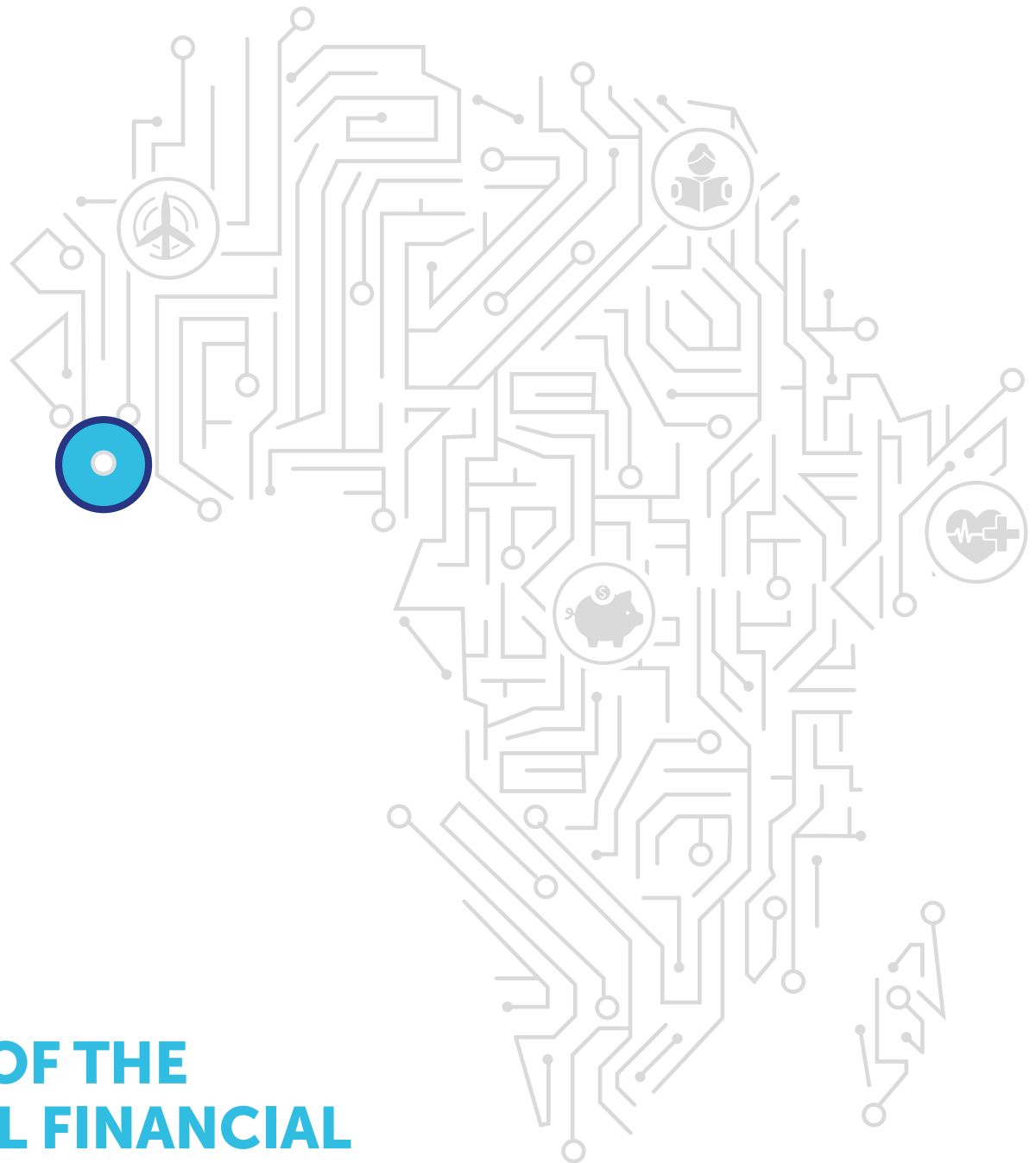




Unlocking Public and Private
Finance for the Poor



STATE OF THE DIGITAL FINANCIAL SERVICES MARKET IN

SIERRA LEONE, 2019

Results from the United Nations Capital
Development Fund Annual Provider Survey

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Acronyms	
DFS	digital financial service
Le	Leones*
MSME(s)	Micro, small and medium enterprises
UNCDF	United Nations Capital Development Fund

***Conversion rate:** US\$1 = Le 9,830. **Source:** <https://treasury.un.org/operationalrates/OperationalRates.php>, 1 May 2020.
Note: This rate is used wherever United States dollar (US\$) equivalents are provided for Sierra Leone Leones (Le).

Glossary

Term	Definition
Active customer account	An account with which at least one transaction was conducted in the last 90 days. A transaction includes cash-in, peer-to-peer transfer, cash-out, bill payment and/or airtime purchase. Conducting a balance inquiry, resetting a personal identification number or completing another transaction that does not involve the movement of value does not qualify for a customer account to be considered active.
Agent, Agent outlet, Active agent outlet	A proprietary agent (an agent who is managed by and operates under the exclusive branding of a particular provider) or a third-party agent, either of whom handles more than 30 transactions per month, including cash-in and cash-out. In many instances, an agent registers new customers.
Airtime transactions	Airtime transactions (also known as top-ups) funded from customer digital finance accounts.
Automated (or Automatic) teller machine (ATM)	An electronic telecommunications device that enables the clients of a financial institution to perform financial transactions without the need for a cashier, human clerk or bank teller. ATMs may be operated either offline or online with real-time access to an authorization database.
Bank account to mobile money account transfers	A direct transfer of funds made from a customer bank account to a mobile money account. This transaction typically requires a commercial agreement and technical integration between the bank and the mobile money provider to allow direct transfers.
Bank of Sierra Leone	Central Bank of Sierra Leone.
Bill payments	The payment of bills using digital financial services regardless of whether they originate from an account or are made over the counter.
Bulk payments	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 over-the-counter. 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".
Cash-in transactions	Cash-in transactions include deposits of any value from a customer into a wallet through an agent. They also represent the process by which a customer credits [his/her] mobile money account with cash. This [process] is usually via an agent who takes the cash and credits the customer's mobile money account with the same amount of e-money.
Cash-out transactions	These transactions include transfers of any value from an agent to a customer. They also represent the process by which a customer deducts cash from [his/her] mobile money account. This [process] is usually via an agent who gives the customer cash in exchange for a transfer of e-money from the customer's mobile money account.
(Agent) Commissions	The revenues paid by the digital financial service (DFS) provider to its agents. Generally, agents earn commissions by conducting transactions and onboarding new customers.
Customer activity rate	The share of actively used registered accounts (i.e. at least one transaction conducted in the past 90 days).
Debit card	An electronic card issued by a bank that provides the bank client with access to his/her account to withdraw cash or pay for goods and services. It eliminates the need for the client to go to the bank to remove cash from his/her account as he/she can go to an ATM or pay electronically at merchant locations.
Digital financial services	All financial services that are accessed through a digital channel to conduct a transaction that involves a movement of value. Digital channels include ATMs, agents, point-of-sale terminals, mobile phones (SMS, unstructured supplementary service data for app and web) and PC/internet. This includes e-money and bank accounts held at financial institutions (banks, microfinance institutions) and non-financial providers (mobile network operators, financial technology companies, cooperatives and other third-party providers) and includes all payment instruments.
Financial inclusion	Access to a range of affordable, convenient and appropriate financial services for all eligible citizens. These services could be formal financial products/services that are provided by formal financial institutions (banks and/or non-bank financial institutions bound by legally recognized rules) or informal financial products/services that are unregulated and operate without recognized legal governance (e.g. village banks or village development funds).
FinTech	A financial technology company.

Glossary (continued)

First-generation products	Basic digital financial services, such as peer-to-peer transfers, airtime purchases, bill (utility) payments and cash-in and cash-out transactions.
International remittances	The total number of cross-border fund transfers for inbound or outbound remittances. Or the cross-border fund transfer from one person to another person. This transaction can be a direct mobile money remittance or can be completed through use of an intermediary organization such as Western Union.
Know-your-customer	Financial institutions and regulated financial service providers are obligated by regulation to perform due diligence to identify their customers. Know your customer refers to these requirements and/or to the regulation which governs these activities. The Financial Action Task Force recommends a risk-based approach to due diligence for anti-money-laundering and counter-financing of terrorism controls. Due to the lack of formal identity documents in some markets, solutions such as [establishing] tiered know-your-customer [requirements] and adjusting acceptable documentation can help mobile money providers facilitate customer adoption and increase financial inclusion, especially in rural areas.
Liquidity management	The balance of cash and e-money held by a mobile money agent to meet customers' demands to purchase (cash-in) or sell (cash-out) e-money. The key metric used to measure the liquidity of an agent is the sum of [his/her] e-money and cash balances (also known as [his/her] float balance).
Merchant	An individual or a registered business using a business channel (i.e. a merchant SIM) to accept payments for goods and services via a DFS channel.
Merchant payments	Movements of value from a customer to a merchant to pay for goods or services at the point of sale.
Mobile microcredit (also microloans)	A solution that enables mobile money customers to access small amounts of credit instantly via their mobile phone.
Mobile money operator	A company that has a government-issued licence to provide telecommunication services through mobile devices.
Over-the-counter transactions	Money transfers or bill payments that are conducted without a registered account. Some mobile money services [e.g. bill payments] are offered primarily in this format. In such cases, a mobile money agent performs the transaction on behalf of the customer, who does not need to have a mobile money account to use the service.
Pay-as-you-go	An option by which an end 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.
Peer-to-peer transfers	Also known as person-to-person transfers, they originate from a customer DFS account and terminate in another customer DFS account.
Registered customers	The cumulative number of customers who have registered for a service, regardless of whether the service is active.
(Agent) Revenue	The total commissions earned by agents for all the transactions they conduct through their agent accounts.
Second-generation products	More advanced digital financial services, such as microcredit and microinsurance products, loan repayments, merchant payments, push (to bank)/pull (from bank) transfers and international remittances.
Third-party operators	DFS providers that leverage existing infrastructure of mobile network operators. They are usually mobile network operator agnostic, and in some cases they could be master agents or act on behalf of a DFS provider or a mobile network operator, whether pursuant to a service agreement, a joint venture agreement or another contractual arrangement.
Transaction	A transaction involves, for example, cash-in, peer-to-peer transfer, cash-out, bill payment and/or airtime purchase. A transaction does not include any type of activity that does not involve the movement of value (e.g. balance inquiry).

FOREWORD

The United Nations Capital Development Fund (UNCDF) in partnership with the Bank of Sierra Leone is pleased to publish this State of the Digital Financial Services Market report for 2019, presenting the findings from the Annual Provider Survey conducted in early 2020.

For the third consecutive year, this report provides information on the state of the digital financial service (DFS) industry by aggregating industry data. It presents the number of players that offer digital financial services, the number of registered and active customers, as well as the volume and value of transactions conducted monthly and the type of services offered in the market. The report also provides information on the different DFS distribution channels available in Sierra Leone and highlights barriers and challenges that providers face. UNCDF and the Bank of Sierra Leone provide recommendations to address certain challenges, examples of good practices and discuss the direction in which the DFS market is moving.

The number of registered accounts grew by almost a million, from 5,438,888 in 2018 to 6,222,277 in 2019. With 1,370,374 90-day active customers in December 2019, 30 percent of the adult population in Sierra Leone is now actively using a DFS account. This is a great improvement on the 14 percent of the previous year. Despite this growth, most active customers are men located in Freetown and other major towns, and mostly using basic digital financial services (first generation products). The industry will need to invest in developing attractive use cases to increase engagement and secure greater retention of active customers. In addition, using a human-centric approach at the core of product and service development will help the industry identify specific customer needs, such as those of entrepreneurs or women, in different sectors of the economy including the agricultural and micro, small and medium enterprise (MSME) sectors. Innovation solutions and disruptive business models including increased partnerships between different provider types can address access and adoption barriers.

The Covid-19 pandemic is putting discussions on the financing challenges faced by MSMEs both in the formal and informal sectors at the forefront. In Sierra Leone, 90 percent of jobs comprise self-employment; 60 percent of those are in low productivity agriculture and 88 percent are in the informal economy.¹ To achieve economic growth and improved livelihoods within these populations, adequate financial services that address the specific needs and financing requirements of MSMEs urgently need to be developed. In the coming years, providers will be leveraging innovative solutions to drive regular use of affordable and accessible financial services for these populations.

The 2019 edition of the report differs from previous reports because the survey, carried out in July and August 2020, was fully digital due to the travel and work restrictions imposed by the Covid-19 pandemic. UNCDF and the Bank of Sierra Leone counted on the dedication of all providers and were successfully able to secure full participation in the survey. This is testimony to the motivation and hard work of the industry players and to the added value that this report gives DFS providers in Sierra Leone.

¹ International Labour Organisation. 2015. Sierra Leone Labour Force Survey.

The previous annual provider surveys inspired many industry stakeholders to work even harder to drive financial inclusion in the country and make the DFS market more competitive and responsive to Sierra Leonean customers. We at UNCDF hope to do the same with the 2019 report, giving providers tangible and relevant information that can be used to make informed decisions regarding the growth of the industry.

Under the new strategy of "Leaving No One Behind in the Digital Era", UNCDF will continue to use a market development approach to support multiple key industry initiatives such as improved data analytics, greater incentives that drive increased activity among customers and agents, better agent network management and more innovations. We will also focus on building inclusive digital economies by empowering youth, women, persons with disabilities and MSMEs—customer segments that are often marginalized and denied digital innovations. We are very encouraged by the results thus far achieved and remain committed to providing support to our Sierra Leonean partners in order to enhance stakeholders' understanding of, interest in, and willingness and ability to develop, improve and expand digital financial services in the country.

We remain inspired by the leadership of the Bank of Sierra Leone and are hopeful that the work undertaken since 2017 will continue to bear fruit in the coming years.



Wycliffe Ngwabe

Country Lead and Technical Specialist





PREFACE

► The Bank of Sierra Leone

The Bank of Sierra Leone is the central bank of the Republic of Sierra Leone and is charged with developing the country's financial sector. It led the development of the National Strategy for Financial Inclusion in Sierra Leone (2017-2020) and provides leadership and coordination support to the Digital Financial Services Working Group. Currently in the assessment phase of the National Strategy for Financial Inclusion (2017-2020), this State of the Digital Financial Services Market in Sierra Leone report outlines progress that has been achieved, while suggesting further improvements and highlighting underlying challenges. The findings from this report can support design of the next stage of the National Strategy for Financial Inclusion in Sierra Leone (2021-2025).

► The United Nations Capital Development Fund

The United Nations Capital Development Fund (UNCDF) makes public and private finance work for the poor in the world's 46 least developed countries. With its capital mandate and instruments, UNCDF offers "last mile" finance models that unlock public and private resources, especially at the domestic level, to reduce poverty and support local economic development. UNCDF's finance models work through two channels: financial inclusion that expands the opportunities for individuals, households and small businesses to participate in the local economy providing them with the required tools to climb out of poverty and manage their financial lives; and localized investments—fiscal decentralization, innovative municipal finance and structured project finance—that drive the public and private funding that underpin local economic expansion and sustainable development.

By strengthening finance operations for poor people at the household, small enterprise and local infrastructure levels, UNCDF contributes to Sustainable Development Goal (SDG) 1 on the eradication of poverty and SDG 17 on the means of implementation. By identifying those market segments in which innovative finance models can have transformational impact in reaching "the last mile" while addressing exclusion and access inequalities, UNCDF contributes to a number of additional SDGs.



► About the “Leaving No One Behind in the Digital Era” strategy

The UNCDF strategy “Leaving No One Behind in the Digital Era” is based on over a decade’s 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 SDGs 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 SDGs. UNCDF will apply a market development approach and continuously seek to address underlying market dysfunctions.

In Sierra Leone, UNCDF and the Better Than Cash Alliance have been providing technical assistance and investment grants for digital services since December 2014 when asked to implement the Payments Programme for Ebola Response Workers with the National Ebola Response Centre. The efforts successfully demonstrated the usage of digital payments, which led to a US\$10 million saving for the Government of Sierra Leone. Since June 2017, UNCDF has supported the Regulatory Sandbox Pilot Programme, which is currently supervised by the Bank of Sierra Leone and is the first of its kind in the region. Recently, UNCDF partnered with the Directorate of Science, Technology and Innovation to map the digital landscape in Sierra Leone and identify opportunities that can accelerate digital development and financial inclusion for all barriers.

► The United Nations Capital Development Fund project team

Developing the UNCDF Annual Provider Survey included gathering data, assessing the incentives of the providers of Sierra Leonean digital finance and surveying local stakeholders. Information was gathered in July and August 2020 and represents data for December 2018 to June 2020. The following project team members authored the report.

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1

INTRODUCTION

This report presents the findings from the third edition of the Annual Provider Survey, a survey conducted each year by UNCDF and the Bank of Sierra Leone among the DFS providers in Sierra Leone. The purpose of this survey and its report is twofold. First, it wishes to provide industry participants with a comprehensive view of the state of the DFS market in the country, highlighting the growth in the market and changes such as new stakeholders and new products/services offered. Second, by gathering data on customer adoption and usage of digital financial services, trends in new service development and drivers and challenges around DFS expansion, the Annual Provider Survey aims to equip the Bank of Sierra Leone and other regulatory bodies with the expertise to better monitor, manage and guide the DFS providers in the country. In turn, it shall help the Bank of Sierra Leone, who is undertaking with support from UNCDF an evaluation of the current National Strategy for Financial Inclusion (2017-2020) to provide recommendations for next strategy (2021-2025).

► Methodology

The Annual Provider Survey was shared electronically by the Bank of Sierra Leone with all DFS providers in July 2020 and, due to the Covid-19 crisis and its restrictions on social gatherings and work arrangements, the data collection process was conducted through digital discussions. Online interviews were conducted by one representative from UNCDF and a data collection consultant. The Bank of Sierra Leone successfully secured the participation of all DFS providers: eight banks and two mobile network operators. Additional providers (at least two banks and two microfinance institutions) are currently designing digital financial services and may participate in future surveys.

Similar to the previous versions of the survey, the Annual Provider Survey 2019 included both quantitative and qualitative questions. Quantitative data were collected on the following indicators:

- total number of customers, registered and active (30 and 90 days)
- composition of customer base (gender, youth, MSMEs)
- total number of unique active customers by service type
- total volume and value of transactions by service type
- total number of agents, registered and active (30 days)
- composition of the agent base (gender)
- total volume and value of transactions conducted with agents
- total value of commissions paid to agents
- total number of merchants accepting DFS payments, registered and active.

This year, new data was collected on:

- composition of customer base (MSMEs)
- volume and value of cash-in and cash-out transaction at ATMs
- product segmentation (products targeting specific segments)
- composition of the providers' agent base.

Qualitative information was collected on the performance and financial sustainability of the institutions interviewed, along with key challenges encountered, strategic priorities for development and level of engagement with the UNCDF Sierra Leone programme.

Due to the peculiar context created by the Covid-19 pandemic, the interviews conducted with providers in July and August 2020 also enabled the team to collect information around the impact of the Covid-19 pandemic on businesses and the strategic shifts that resulted.

UNCDF aggregated the total number of registered and active DFS accounts reported by providers. The conversion of this number to the percentage of adult population with a registered or active DFS account does not consider that customers may have an account with multiple providers. The same applies to agents: agents working for multiple providers are counted more than once.

Institutions were guaranteed that their submissions would remain confidential per the United Nations standard policy on handling proprietary information supplied by its members. UNCDF signed non-disclosure agreements wherever required by the providers. All data presented in this report were therefore aggregated and anonymized. In addition to this publicly available report, DFS providers that participated in the Annual Provider Survey receive a confidential benchmarking report that allows them to gauge their performance relative to the rest of the market.

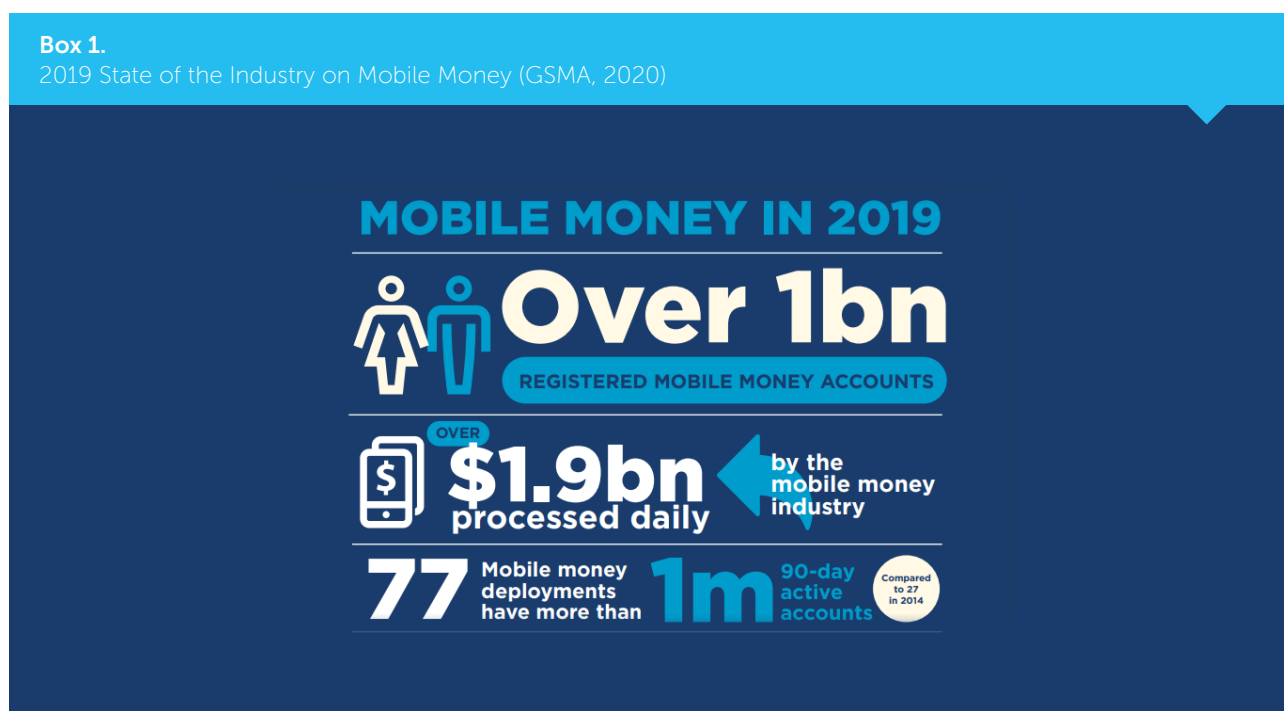
Note: Any variations from the 2018 report may be due to changes in the questionnaire and/or methods of aggregation and calculation.

► State of the global digital financial services industry

Mobile money use has seen unprecedented growth in the last year, with the global industry recording over 1 billion registered users in 2019.² The biggest growth has been in sub-Saharan Africa, where digital financial services are being used to reach as many people as possible with products and services to improve their livelihoods and quality of life. Box 1 shows key indicators of the global mobile money industry in 2019.

After the release of these global figures by GSMA in 2020, the digital finance industry, like other industries globally, was impacted by the Covid-19 pandemic. While the economic impact has yet to be determined, the pandemic has been a driver of adoption of digital services across many sectors, including the finance sector in sub-Saharan Africa. In this report, providers discuss some of the impacts of the Covid-19 pandemic.

Box 1.
2019 State of the Industry on Mobile Money (GSMA, 2020)



² GSMA 2020. 2019 State of the Industry Report on Mobile Money (www.gsma.com/sotir/wp-content/uploads/2020/03/GSMA-State-of-the-Industry-Report-on-Mobile-Money-2019-Full-Report.pdf).

Sub-Saharan Africa accounted for two thirds of the total global transaction value of mobile money in 2019 and almost half the total number of active accounts globally. With such indicators of growth and usage, this industry can leapfrog certain challenges that still hinder development initiatives of under-developed regions in many countries. Further, digital financial services have proven several use cases by improving already-existing services, which has pushed the industries forward or expanded the reach of services.

Today, many people principally rely on digital financial services to conduct business or manage their money. In 2019, digital transactions accounted for the majority of mobile money flow.³ The confidence and trust in digital financial services indicates stability and sustainability within the industry, which will yield further growth and expansion.

A natural consequence of the increase in the usage of mobile money and products and services is an increase in interoperability and integration. Providers are better harmonizing the products and services they offer to make services easier to use and to increase the possible use cases. Further, for the first time, customers are keeping more of their mobile money in circulation in the system, rather than exiting, which was more common in previous years.

The following are further key insights in the global mobile money market, shared in the GSMA 2019 State of the Industry Report on Mobile Money.

Continuous investment in distribution networks – mobile money operators are increasingly investing in their agent and distribution networks leading to a significant increase in agent outlets. The reach of a mobile money agent is seven times that of ATMs and 20 times that of bank branches. As such, mobile money agents have had a transformative impact on financial inclusion, particularly in remote areas.

Providers shifting to a “payments as a platform” model – 2019 saw a significant drop in reliance on revenue from customer fees alongside rising revenue from business fees or shared revenues. This indicates that markets are strategically expanding to offer products and services from which they can draw revenue.

► State of digital financial services in Sierra Leone at a glance

The financial inclusion rate in Sierra Leone was 20 percent in 2017, which placed the DFS market at an early stage of development.⁴ However, the country evolved rapidly between 2017 and 2019 so the number of adults actively using a DFS account⁵ increased from 404,733 (9 percent of adults) in December 2017 to 1,370,374 (30 percent of adults) by the end of 2019. This increase was enabled by greater integration and more partnerships among DFS providers, coupled with efforts around activation and proposing adapted use cases for customers.

³ GSMA 2020. 2019 State of the Industry Report on Mobile Money (www.gsma.com/sotir/wp-content/uploads/2020/03/GSMA-State-of-the-Industry-Report-on-Mobile-Money-2019-Full-Report.pdf).

⁴ Asli Demirgüç-Kunt and others, The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution, Washington DC, World Bank, 2018. doi: 10.1596/978-1-4648-1259-0. Licence: Creative Commons Attribution CC BY 3.0 IGO.

⁵ The number of active customer accounts (90 days) measures all customer accounts that have conducted at least one transaction involving movement of value in the past 90 days.

In 2019 emphasis was placed on onboarding customers, introducing products, facilitating payments and creating use cases to convince customers of the benefits of using digital financial services. In the future, providers will need to find sustainable business models, understand the best pricing solution for the different services and tailor their offers to different customer segments.

Figures I and II provide an overview of Sierra Leone and the state of its DFS market by 2019.

Figure I.

General statistics about Sierra Leone

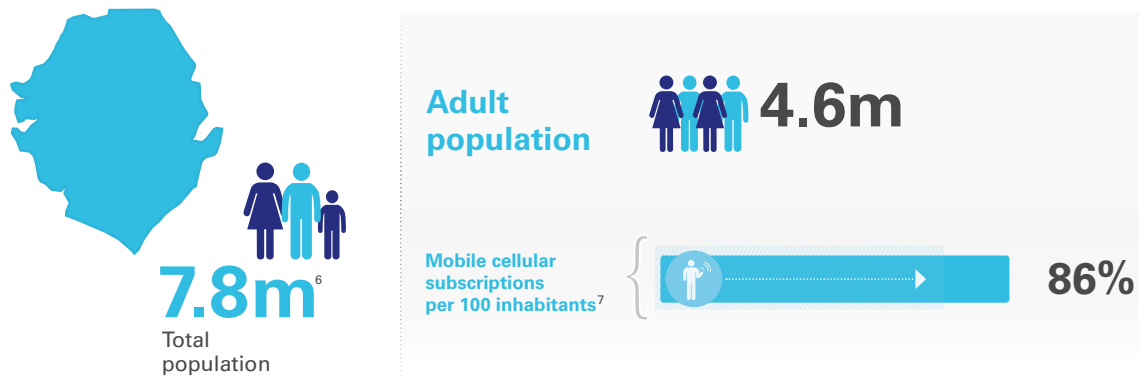
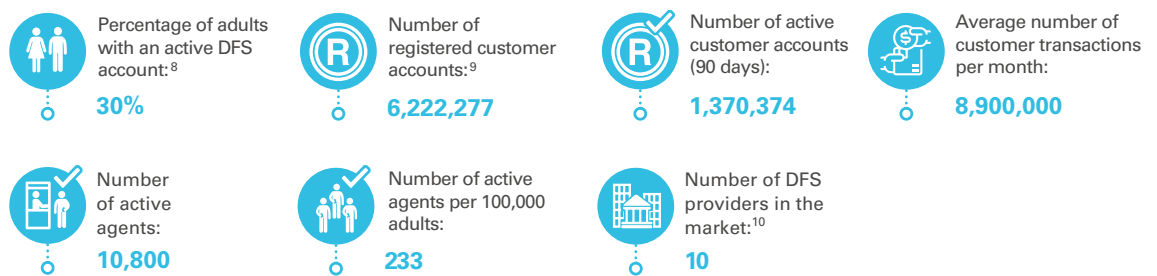


Figure II.

State of the Sierra Leonean digital financial service market (2018)



⁶ United Nations World Population Prospects, 2020 (<https://population.un.org/wpp/>).

⁷ ITU statistics, 2019 (www.itu.int/net4/ITU-D/icteye/#/topics/1002).

⁸ Note that this indicator is calculated by dividing the total number of active accounts in Sierra Leone by the number of adults in the country. This does not consider the fact that a unique customer might own several accounts.

⁹ Note that this figure presents the total number of registered customer accounts in Sierra Leone in 2019, independent of the fact that several accounts can belong to a unique customer.

¹⁰ The report reported 11 DFS providers in Sierra Leone last year but this included a provider that was in the design phase of its digital financial services. The figure used in this report only accounts for providers actively offering digital financial services in 2019.



2

FINDINGS

▶ Providers

Ten providers—two mobile network operators and eight banks—were offering digital financial services in Sierra Leone by December 2019. Two microfinance institutions and two banks were also developing digital financial services.

The following are the 10 DFS providers.

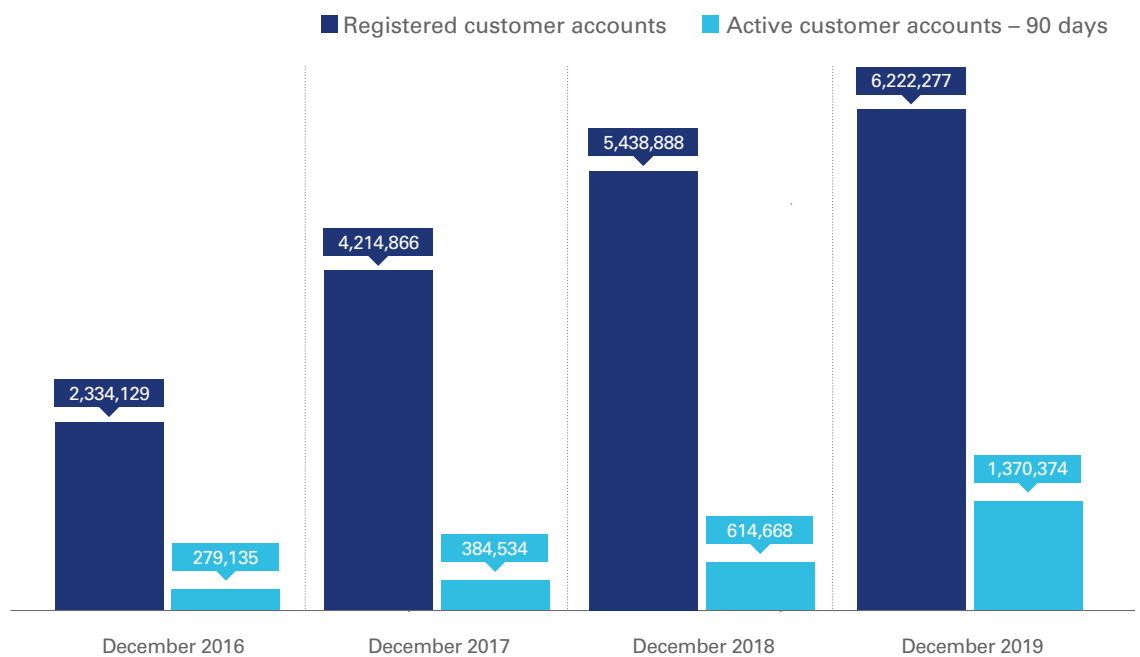
- Banks: Access Bank, Ecobank, Guaranty Trust Bank, Rokel Commercial Bank, Sierra Leone Commercial Bank, Standard Chartered Bank, United Bank for Africa and Zenith Bank
- Mobile network operators: Africell and Orange Money

▶ Customers

Registered and active DFS accounts: In December 2019, providers in Sierra Leone reported 6.2 million registered DFS accounts and 1.4 million active accounts (90 days). This corresponds to a 14 percent growth in the number of registered accounts and a 123 percent growth in the number of active accounts from December 2018. The number of registered customer accounts grew annually from December 2016 (Figure III) but at a slower rate than the number of active customer accounts.

Figure III.

Number of registered and active digital financial service accounts (December 2016 to December 2019)

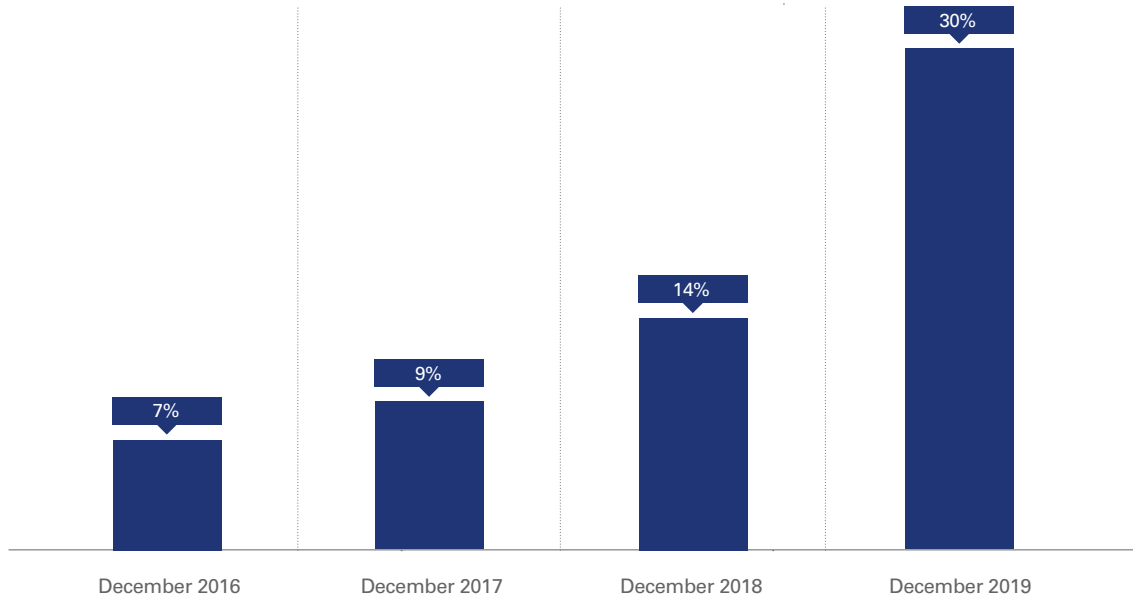


Banks and mobile network operators share the DFS market, albeit unevenly. In December 2019, mobile network operators held 94 percent of the market share, reaching a quasi-monopoly in the number of active customer accounts. This was an increase from 72 percent of the market share in December 2018. The increase in 2019 reflects a development strategy to build better value propositions and improve communication strategies, increasing customer numbers.

The number of active accounts as a percentage of adult population grew from 14 percent in December 2018 to 30 percent in December 2019 (Figure IV). Although this figure does not consider that some customers might have accounts with multiple providers, it is still a good indicator of financial inclusion.

Figure IV.

Active customer accounts as a percentage of the adult population (December 2016 to December 2019)

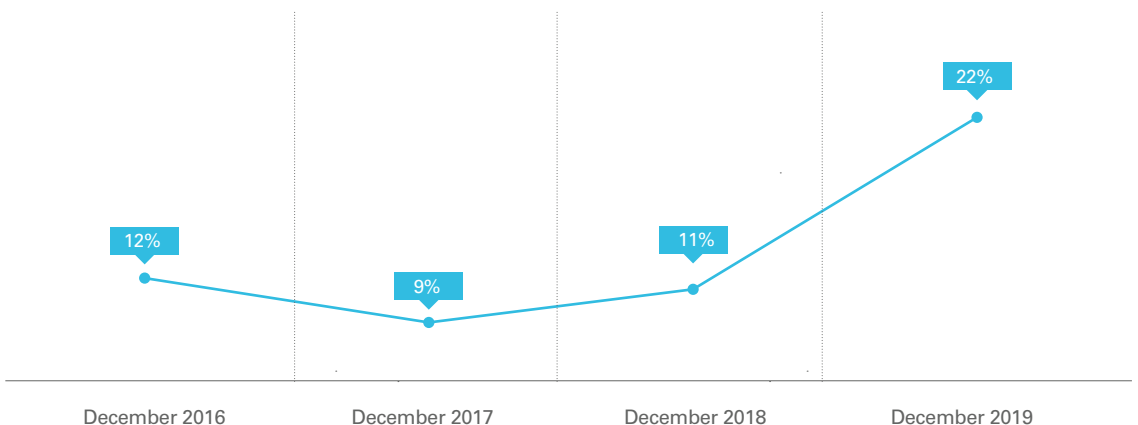


Customer account activity rates reflect the percentage of active registered customer accounts at the time of reporting. An account is considered active when there has been at least one transaction involving a movement of value in the past 90 days. The activity rate doubled in a year, reaching 22 percent in December 2019 (Figure V); this is the best rate ever attained.¹¹

An improved activity rate means that more customers are using the service after being onboarded. This could be due to an increased distribution network and better delivery and services bringing more value to customers. The higher the activity rate, the lower the average cost of acquisition per active client. Innovation can play a critical role in offering products and services that bring value into the customer's life, increasing adoption and customer retention.

Figure V.

Customer activity rate for the market (December 2016 to December 2019)



¹¹ Since the start of the Annual Provider Survey in 2016.

Box 2.

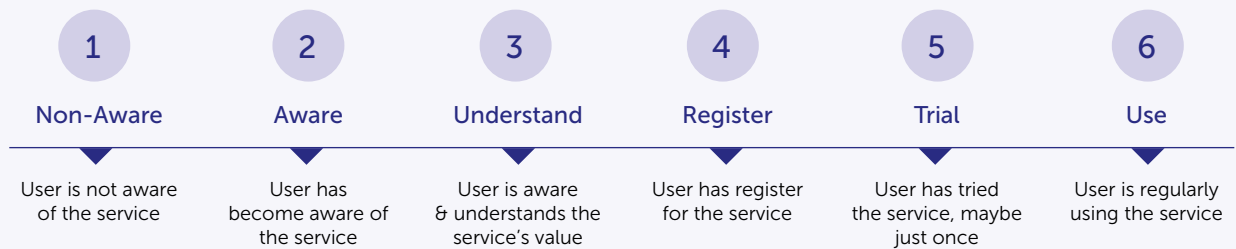
The customer journey framework, GSMA

A framework to understand the customer journey, GSMA¹²

DFS providers in Sierra Leone need to focus on better understanding their customers' needs and challenges to encourage them towards increased uptake and regular use of the services.

GSMA provides an interesting framework to identify constraints that stop customers from using products and services in the most ideal use case.

1. Providers first need to understand the journey that their customers will progress through in their evolving use of a service. By drawing the typical journey of a customer, providers will identify the different stages, from awareness of a product or service to regular usage.
2. In the second stage, data such as transactions data come in handy to identify the different bottlenecks along the journey and set the priority one.
3. Finally, constraints along the customer journey will be solved by testing different business hypotheses.



Transactions: In December 2019, 11 million transactions were conducted totalling Le 831 billion (\$85 million) (Figure VI). This represents a 46 percent growth in the number of transactions and a 23 percent growth in their value compared to December 2018.

Figure VI.

Volume and value of monthly transactions conducted by customers with a registered digital financial service account (December 2016 to December 2019)



Note: The value of transactions in December 2016 are not provided because these data were not being collected at the time.

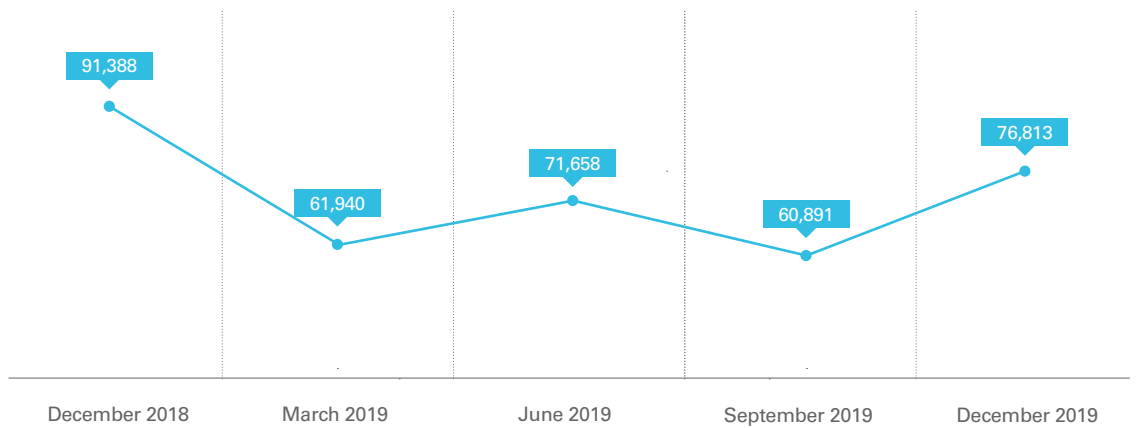
¹² Customer Journey Framework, GSMA, Mobile for Development Impact, September 2015 (<https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/02/The-Customer-journey-Framework.pdf>).

Figure VII shows that the average value per transaction varies by month. Across March, June, September and December 2019, the average value of a transaction is Le 68 thousand (\$7).

Further analysis should be undertaken by providers to understand whether non-DFS transactions, conducted at physical branches, are of the same value or higher. It is possible that customers find it difficult to trust digital financial services when transacting bigger amounts and prefer to rely on cash and/or physical financial providers.

Figure VII.

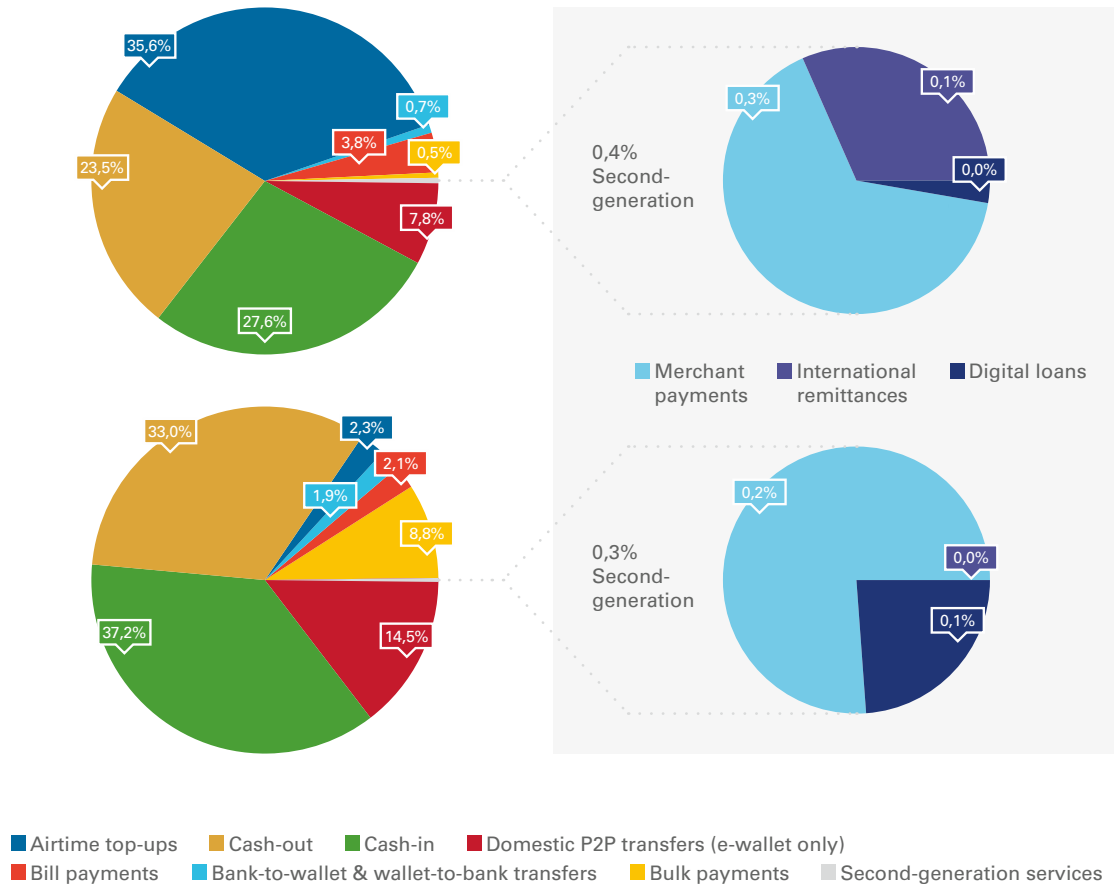
Average value per digital financial service transaction in December 2018, March 2019, June 2019, September 2019 and December 2019



Service types: The DFS market in Sierra Leone offers both first-generation and second-generation services to customers. Second-generation services include merchant payments, international remittances and digital loans, introduced on the Sierra Leonean market for the first time in 2019. Figure VIII shows that second-generation services account for 0.4 percent of the total transaction volume and 0.3 percent of the total transaction value in December 2019.

Figure VIII.

Market share of digital financial services per transaction volume and transaction value (December 2019)



Bulk payments: This service, previously only offered by the two mobile network operators active in Sierra Leone, is now also available with two banks. This service type accounted for 0.5 percent of the total transactions conducted in December 2019 and for 8.8 percent of the total value transacted through digital financial services. It is mainly driven by *one to many transactions*, often because government agencies and utility companies (water companies, electricity companies, etc.) have integrated digital solutions into their payment systems.

Bill payments: This service, provided by two mobile network operators and one bank, represented almost 4 percent of the total transactions volume and 2 percent of the total value transacted in December 2019. Similar to bulk payments, the growth is driven by utility companies offering digital bill payment for their customers.

Merchant payments: In more advanced digital economies, merchant payments are broadly available. This is not yet the case in Sierra Leone where merchant payments only represented 0.3 percent of the total number of transactions conducted in December 2019 and even less of the total value. The launch of the National Switch will solve some of the challenges faced by providers for this payment type. For instance, payment switch would enable merchants using a Point of Sale to accept all types of payments (debit, credit) from customers, regardless of which bank they hold an account from. POS connected to a National Switch also enables fee reductions because banks take less risk as they can, in the case of debit card payments, directly check the customer’s balance and agree/refuse the payment. There is also a need to build merchant payment regulations in Sierra Leone and develop solutions that are affordable and user friendly, both for merchants and end customers.

The DFS market in Sierra Leone offers first-generation services across the country through different channels, distribution networks and increased network coverage. However, most customers are in

Freetown and secondary urban areas like Kenema or Bo and use digital financial services to pay their bills and send money. In order to be more inclusive and reach the rural areas, providers need to i) invest in the rails and infrastructure, including network coverage, ii) increase phone ownership and iii) spread their agent networks.

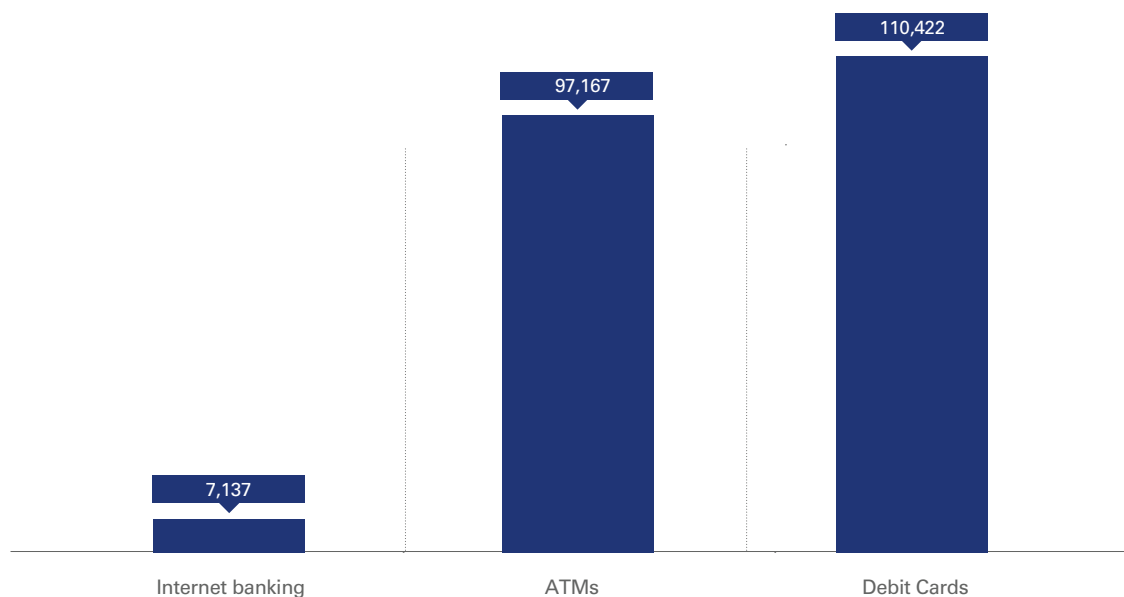
Digital financial services have the potential to address access and usage gaps in specific sectors that have not been solved by physical banks. These sectors include but are not limited to education, energy and agriculture. However, providers have yet to develop adapted services and business models although they are moving in this direction. For instance, one provider has been looking at setting kiosks in health facilities and hospitals to provide a payment solution, either through available agent cash-out or person-to-government payment.

Having a sectoral and segmented approach to develop DFS use cases could increase the overall uptake and usage in the country among different customer segments and sectors, such as education, agricultural and health. The question of how this can best be achieved needs to be addressed.

DFS channels: Six banks also offered digital financial services through internet banking, ATMs and/or debit cards in December 2019. However, due to a change in reporting standards between 2018 and 2019 for some providers, an analysis of the yearly growth was not feasible. In December 2019, internet banking was the least favoured channel to conduct transactions, probably due to higher cost of adoption for the end customer (the customer must be equipped with a computer and/or a smartphone and a stable internet connection). ATMs and debit cards are more attractive solutions (Figure IX) and are generally available around Freetown as a result of providers' strategies to increase their foothold in 2018 and 2019.

Figure IX.

Number of unique active customers using internet banking, ATMs and debit cards (December 2019)



Customer profiles: Six providers were able to give disaggregated data regarding customers in urban/rural areas, but as the definitions used internally differed between providers, accurate analysis of the repartition of the customer base was not possible. For example, some providers consider urban areas to be in a certain radius from the major cities (capital and provincial cities), while others consider urban customers to be those living in Freetown only. Mapping the definitions used by the different providers in Sierra Leone and by the international standards would enable alignment of the definitions for the youth customer base and urban/rural repartition.

The data collected through the Annual Provider Survey did not allow for a gender analysis because only four DFS providers were able to provide gender-disaggregated data.

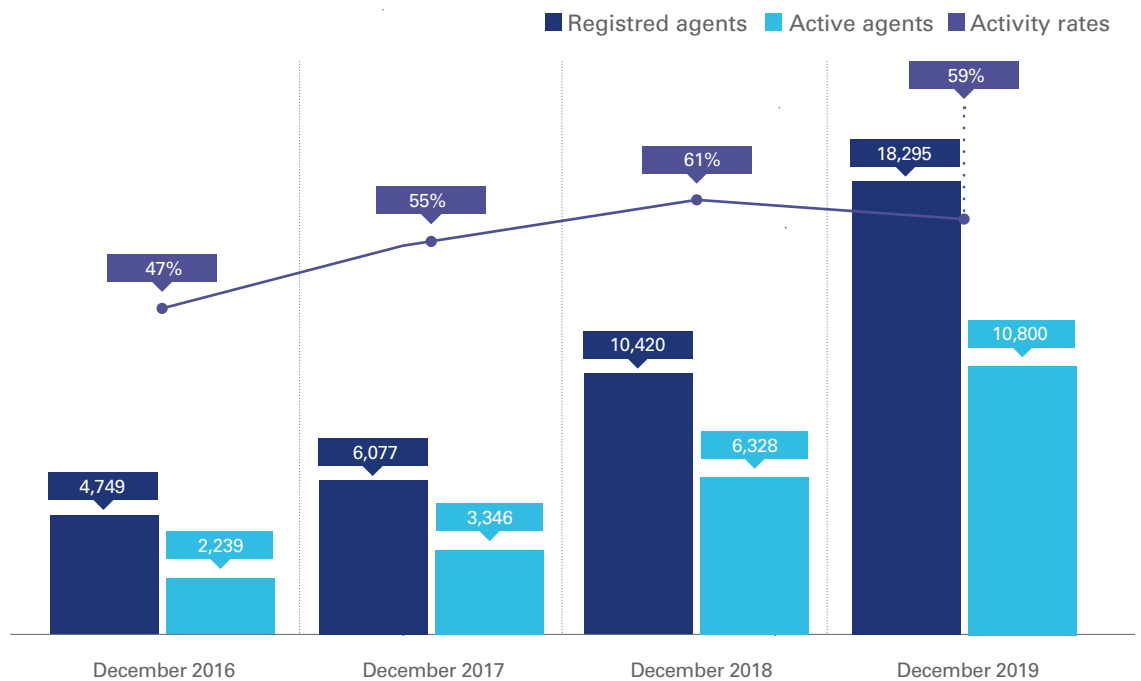
▶ Agents

In 2019, mobile network operators were the only providers allowed to use a network of agents to deliver their services. With the agency banking regulations approved in January 2020, other provider types will be able to roll out their own network of agents and leverage these.

Registered and active agents: The total number of registered agents consistently increased between December 2018 and December 2019, reaching 18,295. This represents an annual growth of 76 percent. Active agents—who have performed at least one transaction in the past 30 days—numbered 10,800 in December 2019, which corresponds to a 71 percent annual growth (Figure X).

Figure X.

Number of registered and active agents (December 2016 to December 2019)

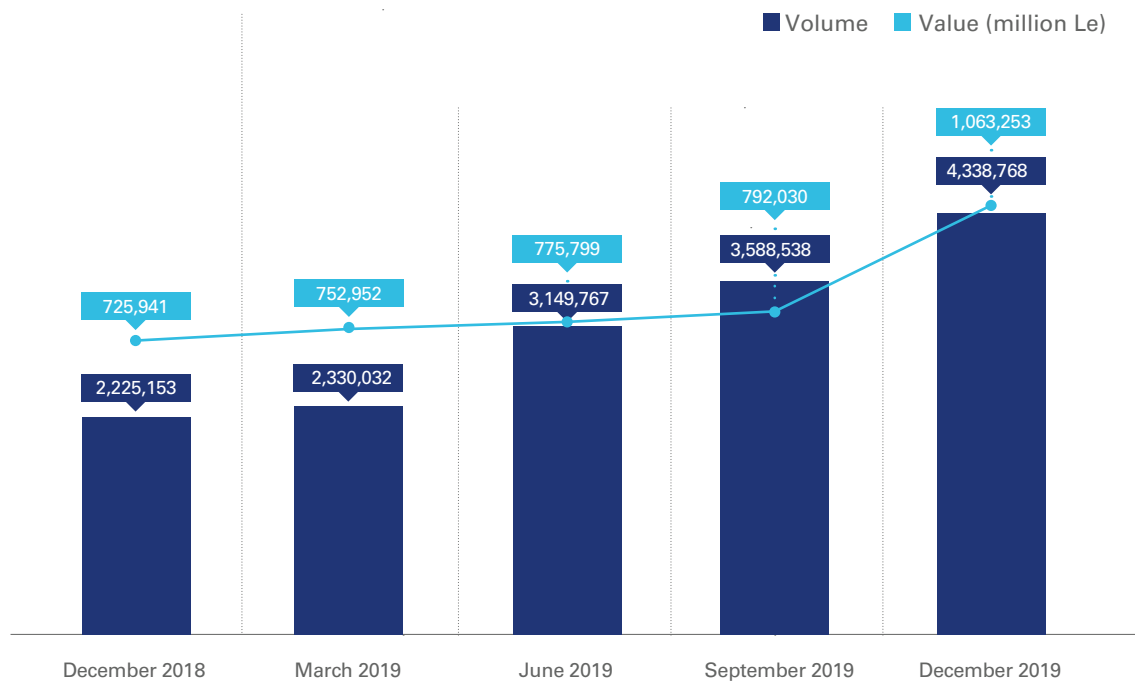


Agent activity rate: Figure X also shows that agent activity rate consistently improved from December 2016 to December 2018 and then showed a slight reduction for December 2019 to 59 percent. Providers need to develop an agent network for which the density is adjusted to customer demand or invest in increasing the demand through better product awareness and cost proposals. Mobile network operators would benefit from understanding the underlying challenges and patterns that often affect agents' activity.

Transactions by agents: The total number of transactions conducted by agents almost doubled (+95 percent) between December 2018 and December 2019, while the total value of transactions increased by 46 percent (Figure XI).

Figure XI.

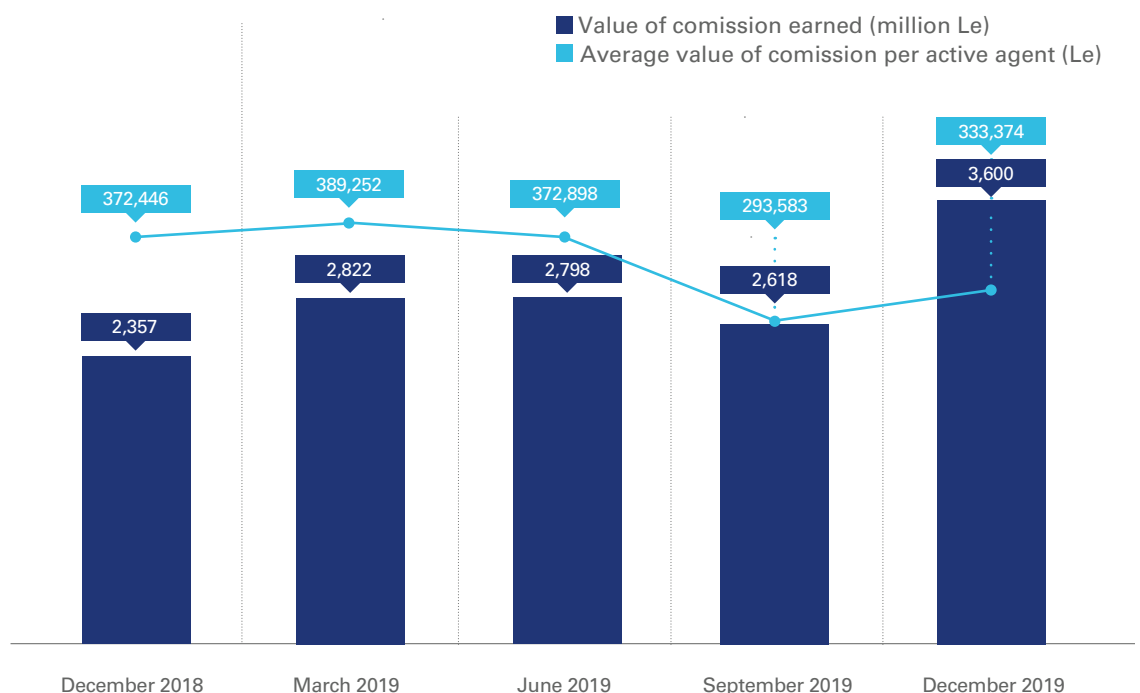
Volume and value of transactions conducted by agents per month (December 2018 to December 2019)



Agent commissions: The value of commission received by agents can increase with the increased volume of transactions conducted and/or with the value transacted depending on the commission model developed by the provider. Between December 2018 and December 2019, the total value of commissions received monthly by agents grew by 50 percent, reaching Le 3.6 billion (\$366,000) in December 2019 (Figure XII). An agent received on average Le 333,374 (\$34) in commission for December 2019.

Figure XII.

Value of monthly commissions earned by agents and average value of monthly commissions per active agents (December 2018 to December 2019)



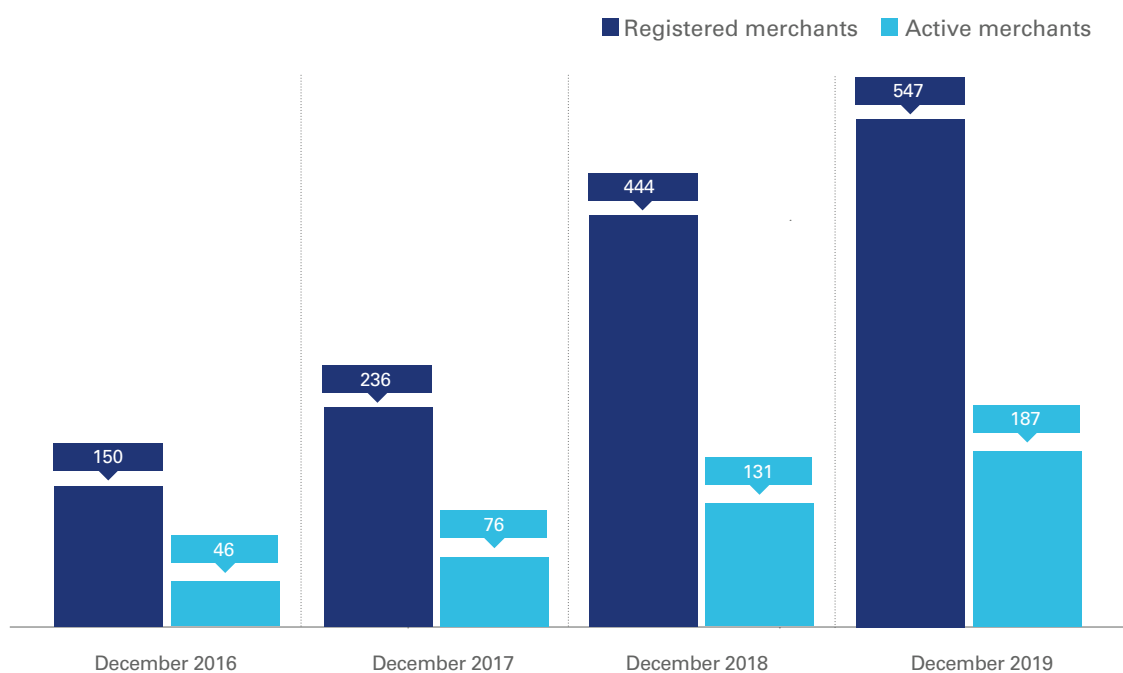
Agent profiles: Due to limited availability of gender-disaggregated data and by rural/urban location, further analysis of agents' profiles could not be completed.

► Merchants

The number of registered and active merchants in Sierra Leone has been growing steadily over the past four years, reaching 547 registered and 187 active merchants in December 2019 (Figure XIII). This represents a yearly growth of 23 percent in registered merchants and 43 percent in active merchants.

Figure XIII.

Registered and active merchants in December 2016, 2017, 2018 and 2019¹³



► Providers' performance and challenges

Seven providers reported a commercially sustainable business model. All 10 providers reported that the commercial sustainability of their business model had improved since 2018. All providers had worked towards improving their technical and organizational capacity by investing in additional staff (+40 percent across all providers) and migrating to more powerful platforms. At time of writing, the Covid-19 pandemic had not negatively impacted the financial stability of the institutions. Providers continued to invest in developing and expanding their digital financial services.

Providers mainly reported challenges in the development of digital financial services around customer capacity in understanding financial products and using digital services.

- **Low literacy rate of target population** is a barrier to DFS usage. Customers not able to read or write often depend on third parties to transact. Lack of financial literacy skills also have an impact as customers often do not understand the benefits of the different financial products offered (e.g., saving versus loan product). Both for literacy skills and financial literacy skills, however, the sector is dependent on the

¹³ The numbers for merchants in December 2018 differ from the 2018 State of the Digital Financial Services Market report due to a change in several providers' definitions, which impacted the reported figures.

education sector in Sierra Leone. The government has highlighted improved education as one of its priorities.

- **Limited digital skills of target population** are a challenge for all DFS providers, and particularly when expanding digital financial services to vulnerable and underserved populations. These populations include but are not limited to people living in rural areas, women, youth and people with disabilities. FinTechs offer innovative solutions to address this skills gap. An example is the Mosabi platform¹⁴ that offers services and education for entrepreneurs, individual customers and MSMEs to better manage their businesses and money.
- **Low customer activity rate**, which partially results from the two issues raised above, often has a negative impact on the financial sustainability of providers. Indeed, onboarding a customer is costly, especially when it requires staff presence, and the costs can only be amortized if the customer uses the service. As mentioned previously, providers will need to understand the journey of their customers¹⁵ in order to identify the bottlenecks and work on adapted solutions. Providers must keep in mind that customer segments might face different challenges, and using a human-centric-design approach will help finetune appropriate solutions.
- **Low level of trust in digital financial services** was also mentioned by three providers and it is a challenge particularly when reaching out to underserved populations.

The regulations around digital financial services in Sierra Leone are being finetuned regularly and providers still face several barriers.

- There seems to be a lack of clarity around the relevant laws and regulations that apply to the different providers and the different types of digital financial services offered. The government needs to strengthen the guidelines and provide additional guidance to the different *providers through public-private dialogue*.
- *Providers regret the lack of a regular forum to discuss issues with regulators where clarity on regulations and restrictions on certain product types could be requested, for example. Such a forum should ideally include all provider types, regulatory bodies and representatives from the customer base to ensure that decisions taken are approved by all stakeholders in the DFS market.*
- *Providers still find that the licensing and prudential requirements are quite onerous and lengthy, which restrict the expansion of new DFS products despite having launched the regulatory sandbox.*¹⁶

¹⁴ <https://mosabi.co/>

¹⁵ Customer Journey Framework, GSMA, Mobile for Development Impact. September 2015 (www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/02/The-Customer-journey-Framework.pdf).

¹⁶ A regulatory sandbox is a framework set up by a regulator that allows Fintech startups and other innovators to conduct live experiments in a controlled environment under a regulator's supervision.



3

OPPORTUNITIES AND THE WAY FORWARD

As providers continue to develop the DFS market in Sierra Leone, its growth has been consistent between 2016 and 2019. The year 2020 is expected to be a tipping point in the DFS industry because of the Covid-19 pandemic: businesses must now rethink their models as customer habits and needs shift. Interviews conducted with providers in mid-2020 provided further insights on the impact of the pandemic on the DFS market, which, together with the findings from the Annual Provider Survey, helped shape recommendations for providers on how to best take advantage of the current opportunities.

► Covid-19 crisis has accelerated the financial industry's shift in the digital era

As a result of the pandemic and the social distancing measures enforced by governments, the shift to digital seems inevitable. In all sectors, e.g., education, health, agriculture and finance, the market is accelerating the implementation of digital solutions (e-learning platforms, digital health consultations). In the financial sector, a clear transition from a cash-based transactions economy to a digital one is taking place.

This shift has been facilitated because cash was pointed out as one potential mode of virus transmission. Providers noticed a strong drop in the number of transactions conducted at physical locations (bank branches and, in some cases, ATMs) coupled with a rise in the number of customers using digital channels (mainly phone and internet banking). For example, bank push-pull transfers grew, and one provider also pointed out that merchants are requesting more POS terminals in order to avoid dealing with cash. While banks were planning to integrate with mobile network operators prior to the Covid-19 pandemic, several integrations have been accelerated and finalized during spring and summer 2020. With that, this Covid-19 pandemic also offers an opportunity for DFS providers to expand their client base and usage.

► Efforts towards increased awareness and customer literacy

Trust in digital financial services specifically in rural areas and in populations with lower education levels remains a big challenge, which restrains adoption and use of digital financial services in the country. A global response in terms of education is required with government leadership.

Providers are developing digital literacy campaigns to increase use of digital products. These campaigns vary to include, for example, short videos, radio programmes, chatbots, or field ambassadors. Translation into local languages of training and communication materials and app features is expensive and time consuming but would bring better results across vulnerable populations. However, these strategies are spilling over to 2020 and we already know that operations have been strongly delayed due to the pandemic. Activities are expected to resume at the end of 2020.

► Partnerships to increase outreach and create more affordable services

With the publication of the agency banking guidelines in January 2020, providers are developing their own agent networks to improve availability of services in locations where traditional physical branches are not established. However, setting up an agent network comes with costs, be it for onboarding, training, providing agents with appropriate devices or marketing materials. In addition, the business model for agents is not yet entirely sustainable as customers do not transact with enough regularity, volumes and value. A solution to both these problems would be for DFS providers and other services providers (i.e. pay-go solar providers and other providers operating in the health and education sectors) to use mobile network operators' existing infrastructures (such as towers) and to ride on their existing agent networks. Indeed, providers would be able to leverage each other's solutions and network to provide affordable solutions. Sharing agent networks, for example, would provide a more affordable solution to banks, and agents would be able to serve more customers, no matter which bank they use. More banks are already integrating with mobile network operators to offer bank-to-wallet and wallet-to-bank services. Banks could also benefit from working alongside these operators, building on their established customer base to offer through a partnership new second-generation services tailored to specific customer segments and regions, instead of investing in acquiring their own customer base.

► Establishing the business case for merchant payments

As economies settle into the digital era, it is in the interests of all stakeholders to digitalize payments for goods and services. Faster, more secure and affordable, digital merchant payments are buzzing across the continent. In Sierra Leone, providers are yet to develop solutions and business models that are adapted to MSMEs and merchants in both the formal and informal sectors. Indeed, the number of active merchants is relatively low in Sierra Leone compared to the sub-Saharan African average so affordable solutions should be offered to serve more merchants with small or informal businesses (e.g. MSMEs through e-payment platforms, QRcodes). This reflection around financially including MSMEs through digital financial services will be accelerated as a result of the Covid-19 crisis as cash was identified as one of the primary vehicles for spreading the virus.

Building an attractive merchant payment solution that reaches scale and introduces customers to a variety of options can strongly position a provider in a market. It offers the possibility of a solid revenue stream, it broadens customer reach and it increases regular customer engagement and transactions. However, implementing a sustainable merchant payment model is often tricky because providers must drive uptake by creating value proposition for both demand (the customers) and supply (the merchants). Simultaneously, providers need to generate revenue through adequate pricing policies. Developing merchant payment solutions also involves some initial investment that balances short- and long-term revenue strategies, and providers need to have in parallel an aggressive strategy to develop partnerships with other companies.

In Sierra Leone, providers are yet to develop the ideal business model for merchant payments, and this will require time and dedication. It is important that the Sierra Leonean market actors research the different business cases for merchant payments on the various pricing solutions in place in other markets and on product availability. Choosing a Profit Strategy for Merchant Payments¹⁷ by CGAP provides interesting reflection points. Simultaneously, the government should also research the good practices around merchant payment regulations in other countries.

► Leaving no one behind: the spread of digital financial services in all sectors and for all population segments

Generally, digital financial services are more affordable than traditional financial services, but some population segments remain excluded from the services offered. To increase accessibility of digital financial services in rural areas, banks and mobile network operators need to understand the different use cases that would work for the different population segments. They also need to have a sectoral/customer-segmentation approach linking financial services with usage. For example, Sierra Leone Commercial Bank is working with My Yone tellers, who have a similar role as agents but are not commission-based, and who facilitate registration, cash-in and cash-out transactions for customers. They are located in Freetown, mostly around market areas. Women entrepreneurs are using My Yone for safety reasons to cash in money at the end of a business day instead of transporting it to the nearest branch. Sierra Leone Commercial Bank is looking at an opportunity to develop a MSME loan product specially designed for female entrepreneurs through My Yone tellers.

In Sierra Leone, 65 percent of the population lives in rural areas¹⁸ and the agriculture sector employs 55.5 percent of the country's labour force,¹⁹ but availability of financial services in rural areas and in the agricultural sector is often limited. This is a result of reduced access to formal financial services or products and services that are not adapted to the seasonality of the businesses and the risks inherent in the sector. Agriculture and rural finance could, however, be an important catalyst for economic growth in Sierra Leone and providers should recognize the huge potential that is yet to be exploited. DFS providers could look at partnering with established cooperatives, agricultural business centres, community banks and financial service associations that have a dense network of branches in areas where banks are traditionally less present. They could offer digital financial services fitted to the specific needs of the customers (such as digital loans to access seeds, access to information on farming techniques and prices through digital

¹⁷ www.cgap.org/research/publication/choosing-profit-strategy-merchant-payments

¹⁸ FAO, Sierra Leone at a glance (www.fao.org/sierra-leone/fao-in-sierra-leone/sierra-leone-glance/en/).

¹⁹ World Bank data, 2018.

tools). Such partnerships would benefit all parties: cooperatives would digitalize their products, processes and management information systems and offer a wider range of improved products to their customers, and banks would use the knowledge generated by cooperatives to create tailored products and increase their customer base.

▶ Regulators and private sector stakeholders need to work hand in hand

Public-private dialogue is key to highlighting challenges that affect economic development and inclusivity towards less privileged population segments. Such challenges, once identified, can often only be solved by involving all stakeholders in the design and implementation of solutions.

For example, as a result of previous discussions, the Bank of Sierra Leone, the National Civil Registration Authority and Kiva, supported by UNCDF and UNDP, have been creating a national digital identity linked to the credit reference bureau to provide Sierra Leonean citizens with formal identities to increase financial inclusion. The Bank of Sierra Leone also published tiered know-your-customer guidelines in June 2020. These directives allow for flexible account opening requirements (customer due diligence) for low value and low risk accounts that are subject to cap and restrictions as the amount increases.²⁰ Carefully loosening the regulatory restrictions can help bring more people into the formal financial system, which benefits both private sector stakeholders (who can grow their customer base) and the government (who can include more customers in the formal economy). Tiered know-your-customer guidelines are particularly useful to reflect the reality of different population segments, such as women, youth or informal MSMEs, who do not have access to all the documentation traditionally requested by banks.

One of the government's future priorities to finance its Medium-Term National Development Plan is to increase domestic resource mobilization. Including more people in the formal economy is a key step to capital accumulation, increasing the volume of revenue collection and leveraging available domestic sources for development finance. The United Nations launched in October 2020 a two-year programme "Strengthening Domestic Resources Mobilization for SDGs Financing" to support Sierra Leone's efforts in mobilizing much-needed public domestic resources to achieve the SDGs.²¹ The programme is designed to realize two key activities: i) enhance government revenue collection, and ii) increase domestic capital accumulation with expanded financial inclusion. It will focus on removing policy, institutional and access barriers, while promoting governance and coordination among government, private sector and civil society actors.

▶ Data, product design and customer protection

Data plays a critical role in the digital finance industry as it enables providers to make informed decisions and develop products and services tailored to the needs of specific customer segments. Data also helps the central bank in its supervision role, and it plays a strategic role in identifying critical risks that could potentially put the customer at risk (e.g. loss of savings, expensive interest rates).

The Bank of Sierra Leone and UNCDF have started discussing how data could be collected, aggregated and analysed through a data automation platform. Examples of such data systems developed by central banks with the support of UNCDF can be found in Nepal²² and Zambia.²³

²⁰ Bank of Sierra Leone, Directives on tiered know your customer, June 2020.

²¹ UNCDF, Strengthening Domestic Resources Mobilization for SDGs Financing in Sierra Leone (www.uncdf.org/article/6189/strengthening-domestic-resources-mobilization-for-sdgs-financing-in-sierra-leone).

²² www.uncdf.org/article/3953/nepal-rastra-bank-and-united-nations-capital-development-fund-unveil-the-nepal-financial-inclusion-portal

²³ www.uncdf.org/admin/editors/ArticleItem/Index/4820?articleTitle=introducing-the-dfs-data-automation-system-bank-of-zambia-and-uncdfs-data-automation-solution

CONCLUSION

The DFS market in Sierra Leone showed significant improvements in 2019, reaching 1,370,374 active 90-day customer accounts by the end of December 2019 for a registered base of 6,222,277 DFS accounts. There is also increased diversity in the services and product types available in the market, with the introduction of digital loans and additional utility companies opting for digital bill payment services and bulk payment solutions. With the release of the agency banking guidelines, new business models and partnerships are also being considered.

The DFS market is expected to grow further once the remaining barriers to access and usage have been addressed. By closely monitoring the developments and innovations happening in more advanced economies, providers in Sierra Leone will be able to adapt solutions that are working abroad to the Sierra Leonean context. This includes, for instance, partnering with FinTechs to deliver affordable solutions for digital financial services to “the last mile” or developing tailored financial products to answer specific financing needs in sectors such as education, agriculture or energy.

In recent years, it has become clear that growing digital finance can only be truly successful when economies have a proper understanding of the broader digital ecosystem. To this end, UNCDF is working closely with the Directorate of Science Technology and Innovation to create a baseline of information of different stakeholders that operate in the digital space in Sierra Leone. Harnessing local knowledge and understanding the digital space in Sierra Leone and collectively shaping opportunities is key to unlocking the barriers and achieving digital and financial inclusion for all.



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Disclaimer

This report is based on data collected through the 2020 Annual Provider Survey of Digital Financial Services and internal analysis by the UNCDF team.

Survey data

Survey data are self-reported and have not been verified independently by the UNCDF team; however, data are thoroughly checked and cross-checked against other benchmarks and data sources.

Confidentiality

Data published in this report have been presented in a way to protect the confidentiality of each provider. Any specific references or highlights in this report have only been presented with the approval of the provider to disclose key performance information.

Limitations

All data in this report are self-reported. In some cases, providers submitted partial data. Only a few of the providers that participated in the survey had data that were disaggregated by gender and/or rural/urban split, which limited the level of analysis that could be completed. While this report is based only on data submitted by 10 DFS providers, UNCDF expects a larger number of providers to be represented in the 2020 report.



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