her daily transactions as well as how long she had been continually in business, the FINCA agent told Elase that she would be eligible for an 'Agent Cash' loan. After receiving the loan, Elase immediately used it to expand her float, which allowed her to serve more customers. More customers meant more revenue, and within three months, she was able to expand her business to five booths.

Elase has since expanded her business further, employing four people from her extended family and her church. Moreover, she takes care of her two daughters and supports her niece in nursing school. Since she started using mobile money and received the non-collateralized loan from FINCA, Elase became financially independent of her husband and upgraded her business. She is poised to take advantage of any other opportunities that she so desires.

This change would not have been possible without the financial and technical support we provided to the FINCA partnership with MTN to expand outreach and improve service quality as well as to pilot agent loan services, created for and with agents, to remove key barriers of agent liquidity.

⁵ Interview by Malingose Kambandu and Howard Miller, Lusaka, 25 September 2019.

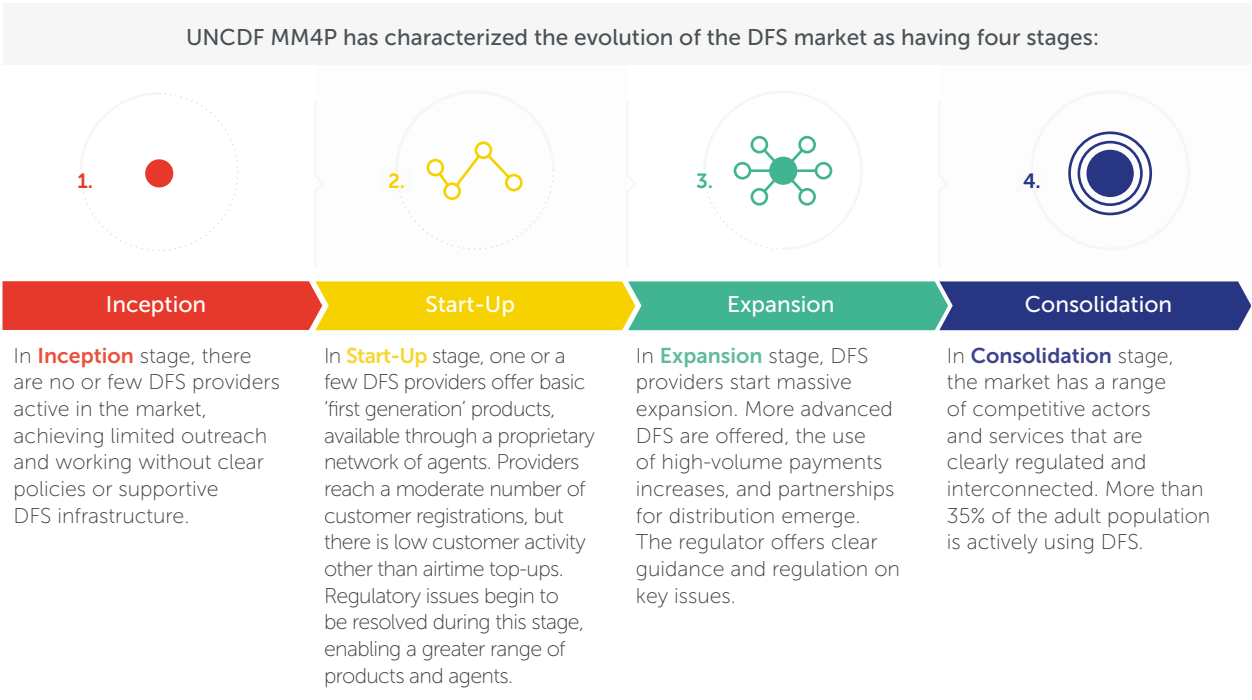
1.2 GROWING FROM START-UP TO EXPANSION

Digital financial services (DFS) encompass a range of formal financial services accessible via digital channels, such as mobile money, agency banking, automated teller machines and debit cards, as opposed to traditional financial services accessed through physical visits to a provider's outlet. With the emergence of DFS, the UN Capital Development Fund (UNCDF) launched the programme MM4P (Mobile Money for the Poor) to ensure that the opportunities and benefits of digital finance would be sure to reach low-income people in difficult markets as well. To do so, the programme was designed to provide a mixture of technical, financial and policy support to policymakers, regulators, providers, distributors and users of

digital finance. In short, we set out to help improve not only financial inclusion but also **digital** financial inclusion, which means ensuring all eligible citizens have digital access to and can use a range of affordable, convenient and appropriate formal and informal financial services.

When we launched our MM4P programme in Benin, Senegal and Zambia, in partnership with the Mastercard Foundation, our goal was to fast-track digital financial inclusion for people like Birane, Elase and Pierrette. In 2015, all three countries were in a stage of market development best characterized as Start-Up (see figure I for a description of each stage), though they had varied financial landscapes. In Benin, for instance, only 2% of the adult population was actively using DFS.⁶ There were just two DFS providers and 10 agents per 100,000 adults actively providing DFS.⁷ In Zambia, the active usage rate of DFS by the adult population was 4%, while there were five DFS providers and 13 active DFS agents per 100,000 adults. In Senegal, the active DFS usage rate was higher, at 13%, with four DFS providers and 12 active DFS agents per 100,000 adults.

Figure I Market development framework



In contrast to Benin, the markets in Senegal and Zambia were dominated by over-the-counter (OTC) money transfer companies, which risked being a double-edged sword.⁸ On the one hand, OTC services eased money transfers for people who used to rely on cash or expensive remittance companies. On the other hand, when interacting with OTC agents, customers mostly remained oblivious to the opportunities that owning their own wallet presented, such as more advanced ownership and access to additional financial services in the formal financial system. In short, customers' overreliance on OTC agents to process transactions on their behalf stymied their financial inclusion.

However, one thing that Benin, Senegal and Zambia all had in common was a siloed, non-collaborative financial market. In Benin, MFIs such as ALIDé were particularly vocal in their fear that MNOs or fintechs would encroach on what they saw as their turf—that is, the provision of financial services to informal entrepreneurs like Pierrette. The market looked so fraught with tension and distrust among stakeholders, so challenging because of what were perceived as stiff regulatory procedures and structural economic obstacles, that we kept our goals very cautious and translated them into safe targets; namely, we set our aim to ensure 12% of adults in Benin would be financially included with DFS by 2019.

In Zambia too, the digital finance sector was stagnating. Despite having seen one of the earliest launches of mobile money services on the continent (Zap by Celpay in 2002), mobile money was stuck in a vicious circle: there were not enough agents to serve customers and not enough customers to incentivize agents to offer mobile money. Similarly, Senegal was characterized by a fragmented financial landscape of insulated entities. The OTC providers had 'first mover' advantage in the market, as there had been massive adoption of their model. Mobile money struggled to offer a value proposition compelling enough to change customer behaviour, resulting in low usage of DFS. The divergence of focuses and the fear of encroachment were keeping the key stakeholders apart, hindering the discussion of how to build an ecosystem to increase the financial security of vulnerable customers, enable the economic empowerment of youth and women, and facilitate access to credit for MSMEs and smallholder farmers. Moreover, the regulators were just starting to engage private-sector actors, given the looming changes in financial innovation and fintech on the horizon.

Five years down the line, a more expansive digital finance ecosystem, shaped by a big leap forward in the number of active users, agents and stakeholders, has emerged in all three countries. Partnerships are thriving. Players that, until recently, had very little grasp of each other's work are exploring ways to collaborate. Banks and fintechs are a case in point: once worlds apart, they are now forging synergistic relationships. The local DFS markets have transitioned from Start-Up stage to Expansion stage, as per the UNCDF market development framework.

In Benin, the number of adults conducting digital payments has skyrocketed. Overcoming our wildest expectations, the active adult DFS usage rate in the country has hit 40%. Today, three MNOs, one MFI, one bank and one Post Office provide DFS, and there are 649 active DFS agents per 100,000 adults across the nation. Benin has turned from a digital laggard into a digital locomotive. In the past five years, there has been an increase of 2.5 million active DFS users like Pierrette.

In Zambia, active adult DFS usage is 44%. There are 478 active DFS agents per 100,000 adults and 18 DFS providers. In the period of December 2017 to December 2018 alone, the number of active DFS users doubled to 4.35 million and the number of active DFS agents doubled to 46,000. In the last five years, the change in the market has greatly exceeded our initial goal of seeing the market grow from 4% to 15%, with millions of new and active DFS users like Elase. While OTC was seen as a dominant trend in 2014–2015, due to a competitive environment and customer tastes, wallet usage is now much more dominant and in demand.

Compared to the other two countries, Senegal has underperformed, although the number of active DFS users is today 2,790,401 (29% of the adult population). OTC services played much more of a dominant role in Senegal than in Zambia, setting a precedent in the market for users and providers that prevented the uptake of DFS wallets. However, a diverse array of players does provide DFS (three MNOs, three banks, three OTC agencies, 12 fintechs and one Post Office), with an active DFS agent rate of 192 per 100,000 adults. In the past five years, there has been an increase of 1.7 million active DFS users like Birane.

The timelines in figures III, IV and V, on pages 16 and 17, show the changes that occurred in the three countries and illustrate the activities we conducted in each over the same five-year period.



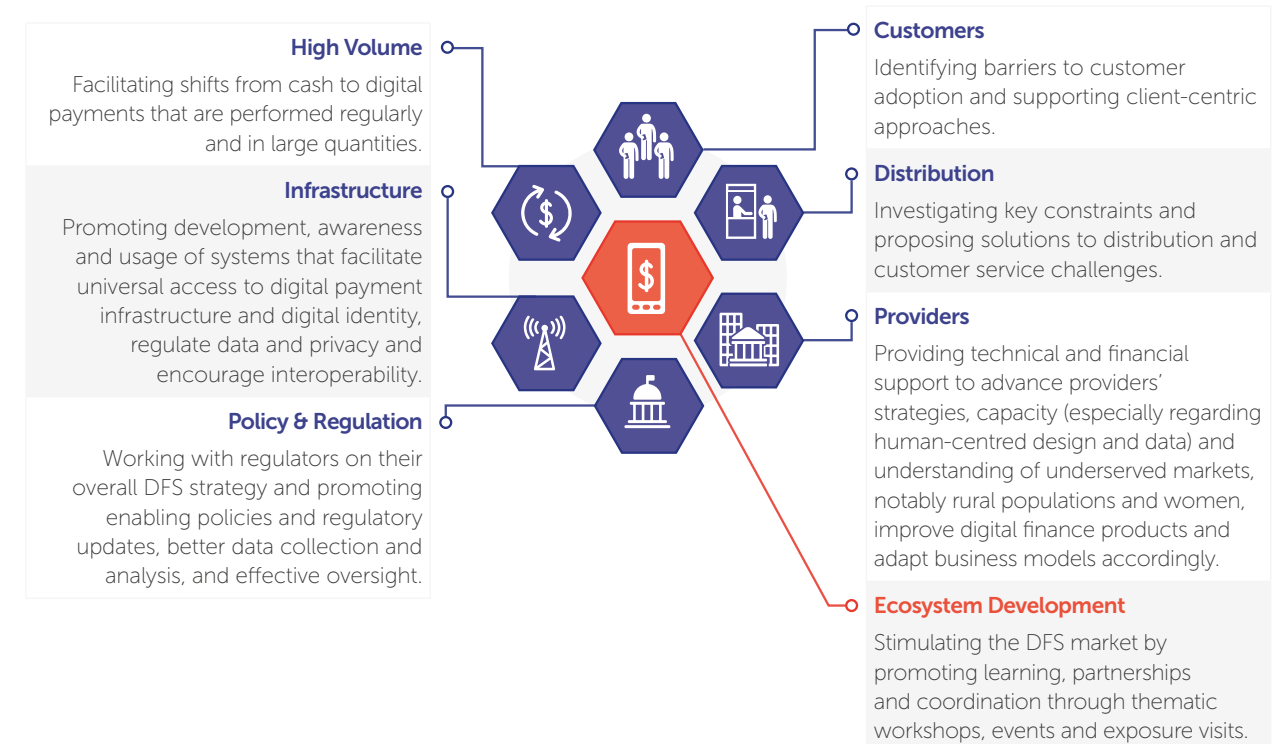
PART 2 – OUR ROLE IN THE MARKET



2.1 OUR APPROACH

We have been central to these stories of growth. The stories are varied and complex, with many moving parts and a wide range of stakeholders, working both to increase their own stakes in the market and the ecosystem as a whole. The ecosystem development approach that we developed (see figure II for a description) recognizes that change in a market system is non-linear and that each actor requires different types of support at different points in the market's development. It acknowledges that the interaction of financial service providers with customers relies on effective agent networks and well-designed products, in an environment supported by an appropriate delivery infrastructure and enabling policies and regulations.

Figure II Ecosystem development approach



When we entered these three markets, they were all in the Start-Up stage of development but with variations in the components of their ecosystem. Senegal had a fledgeling MNO-led sector, with 13% of the adult population using mobile money, and the sector was struggling to grow. Benin had no legacy of OTC models, and active adult DFS usage was just 2%. Zambia had experience with DFS for some time; however, despite the recent growth of Zoono (a fintech focused on OTC products), it was struggling to reach a critical mass with just 4% of adults actively using DFS.

Although major differences existed and still do among the economies and digital finance sectors of Benin, Senegal and Zambia, there are some common threads in the way that we approached working in these three markets. Together, those commonalities represent the unique formula that underpins our success in driving digital financial inclusion.

We have taken an ecosystem approach. This has meant working across the digital finance sector, addressing key constraints for all parts of the market (from customers to public-sector actors to private-sector players) and supporting innovation wherever it may arise.

Our technical teams have been on the ground. This has meant our DFS experts have an intimate understanding of the market dynamics and are able to provide high-quality technical support, without always having to rely on external experts. It has meant we can respond quickly and dynamically and can build trust with market stakeholders.

Our role has been to catalyse sustainable solutions. This has meant we maximize our resources by concentrating them on identifying and unlocking market constraints wherever they appear. Our approach has been to support proofs of concept, demonstrate effectiveness and sustainability, and then crowd in others to take projects forward.

We have built bridges to promote collaborative DFS sectors. This has meant we play a matchmaking role to exploit synergies and carve out a position as a neutral broker, equidistant from all players in the market and trusted by all.

We have brought new ideas to the market. This has meant demonstrating the effectiveness of tools like HCD and alternative data analytics, leveraging our global UNCDF network for cross-pollination of ideas.

“The strength of UNCDF lies in its holistic approach. It covers all the aspects of digital finance, from the training of the actors to the technical assistance on specific projects. ... On top of that, UNCDF has developed a platform that has enabled the stakeholder to meet and better understand how to collaborate.”

— Hermann Ahouandjinou, Manager of FS Sales & Ecosystem, MTN Benin

2.2 THE MARKETS AND OUR ACTIVITIES AT A GLANCE

Figure III Timeline in Benin

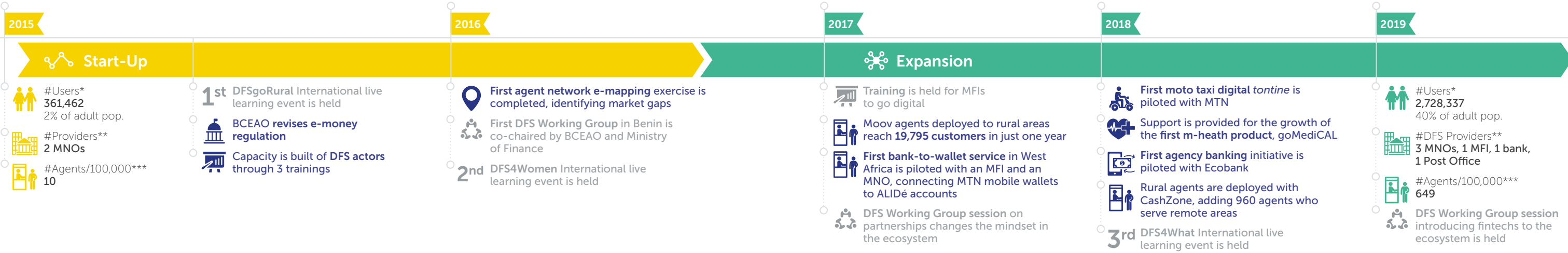


Figure IV Timeline in Zambia

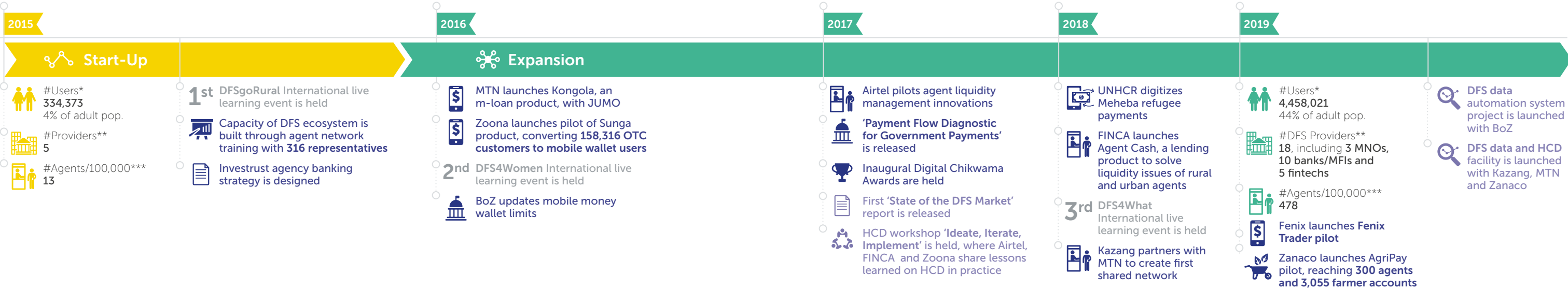
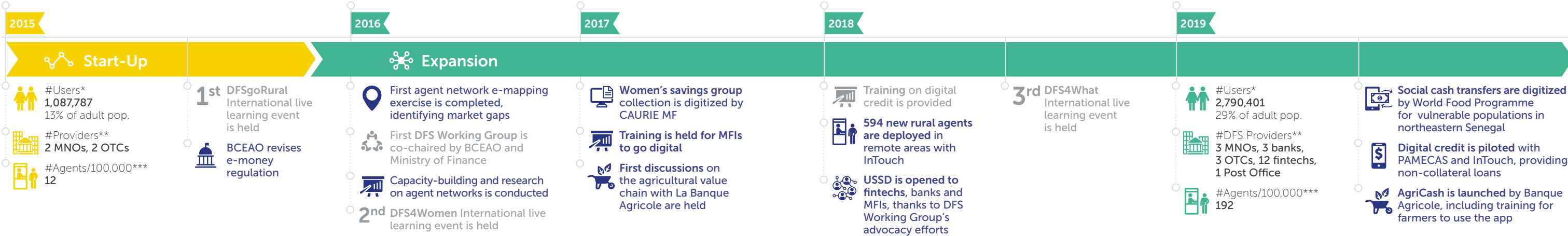


Figure V Timeline in Senegal



*Customer activity is defined as having made at least one transaction in the past 90 days. **Number of providers comprises those that offer DFS on a sustainable basis, self reported. ***Agent activity is defined as having made at least one transaction in the past 30 days.

Acronyms: BCEAO, Banque Centrale des Etats de l'Afrique de l'Ouest; BoZ, Bank of Zambia; PAMECAS, Partenariat pour la Mobilisation de l'Épargne et du Crédit Au Sénégal; UNHCR, Office of the United Nations High Commissioner for Refugees; USSD, unstructured supplementary service data; Zanaco, Zambia National Commercial Bank.



2.3 OUR ACTIVITIES AND PROJECTS

When we launched the programme in Benin, Senegal and Zambia five years ago, the markets were all in the Start-up stage of development. Digital finance was not necessarily seen by the financial service industry at the time as a high-potential area for growth. Our theory of change was that, by providing information and insights, building relationships and capacity, and investing in high-potential projects, we could positively affect changes in the behaviours of providers and other stakeholders in the DFS ecosystem. These changes would in turn

influence the way that customers accessed and used DFS, ultimately improving their lives. In this way, the market would develop and poor households would benefit from increased financial security.

Over the past five years, we have carried out over 80 activities and projects across Benin, Senegal and Zambia, working through six distinct but complementary workstreams: (1) customers, (2) agent networks and distribution, (3) providers, (4) high-volume payments, (5) enabling policy and regulation, and (6) ecosystem development. Using a mixture of grants, technical assistance, research, data, dialogue and—most importantly—relationships, we have worked across each market to unlock constraints wherever they occur and help build an inclusive, customer-centric digital finance ecosystem.

Customers

A major achievement of our work in Benin, Senegal and Zambia has been to incorporate the customer’s voice into digital finance products and services. Through our HCD work with a wide range of providers, we have been able to mainstream the idea that products need to be built with customer usability front and centre. In Senegal, we used an HCD approach with Partenariat pour la Mobilisation de l’Épargne et du Cr dit Au S n gal (PAMECAS, an MFI) to develop a new digital credit scoring model for lending to agents, most of whom are young and lack access to collateral. In Zambia, we worked to mainstream the use of HCD in projects with Airtel, FINCA and Zoono. In fact, a number of providers with whom we worked in all three markets have now mainstreamed HCD into their strategies, a major shift from five years ago.

“ UNCDF’s expertise, particularly on customer journey mapping, was critical. We realized we had to completely change the way we did customer acquisition.”

— Chris Chileshe, former Country Head, Airtel Money Zambia

We have focused particular attention on customer groups that are the most vulnerable and are typically excluded from the financial system, as they have the most to gain from DFS. These groups include women, youth, MSMEs and refugees. We have used research and data to bring visibility to the needs of various underserved customer groups through landmark studies such as our ‘Labour Pains’ report on the financial lives of Zambian mothers.⁹ This foundational research was followed by a design sprint called Sprint4Women (supported by Comic Relief and Jersey Overseas Aid) to encourage DFS providers to innovate and create new products for women in Zambia.¹⁰ Through our partnership with the Office of the UN High Commissioner for Refugees (UNHCR) and Airtel in Zambia, we also opened up the option of bulk payments to over 5,700 refugees. Bulk payments are transactions conducted from one account to many accounts, or from many accounts into one account. The former, such as salary payments or government transfers, may terminate in an account or an OTC transaction. They are referred to as ‘one to many.’ The latter, such as several customers paying for utilities, comprise collections by an organization from multiple payers. They are referred to as ‘many to one.’¹¹ The payments to refugees fall into the former, ‘one to many,’ category of bulk payments.

In addition to using research at a market level to provide visibility to underserved segments, we have also supported targeted research on specific products. In Benin, our work with ALID  and Moov (see box 1) identified specific details that informed product features. For instance, with the MFI ALID , it became clear that users valued not only the ability to repay a loan or deposit money into a savings account via mobile money but also some of the most basic functions (e.g., balance check and confirmation of SMS receipt). Moreover, the study revealed that customers were willing to pay a certain premium for the benefits of the service. Details such as these, identified by focused research, fed directly back into product design in order to improve the DFS customer experience.

Box 1: Moov (Benin)

Market constraint:
Mobile money account dormancy – Moov felt that an information campaign conducted through messages to customers was not effective at improving dormancy of its Beninese customers.
Solution:
We brought in an external market research expert to map the entire customer journey, from first hearing about the service to actively using it. When testing variations of the messaging options, we found that a single word could make a huge difference in the way a message is perceived. For example, it turned out that the customers responded far more positively to ‘send/receive money’ than ‘transfer money.’
Outcomes:
Moov fully integrated the lessons from HCD and updated language throughout its messaging. The language change, coupled with extensive work on the agent network, improved service uptake, resulting in over 421,000 registered customers.

“ HCD opened our eyes. We used to refer to ‘transfer money.’ But, then we switched the wording to ‘send/receive money.’ It seems a little change, but this new way of reframing the same activity really [struck] a chord with customers in terms of uptake.”

— Aissatou Diallo, Head of Marketing, Moov

⁹ Read the full report here: <https://www.uncdf.org/article/4445/labour-pains-discovering-the-financial-lives-of-zambianmothers>.
¹⁰ To learn more about the Sprint4Women, check out the following articles:
<https://www.uncdf.org/article/5171/uncdfssprint4women-design-sprint-competition-to-increase-zambian-womens-financial-inclusion-kicks-off>,
<https://www.uncdf.org/article/5058/request-for-applications-for-the-sprint4women-zambia-design-sprint-competitionfor-womens-financial-inclusion>.
¹¹ Check out our white paper to learn more about bulk payments: <https://www.uncdf.org/article/4450/smart-masspayments-bulk-payments-made-easy>.



Pamecas — Providing digital loans to women and youth with no collateral

Ababacar Tour , Director of Credit and Risk at PAMECAS, a Senegalese MFI, is adamant: “At the beginning, we saw fintech as a threat. We [an MFI] feared that they were going to disrupt the market and displace us.” However, with the passing of time, “The threat turned into an opportunity.”

As Mr. Tour  attests, we played a crucial role by placing market development at the centre of the discussion among all ecosystem stakeholders. In the past, we supported PAMECAS on projects to create income opportunities for youth and women. Then, in 2017, we launched a call for proposals to develop more advanced DFS. At the time, we had just started a conversation with InTouch (an aggregator of payment platforms) regarding how to collaborate on projects to facilitate access to credit for agents and customers. The call for proposals provided an opportunity for the two organizations to align their priorities, and by the end of the year, a tripartite agreement was signed by PAMECAS, InTouch and UNCDF.

The project began in 2018 and achieved a long-overdue goal of PAMECAS: to use digital channels to expand the reach of its services. Through the technical assistance and grant we provided, we were able to help the organization develop a credit-scoring model to calculate the risk of providing unsecured loans to InTouch agents based on their transactional data. PAMECAS recently launched a pilot of the solution in one branch and was able to process loans (from customer request to disbursement) in less than 48 hours, which is an improvement from the one-week-long standard process. The pilot just started in October 2019, and in less than a month, 11 digital loans were granted for a total of CFAF 2.3 million (US\$3,896).¹²

The vision that we assisted PAMECAS to create can have a radical impact on youth and women in Senegal who lack collateral to initiate or expand their business.

Ecobank — Demystifying the bank

Ecobank first came across UNCDF in 2015, when our team in Benin invited the bank’s managers to the just established DFS Working Group. Ecobank had already ventured into the field of digital finance back in 2012 but with limited success. In 2016, after some engagement in our DFS Working Group, Ecobank started developing an agent banking strategy in partnership with Moov and MTN. The idea was to launch wallet-to-bank transactions and set up an agent network to introduce customers to digital finance.

We provided HCD training, through which Ecobank became aware of some weaknesses in its model and was able to design an agent management strategy that considered the needs of DFS clients. “People mostly need to transfer a small amount of money, without going through cumbersome KYC [know-your-customer] procedures,” says Mathias Dekadjevi, Head of Distribution and Marketing at Ecobank Benin. “The next step will be to focus on digital payments for utilities. But, in the meantime, HCD has helped us demystify the bank, by showing us how to make it friendlier to our clients.”

An Ecobank Mobile app has been up and running since 2017, and the agent network today has grown from zero to 133 Xpress Points (points of service). Agents each perform an average of 40 transactions per month. This digital extension of services by Ecobank has borne fruit: as of 2019, the Ecobank customer base has increased by 21%, with more than 8,000 Xpress accounts opened.

¹² Conversion rate: US\$1 = CFAF 590.42. Source: <https://treasury.un.org/operationalrates/OperationalRates.php>, 1 November 2019.

Agent networks and distribution

At UNCDF, we know that getting agent networks right is critical to unlocking growth in the digital payment ecosystem. Early on, we commissioned the Helix Institute of Digital Finance to conduct a diagnostic study of agent journeys to understand, in detail, the key challenges faced by different types of agents across Benin, Senegal and Zambia.¹³ The challenges that were identified led directly to a number of projects, including support for FINCA in Zambia (see box 2), the agent network provider CashZone in Benin to expand its rural footprint (see box 3), and Moov in Benin to ‘externalize’ its agent network by using a third party to manage recruiting, training and monitoring of agents. In fact, the active agent base of Moov expanded from 167 agents to 19,725 within a year of the project.

Box 2: FINCA (Zambia)

Market constraint:
Poor agent liquidity – Mobile money agents, with no physical assets to borrow against, were unable to access the capital they needed to serve customers and expand their operations in Zambia.
Solution:
We worked with FINCA to develop a lending model specifically for mobile money agents, based on their own transaction data. By mining their data for indicators that were likely to correlate with repayment, we were able to test and develop a proof of concept for transaction-based lending.
Outcomes:
We tested the model with 296 MTN agents across urban and rural Zambia, disbursing loans for a total amount of ZMW1,500,000 (US\$113,111) against a target of ZMW500,000 (US\$37,704). ¹⁴ Agents like Elase were able to access capital to grow their enterprises and create jobs. Default rates, at around 10%, were comparable to others in the microfinance sector. Liquidity for rural agents increased by 113%.

Box 3: CashZone (Benin)

Market constraint:
Lack of agent coverage outside urban areas – Expanding an agent network into rural areas of Benin, with patchy connectivity, liquidity issues and challenges with agent recruitment, was difficult.
Solution:
We supported CashZone to develop a business plan to expand its agent network into selected areas of rural Benin. We also provided training to CashZone agents.
Outcomes:
In sum, 960 rural agents were recruited, including 224 women and 403 youth, allowing vulnerable people access to DFS in Benin.

Conscious of the dangers of siloed agent networks, we have promoted interoperability and shared network infrastructure through various projects, such as the development of a new strategy for Kazang, a leading third-party provider of payment solutions, to offer the first shared agent platform in Zambia. It has 9,000 active agents as of November 2019 and offers services to customers of five other providers: Atlas Mara, Ecobank, MTN and Zoon.

“ The project was an unmitigated success. We credit UNCDF not just with developing the new strategy but also helping us to operationalize it. We met all KPIs [key performance indicators] on number of agents, revenues, sustainability and profitability.”

— Nasho Sombe, Head of Business Development, Kazang Zambia

We have also brokered new partnerships, such as that between ALIDé (an MFI) and MTN (an MNO) in Benin. Through this partnership, the first bank-to-wallet service was launched in the region, connecting an MFI account with a mobile wallet. Since the service was launched in early 2018, almost 6,000 customers have started using the service, including Pierrette who is now able to repay her ALIDé loan with her MTN Mobile Money account. In Senegal, we have been able to broker partnerships between InTouch (an aggregator of payment platforms) and at least four different DFS providers (see box 4).

Box 4: InTouch (Senegal)

Market constraint:
Lack of agent coverage outside urban areas – Developing and maintaining an agent network outside of major urban centres in Senegal was a goal and a challenge.
Solution:
We provided financial and technical support to help InTouch prepare a rural agent acquisition strategy. Through our DFS Working Group sessions, we also introduced InTouch to a range of potential partners that allowed the organization to grow through collaboration.
Outcomes:
InTouch has a partnership agreement with Orange for franchising, as well as agent partnerships with PAMECAS (an MFI), Ecobank and pay-as-you-go energy providers. InTouch has exceeded its target of 360 rural agents, reaching over 550 (including Birane), while serving close to 300,000 unique customers in rural areas.

¹³ Read more about the results in this presentation: Akhand Tiwari and Irene Wagaki, ‘Agent Network Accelerator Survey: Zambia Country Report 2015’ (n.p., UNCDF, 2016). Available from <http://www.uncdf.org/article/868/agent-network-accelerator-survey-zambia-country-report-2015>.
¹⁴ Conversion rate: US\$1 = ZMW13.2613. Source: <https://treasury.un.org/operationalrates/OperationalRates.php>, 1 November 2019. Note: This document refers to the Zambian kwacha as ZMW based on guidance from the Bank of Zambia, the country’s central bank, after a currency adjustment.



Kazang — Building a third-party agent network

We aim to catalyse innovation—we fund initial risks, to prove new concepts and demonstrate effectiveness, and then crowd in investment from others. An example of this approach is provided by our work in Zambia with Kazang, a fintech that was at a crossroads in 2017, deciding whether it should develop its own mobile wallet or become a third-party provider. Third-party operators are DFS providers that leverage the existing infrastructure of MNOs. They are usually MNO agnostic and, in some cases, can be master agents or others acting on behalf of a DFS provider or an MNO, whether based on a service agreement, a joint venture agreement or another contractual arrangement.

Kazang came to us with a question: “What services do we need to offer to remain relevant?” We supported Kazang to develop a business strategy to pivot to a model as a third-party agent network, opening up the infrastructure for other market players and becoming the first and only shared agent platform in the country. We also provided capacity-building in data analytics and support to help Kazang understand the dynamics of agent churn and increase agent profitability, a critical piece of the agent strategy.

That strategy was used to persuade management to invest in the new business model. In fact, the private-sector investment that was catalysed by our initial support has grown the Kazang active agent network from 2,300 to 9,000, and the fintech is starting another funding round to expand further. Nasho Sombe, Head of Business Development at Kazang Zambia, described the project as “an unmitigated success... we credit UNCDF not just with developing the new strategy but also helping us to operationalize it.”

Providers

Over the past five years, we have helped DFS providers with the transition from a ‘first generation’ of OTC mobile money to a ‘second generation’ of DFS. First-generation products comprise basic DFS, such as person-to-person transfers, airtime purchases, bill (utility) payments, and cash-in and cash-out transactions. Second-generation products are more advanced DFS, such as microcredit and microinsurance products, loan repayments, merchant payments, push (to bank)/pull (from bank) transfers and international remittances.

Across the three countries, we have supported a total of 27 DFS providers, including banks, MNOs, fintechs and MFIs (see box 5 for an example), in a range of projects. Common themes of those projects have included improving the design and delivery of their products, leveraging digitization and data more effectively, and integrating HCD into their processes.

In doing so, we have helped build the business case for using DFS to reach underserved markets and catalysed greater investment from providers themselves. The independent mid-term evaluation of the programme that was conducted by Genesis Analytics in 2018 reported, “Airtel management in Zambia increased investment in the mobile money unit significantly following UNCDF-supported HCD research that helped improve customer uptake numbers.”¹⁵ Airtel is in one of the top two providers in the country, with more than 1 million active customers.

We have forged partnerships for the long term, taking time to build trust, and we became the go-to development partner for advice and technical support. For example, our relationship with MTN in Benin has traversed the country’s extraordinary path towards DFS growth, from Agent Network Accelerator training¹⁶ to the development of mobile wallets, the design of digital *tontines* (ubiquitous self-help savings groups) and the linkage of mobile wallets at MTN (an MNO) with accounts at ALIDé (an MFI). In September 2019, MTN Mobile Money celebrated its two millionth active mobile money subscriber in Benin.

However, other benefits are harder to quantify. As Hermann Ahouandjinou, Manager of FS Sales & Ecosystem at MTN Benin, suggests, “UNCDF has created a situation in which key stakeholders could build personal relations, and this was crucial to advance hot dossiers, such as digital *tontines* and the integration of mobile wallets and MFI accounts.” Virgile Toffodji, Managing Director of MTN Mobile Money Benin, backs this view. “Thanks to what we have learned from UNCDF, in terms of methodology and process, today we have a well-defined position in the market. And, other actors are taking notice of our approach; they appreciate it and want to partner with us because our strategy is clear.”

We have also had significant success in nudging providers towards rural customers. For instance, in Zambia, our development of a bulk payment strategy for MTN was referenced by the Rural Finance Expansion Programme of the International Fund for Agricultural Development as a critical component of a project that enabled the programme to make payments to 45,000 smallholder farmers. In Senegal, we worked with La Banque Agricole to pilot a new model for a mobile wallet solution for smallholder rice producers. In addition, our efforts in rural areas have allowed us to leverage mobile money for energy solutions, such as our work on pay-as-you-go solar systems with Fenix

in Zambia. Pay-as-you-go is an option by which a customer makes a deposit for a product with the end goal of owning the device through a series of usage payments paid through a DFS channel.

“ We are a bank and don’t typically work on digital finance. We needed someone who knows more than we do to decide which direction to take, with whom to collaborate and how to scale up. We learned from UNCDF all of what we know today in this field. UNCDF has helped us develop our digital approach to value chains and roll out our platform.”

— Malick Ndiaye, Managing Director, La Banque Agricole

Box 5: CAURIE MF (Senegal)

Market constraint:
Poor capacity to adapt MFI processes to the digital era, along with a lack of second-generation offers in the market – Caisse Autonome pour le Renforcement des Initiatives Economiques par la Microfinance (CAURIE MF), a Senegalese MFI, was struggling with the digitization of its processes.
Solution:
We supported CAURIE MF to digitize the deposit and loan processes of its village banking groups, composed of 90,000 women, by using tablets. We supported the process end to end, from initial customer research to development of a standard operating manual for digital services and provision of ongoing support through the pilot testing process.
Outcomes:
The project increased the efficiency and accuracy of operations of the MFI by reducing end-of-month reporting time from five days to one day and errors by 90%, as well as reducing approval times for new loans by 30%. The digitization of processes also laid the foundation for the next step in the organization’s DFS journey: launching mobile banking and bank-to-wallet transactions.

¹⁵ Genesis Analytics, ‘Mid-Term Evaluation: Mobile Money for the Poor (MM4P),’ p. 32 (n.p., UNCDF, 2018). Available from <https://www.genesis-analytics.com/projects/mid-term-review-of-largest-uncdfs-programmes-in-digital-finance>.
¹⁶ Agent Network Accelerator is a four-year research project launched by the Helix Institute of Digital Finance and conducted in 11 countries, including Benin, Senegal and Zambia in partnership with the programme.



La Banque Agricole — Offering a digital wallet to smallholder farmers

We first discussed with La Banque Agricole the possibility of a partnership during a field visit to northern Senegal in 2016, at a time when investments were flowing into agriculture in the rice-producing region. As the main Senegalese bank for the agricultural sector, La Banque Agricole asked us, “How can we work together to sustain this booming value chain?” Our answer was to look at digital solutions for both reducing transaction costs and improving market efficiency among rice producers and buyers.

After almost two years of preparatory discussions with us, La Banque Agricole launched a pilot of a mobile wallet for rice producers at the end of August 2019, just in time for the beginning of the rice season. In broad strokes, the bank finances producers directly (transferring loans to their mobile wallets) and is refunded by the agribusinesses with which it has brokered the sales. We were with La Banque Agricole throughout the journey that led to the pilot launch, by facilitating an HCD study with smallholder farmers, testing the AgriCash platform and training La Banque Agricole staff on best practices in agent network management.

Enabling policy and regulation

We have facilitated public-private dialogue to help unlock constraints in the policy and regulatory system of the three countries. Notably, we have done so in Zambia through our Feedback2Action workshops that provide DFS providers with a forum to explain their challenges to policymakers (see box 6). These conversations have aided policymakers to make important changes, such as altering know-your-customer requirements for refugees in Zambia and increasing maximum balances on mobile wallets in 2016, which helped catalyse the rapid growth in mobile money in Zambia.¹⁷

We have also been responsive to the needs of government agencies and worked hand in hand to identify and address potential improvements in the DFS ecosystem in each country. For example, we completed a payment flow diagnostic for Senegal¹⁸ and Zambia.¹⁹ The latter was conducted in collaboration with the Ministry of Finance and Bank of Zambia, which directly fed our data automation project with that institution (see box 7).

“ UNCDF has influenced the policy and regulatory environment by building the capacity of regulators. Through the provision of trainings such as the Digital Frontiers Institute on Mobile Money, UNCDF has strengthened the knowledge and capacity of regulators on DFS. By successfully building relationships with the Central Bank and providing TA [technical assistance], UNCDF has contributed to the increase in the regulators’ commitment to building a supportive environment for providers to offer digital solutions.”

— Genesis Analytics, excerpt from ‘Mid-Term Evaluation: MM4P’

Box 6: Industry-wide stakeholders

Market constraint:
Lack of public and private dialogue and limited partnership – DFS providers felt that they were unable to voice their concerns about regulatory issues constraining DFS growth.
Solution:
Through the DFS Working Groups that we developed in Benin and Senegal and the Feedback2Action workshops in Zambia (in partnership with Financial Sector Deepening Zambia), we convened all DFS providers in the three countries, providing a platform for stakeholders to share concerns and overcome constraints in a collaborative manner.
Outcomes:
Trust was built in the sector. Regulations were demystified in West Africa. Specific regulations were altered, such as the maximum balance on mobile wallets in Zambia and accessibility to unstructured supplementary service data (USSD) in Senegal. In addition, interoperability awareness improved across Senegal and Benin.

Box 7: Bank of Zambia

Market constraint:
Lack of visibility for the regulator on the efficiency and impact of its regulations – The Bank of Zambia, that country’s central bank, was unable to monitor data effectively from the DFS industry due to inefficient legacy systems and manual processes.
Solution:
We worked with the Bank of Zambia to develop a data automation strategy that would provide a frictionless flow of data from DFS providers to the bank’s systems. We then provided an in-house technical expert to implement the automation process.
Outcomes:
The Bank of Zambia, as well as other ecosystem players, can make more informed, data-driven decisions. Visibility over the performance of different players also promotes competition.



Bank of Zambia — Automating data on digital finance

From the beginning of our programme, we knew that a lack of accurate and timely data was hampering the ability of DFS stakeholders to make decisions. It was true for DFS providers, who need to know where to channel resources most effectively, but also for regulators, who need to know what is happening in the market in order to oversee it effectively.

In this vein, we supported the Bank of Zambia to design and develop a scalable, secure and flexible DFS data automation and analytics platform.²⁰ It automates the flow of DFS data into the bank’s systems and provides aggregated market data for the Zambian DFS ecosystem on a regular basis. It is intended for the DFS ecosystem, allowing the Bank of Zambia and DFS providers to make more informed, data-driven decisions, and to increase competition by providing visibility over the performance of different players. Other public-sector institutions, like the Central Statistical Office and Ministry of Finance as well as the World Bank and others, can also use the data. Additionally, the platform allows the Bank of Zambia to support the monitoring of the implementation of the National Financial Inclusion Strategy and to mandate collection and usage of sex-disaggregated data, a critical building block as we push for gender equality in DFS.

¹⁷ Find the MM4P Zambia Annual Monitor 2016 here: <https://www.uncdf.org/article/2385/zambia-annual-monitor-2016>.
¹⁸ Check out this brochure summarizing the findings: <https://www.uncdf.org/article/4177/payment-flow-diagnostic-in-senegal>.
¹⁹ Read the full report here: <https://www.uncdf.org/article/2438/payment-flow-diagnostic-for-government-payments-in-zambia>.

²⁰ To learn more about the DFS data automation system, check out this news article: <https://www.uncdf.org/article/4820/introducing-the-dfs-data-automation-system-bank-of-zambia-and-uncdfs-dataautomation-solution>.

Ecosystem development

Our ecosystem approach is designed to promote long-term, sustainable growth in digital financial inclusion. Building the ecosystem means bringing stakeholders together, for collaboration and shared learning. We have seen how DFS sectors have been transformed by breaking down siloes and promoting dialogue between banks and MNOs as well as between DFS providers and policymakers. Our DFS Working Groups in Benin and Senegal have been an important component of this work. For example, the DFS Working Group we established in Senegal is co-chaired by the Central Bank of West African States (known as BCEAO) and the Ministry of Finance. The first meeting, held in April 2016, convened 30 participants. It now meets on a quarterly basis, with an average of 50 participants per session, to jointly identify solutions to challenges that arise for the sector (e.g., making USSD open to fintechs, banks and MFIs). Advocacy through the DFS Working Group has contributed to changes and built awareness of interoperability schemes and opportunities for market players.

We have also used research as a ‘public good’ to empower DFS providers (see boxes 8 and 9). In the early days of UNCDF, we identified bottlenecks in agent networks as a critical constraint to DFS growth in Benin, Senegal and Zambia. Consequently, we commissioned the Helix Institute of Digital Finance to conduct Agent Network Accelerator Surveys in order to develop country-level analyses of the critical constraints for agents and recommendations for how DFS providers could overcome the cost and complexity of building sustainable agent networks.

“**UNCDF has been critical for the market’s development. The team has played a key role in bringing the sector together. We see them as an enabler for everyone else.**”

— Gareth Evans, International Technical Adviser, Rural Finance Expansion Programme, Ministry of Finance and International Fund for Agricultural Development

“**Building an ecosystem is a slow and complex endeavour. UNCDF has been a catalyst to smooth and accelerate this process.**”

— Hermann Ahouandjinou, Manager of FS Sales & Ecosystem, MTN Benin

together over 100 participants from 20 countries, was followed by a second one in 2016 that focused on DFS for women. In this second edition of the event, called DFS4Women, participants were challenged to rethink the position women hold in their customer base, the potential they offer as employees, agents and tellers, and the ways that they collect data about women (a segment representative of over half of the world’s population). The last edition of the event, named DFS4What, was held in 2018 and focused on the next generation of services and the power of data and innovation, moving beyond mobile wallets and looking at the range of services and use cases (financial and non-financial) that will lead to inclusive digital economies. Each event represented a live learning opportunity, as the event programme included a full day in the field that involved meetings with clients and operators, as well as exercises that challenged participants’ assumptions about vulnerable segments such as farmers, women and youth.²¹

Box 8: Industry-wide stakeholders

Market constraint:
Lack of data and benchmarks with which to track the progress of the digital finance industry.
Solution:
The inaugural State of the Industry Report was designed and launched by our team in Zambia in 2016. It was soon replicated in Benin and Senegal (as well as other UNCDF countries such as Sierra Leone). ²² Building on data provided by DFS providers in our Annual Provider Survey, the Report promotes transparency and competition and identifies key trends that could be relevant to stakeholders across the public and private sectors.
Outcomes:
The Reports became mainstays of the countries’ DFS eco-systems. They are commonly referenced by market stakeholders, particularly for their ability to allow the organizations to benchmark themselves against their peers. The Reports became the most in-demand publications produced by UNCDF and created a unique dataset through which to track the development of these markets. Both domestic and international investors “put Zambia on their list” as an investment option because there is clear documentation of the growth trends in the market and the market leaders.

On top of the DFS Working Group sessions in Benin and Senegal and the Feedback2Action workshops in Zambia, we organized three international live learning events to expose stakeholders to best practices and share lessons learned from their respective markets. The first, entitled DFSgoRural, was organized in Uganda in early 2015. It provided insightful exposure to private-sector partners from Benin, Senegal and Zambia as well as stakeholders from Asia and other African countries who were invited. The objective was twofold: first, to introduce the ‘missed opportunity’ that rural customers represent and, second, to expose decision makers to HCD techniques. That first event, which brought

²¹ Check out these news articles detailing a couple of the field visits: <https://www.uncdf.org/article/4219/dfs4what-field-visit-explores-promise-of-chatbots>, <https://www.uncdf.org/article/4219/dfs4what-field-visit-generates-interesting-questions-about-psychometric-testing>.
²² Read recent reports here: <https://www.uncdf.org/article/4669/state-of-the-digital-financial-services-market-in-benin2017>, <https://www.uncdf.org/article/4356/enquete-annuelle-aupres-des-fournisseurs-de-services-financiers-numeriques-2018>, <https://www.uncdf.org/article/4757/state-of-the-digital-financial-services-market-in-zambia-2018---report>.

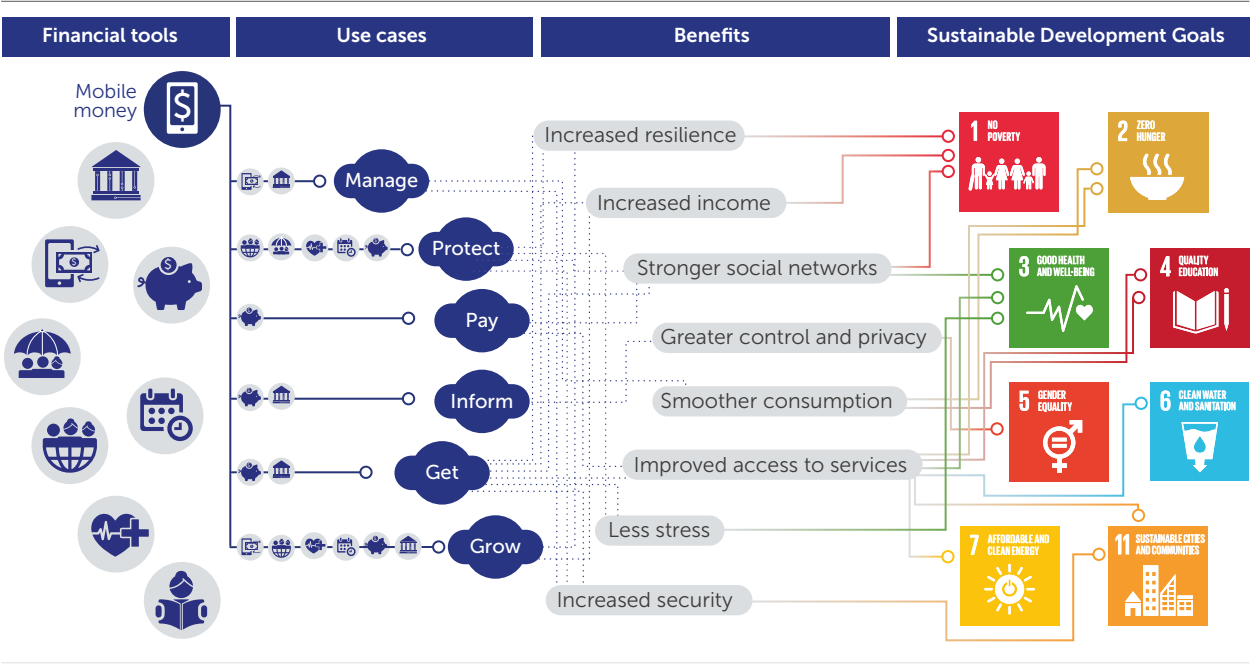
Box 9: MTN Zambia

Market constraint:
A lack of understanding across the DFS industry of how digital financial inclusion links to improved livelihoods and the UN Sustainable Development Goals.
Solution:
Building on the work of UNCDF in the Pacific, we developed a framework that links usage of various digital financial tools via their use cases to specific benefits, such as increased resilience and smoother consumption patterns, and ultimately to the UN Sustainable Development Goals (see figure VI).
Outcomes:
By testing this framework in Zambia, we found that 77% of MTN Mobile Money users felt the service helped them build financial resilience and 63% of users said it helped them increase their income. The results of this analysis are an important step in building a fuller picture of the complex impact pathways of digital finance.

Box 10: BongoHive (Zambia)

Market constraint:
Difficulties navigating regulations and accessing capital and technical advice – Early-stage fintechs at Lusaka-based incubator BongoHive were struggling to navigate regulations and access the capital and expertise they needed to develop their products.
Solution:
Building on the success of our work with the Mastercard Foundation, with support from Comic Relief and Jersey Overseas Aid, we developed the FinTech4U accelerator with BongoHive. It provides promising fintechs with a platform to develop and test their products in a safe environment, interact with regulators, build partnerships with larger players and jump through the various hurdles of early-stage growth.
Outcomes:
The project, which is ongoing, will identify the next generation of fintech innovations, arising outside of traditional players, and support them to a point at which they can seek outside investment.

Figure VI Our framework of financial tools and use cases and associated benefits and linkages to UN Sustainable Development Goals





goMediCAL — Leveraging mobile money for broader development outcomes

In 2015, Gilles Kounou had a few contacts and a good idea: to create a mobile app to facilitate payments for health-care services. When he pitched the idea to Moov and MTN, the response was positive; however, they suggested that the project needed some polishing. “So, they advised I get in touch with UNCDF,” recalls Mr. Kounou, today the CEO of goMediCAL. He joined the DFS Working Group, where he had the opportunity to explain the project better.

Four years on, goMediCAL is up and running. The advice from Moov and MTN to “go and meet UNCDF” turned Mr. Kounou’s idea into the first m-health platform in Benin and one of the few experiences of DFS in Africa that focuses exclusively on health-care providers. The platform is linked to both Moov and

MTN and is integrated with the Visa, Mastercard and American Express networks to also allow payments via credit cards. It enables patients to find doctors and pay via mobile wallet, as well as offering the possibility for relatives to cover payments of medical fees. Thanks to the technical assistance that we provided in early 2019, goMediCAL has honed its acquisition strategy to shift the focus from the patients to the doctors. This adjustment has proven crucial. The number of doctors linked to the platform has jumped, reaching 250 (about 10% of physicians in the country).²³ Because of this large pool of professionals, the number of patients and hospital professionals using the app has dramatically increased in recent months. As of 2019, some 15,000 patients regularly use the app, well above the initial target of 10,000 users. Moreover, 250 appointments are made every day via the app. Having the support of UNCDF has rendered goMediCAL “more credible,” particularly with medical facilities, Mr. Kounou acknowledges. “We’re no longer seen as just another start-up.”

²³ World Bank, “Physicians (per 1,000 people),” 2016 data. Available from <https://data.worldbank.org/indicator/sh.med.phys.zs>.

PART 3 — LESSONS LEARNED

3.1 CRITICAL SUCCESS FACTORS

Relationships are prime in our role as a neutral broker. As a UN agency, we are uniquely positioned to act as a trusted, independent market facilitator. Market development occurs when the public and private sectors can work together to identify and overcome market dysfunctions. Under the UNCDF motto, “Your KPIs are our KPIs,” we clearly aligned the results of our engagement with the key performance indicators of relevant stakeholders, creating a roadmap for win/win outcomes. We were able to promote constructive dialogue, through both formal and informal channels, without being perceived as being on any one particular stakeholder’s side.

“ We see them as a trusted partner in development. It has really helped to have a third party who is trusted by the regulator to be independent.”

— Edmund Barwuah, Country Head of Mobile Money, MTN Zambia

Our team of experts is on the ground, leveraging a global knowledge base. By having a team of experts on the ground for a long period, we were able to build trust and demonstrate our commitment to long-term market development. As a local partner, we could better evaluate projects, take more risks and let some projects fail, confident that we could learn from them and increase our impact over the long term. We were also able to leverage a global knowledge base, drawing from similar experiences across Africa and Asia. Exposing DFS providers to examples of what had worked elsewhere (e.g., in East Africa) provided examples upon which to build. Because of our global footprint, we were able to provide a wide range of training workshops, international learning events and insights that helped accelerate growth.

“ UNCDF’s successful establishment in-country as a trusted broker and go-to market player for DFS has improved partners’ willingness to share organizational data and made it easier for partners to request assistance. ... The DFS expertise, experience and networks of the UNCDF team is one of the strengths of the programme, as well as [their] in-country presence, which not only makes the programme unique but is a driver of the programme’s success.”

— Genesis Analytics, excerpt from ‘Mid-Term Evaluation: MM4P’

An agile approach allows us to respond quickly to changes in market conditions. Our development programme is not a typical one. Our approach to market development allowed us to move faster than traditional programmes. Using our market development approach meant that our team had the agility to adjust to rapid changes in the market. For instance, the market in Benin grew faster than planned, obliging our team to adjust priorities along the way. Initial scoping remains critical, but change is non-linear, complex and unpredictable—some projects may start with a goal and a series of activities that may have to change as a partner or the market takes an unexpected turn.

We shine a light on previously underserved market segments. We used a combination of tools to nudge DFS providers towards certain demographics and geographies, such as youth, female entrepreneurs and rural communities. We started with research to map the market opportunities and shared the resulting information that could help DFS providers build the business case for those segments. We could thus align our targets, in terms of demographics and geographies, with the key performance indicators of different DFS providers. With that alignment, we were then able to use more focused approaches, such as HCD, to improve design and delivery for underserved customers.

“ Without UNCDF, we would have probably never moved into rural areas... UNCDF helped us understand the potential of investing in hard-to-reach areas and anticipate the challenges.”

— Virgile Toffodji, Managing Director, MTN Mobile Money Benin

We go to places where others do not want to go and tackle some of the most complex challenges in the digital finance ecosystem. We went to areas that others might have considered too risky or challenging, such as our work to provide DFS access to refugees in partnership with UNHCR. We were also willing to work in ‘less glamorous’ areas of the industry, like capacity-building and automation of bulk payment data, confident that it was what the industry needed. Through our grants and technical support services, we minimized the risks for our partners to invest in challenging contexts. Moreover, we helped them develop the capabilities to structure and manage agent networks in areas where cash is scarce and logistics are time-consuming.



3.2 KEY LESSONS FOR THE NEXT PHASE

Making a long-term investment and having flexibility is critical. The flexibility of our partnership with the Mastercard Foundation allowed our team to develop long-term relationships with all of the relevant DFS stakeholders in the three countries and focus on overcoming market barriers in each. After achieving buy-in from the stakeholders, we were able to begin testing more-radical ideas to make digital finance and the digital economy more inclusive. These achievements were only possible because of the long-term investment and the flexibility given to the local teams to issue grants, provide technical assistance, conduct research, focus on ‘matchmaking’ among DFS stakeholders and provide other interventions as needed.

Things move fast. Being useful means keeping up with the next wave of innovation. Just as the digital finance landscapes so dramatically changed over the last five years, they will continue to change at a rapid pace in the next five. Stakeholders, in the public and private sectors, need help to keep up. New technologies, more data and the growth of super platforms will expand opportunities but will also require appropriate policy and infrastructure to ensure they work in the interests of consumers. We found that providing a mixture of research, data and best practices along with the most important ingredient—actionable recommendations—is a ‘must’ for any actor to drive an inclusive digital economy.

We need to keep in mind that innovation goes hand-in-hand with regulation. In order to balance the needs of banks, MNOs, MFIs and fintechs to test new ideas and approaches along with the concerns of the central banks for compliance and transparency, we have to keep open channels of communication between the parties and facilitate their mutual understanding. Our DFS Working Groups provided a useful platform for coordinating private-sector actors, but we need to improve the channels through which they engage with public-sector actors around innovations. We already developed two useful models for this kind of public-private coordination: the Feedback2Action approach in Zambia and the regulatory sandbox model pioneered in Sierra Leone.

Growth must be conscious of the digital divide. Although we saw incredible progress in mobile money, it is not a given that DFS will continue to grow until the whole population is digitally and financially included. Certain populations, particularly poorer and very rural ones, without access to a mobile phone or a cash-in/cash-out network, still do not have access to basic services. As we push into new areas, we need to make sure not to leave people behind; we must use digitization to narrow, not widen, inequalities.

The end goal is providing people with the digital tools to help them achieve their needs, wants and aspirations. Real impact comes when people use digital finance as a tool to improve their livelihoods. With goMediCAL in Benin, we saw an example of how mobile money can enable solutions to the everyday problems that people face. Yet, we know that people want more. To be more customer-centric, digital solutions need to address more issues that people face in their everyday lives. This demand means that their digital finance accounts need to help them pay their utility bills and school fees, insure them against health emergencies and crop failures, enable them to access energy and allow them to invest in new enterprises. All of these developments mean adopting a broader approach to digital inclusion, including having a wider range of non-financial actors.

PART 4 — BUILDING THE NEXT DIGITAL ECONOMY SUCCESS STORIES

A close-up photograph of a woman with dark skin, wearing a teal headscarf, looking intently at a smartphone held in her hands. The background is a blurred, colorful pattern, possibly a wall or a display of goods.

The cornerstone partnership between the Mastercard Foundation and UNCDF has helped us experiment (very successfully) with a model of market development that has definitively advanced digital financial inclusion in the countries in which we have worked. Over the past five years, we have seen a step change in the way that digital finance systems can contribute to inclusive development. Across Benin, Senegal and Zambia, as well as the other countries where we operate, basic mobile money sectors have grown into flourishing digital finance ecosystems, brimming with innovation and collaboration. For customers like Pierrette, Birane, Elase and millions just like them, digital finance has increased their financial security and provided new opportunities for growth.

Yet, we can also see that there is so much more to do. While digital finance is important, it is increasingly becoming a means to an end. Digital finance enables business models that allow people to have access to critical services that were previously unaffordable and inaccessible, like access to clean energy, clean water, high-quality agricultural inputs, education, health services and transportation services. Examples from our work in these areas include Fenix, FinTech4U with BongoHive, goMediCAL and more. When we conducted a listening tour in the 20+ countries of UNCDF operation, and across the global community of stakeholders focused on achieving the Sustainable Development Goals, this is what we heard: Citizens of the countries where we work want more—they want to improve the quality of their lives. Governments want their citizens to have greater access to critical services. Development partners and donors want to support efforts that demonstrate the sustainability of business models that can be taken on by the private or public sector. The private sector wants increased customer growth and usage of products and services. All of this adds up to much more than advancing digital financial inclusion—it is advancing **inclusive digital economies**.

After deep reflection on lessons learned—not only from this programme but also across our programmes in other

countries (Lao People's Democratic Republic, Liberia, Malawi, Nepal, Sierra Leone and Uganda) and initiatives focused on youth, clean energy, microfinance, data and others—we came to realize that the most important role UNCDF has to play in the next five years is helping to build **inclusive digital economies** in the 20+ least developed countries where we work. We will leverage our deep local presence with our expansive knowledge base and global network to ensure the digital economies that we help leave no one behind. Increasingly, we are being asked for advice and support on strategies, projects and initiatives that help grow an inclusive digital economy. For instance, in partnership with the Swedish International Development Cooperation Agency, we are implementing a \$15-million, five-year strategy to support the growth of the digital economy in Uganda. In collaboration with the Ugandan Ministry of ICT, we are using our inclusive digital economy scorecard to measure the growth of the country's digital economy (see the section below on this tool as well as figure VIII on page 37).

Digital economies that leave no one behind can only be achieved if the digital economies are developed at the national level and if there is a focus on making them inclusive—without any new form of exclusion. We place particular importance on youth, women, migrants, refugees and MSMEs, as these customer segments are often marginalized and denied digital innovation and technology due to social norms, societal status, and limited revenue and capacity (see box 11 for more on our focus on women and the digital economy). We place the empowerment of these customer segments at the centre of UNCDF initiatives to develop innovative services in various sectors. It is with this focus that we have already laid the foundation for our work on inclusive digital economies through, for example, our fintech accelerator FinTech4U with BongoHive in Zambia and our work in various UNCDF countries to address innovation and skill development in the digital era (Burkina Faso, China, Malaysia, Nepal, the Pacific, Uganda and more).

Box 11: Women and the digital economy

Addressing gender equality and women’s economic empowerment is central to the UNCDF mandate and is considered a cross-cutting priority throughout UNCDF programmes and operations and in the UNCDF Strategic Framework for 2018 to 2021. As an overarching goal, we aim to make digital economies work for women by expanding the supply of financial products targeting and responding to the needs of women and girls, as well as identifying women as agents of change in the digital economy. Sixty percent of the customers empowered through the new strategy will be women.



60%
of the
customers
empowered in the new
strategy will be women.

4.1 OUR NEW APPROACH

Our new approach will involve working with the government, the private sector and academia to develop the right services that reduce the digital divide and empower key customer segments. To achieve that objective, we will focus on understanding the intersection of six categories of digital services across five customer segments. The six categories of digital services cover six sectors (see figure VII).

Underpinning all of these efforts is an acknowledgement that DFS are foundational, in that they enable local entrants to innovate in markets, foster sustainability for new services, and create marketplaces for a wide range of products and services—both digital and non-digital. We have seen, for instance, the central role that mobile money plays in facilitating new energy markets via products such as M-KOPA Solar and in forging new ride and delivery infrastructure via transport companies like Bolt and Gojek.

To implement the UNCDF strategy, we will apply a country-level market development approach. The objective of such an approach is to continuously aim to understand and intervene in select market systems to address underlying market dysfunctions in order to improve efficiency, effectiveness and sustainability. The approach seeks to (1) leverage the roles and behaviours of current players in the marketplace, supporting them

Figure VII Digital services in six sectors



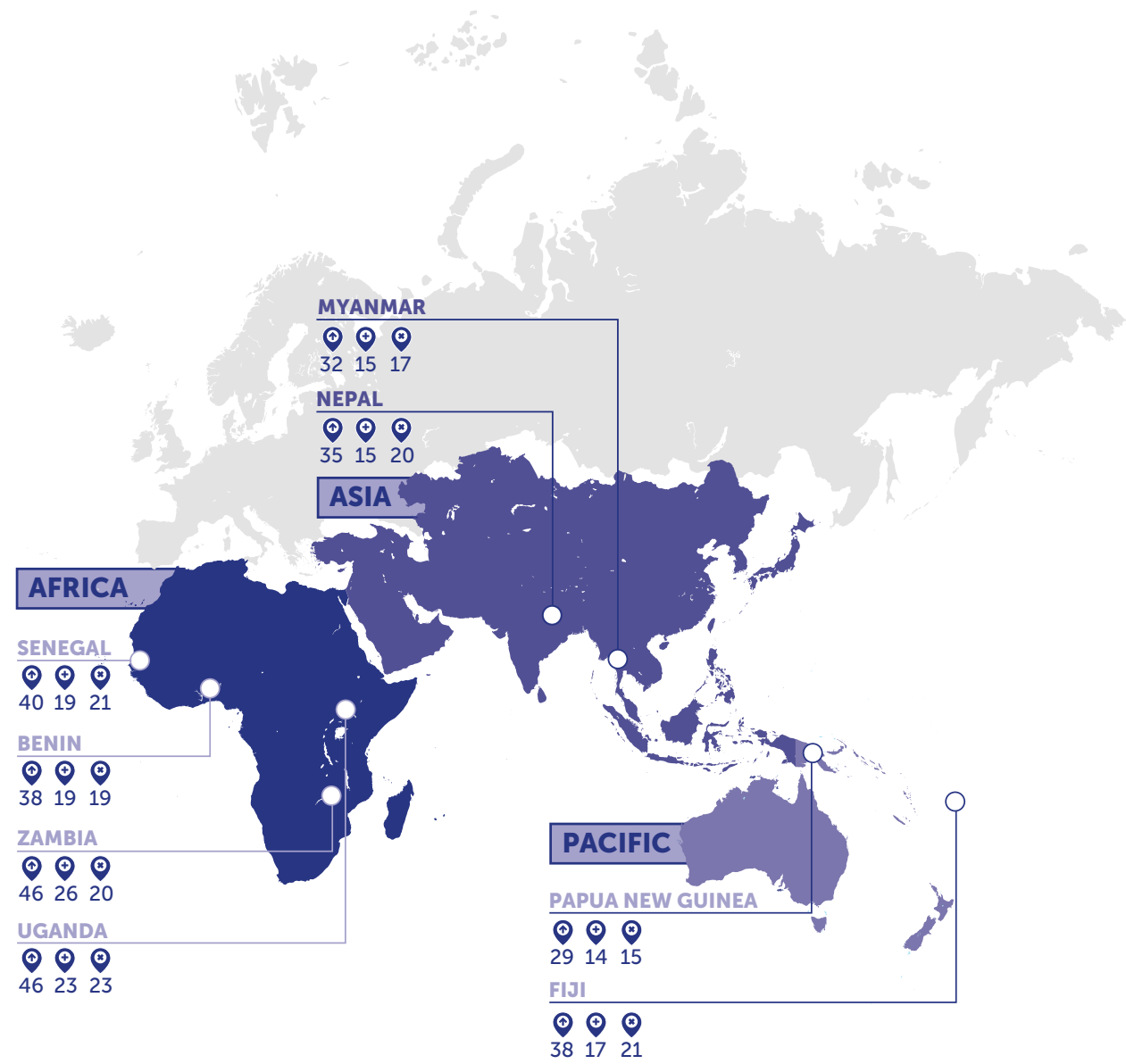
to do what they do better or to change their behaviour; (2) strengthen the systems and relationships among the various market and sector actors; and (3) work with current players to de-risk new business models in order to make digital solutions more inclusive for key segments and reduce the digital divide.

4.2 TOOL TO TRACK THE DEVELOPMENT OF INCLUSIVE DIGITAL ECONOMIES

We have developed an inclusive digital economy scorecard to track the development of inclusiveness in a digital economy at the country level (see figure VIII). Key components of an inclusive digital economy are the policy and regulatory environment, the digital payment infrastructure, the innovation ecosystem and the access to required skills. The level of development of the digital

economy varies by country, and the types of intervention are tailored accordingly. To do so, we carry out a diagnostic of the key components in order to plan the necessary activities for the development of an inclusive digital economy. We measure the development of each market over time with the scorecard in order to adapt the approach continuously based on fast-changing market dynamics.

Figure VIII Our inclusive digital economy scorecard



About the scorecard

The scores are on a scale of 0 to 100.

- Digital Economy Score:** the overall status of the digital economy and its components—the higher the score, the more developed the digital economy.
- Digital Inclusiveness Score:** the level of inclusion in the digital economy for key customer segments—the higher the score, the more inclusive the digital economy.
- Digital Divide Score:** the difference between the above two scores, indicating the extent to which the digital economy is exclusive of key customer segments—the higher the score, the more important the digital divide.

4.3 WORKSTREAMS AND INSTRUMENTS

Our approach has four key components (workstreams) and applies strategic instruments across them (see figure IX).

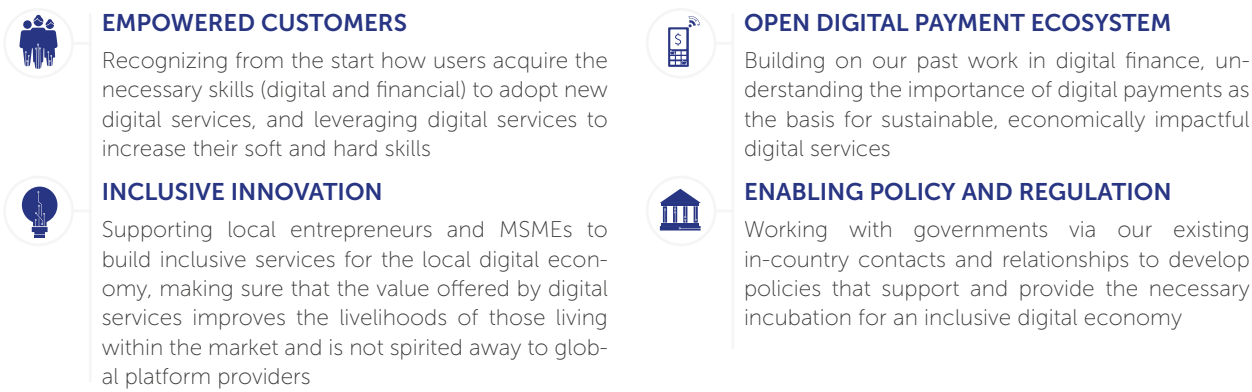
Figure IX Our strategic framework

The approach is organized in four workstreams, which constitute the strategy for achieving the goal. The key strategic instruments comprise the tools that UNCDF employs across the workstreams.



Our four workstreams build upon our existing strengths (see figure X).

Figure X Our workstreams



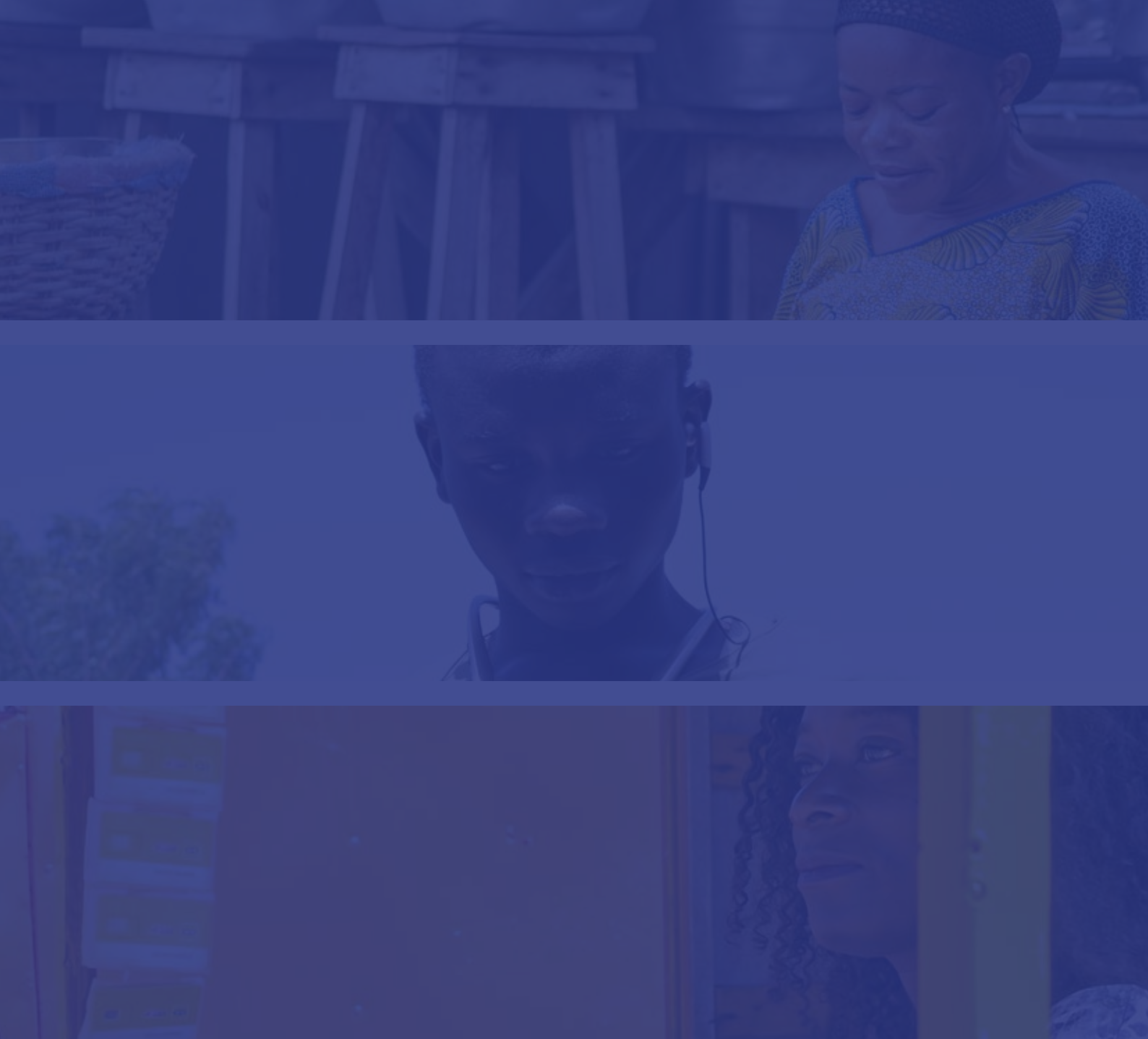
CONCLUSION

We at UNCDF provide an experienced hand, and we are focused increasingly on perfecting each of the critical success factors in all of the 20+ countries in which our Financial Inclusion Practice Area works. We aim to continue our on-the-ground, local presence, remaining agile and neutral and bringing in best practices from across the globe. We want to continue leveraging our strong relationships with the public sector, the private sector and civil society to build inclusive digital economies—digital economies that will meet the needs, wants and aspirations of those that live in the countries

where we work and that will bring us closer to achieving the Sustainable Development Goals for every person on earth by 2024. We have ambitious goals; however, based on what we have been able to achieve in collaboration with stakeholders of the amazing ecosystems where we have worked (Benin, Senegal and Zambia—originally considered some of the most difficult geographies and markets in which to work in the world), we have confidence in our ability to achieve these goals.

We will need help. We cannot do this alone, and we will need the assistance of the private sector, the public sector and development partners to achieve our goals. Yet, together, we will succeed in making Africa, Asia and the Pacific more inclusive digital economies by 2024.





LEAVING NO ONE BEHIND IN THE DIGITAL ERA

The UNCDF strategy 'Leaving no one behind in the digital era' is based on over a decade of experience in digital finance in Africa, Asia and the Pacific. UNCDF recognizes that reaching the full potential of digital financial inclusion in support of the Sustainable Development Goals aligns with the vision of promoting digital economies that leave no one behind. The vision of UNCDF is to empower millions of people by 2024 to use services daily that leverage innovation and technology and contribute to the Sustainable Development Goals. UNCDF will apply a market development approach and continuously seek to address underlying market dysfunctions.

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