
Results from the UNCDF-MM4P Annual Provider Survey
The Annual Provider Survey for Zambia was conducted by UNCDF MM4P in partnership with
About United Nations Capital Development Fund (UNCDF)

United Nations Capital Development Fund (UNCDF) is the UN’s capital investment agency for the world’s 48 least developed countries (LDCs). 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. This last mile is where available resources for development are scarcest; where market failures are most pronounced; and where benefits from national growth tend to leave people excluded.

About Mobile Money for the Poor (MM4P)

Mobile Money for the Poor (MM4P) is a programme launched by UNCDF in partnership with the Swedish International Development Agency (Sida), the Australian Department of Foreign Affairs and Trade (DFAT), the Bill & Melinda Gates Foundation and The MasterCard Foundation. MM4P provides support to digital financial services (DFS) in a selected group of least developed countries (LDCs) to demonstrate how the correct mix of financial, technical and policy support can build a robust DFS ecosystem that reaches low income people in LDCs. MM4P is currently engaged in eight LDCs: Benin, Lao People’s Democratic Republic, Liberia, Malawi, Nepal, Senegal, Uganda and Zambia, each of which offers unique opportunities and challenges.

In Zambia, MM4P launched its programme in March 2015. The programme is funded by The MasterCard Foundation and is aimed at increasing active usage of DFS within the adult population, from 2% in 2014 to 35% by 2019. Using a theory of change based on the Making Markets Work for the Poor approach, the programme seeks to work with all DFS providers, the regulators and the Government to achieve this mandate.

MM4P Project Team

The process to develop the Annual Provider Survey included gathering data, assessing the incentives of the providers in the Zambian DFS context and surveying the insights of local stakeholders. Content of this report is based on information gathered during the month of April 2017 and represents data for the period of December 2015 to December 2016. The following project team members authored the report:

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<table>
<thead>
<tr>
<th>Acronyms</th>
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<tbody>
<tr>
<td>APS</td>
<td>Annual Provider Survey</td>
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<tr>
<td>ATM</td>
<td>automated teller machine</td>
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<tr>
<td>DFS</td>
<td>digital financial services</td>
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<td>GSMA</td>
<td>GSM Association – A trade body representing the interests of mobile network operators globally</td>
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<td>MM4P</td>
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<td>MTN</td>
<td>Mobile Telephone Networks</td>
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<td>OTC</td>
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<td>person-to-person</td>
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<td>UNCDF</td>
<td>United Nations Capital Development Fund</td>
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<tr>
<td>Zampost</td>
<td>Zambia Postal Services Corporation</td>
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<td>Zanaco</td>
<td>Zambia National Commercial Bank</td>
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</table>

**Active customer account**

An active customer account is an account with which at least one transaction was conducted in the last 90 days. A transaction includes cash-in, person-to-person transfer, cash-out, bill payment and/or airtime top-up. A balance inquiry, PIN reset or other transactions that do not involve the movement of value DO NOT qualify for a customer account to be considered active.

**Agent, Agent Outlet, Active Agent**

An agent may be a proprietary agent (an agent who is managed and branded exclusively by a deployment) 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 too.

In the case of mobile money, an agent outlet is a location where one or several provider-issued tills are used to conduct transactions for clients. Agent tills are provider-issued ‘lines,’ which can be SIM cards or point-of-sale machines, authorized and used to facilitate mobile money transactions. An agent outlet may operate tills issued by several providers; this type is generally referred to as shared or non-exclusive outlet.

An active agent outlet is an agent outlet where any of the tills are used to facilitate at least one transaction within the last 30 days. The most important of the transactions conducted at an agent outlet are cash-in and cash-out (i.e., loading value into the mobile money system and then converting it back out again).
<table>
<thead>
<tr>
<th>Glossary</th>
<th>Definition</th>
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<tr>
<td><strong>Airtime top-up</strong></td>
<td>An airtime top-up is funded from a customer account.</td>
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<tr>
<td><strong>Automated (or Automatic) teller machine (ATM)</strong></td>
<td>An ATM is a computerized 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.</td>
</tr>
<tr>
<td><strong>Bank account to mobile money account transfer</strong></td>
<td>This transaction is a direct transfer of funds made from a customer bank account to a mobile money account. It typically requires a commercial agreement and technical integration between the bank and the mobile money provider to allow the direct transfer.</td>
</tr>
<tr>
<td><strong>Bill payments</strong></td>
<td>These transactions are the payment of bills using digital financial services, regardless of whether they originated from an account or were made over the counter.</td>
</tr>
<tr>
<td><strong>Cash-in transactions</strong></td>
<td>These transactions include transfers of any value from a customer to an agent. It is the process by which a customer credits his/her mobile money account with cash. It is usually conducted via an agent, who takes the cash and credits the customer’s mobile money account with the same amount of e-money.</td>
</tr>
<tr>
<td><strong>Cash-out transactions</strong></td>
<td>These transactions include transfers of any value from an agent to a customer. It is the process by which a customer deducts cash from his/her mobile money account. It is usually conducted via an agent, who gives the customer cash in exchange for a transfer of e-money from the customer’s mobile money account.</td>
</tr>
<tr>
<td><strong>(Agent) Commissions</strong></td>
<td>Commissions are the revenues paid by the digital financial service provider to its agents. Generally, agents earn commissions through transactions and on-boarding of new customers.</td>
</tr>
<tr>
<td><strong>Customer activity rate</strong></td>
<td>Customer activity rate is the share of actively used registered accounts (i.e., at least one transaction during the past 90 days).</td>
</tr>
<tr>
<td><strong>Debit card</strong></td>
<td>A debit card is 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 removes the need for the client to go to the bank to remove cash from his/her account as he/she can just go to an ATM or pay electronically at merchant locations. This type of card, as a form of payment, also removes the need for cheques, as the debit card immediately transfers money from the client’s account to the business account.</td>
</tr>
<tr>
<td><strong>Digital financial services (DFS)</strong></td>
<td>DFS refers to a range of formal financial services accessible via digital channels, such as mobile money, agency banking, ATMs and debit cards, as opposed to traditional financial services accessed through physical visits to a provider’s outlet.</td>
</tr>
<tr>
<td><strong>Financial inclusion</strong></td>
<td>Financial inclusion is the end state of the goal of all eligible citizens having access to and using a range of affordable, convenient and appropriate financial services. These services could be formal financial products/services that are provided by a formal financial institution (bank and/or non-bank financial institutions bound by legally recognized rules) or informal financial products/services that are not regulated and operate without recognized legal governance (e.g., village banks or village development funds).</td>
</tr>
<tr>
<td><strong>First-generation products</strong></td>
<td>These products are basic DFS, such as person-to-person transfers, airtime purchases, bill (utility) payments, and cash-in and cash-out transactions.</td>
</tr>
<tr>
<td><strong>Float</strong></td>
<td>Float is the balance of e-money, physical cash or money in a bank account that an agent can immediately access to meet customer demands to purchase (cash-in) or sell (cash-out) e-money.</td>
</tr>
<tr>
<td><strong>Informal over-the-counter (OTC) transactions</strong></td>
<td>These transactions occur when a customer provides cash to an agent who performs a transaction via an agent account to send funds to the wallet of a registered customer.</td>
</tr>
<tr>
<td><strong>Glossary</strong></td>
<td></td>
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<td>---------------------------------------------------------------</td>
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<tr>
<td><strong>International remittances</strong></td>
<td>International remittances can refer to the total number of cross-border fund transfers for inbound or outbound remittances. International remittances may also refer to the cross-border fund transfers from one person to another person. These transactions can be direct mobile money remittances or can be completed through intermediaries such as Western Union.</td>
</tr>
<tr>
<td><strong>Know-your-customer (KYC)</strong></td>
<td>Financial institutions and regulated financial service providers are obligated by regulation to perform due diligence to identify their customers. The KYC term refers to these requirements and/or to the regulation that governs these activities. The Financial Action Task Force recommends a risk-based approach to due diligence for anti-money laundering and combatting the financing of terrorism controls. Due to the lack of formal identity documents in some markets, solutions such as establishing tiered KYC requirements and adjusting acceptable KYC documentation can help mobile money providers facilitate customer adoption and increase financial inclusion, especially in rural areas.</td>
</tr>
<tr>
<td><strong>Merchant payments</strong></td>
<td>These transactions are movements of value from a customer to a merchant to pay for goods or services at the point of sale.</td>
</tr>
<tr>
<td><strong>Mobile microcredit (also microloans)</strong></td>
<td>Mobile microcredit is a solution that enables mobile money customers to access small amounts of credit instantly via their mobile phones.</td>
</tr>
<tr>
<td><strong>Mobile microinsurance</strong></td>
<td>Mobile microinsurance is when insurance premiums are paid from a mobile wallet through a mobile money platform.</td>
</tr>
<tr>
<td><strong>Over-the-counter transactions (OTC)</strong></td>
<td>These transactions include money transfers or bill payments that are conducted without a registered account. Some mobile money services (e.g., bill payments) are offered primarily OTC. 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.</td>
</tr>
<tr>
<td><strong>Pay-as-you-go</strong></td>
<td>Pay-as-you-go is when an end customer makes a deposit for a product with the end goal to ultimately own the device through a series of usage payments paid through a DFS channel.</td>
</tr>
<tr>
<td><strong>Person-to-person (P2P) transfers</strong></td>
<td>These transactions originate from a customer DFS account and terminate in another customer DFS account.</td>
</tr>
<tr>
<td><strong>Registered customers</strong></td>
<td>Registered customers are the cumulative number of customers who have registered for a service, regardless of whether they are active.</td>
</tr>
<tr>
<td><strong>(Agent) Revenue</strong></td>
<td>Revenue is the total commissions earned by agents for all the transactions they conduct through their agent accounts.</td>
</tr>
<tr>
<td><strong>Second-generation products</strong></td>
<td>These products are more advanced DFS, such as microcredit, microinsurance, loan repayments, merchant payments and international remittances.</td>
</tr>
<tr>
<td><strong>Third-party operators</strong></td>
<td>Third-party operators are master agents or others acting on behalf of a DFS provider or mobile network operator, whether pursuant to a service agreement, joint venture agreement or other contractual arrangement.</td>
</tr>
<tr>
<td><strong>Transaction</strong></td>
<td>A transaction includes cash-in, P2P transfer, cash-out, bill payment and/or airtime top-up. A transaction does not include any other type of activity that does not involve the movement of value (e.g., balance inquiry).</td>
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</table>
United Nations Capital Development Fund (UNCDF) believes in the power of financial services to change lives. Access to financial services not only allows individuals to be more resilient in difficult times, but also increasingly allows individuals access to much-needed services like power, water, education and quality agricultural inputs that were previously far from their reach. The high cost of building and operating traditional bank branches has been a major obstacle hindering the growth of financial inclusion, especially in the least developed countries. Banks, microfinance institutions, mobile network operators and third-party providers are leveraging digital channels, along with networks of small-scale agents, to offer basic and, in some cases, advanced financial services at greater convenience, larger scale and lower cost than traditional banking allows.

More than 400 million people are linked globally through basic mobile payment services, allowing them to send money, pay bills or purchase prepaid electricity with greater ease, affordability and access. In Zambia, the focus on increasing the penetration of financial services has grown substantially since 2015. Evidence is seen in the exponential growth of mobile money agent networks for both Airtel and Mobile Telephone Networks (MTN), which are the major mobile network operators; cGrate, Kazang and Zoona, all third-party providers offering digital financial service (DFS) solutions, have also substantially augmented the reach of their agent networks.

As this report will detail, DFS uptake among Zambian adults has increased significantly, suggesting that providers are getting better at developing and promoting products that meet their customers’ needs, wants and aspirations.

It is critical to note that there are still several barriers to advancing digital financial inclusion, including lack of meaningful awareness among customers, liquidity challenges for agents and lack of products that address the needs of Zambians. In addition, lack of complete and readily available market data remains a barrier to the development of more use cases for customers beyond just payments.

The Annual Provider Survey by the UNCDF programme Mobile Money for the Poor (MM4P) was launched to provide industry participants and observers with a comprehensive picture of the state of DFS in the Zambian market, encompassing customer adoption, usage and trends of DFS in the country. On an individual basis, the survey also gives DFS providers insight into the performance of their products and services relative to the market.

Looking ahead, partnerships between the relevant stakeholders are imperative if DFS in Zambia is to advance to the next stage of market development.

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UNCDF-MM4P is supporting multiple key industry initiatives to strengthen the foundations for DFS, supporting industry growth in terms of improving the efficiency of agent networks and accelerating the next generation of DFS. UNCDF-MM4P is especially excited by the industry’s commitment to improving DFS offerings, to raise the bar to achieve global best practice standards, as well as by efforts to bridge the DFS gender gap.

What is increasingly clear is that the organizations that are the most competitive in the market, including those bridging the gender gap, are those whose leaders have greater understanding of their agent networks and data systems. Armed with that knowledge, they are able to pivot, depending on the trends they see. The organizations that are able to invest in and maximize the use of data are largely “winning” in markets across the globe, including in Zambia.

All of these factors combined will go a long way in helping the ecosystem leverage the transformative ability of DFS to generate benefits that could meet the needs, wants and aspirations of Zambian customers. This vision continues to be the ‘north star’ of UNCDF-MM4P in all that this programme does.
INTRODUCTION
State of the Digital Financial Service Industry

Globally, significant progress has been made over the last decade when it comes to digital financial services (DFS). DFS has changed the way financial services are delivered, and it has had a transformative effect on the lives of millions of people. In 92 countries around the world, DFS has contributed to financial inclusion efforts, giving people access to secure and transparent digital transactions and the tools they need to better manage their financial lives. It has also provided an entry point to other financial services, such as insurance, savings and credit.

The impact of DFS goes beyond transactions and accounts. On an individual level, DFS has imbued people’s lives with a sense of security and empowerment. At the household level, DFS has given families a way to withstand financial shocks. Figure I highlights some of the key facts and figures that capture the state of the global DFS industry.

Figure I
State of the global digital financial service industry, 2016

Overview: 2016 at a glance

Mobile money is available in two-thirds of low- and middle-income countries

Mobile money providers are processing an average of 30,000 transactions per minute, or more than 43 million per day

In December 2016, the industry processed more than US$ 22 billion in transactions

More than 40% of the adult population in Kenya, Tanzania, Zimbabwe, Ghana, Uganda, Gabon, Paraguay and Namibia are using mobile money on an active basis (90-day). This is an increase from just two countries in 2015 (Kenya & Tanzania)

Mobile money is strengthening the banking industry

Between September 2015 and June 2016, the volume of flows to and from bank accounts grew more than +120%

Background: Digital Financial Services in Zambia

While Zambia was the earliest adopter of DFS in Africa, having done so in 2002, it had lagged behind in leveraging those services to advance financial inclusion in the country. However, years of inertia have shifted to a period of momentum, as demonstrated by the significant increase in the number of adult Zambians who are actively using DFS. As of December 2016, there were 18 DFS providers in the market and the percentage of adults actively using DFS had increased to 18%.

Survey: Background and Methodology

Many decisions made by DFS providers, investors (both financial and charitable), policymakers and financial inclusion advocates hinge on implicit assumptions about the current size of the DFS market and its prospects for growth. As such, generating more robust market-level data on DFS would facilitate better decision-making and improve the effectiveness of all the identified players.

Market-level data is vital to shaping the understanding of a country’s DFS market, its level of development and trends. Key indicators include the number of providers and the types of products and services offered, the number of active agents, the number of active DFS customers and their transactional data. To date, the availability of high-quality, aggregated data on the Zambian DFS market, in the public domain, has been limited.

This report provides key insights into the state of the Zambian DFS market, drawing on data collected through the 2016 UNCDF-MM4P Annual Provider Survey (APS), and complemented by data from other sources such as GSMA and the Agent Network Accelerator Survey conducted by The Helix Institute of Digital Finance.

The UNCDF-MM4P APS was launched to provide industry participants and observers with a more comprehensive picture of the state of the DFS market, regarding customer adoption, usage and trends of DFS in Zambia. On an individual basis, the APS also gives DFS providers insights into the performance of their products and services relative to the market.

The survey was developed by the UNCDF-MM4P team and administered to providers that offer digital financial solutions, including mobile money operators, banks and third-party operators in Zambia. The survey included both quantitative and qualitative questions.

Quantitative data was collected on the following indicators:

- Number of customers: registered and active (90 days)
- Types of services offered
- Number of unique active customers per service type
- Number of active agents (30 days)
- Volume of transactions with agents
- Commissions paid to agents
- Number of merchants accepting DFS payments

Note that DFS includes debit cards and automated teller machines (ATMs). This round of the APS, however, does not measure the number of customers using these channels. UNCDF-MM4P hopes to include these channels in the 2018 survey.

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Qualitative information was collected on the performance of the institutions interviewed, key challenges encountered and providers’ level of engagement with the UNCDF-MM4P Zambia programme.

Institutions that participated in the survey will receive a customized benchmarking report that allows them to gauge their performance relative to the rest of the market.

Participants were guaranteed that their submissions would remain confidential per the United Nations Development Programme standard policy on handling proprietary information supplied by its members. UNCDF also signed non-disclosure agreements with all participants of the survey. As such, all data presented in this report has been aggregated and anonymized.

UNCDF-MM4P gathered these insights with the participation of 6 DFS providers: Airtel Money, Spargris Zambia (Kazang), MTN Mobile Money, Zambia National Commercial Bank (Zanaco), Zambia Postal Services Corporation (Zampost) and Zoona.
CONTEXT: ZAMBIA AT A GLANCE
Figures II and III provide an overview of Zambia and the state of its DFS market as of 2016.

### Figure II
**General statistics about Zambia**

<table>
<thead>
<tr>
<th>Adult population:</th>
<th>Financial inclusion rate:</th>
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<tbody>
<tr>
<td>9.1m</td>
<td>$60%</td>
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<table>
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<tr>
<th>Male/Female split:</th>
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<tr>
<td>49%</td>
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<tr>
<td>51%</td>
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<tr>
<th>Rural/Urban split:</th>
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<tr>
<td>57%</td>
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<td>43%</td>
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<tr>
<th>Mobile penetration rate:</th>
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<td>77%</td>
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### Figure III
**State of the Zambian digital financial service market**

<table>
<thead>
<tr>
<th>Percentage of adults with an active DFS account, including ATMs and debit cards</th>
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<tr>
<td>18%</td>
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<tr>
<th>Percentage of adults with an active DFS account (APS 2016)</th>
<th>14%</th>
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<tr>
<th>Annual growth rate in active agent network (2016)</th>
<th>69%</th>
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<tr>
<th>Annual growth rate of transaction volume by agents (2016)</th>
<th>86%</th>
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</table>

<table>
<thead>
<tr>
<th>Percentage of adults with active DFS Account</th>
<th>Number of active customers</th>
<th>Number of agents per 100,000 adults</th>
<th>Number of active agents</th>
<th>Number of DFS providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>18%</td>
<td>1,300,000</td>
<td>83</td>
<td>737</td>
<td>18</td>
</tr>
<tr>
<td>12%</td>
<td>1,000,000</td>
<td>83</td>
<td>737</td>
<td>18</td>
</tr>
<tr>
<td>2%</td>
<td>333,000</td>
<td>83</td>
<td>737</td>
<td>18</td>
</tr>
</tbody>
</table>

* UN World Population Prospects, 2016
* FinScope, 2015 (This includes both formal and informal financial inclusion)
* ZICTA, 2015
* UNCDF, 2017 (unless otherwise noted)
* While the analysis of the APS 2016 does not include accounts accessed through ATMs and debit cards, the percentage of the adult population with a DFS account is adjusted using the assumption that 10.2% of adults use ATMs and debit cards (FinScope, 2015).
FINDINGS
Between 2015 and 2016, there was an increase in the number of products being offered by DFS providers from 5 to 13 products. New products introduced in 2016 included second-generation products, such as microloans (microcredit), savings products, pay-as-you-go solar payments and international remittances. However, the Zambian DFS market is still heavily dominated by first-generation DFS. These products include person-to-person (P2P) transfers, airtime purchases, bill (utility) payments, and cash-in and cash-out transactions.

The number of partnerships that include DFS providers is on the rise. There are (i) partnerships between DFS providers (e.g., between a mobile money operator and a bank or between a mobile money operator and a third-party provider), (ii) partnerships between DFS providers and other financial service providers and (iii) partnerships between DFS providers and non-financial service providers (e.g., between a mobile money operator and a solar energy provider).

Note: Zamtel launched its Zamtel Kwacha mobile money service in Q2 2017.
These partnerships have resulted in the development of second-generation products, such as these:

- Microcredit
- Microinsurance
- Push (to) and pull (from) a bank account
- Pay-as-you-go solar payments
- Merchant payments

DFS providers recognize the need for long-term investment in their services. All respondents to the APS maintained or increased their level of investment in DFS in comparison to the previous year. These investments also included an increase in the level of human resources dedicated to DFS within the different organizations.

**Customers**

(Formal) Over-the-counter (OTC) transactions: OTC activity still characterizes a significant number of DFS transactions in Zambia today. The number of OTC transactions grew from 1,271,561 in March 2016 to 1,406,280 in December 2016, representing a growth rate of 11%. However, the total number of mobile money OTC transactions may be higher, as the figures reported do not track the number of informal OTC transactions conducted by mobile money agents.

While OTC transactions are significant, their growth rate is slowing down, relative to overall growth of account adoption. The 11% growth rate of OTC transactions from March 2016 to December 2016 pales in comparison to the 24% growth rate in the number of active DFS accounts over the same period. This finding suggests that the increased focus of DFS providers on converting OTC customers to active wallet users is showing early signs of success.

Registered accounts: In December 2015, there were 5.6 million registered customer accounts, of which approximately 1.0 million accounts were actively used. In December 2016, there were 7.0 million registered accounts and 1.3 million active accounts. This data means that, over the course of 2016, both the number of registered accounts and the number of active accounts increased by 24%.

The quarterly growth rates of the registered and active customer bases show some level of volatility. In Q1 2016 the number of registered accounts increased by 17%, followed by two quarters (Q2 and Q4) with lower growth rates. In Q3 the growth rate was negative. The quarterly growth rate of active customer accounts is less volatile but shows a similar trend, as shown in figure V.

*Figure V*

Growth rate of registered and active digital financial service customer base
Customer activity rate is the share of actively used registered accounts (i.e., at least one transaction during the past 90 days). Figure VI shows a steady increase in customer activity rate from 6% in December 2015 to 11% in December 2016.

**Figure VI**
Digital financial service customer activity rate

The growth in the number of accounts discussed above corresponds to an increase in the percentage of adults with an active DFS account from 12% in December 2015 to 14% in December 2016. The APS 2016, however, does not capture accounts accessed through ATMs and debit cards. When adjusting the figure above with the assumption that 10.2% of adults use ATMs and debit cards, 14% of Zambian adults had an active DFS account in 2015, which increased to 18% in 2016.

The APS also aims to provide insights into how customers use DFS. Figure VI shows the number of unique customers per type of service for December 2015 and December 2016. Though inconsistent across all products, there was a general growth trend in the adoption of DFS products from 2015 to 2016. This growth is as low as 44% for cash-in transactions and as high as 185% for bill payments. No product showed a decline in number of unique active users.

The total number of customers conducting **P2P transactions** increased by 75% (i.e., from 119,828 in December 2015 to 209,471 in December 2016). The number of customers conducting P2P transactions as a percentage of the active customer base declined from 39% in 2015 to 30% in 2016, which means that the following conclusions may be drawn:

- Even though the total number of active users is increasing, the number of customers conducting P2P transactions has only marginally increased.
- The growth of the total number of active customers has been largely driven by other services other than P2P transactions like airtime purchases, etc.

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Bill payments: The number of customers actively conducting bill payments, including paying for utilities and television services, increased by 185%. While bill payments had the highest growth rate among all the DFS products in terms of number of active customers, the total number of users remains low. The growth rate underscores the importance of developing more relevant use cases for customers.

Airtime purchases: The number of active customers purchasing airtime using mobile money accounts increased by 132%. In December 2016, 52% of active customers used their account to purchase airtime, versus 50% in December 2015. The growth of customers purchasing airtime using mobile money can be attributed to incentive schemes from providers that give extra talk time for airtime purchased through mobile money.

Cash-in and cash-out transactions: Customers conducting cash-in transactions increased by 44%, while customers conducting cash-out transactions increased by 148%. As highlighted earlier in this report, this finding could be an indication of the following:

- Customer accounts being credited through alternative channels other than cash-in at agent locations. These channels could include bulk payments and bank account to wallet transactions.
- One customer performing a cash-in transaction followed by multiple P2P transactions to multiple other accounts whose account holders eventually conduct cash-out transactions.

The data provided through the APS did not allow for an analysis of the customer base in terms of gender or rural/urban location, as most providers do not actively track gender and rural/urban split.

Agents

Working on the front lines of DFS, agents are often the first, and sometimes the only, interface most customers have with DFS. They perform a range of functions including registering new customers, conducting cash-in and cash-out transactions, resolving customers’ queries, and combating money laundering and the financing of terrorism by enforcing ‘know-your-customer’ regulations.
From December 2015 to December 2016, the number of active agents increased by 69% from 7,304 active agents (83 active agents per 100,000 adults) to 12,376 active agents (136 active agents per 100,000 adults).

Figure VII illustrates the steady increase of the active agent base during 2016. The total number of transactions conducted by agents shows a similar trend, confirming that the new active agents did not replace the business of existing agents, in terms of number of transactions.

Figure VIII
Number of active agents and transactions at agent points (including over-the-counter transactions)

An increase in the total number of transactions may be the result of an increase in the number of active customers and/or due to an increase in the number of transactions conducted by active customers. In 2016, the number of active agents increased by 69%, compared to a 24% increase in the number of active customer accounts (see figure III).

The active agent base grew much faster than the active customer base, suggesting that the increase in total number of transactions conducted by agents was predominantly the result of existing customers conducting more transactions.

Figure VIII confirms that the average number of transactions per active agent per month was relatively constant over the course of 2016. Considering that the absolute number of active agents was increasing, and the number of active customers shows a much slower growth rate, it is not surprising that the average number of active customers served by an agent shows a declining trend. Yet, due to the increased number of transactions per customer in 2016, the average number of transactions conducted per agent remained constant over the same period.

These findings suggest that there is a demand for more active agents. By increasing the active agent base, customers are likely to conduct more transactions because of increased access to agents. If agent liquidity is improved as well, with customers conducting more transactions, then agents are likely to become more profitable.
The increase in the number of active agents and the number of transactions conducted by these agents is reflected in the doubling of the total value of commissions paid to agents from 2015 to 2016 (see figure X). The average commission earned per agent per month also increased, from K785 (US$76) in December 2015 to K922 (US$94) in December 2016.\footnote{Source of conversion rates: UN Treasury – Operational Rates of Exchange.} In comparison, the Helix Agent Network Accelerator Survey, which was conducted in Q1 2015, reported that, on average, Zambian agents earned US$72.\footnote{Helix Institute of Digital Finance, ‘Agent Network Accelerator Survey: Zambia Country Report 2015.’}

The increased investment by agents into their businesses in the form of increased float or even increased number of agent points is driven by the commissions earned. Providers that have increased their engagement with and support to agent networks have seen a growth in number of agents as well as in the number of transactions at agent locations.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure IX.png}
\caption{Number of transactions and number of active customers per active agent}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure X.png}
\caption{Commissions paid to agents (K)}
\end{figure}
Providers’ performance and challenges

The APS also included qualitative questions on the performance of the DFS providers. To follow are the key insights garnered from the responses.

The challenges faced by DFS providers are diverse and affect different aspects of DFS businesses. The most commonly reported challenges are the following.

- **Liquidity management, especially in rural areas.** It hinders both agent network growth and expansion of capacity among existing agents, particularly in rural areas. Despite the increase in agent earnings, agent profitability remains a key challenge that providers need to overcome.

- **Expansion and management of agent networks in rural areas.** Providers highlighted the challenges related to developing cost-effective and sustainable agent network management structures, particularly in rural areas.

- **Low levels of consumer awareness and education on new and existing products** that result in high inactivity rates within the customer base.

- **Belief or understanding of profitable business models to support partnerships** that drive increased collaboration between financial and non-financial service providers in a bid to expand the reach of DFS among rural communities. These business cases should include justification for expansion of network coverage in rural areas.

- **Inadequate access to and use of data for decision-making** to support strategic decisions and effective use of limited resources. Several providers reported limited resources as a challenge to growth and to unlocking more investment in areas like bulk payments, expansion into rural areas and the development and launch of new products. The lack of data makes the justification for such expansion difficult within the provider organizations. Inadequate data analysis is also a barrier to the identification and development of relevant use cases for existing and potential customers. It may be the root cause and root possible solution for several challenges identified.

- **Inadequate infrastructure in rural areas.** In particular, inadequate network coverage, low mobile phone penetration and lack of electricity to charge phones remain a barrier to adoption of DFS.

- **Limited manpower or skills.** Even though four of the six providers that responded to the survey highlighted an increase in the number of resources dedicated to DFS, there is still a need for additional resources and skills within providers’ organizations. This need is particularly critical as the Zambian market begins to adopt second-generation products.
OPPORTUNITIES AND THE WAY FORWARD
• ‘Build the rails’ on which the next generation of DFS will ride.
The findings of the report show that first-generation products heavily dominate the Zambian market. The successful expansion of DFS in Zambia hinges on the ability to ‘build the rails’ on which expansion efforts will ride. The ‘rails’ include strengthening agent networks both in terms of reach and liquidity management, increasing meaningful awareness of DFS among consumers and improving access to DFS (both network coverage and phone ownership). These rails will provide the foundation on which second-generation products, merchant payments and e-commerce solutions will be built—products that providers are starting to offer in the market.

• Recognize that agent profitability and engagement goes hand in hand with success.
There is a strong relationship between the average number of transactions that agents conduct each day and the performance of the provider. The findings from the APS show a positive correlation between active agent growth and number of transactions at agent locations. The most successful services have calibrated the growth of their agent networks to ensure that agents are able to perform the right volume of transactions. Other providers looking to improve their agent networks should follow suit. Possible interventions to achieve agent network growth could include a greater number of agent support staff to improve training, regional agent workshops to share best practices, liquidity management solutions, agent start-up and float loans, etc.

• Leverage data to support effective decision-making and develop viable business cases.
As Zambia moves to introduce second-generation products, usage of data for decision-making will become just as critical. Data analysis allows for key insights into customer profiles and segmentation, usage trends as well as behaviours of customers and agents that can lead to targeted agent deployment and product development.

• Look for sustainable and commercially viable partnerships to drive expansion of DFS in rural areas.
Considering the population density in rural Zambia, the profitability of agents in such locations is a key barrier to expansion of DFS to reach excluded populations. Exploration of mutually beneficial partnerships to provide products that address the needs of rural populations, such as microcredit, savings and pay-as-you-go solar payments, among others, could unlock the opportunities that exist.
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Disclaimer

This report is based on data collected through the 2016 Annual Provider Survey of Digital Financial Services and internal analysis by the UNCDF-MM4P team.

Survey Data

Survey data is self-reported and has not been verified independently by UNCDF-MM4P; however, data is thoroughly checked and crosschecked against other benchmarks and data sources.

Confidentiality

Data published in this report has 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 is self-reported, and in some cases, providers submitted partial data. None of the providers that participated in the survey had data that was disaggregated by gender or rural/urban split, which limited the level of analysis that could be completed with the data. While this report is based only on data submitted by 6 DFS providers, UNDCF expects a larger number of providers to be represented in the 2017 report.