





Growing Digital Financial Inclusion in Senegal



### SENEGAL GROWS FROM START-UP TO EXPANSION **STAGE**

Birane's story would have been impossible in 2015. Back then, the country had guite a different financial landscape. Mobile network operators (MNOs) sought to carve out space for themselves in a market dominated by over-the-counter (OTC) money transfer companies. Since 2010, Orange had been offering Orange Money, its mobile money product, but the active usage rate was quite low. OTC services were a double-edged sword. On the one hand, they introduced money transfers to over half of adults in Senegal. On the other hand, OTC services did not facilitate the empowerment of customers via wallets and further entrenched customers' overreliance on agents to process transactions on their behalf. Microfinance institutions (MFIs) and banks were pondering whether to close ranks or cautiously test the ground for digitization. Regulators, as well as the region's central bank BCEAO (Banque Centrale des Etats de l'Afrique de l'Ouest), were figuring out how to react to the looming changes in financial innovation. Fintechs were beyond the horizon. Each actor had a narrow view of the market.

Five years down the line, what used to be a loose conglomeration of insulated entities has become a community of financial actors with a similar understanding of the market and increasingly converging visions. 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.

According to the UNCDF market development framework, shown in figure I, the sector has evolved from the Start-Up stage to reach late Expansion stage in 2019. This dramatic transformation contains millions of stories like that of Birane, of digital financial services (DFS) offering new opportunities for Senegalese people, both as beneficiaries and agents of change. These stories are ones of business growth, community development, increased resilience and improved livelihoods.

In our work in Senegal, we have positioned ourselves as a catalyst for transformation. We have pursued this goal by facilitating conversations among different actors, primarily in DFS Working Group sessions, where we created opportunities for training and sharing of best practices.

As the timeline in figure II well shows, we have focused on different actors, inspiring change at multiple levels. At the provider level, we have helped innovators fast-track pilot tests with financial and technical assistance. At the level of policy and regulation, we have worked with regulators to build capacity in the area of DFS innovation and helped raise awareness of the importance of interoperability at all levels.

Figure | Market development framework

#### UNCDF MM4P has characterized the evolution of the DFS market as having four stages:









Consolidation

#### Inception

In **Inception** stage, there are no or few DFS providers active in the market, achieving limited outreach and working without clear policies or supportive DFS infrastructure.

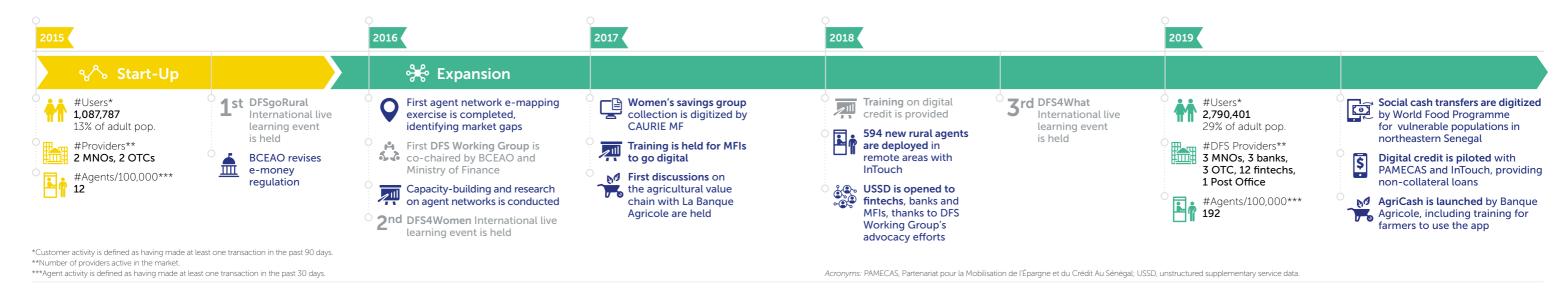
In Start-Up stage, one or a few DFS providers offer basic 'first generation' products, available through a proprietary network of agents. Providers reach a moderate number of customer registrations, but there is low customer activity other than airtime top-ups. Regulatory issues begin to be resolved during this stage, enabling a greater range of products

and agents.

In **Expansion** stage, DFS In Consolidation stage providers start massive the market has a range expansion. More advanced of competitive actors DFS are offered, the use and services that are of high-volume payments clearly regulated and increases, and partnerships for distribution emerge. The regulator offers clear is actively using DFS. guidance and regulation on

interconnected. More than 35% of the adult population

0.3



## PART 2 — OUR ROLE IN THE MARKET

### **OUR APPROACH**

When we launched the MM4P programme in Senegal, in partnership with the Mastercard Foundation, our goal was to fast-track digital financial inclusion by improving the active usage of mobile financial services and enabling MNOs, banks, fintechs and regulators to have a better grasp of a shifting digital landscape.

After years of working to advance financial inclusion in countries across the globe, we developed a market-based ecosystem approach that allowed us to catalyse change, align incentives, and apply formal as well as informal methods of market facilitation. The ecosystem

development approach, as represented in figure III, has provided the overarching framework for our work in Senegal. We have worked across the ecosystem, addressing constraints as they arose for all stakeholders.

The result of our five-year engagement is that the Senegalese DFS market has gone through momentous transformation (see table 1 for a comparison of market indicators over time). The number of registered mobile wallet accounts has increased significantly, to more than 5 million. The offer of digital finance has diversified, and second-generation DFS such as digital credit and pay-as-you-go-solar products are gaining momentum. Fintechs have mushroomed, and the interest in their activities from banks and MFIs has intensified. Because of risk-based policies and mitigation mechanisms shared through the DFS Working Group sessions and bilateral engagements, regulators have started looking at financial innovations in a different light.

Figure III Ecosystem development approach



Table 1 Digital finance indicators in Senegal, 2015 versus 2019

Indicator	Market stage and value (2015)	Market stage and value (June 2019)
Percentage of adult population with an active registered DFS account	13%	29%
Number of active agents per 100,000 adults	54	192
Number of providers offering DFS in the market <b>on a</b> <b>sustainable basis</b>	4	There are 3 MNOs (among which 1 is sustainable), 3 banks and 3 OTC providers expanding to wallet services, as well as at least 2 fintechs offering wallet services, and the Post Office. MFIs are using digital technologies to streamline operations and deploy push-pull integrations with DFS providers. Ten fintechs are offering aggregation, distribution and acceptance of digital means of payments.
Providers' attitudes and plans towards expanding and improving their digital finance products and services	Providers appear to be committed to DFS as more begin to offer services. Only one provider that responded to the Annual Provider Survey indicated that services were "not yet sustainable."	MNOs are increasingly investing in DFS, and OTC providers are moving towards wallets. Banks are investing actively in mobile money. Fintechs add value to the product portfolio and distribution channels. MFIs are starting to invest in digital solutions. Providers show more willingness to go rural. The industry is moving forward and engaged with DFS.
Types of products offered in the market	There are mostly first-generation products, with some nascent second-generation products: bill payments, P2P transfers, deposits and withdrawals. Basic retail payments are dominated by many-to-one relationships (P2B or P2G).	First-generation products and high-volume payments are offered (G2P and B2P; P2G and P2P). Merchant payments are expanding. There is one provider offering digital credit. A couple of providers facilitate insurance subscriptions, as well as premium and indemnity payments.
Types of institutional arrangements established for high-volume payments	There are bilateral agreements between providers and partnerships for bill payments (electricity, water and cable TV).	There are bilateral agreements between providers and partnerships for bill payments (electricity, water and cable TV), social benefit payments and salary payments. There are a few bilateral agreements for scholarship payments (Ecobank) and family subsidies (Orange) in rural areas.
Types of partnerships formed for delivering DFS	There are bank and MNO partnerships (e.g., a partnership in which a bank issues e-money for an MNO).	Many banks offer push-pull with Orange Money or other DFS providers. MNOs rely on mega distributors to ensure distribution. Multiple banks create e-money on behalf of third-party operators (fintechs) that offer wallet services.
Types of regulation supporting DFS	BCEAO established a regulatory framework for the entire West African Economic and Monetary Union zone, enabling financial institutions but also non-bank actors (MNOs, money transfer specialists, etc.) to provide DFS to individuals and businesses as well as issue e-money, subject to BCEAO approval.	A revision of e-money regulation was completed, and there is more focus on customer protection and e-money issuers' responsibilities. USSD access was recently opened to non-MNOs by telecommunication authorities.
Senegal market stage	<b>∜</b> Mid-Start-Up	Mid-Expansion

Acronyms: B2P, business-to-person; G2P, government-to-person; P2B, person-to-business; P2G, person-to-government; P2P, person-to-person; USSD, unstructured supplementary service data.

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Five years ago, Senegal was a market in the Start-Up stage of development. DFS providers were treading carefully in a fledgling market that lacked a clear business case. We used our theory of change as a tool to develop the market in a way that would benefit all ecosystem stakeholders. Our idea was that, by providing information and insights, demonstrating an active commitment to building relationships and capacity, and investing in high-potential projects, we could trigger a chain of positive behavioural changes that would start with providers as well as other key stakeholders and end with customers. By accessing DFS and becoming increasingly aware of their potential, customers would experience a clear positive impact on their livelihoods, in terms of financial security and investment capital, thus driving the demand for more sophisticated DFS and consolidating the ecosystem.

Our ecosystem approach enabled us to work across the Senegalese digital finance landscape using a mixture of grants, technical relationships. With the support of the Mastercard Foundation, we carried out 10 projects in Senegal over five years: BASIF (Banlieue Action Solidarité Immobilier Finances), CAURIE (Caisse Autonome pour le Renforcement des Initiatives Economiques par la Microfinance), InTouch, InTouch-PAMECAS (Partenariat pour la Mobilisation de l'Épargne et du Crédit Au Sénégal), La Banque Agricole, Oolu Solar-Wizall, TigoCash, the Treasury, World Food Programme and YUP. In addition, we worked hand in hand with BCEAO, which supervises DFS players in Senegal as well as other nations in the West African Economic and Monetary Union. Our introduced BCEAO, through live demonstrations, to solutions used by the central banks of Nepal and Rwanda. Our projects, described in the paragraphs below as well as table 2, have brought about change in the ecosystem in a multitude of ways.

Our vision for the ecosystem inspired our approach in the Senegalese market. To begin, we established the DFS Working Group, co-chaired by BCEAO and the Ministry of Finance. The first meeting, held in April 2016, convened 30 participants. Sabine Mensah, UNCDF Regional Technical Specialist in West Africa,

If we wanted to build the ecosystem, we had to start by providing each stakeholder with a platform to introduce who was doing what. We began with ourselves—our view, our goals, our approach—and all the others took notice and did the same. As a result, at each DFS Working Group session, which occurred every three months, the distance among the participants lessened and the interest in each other's work grew. We helped the stakeholders refocus their gaze on underserved groups, such as youth like Birane, as well as gaps in the market. At the same time, we provided capacity-building, mentoring, grants and technical support. In regards to knowledge-and capacity-building, we leveraged the sessions to provide professional education in the following areas: partnerships in digital finance, DFS and financial education, DFS for financial inclusion, as well as DFS for youth and female economic empowerment. In total, 500+ DFS professionals (100+ female) in Senegal participated. As different players gained knowledge and gradually came to appreciate the technical capacities and business models of others, partnership opportunities revealed themselves.

### InTouch — Supporting inclusive agent networks

It all started with our call for proposals to develop a network of agents in rural areas. The call placed particular emphasis on the involvement of youth and women. It was 2016, and at the time, InTouch was struggling even to explain its role. "At the beginning, nobody really knew what an aggregator was," explains Omar Cissé, InTouch CEO. "So, nobody seemed really interested in hearing from us. We knocked at many doors, but we hardly drew any attention." InTouch took on the agent-network challenge, and we offered both our financial and technical support. As Mr. Cissé recalls, "Access points were very scarce in rural Senegal."

InTouch immediately realized that establishing and running a network of agents outside of the country's main urban areas was going to be daunting. The difficulties were mostly due to patchy connectivity in the often-isolated target communities as well as the poor provision of liquidity and the informal nature of businesses, which complicated compliance with know-your-agent regulatory requirements

The company also recognized the need to address social norms when recruiting female agents, like engaging with not only women but also their husbands to ensure the families would be supportive of the women taking on such a role.

First, with our technical assistance, InTouch defined a strategy over the course of two months. Next, InTouch leveraged the DFS Working Group as a platform to introduce its services to other players. Initially, MNOs, banks and MFIs did not see the value added of the aggregator, but gradually agent network development was mainstreamed. In 2016, InTouch signed a partnership agreement with Orange Money for franchising. The project paid off: Orange Money attributes the turning point in the success of its mobile money wallet to the expansion of its agent network, which proved to be crucial in every DFS strategy.

InTouch has since continued with its robust expansion. It has partnered with PAMECAS (see below), Ecobank and pay-as-you-go energy providers. It has exceeded the initial target of 360 active agents in rural areas, a number that includes Birane. Today, more than 300,000 people in Senegal have access to DFS through InTouch services because of the rural agent network project.

## **CAURIE MF** — Demonstrating the potential for the digitization of microfinance

In recent years, CAURIE MF has become a use case for best practices by a digitally powered MFI. In fact, it was invited in 2018 to a conference in Morocco to demonstrate what the digitization of an MFI can achieve.

Since 2016, we have been supporting the digitization of deposit and loan processes of women's savings groups at CAURIE MF through tablets. First, we offered financial and technical assistance, which involved studying customers' needs, training MFI staff and developing a standard operating manual for digital services. Next, CAURIE MF launched a pilot test in 2017.

Since then, CAURIE MF has achieved critical efficiency improvements: credit officers gained a 30% time savings, and completion of end-of-month accounting reconciliation procedures was reduced from five days to just one. The MFI has also improved data accuracy, reduced approval time for new loans or loan rollouts and decreased operational costs. In addition, CAURIE MF is laying the groundwork for the next steps in its digitization journey: launching bank-to-wallet and mobile banking solutions and building its own agent network that will serve more than 94000 women organized in savings groups.

## PAMECAS — Providing digital loans to women and youth with no collateral

Ababacar Touré, Director of Credit and Risk at the MFI PAMECAS, is adamant: "At the beginning, we saw fintech as a threat. We feared that they were going to disrupt the market and displace us." However, with the passing of time, he notes, "The threat turned into an opportunity."

As Mr. Touré 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 to develop second-generation DFS. At the time, we had just started a conversation with InTouch regarding how to collaborate on projects to facilitate access to credit for agents and customers. The call for proposals provided the opportunity for both 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. The vision that we assisted PAMECAS to cultivate can have a radical impact on youth and women who lack collateral to initiate or expand their business. PAMECAS just 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.

## La Banque Agricole — Offering a digital wallet to smallholder farmers

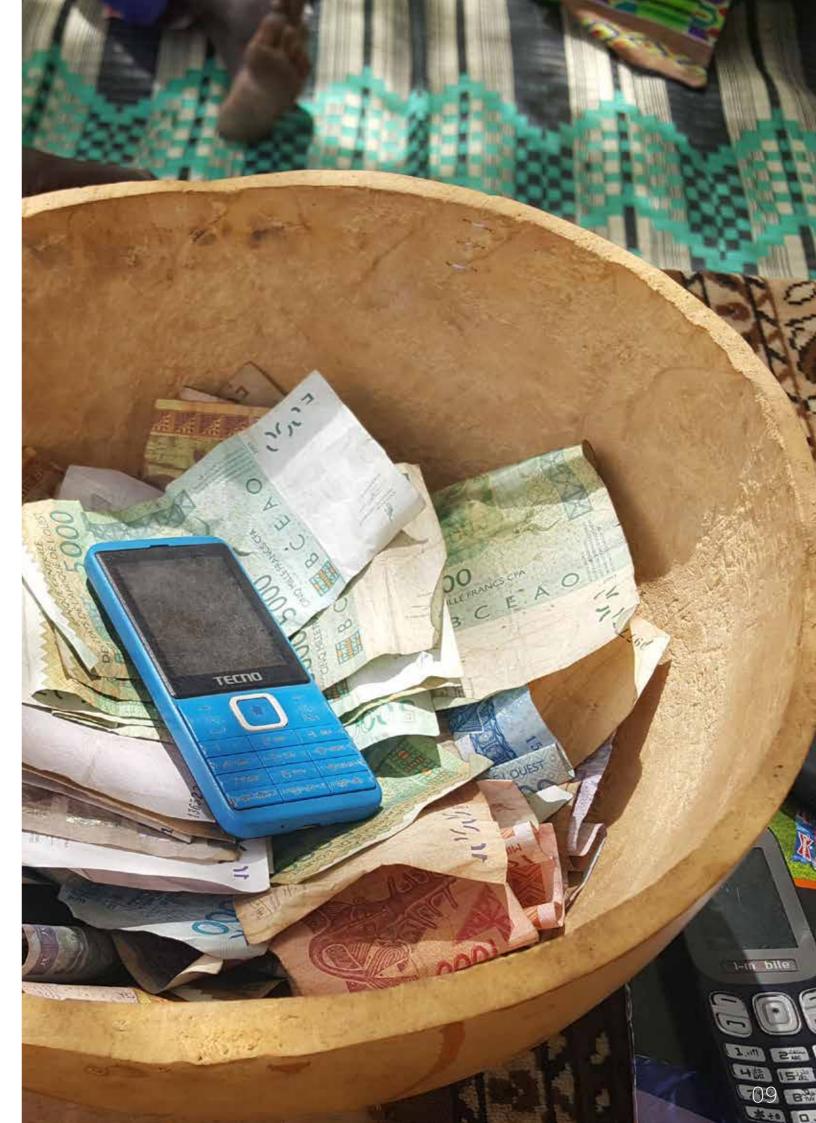
We first discussed with La Banque Agricole the possibility of a partnership during a field visit to northern Senegal in 2016. "The expanses of paddy fields all around us, as we were in the country's main rice-producing area, were a testimony to the golden moment that agriculture was experiencing," recalls Cheikh Ndiaye, Sales and Marketing Deputy Director of La Banque Agricole.

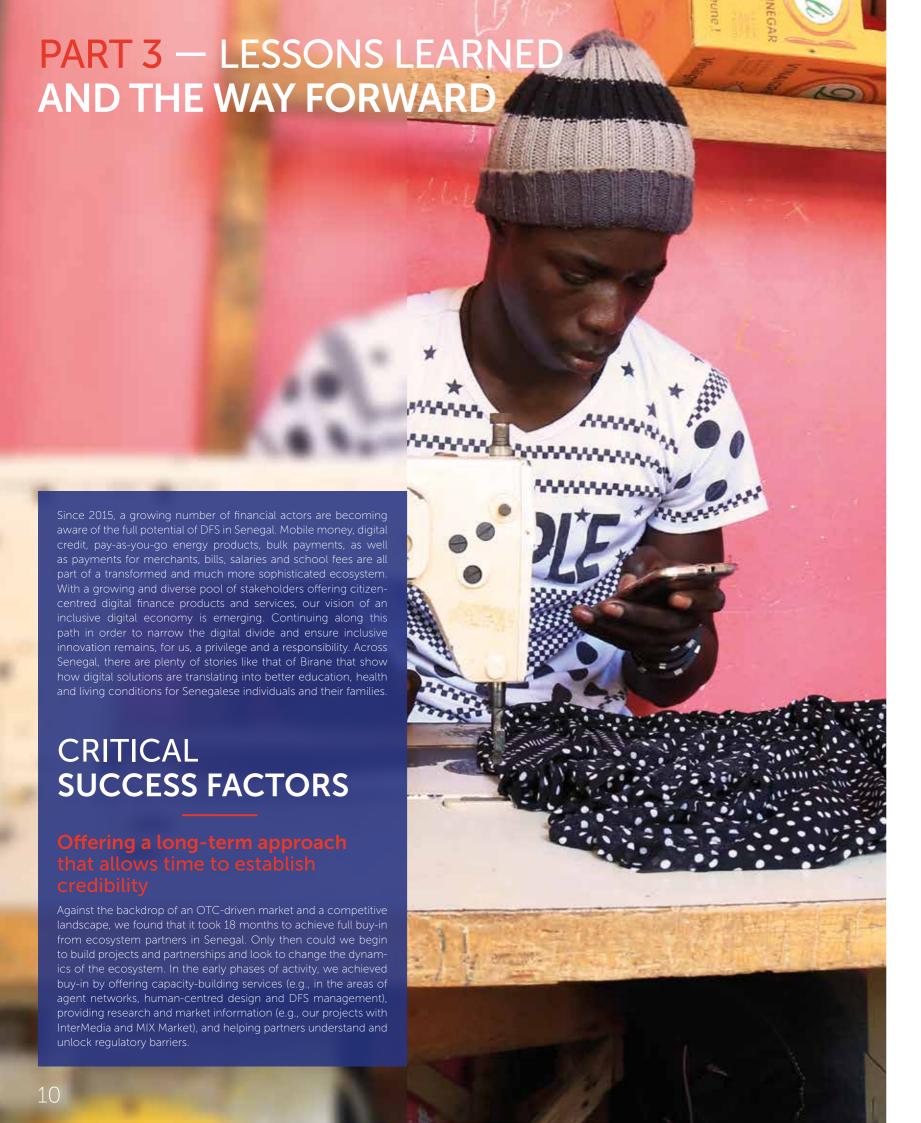
Driven by a plan to become a middle-income country by 2035, Senegal is committed to modernizing the agricultural sector, which is still the economic backbone of the country. The plan is to begin with strategic crops such as rice. After a period of stagnation, investments poured into the area, enabling agribusinesses to modernize and focus on processing products. 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 that could offer on-demand financial and non-financial services adapted to the needs of smallholder farmers in order to contribute to their resilience and increase the coordination between rice producers and buvers. According to Malick Ndiave. Managing Director of La Banque Agricole, our main contribution to this journey was to "emphasize the need to adjust to a quickly shifting financial landscape."

After almost two years of preparatory discussions with us, La Banque Agricole started working on its AgriCash wallet project in January 2019 and launched the pilot among rice producers at the end of August 2019. It was 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, helping the bank with research, design and training to advance a solution to digitize payments. As Mr. Ndiaye explains, "With the support of UNCDF, we decided to adopt a mobile wallet as a landing spot for digital loans. This was a win-win decision, for us and for the farmers, in terms of increased security and easier access to liquidity."

## LIST OF PROJECTS

НЕМЕ	KEY CHALLENGES	KEY ACHIEVEMENTS
Customers	Helix Institute of Digital Finance	Research on the acceleration of agent networks in Senegal
	Bridging the gaps in knowledge of DFS ecosystem stakeholders to build agent networks.	Results of the research were shared with ecosystem stakeholders during DFS Working Group sessions, improving their understanding of the agent value proposition.
	InterMedia	Research on behaviours of DFS users in Senegal
	Bridging the gaps in knowledge of DFS ecosystem stakeholders to address customers' real needs.	Results of the research were shared with ecosystem stakeholders during <b>DFS</b> Working Group sessions, improving their capacity to offer adapted products to their customers.
Agents and distribution	BASIF and Orange Finances Mobiles Sénégal	Youth DFS kiosk franchising model
	Improving the low employment rate of youth by exploring job opportunities offered by the DFS industry.	There was a temporary opening of 10 youth kiosks between March and April 2018. Some 5,984 transactions for a total CFAF 46,285,717 (US\$78,395) were performed through the kiosks. The project is being revamped to work directly with existing Orange Money franchisees.
	InTouch	Deployment of a network of 368 agents in rural areas of Senegal
	Filling gaps of DFS agents in rural areas of Senegal.	By March 2019, InTouch had <b>368 active agents deployed to 10 rural districts.</b> Those agents average nine transactions per day for a total CFAF 38,000 (US\$664). In total, <b>550+ agents were deployed for the project, earning total commissions of CFAF 47 million (US\$79,604)</b> while serving close to 300,000 unique customers in rural areas.
	CAURIE MF	Digitization of deposit and loan processes of women's savings groups through tablets
	Accelerating the MFI digitization journey in Senegal.	Training and provision of digital tablets were completed with <b>107 loan officers</b> (including <b>43 women</b> ) by mid-2019. Those loan officers served <b>94,432 female</b> customers through 10 CAURIE MF agencies. The project increased the efficiency and accuracy of its operations by reducing reporting time from 5 days to 1 day and errors by 90%, and reducing approval times for new loans by 30%.
Providers	PAMECAS and InTouch	Launch of a digital credit product
	Building the business case for second-generation DFS.	<b>Pilot started on 1 Oct. 2019.</b> Eleven digital loans were granted for a total CFAF 2.3 million (US\$3,896) since the pilot launch.
	Oolu Solar and Wizall	Development of mobile payments for solar energy access
	Building a robust and reliable rural network of agents, who can facilitate mobile payments to enhance access to clean energy for rural clients with low levels of education and literacy.	The business case of the DFS agent network planned by Oolu Solar and Wizall proved unsustainable. <b>Hence, the project stopped at the scoping phase; there was no pilot phase.</b>
	La Banque Agricole	Human-centred design research on smallholders' needs + management and agent network training
	Contributing to the financial inclusion of farmers in the rice value chain.	We provided DFS training for staff and capacity-building services in agent network management. We were part of the bank's journey to launch the AgriCash wallet (a wallet for farmers). We will soon provide technical and financial assistance to help the bank digitize the payments farmers receive for their production surplus (product left after they have repaid their loan), an effort that will include wallet registrations and financial education for smallholders.
High-Volume Payments	World Food Programme	Human-centred design research on beneficiaries + training of trainers for the World Food Programme and its local distribution partners
	Helping World Food Programme beneficiaries who receive financial assistance through wallets to become effective users of DFS	Results of the research were shared with World Food Programme staff, and training-of-trainer events were conducted. The financial assistance campaign was only started in October 2019. So far, 1600+ households received their financial aid. Results on subsequent wallet usage are expected.





### Shining a light on previously underserved market segments

We used a combination of tools to nudge DFS providers in Senegal towards certain demographics and geographies, such as youth, female entrepreneurs and rural communities. We started with research to map the market opportunities and provided the resulting information that could help DFS providers build the business case for those segments. We aligned our targets, in terms of demographics and geographies, with the key performance indicators of the different DFS providers. With that alignment, we were then able to use more focused approaches. For example, once the Treasury identified pensioners, mobile money operators, merchants and youth as target segments, we used human-centred design to help the Treasury to design adapted solutions.

## Leveraging our position as a neutral broker to forge partnerships

To establish ourselves as a neutral broker within the Sene-galese ecosystem, we first had to create an environment for partners to move from competition to collaboration. Our DFS Working Group was critical to that effort, as it provided a new channel for partners to engage and build understanding. Next, we identified synergies between players and played a 'matchmaking' role to bring them together, taking into account varying organizational dynamics and ensuring partner engagement at multiple levels of their organizations. We also found that partnerships worked better when technical assistance was provided to all partners engaged in the projects in order to maximize synergies. Ultimately, these efforts meant that we were able to forge fruitful partnerships, such as the one between PAMECAS and InTouch to pilot a digital credit product.

### KEY LESSONS LEARNED FOR THE NEXT PHASE

## **Strong financial backing** is crucial to the sustainability of projects

Some of the projects that we supported in Senegal did not live up to expectations because the partnerships, particularly in the case of the agent network franchising model, did not have proper financial backing. The launch period can be both loss making and cash consuming if neither the franchisor nor the franchisees have the resources to guarantee enough liquidity. In these cases, it is acceptable to go back to the drawing board. Strong equity and cash flow are needed to move the agent network franchising model beyond the pilot stage.

## Limited connectivity is still a major obstacle to the realization of a cashless ecosystem

Despite the great progress that we witnessed in the Senegalese DFS ecosystem, there is still work to be done to improve digital penetration, particularly in rural areas. More catalytic investment is required to incentivize the private sector to invest in last-mile connectivity. This issue is applicable not just for digital finance but for the broader digital ecosystem.

## Interoperability could be a game-changer for digital finance in Senegal

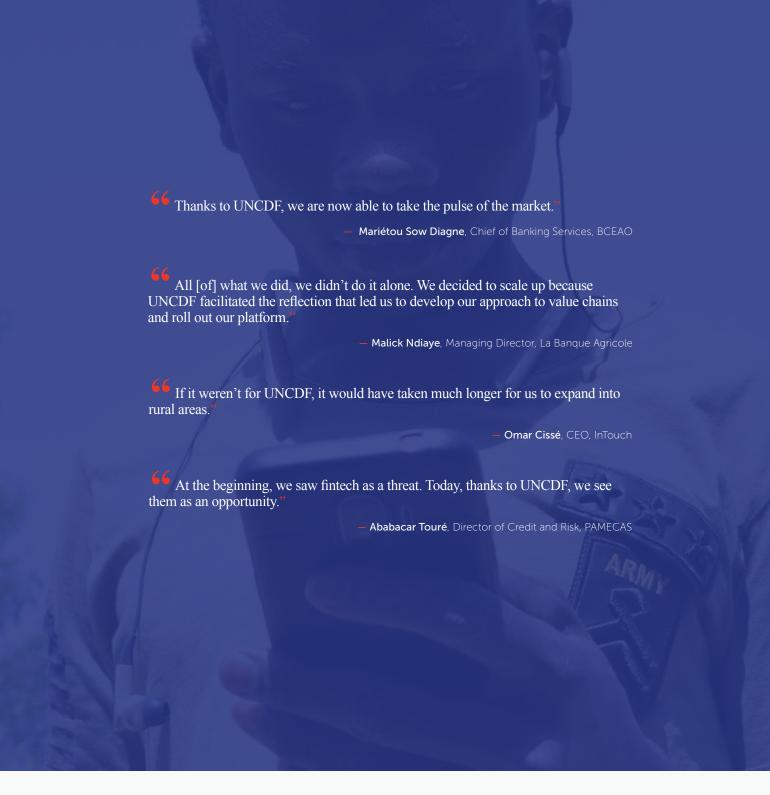
Moving beyond the partnership models that we helped to develop in Senegal, a truly interoperable ecosystem is one in which the movement of money from one DFS provider to another is frictionless. Opening up application programming interfaces and sharing data at a market level could provide the basis for a new wave of innovation, particularly for fintechs looking to build business models that leverage the networks and data of banks and MNOs. Creation of an open digital payment infrastructure would require significant coordination and investment across the sector, but it would create a fertile ecosystem for the next wave of inclusive innovation.

# More work is needed on customer empowerment, particularly around financial education and entrepreneurship

Customers—particularly those who are marginalized by the current financial and digital systems in Senegal—need support to access and use digital finance tools to improve their livelihoods. For people looking to leverage digital tools to start and grow enterprises, there is demand for capacity-building, mentorship and financial planning. The need for empowerment goes beyond standard approaches to financial literacy to include broader themes around digital empowerment, ensuring that no person is left behind in the digital economy.

## The Senegalese digital finance ecosystem is not limited by national borders

There are numerous opportunities for Senegal to learn from its neighbours and for Senegalese DFS providers to expand within the region. BCEAO has expressed a wish to draw further upon our network to learn how regulators elsewhere have tackled regulatory issues related to financial innovations such as alternative data for credit scoring. In addition, dynamic start-ups like InTouch and SUDPAY are looking to build on our partnership to scale up and expand across the country's borders. Future projects can achieve more by leveraging the UNCDF regional footprint.





### 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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