Project Description

The *Helix Institute of Digital Finance*, founded in November 2013 as a partnership between *MicroSave*, the Bill & Melinda Gates Foundation, the International Finance Corporation (IFC), and the UN Capital Development Fund (UNCDF) provides world-class training and cutting-edge data for digital financial service providers.

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The views expressed in this publication are those of the author(s) and do not necessarily represent those of the United Nations, including UNCDF, or their Member States.
Focus Of Research

The research focuses on operational determinants of success in agent network management, specifically:

- Agency Demographics
- Core Agency Operations
- Business Model Viability
- Liquidity Management
- Quality of Provider Support
A Short History Of Digital Financial Services (DFS) In Zambia

Celpay launched mobile money services in partnership with six financial service providers. Celpay was the first DFS provider in Africa.

Zoona, Zambia's first third-party service provider, launched with a focus on person to person (P2P) transfers.

Airtel launched its mobile wallet, offering bill payment services and P2P transfers.

Investtrust forays into agency banking with Eaze Account.

2002 ...

Zanaco launched Zambia's first mobile banking service, Xapit.

Zanaco launched Zanaco Xpress – agent banking services – in partnership with Zampost.

Celpay ceased to function. Zanaco's partnership with Zampost ended.

MTN launched MTN mobile money, a mobile wallet that offers money transfers and bill payment services.

Sources: Provider websites and annual reports, see UNCDF BNs on Zambia, GSMA: Interview with Lazarus, CEO Celpay (2009)
The Zambian market has grown increasingly competitive with five players vying for a piece of the pie. Zambia is at a critical juncture, characterised by widespread adoption of the Over the Counter (OTC) transaction methodology by customers and agents. Compared with East Africa, fewer agents are offering account registration as well as cash-in and cash-out services from the wallet. The Zambian DFS market could either shift to a OTC market like Pakistan or a wallet-based market such as Kenya.

- The market is largely focused on payments – person to person (P2P), bill payments, and bulk payments. Meanwhile, there is less focus on customer registration: not all agents capable of opening accounts are actually performing registrations. This is suboptimal in a nascent market.

- Though median transaction levels are comparable to Tanzania and Uganda, revenues are much lower, resulting in lower profits.

- Low customer awareness of DFS products is cited as a barrier to expanding an agent’s business. Although agents appreciate the support systems put in place by providers, support metrics are lower than those observed in East Africa.
# Zambia DFS Market Overview – What Providers Offer

<table>
<thead>
<tr>
<th>Services offered</th>
<th>Transaction method</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Money transfers and bill payments</td>
<td>✓ Over the counter</td>
</tr>
<tr>
<td>✓ Deposit through mobile wallets</td>
<td>✓ Agents use kiosks to conduct transactions</td>
</tr>
<tr>
<td>✓ P2P and bill payments</td>
<td>✓ Agents report both wallet-based and over the counter</td>
</tr>
<tr>
<td>✓ Bulk payments with Government and private companies</td>
<td>✓ USSD-based interface</td>
</tr>
<tr>
<td>✓ Savings through account</td>
<td>✓ Agents report both account-based and over the counter</td>
</tr>
<tr>
<td>✓ P2P and bill payments</td>
<td>✓ Both mobile and card-based interface</td>
</tr>
</tbody>
</table>
Agency Demographics
The Research Is Based On 1,237 Nationally Representative Agent Interviews*

Sample Distribution By Location**

- Lusaka
- Non-Lusaka Urban
- Rural

Sample Profile

<table>
<thead>
<tr>
<th>Total Sample Size</th>
<th>Ownership Of DFS Business</th>
<th>Exclusivity</th>
<th>Dedication</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owner Operator</td>
<td>Exclusive</td>
<td>Dedicated</td>
<td>Male</td>
</tr>
<tr>
<td>1,237</td>
<td>306 25%</td>
<td>1,130 91%</td>
<td>611 49%</td>
<td>667 54%</td>
</tr>
<tr>
<td></td>
<td>931 75%</td>
<td>107 9%</td>
<td>626 51%</td>
<td></td>
</tr>
</tbody>
</table>

*Only those agents that conduct at least one transaction per month (considered active agents) were interviewed as part of the ANA survey.

**Lusaka: national capital; non-Lusaka urban: province headquarters and other cities with high economic activity; rural: areas outside of demarcated town areas.
Agent market presence is defined as the proportion of cash-in/cash-out (CICO) agents by provider. Numbers here are provided on a till basis not on the outlet level. Hence, if an agent serves three providers it is counted three times.

The Zambian market is fractured and there is no dominant frontrunner. Zoona currently holds the largest share of market presence (33%), followed by MTN (27%) and Airtel (27%).

Banks have a relatively greater presence in rural areas, likely due to their mandate to offer DFS touch points across the entire country.

*Agent market presence is defined as the proportion of cash-in/cash-out (CICO) agents by provider. Numbers here are provided on a till basis not on the outlet level. Hence, if an agent serves three providers it is counted three times.*
Most Agents* Have Been In Business For One Year Or Less

Even though DFS first launched in 2002, more than three-quarters of agents in Zambia are still new. Further research on agent growth and churn rates in Zambia is advised.

80% of agents foresee themselves remaining in this business one year from now. Of these, 78% are non-dedicated, indicating that non-dedicated agents are looking to expand their current level of engagement in the agency business.

* The analysis of age and agent’s motivation to be in agency business is done for owners only.
Levels Of Exclusivity And Dedication

Zambia has the highest levels of exclusivity compared to other ANA countries. In 2013, Kenya also had high levels of exclusivity (95%) which decreased to 87% in an year. **High levels of exclusivity in a nascent market, especially when combined with dedication, put a lot of pressure on the provider and agents to achieve a critical mass of customers and transactions respectively.**

**Exclusivity In ANA Countries***

In 2013, Kenya had higher levels of exclusivity at 95% and 46% of agents were dedicated.

**Dedicated Agents In ANA Countries***

There are fewer dedicated agents in rural areas (42%) as compared to Lusaka (52%) and non-Lusaka urban (56%).

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* ANA surveys were conducted in 2013 in Uganda, Kenya, and Tanzania; and in 2014 in Bangladesh, Kenya, Pakistan, and India.
Core Agency Operations
The proportion of agents who offer account opening is higher than in Pakistan (21%) and lower than in Kenya 2014 (58%). In 2013, though Kenyan providers were expanding their business, 79% of agents offered account opening services.

In terms of product offering, Zambia resembles a hybrid of the 2014 Pakistan market (OTC-led) and the 2013 Kenyan market (multiple products). The proportion of agents who offer account opening is higher than in Pakistan (21%) and lower than in Kenya 2014 (58%). In 2013, though Kenyan providers were expanding their business, 79% of agents offered account opening services.

*Cash in and cash out from wallet/account is referred to as cash in and cash out in this report.
**Zambia Could Become An OTC-Led Market**

We define **Over the Counter (OTC)** as “a transaction which the agent conducts on behalf of the customer.” An OTC transaction may or may not be performed using an agent’s account. OTC also includes **agent assisted transactions**, where many customers, including those who have wallets, ask or use agents to conduct a transaction for them.

<table>
<thead>
<tr>
<th>Identified*</th>
<th>Formal</th>
<th>Informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan, Paraguay, Guatemala, Honduras, Zoona (Zambia)</td>
<td>East Africa (Agent Assisted) Zambia</td>
<td></td>
</tr>
</tbody>
</table>

Uganda has a significantly higher percentage of agent-assisted transactions than its East African counterparts. **57% of registered users** actually prefer agent assisted transfers over using their own handset.

In Zambia, Zoona agents (33% of market presence) conduct OTC transactions. At the same time, two-thirds of all Zambian agents offer money transfer services in the country. Thus, half of non-Zoona agents conduct either agent assisted transactions or OTC transactions similar to Bangladesh.** It would be prudent for providers to understand: 1. why registered users ask agents to conduct transactions on their behalf, and 2. why non-Zoona agents conduct OTC transactions, when it is not a part of their formal product mix.**

*A customer is identified if their identity is verified by the provider prior to conducting a transaction. OTC is formal if it is legally allowed by regulation, such as for Zoona.

**Non-Zoona provider’s money transfer products do not support OTC transaction methodology.
Daily Transactions* Across ANA Countries

Median daily transactions in Zambia are comparable to Uganda and Tanzania but higher than Asian countries.

75% of agents close their outlets by 6 PM. Even at the current level of customer adoption of DFS, there is potential to increase transaction volumes by extending agency opening hours.

<table>
<thead>
<tr>
<th>Transaction Type</th>
<th>Median Volume Of Transactions</th>
<th>Median Value Of A Transaction (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money Transfer/Day</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td>Cash In/Day</td>
<td>10</td>
<td>36</td>
</tr>
<tr>
<td>Cash Out/ Day</td>
<td>10</td>
<td>36</td>
</tr>
<tr>
<td>Airtime/Day</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Account Opening/ Month</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Bill Payments /Month</td>
<td>6</td>
<td>11</td>
</tr>
</tbody>
</table>

Agents conduct more money transfers than other transactions types, pointing to the prevalence of the OTC market.

*Numbers represent transactions per day by selected provider, not overall volumes for the agency and are inclusive of airtime.

**Numbers represent medians (a positional central tendency measurement) for each type of transaction and should not be added to get the median number of total daily transactions in Zambia (28).
Largest Stated Barriers To Doing More Business*

As most agents are operators, they are dependent on the owners’ float management system. This can provide an opportunity for providers to **extend a line of credit** for liquidity to its agents and help **build loyalty** among agents.

Agents are feeling the **pressure of competition**. ANA data demonstrates that there is an agent serving the same provider within a median of 5 minutes. According to field observations, agents of different service providers are often located in close vicinity. **

<table>
<thead>
<tr>
<th>Lack of resources to buy enough float</th>
<th>Too many other agents competing for business</th>
<th>Lack of awareness of service among potential customers</th>
<th>Customers not following my instructions</th>
<th>Individual clients demand for service is not very regular</th>
<th>Too often have only either cash or e-float when the client needs the other</th>
<th>Doing more business means too much more risk of fraud</th>
</tr>
</thead>
</table>

This barrier points to the nascent stage of DFS adoption in Zambia and to a need for **aggressive marketing**. Additionally, one third of agents say that their **providers’ marketing is not effective** in increasing customers' awareness on DFS.

*Agents ranked a minimum of three of these seven dimensions. The above figures are a weighted average of the first three choices, where taller bars mean a higher relative ranking.

**The research team also observed this phenomenon during field work.
Business Model Viability
Agent Revenue, Operating Expenses, and Profit*

Total earnings reported by Zambian agents (US$ 180, PPP adjusted) are below the Zambian GNI per capita (US$ 308, PPP adjusted). Unless earnings increase, agents are likely to become non-dedicated and/or non-exclusive to secure multiple revenue streams.

<table>
<thead>
<tr>
<th></th>
<th>Total (US$)</th>
<th>Lusaka (US$)</th>
<th>Non-Lusaka Urban (US$)</th>
<th>Rural (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit</td>
<td>$42</td>
<td>$24</td>
<td>$39</td>
<td>$56</td>
</tr>
<tr>
<td>Revenue</td>
<td>$72</td>
<td>$72</td>
<td>$72</td>
<td>$84</td>
</tr>
<tr>
<td>OpEx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Low earnings could be attributed to both low commissions from providers and limited use of DFS. Rural agents seem more profitable because of the high value transactions reported, which results in higher revenue.

Total earnings reported by Zambian agents (US$ 180, PPP adjusted) are below the Zambian GNI per capita (US$ 308, PPP adjusted). Unless earnings increase, agents are likely to become non-dedicated and/or non-exclusive to secure multiple revenue streams.

*Profit for agents is calculated by subtracting expenses from the earnings from all the providers being served. Only agents who reported both earnings and expenses have been included in the profit calculation, therefore revenues minus expenses does not equal profit exactly as displayed here.
Profitability* Is Low Compared To ANA Research Countries

Zambian agents make the lowest profits compared to their counterparts in East African countries where ANA studies have been conducted.

Median Profitability Comparison

*Profitability as shown in the graph is calculated as total earnings minus operating expenses for all countries. In the case of India, the fixed monthly component given to agents has also been considered in this calculation. This is different from other ANA countries where commissions earned make up the total earnings of the agent. The profits reported are at outlet level for all countries.

**Median daily transactions are reported at the provider level. High levels of exclusivity in Zambia allows us to assess the bearing of transaction volumes on outlet level profitability. In the case of Pakistan, a non-exclusive agent serves 3-4 providers on average.
Low Monthly Earnings Drive Low Profitability Despite Low OpEx

Low profitability in Zambia is intriguing, given the similar transaction volumes and the lowest operating expenses among East African ANA research countries.

Exclusivity is likely to break down as agents seek to generate more revenues through multiple DFS providers.

These financial metrics warrant a review of providers’ commission structures for agents. The commission structures may not favor low value transactions.

*Total monthly earnings is the sum of earnings from all the providers being served.
Top Challenges To An Agent’s Business*

This indicates that there is low customer awareness of DFS amongst Zambians.

Only 32% of agents are satisfied with the commissions they receive for DFS transactions. Moreover, 14% of agents cited that being an agent is not profitable at all.

*Agents ranked a minimum of three of seven dimensions. The above figures are a weighted average of the first three choices, where taller bars mean a higher relative ranking. Only top six are shown in the graph. The seventh dimension is 'Time spent in training from service provider'.
Liquidity Management
Agents Who Travel* For Rebalancing Mostly Use Banks

<table>
<thead>
<tr>
<th>Characteristics Of The Most Frequently Used Rebalancing Option</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Median travel time taken for rebalancing (in mins)</td>
<td>10</td>
</tr>
<tr>
<td>Median distance travelled for rebalancing (in KM)</td>
<td>1</td>
</tr>
<tr>
<td>Median frequency of CI per month (buying e-float)</td>
<td>5</td>
</tr>
<tr>
<td>Median frequency of CO per month (selling e-float)</td>
<td>0</td>
</tr>
<tr>
<td>Median transactions denied/day due to lack of liquidity</td>
<td>2</td>
</tr>
<tr>
<td>Median cost of rebalancing</td>
<td>$0.96</td>
</tr>
</tbody>
</table>

More than half of agents (58%) who travel to rebalance, walk to their rebalancing point.

Less frequent rebalancing for cash than e-float suggests that agents are able to manage cash. A non-dedicated agent may be using excess cash from same owner’s other outlet or cash from parallel business.

This is the highest cost among East African ANA research countries.

<table>
<thead>
<tr>
<th>Most Frequently Used Rebalancing Points*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank branch</td>
</tr>
<tr>
<td>Provider's Office</td>
</tr>
<tr>
<td>Another agent</td>
</tr>
</tbody>
</table>

These are agent network managers such as PostdotNet. Some providers have formally allowed agents to transfer e-float to each other, and owners can rebalance across their multiple tills and outlets.

55% agents (81% of operators) do not travel to rebalance. This indicates that owners take the responsibility to manage e-float and cash at the outlet. Of the 19% of owners who do not travel, 81% are non-dedicated.

*9% of the responses are scattered in three categories each of which are less than 5% and not presented in the chart, namely ATM - 2%, aggregator’s office - 2% and other options - 4%
Impediments to Float Management*

The volatility of transactions in Zambia could be attributed to the person-to-person (P2P) nature of transactions and the current level DFS adoption. It will be important to analyse the frequency and magnitude of these fluctuations as demonstrated by this analytical framework.

43% of operators are dependent on owners to manage liquidity who either transfer e-float and/or take excess cash from the outlet.

Crowds at bank branches increase rebalancing time for agents. Providers could use other modes of rebalancing such as Master Agents, lines of credit, or dedicated bank counters.

*Agents ranked a minimum of three of seven dimensions. The above figures are a weighted average of the first three choices, where taller bars mean a higher relative ranking. Only top six are shown in the graph. The seventh dimension is “I need to take a loan out to manage my float.”
Quality of Provider Support
Agents Are Trained At Par With The East African Community

81% of agents feel they have received adequate training thus far. Only 47% of trained agents have received refresher trainings. Currently, the product suite available is simple and easy for agents to understand. **However, if providers are to offer sophisticated DFS products, they will have to revisit their agent training strategy.**
66% of agents receive regular support visits, as compared to 59% in Kenya 2014, 33% in Uganda, and 79% in Tanzania. Some 15% of these agents are visited daily, 44% are visited at least weekly, and 28% monthly.

90% of agents are aware of a call center as compared to 95% in Kenya. These agents make a median of two calls a month as compared to three calls per month in Kenya and Uganda.

A low percentage of agents (26%) receive promotional materials from providers. Only 22% agents receive marketing collateral when there is a change in the system. 94% agents do not buy marketing materials, indicating that agents do not invest in marketing of DFS on their own.

79% of agents experience service downtime at least once a week. Only 21% receive prior notice of the service downtime which is lower than in Kenya 2014 (77%) and Uganda (48%).

Agents report ‘time spent in teaching customers’ and ‘low awareness of DFS amongst customers’ among the top three barriers to expanding their business and doing more transactions, respectively. Insufficient marketing and awareness could be among the reasons for the current level of DFS adoption.
Diverse business models and players in Zambia make it a competitive market. As the DFS market in Zambia grows, it is plausible that the country may witness more players and different business models.

A high percentage of agents are trained, comparable to levels across East Africa ANA research countries.

Operating expenses are the lowest compared to ANA East Africa research countries, and transaction volumes are comparable to these countries, where DFS adoption is high.

Agents are able to focus on outlet operations as 55% do not travel to rebalance – a proportion that is higher than in other ANA East Africa research countries. Further, rebalancing points are close and owners who own multiple outlets can transfer cash and/or e-float easily to their agents.
Zambia was the first country in Africa where DFS was launched, yet the growth of DFS is stymied. It could be that providers have yet to find a value proposition for their customers. At the same time, the use of money transfer services and variation in operational statistics across geographies indicate that providers’ marketing and customer awareness have been major roadblocks in the success of DFS in Zambia.

It would be prudent for providers to **re-visit their marketing strategy** to increase customer awareness. Enhancing promotional and marketing activities at agent outlets will catalyse registration and transactions at the outlets.

In the short term, providers can **de-cluster outlets** and spread outlets to market peripheries and residential areas. Providers may also want to motivate their agents to extend their opening hours. This would increase both availability and accessibility of outlets to customers.
Opportunities For Improvement (2/2)

Providers may investigate how the **interplay of transaction volumes, transaction types, and commission structures** is influencing their agent’s profitability. This would enable providers to revisit commission structures and/or design incentives and campaigns for both agents and customers aimed at increasing the value and volumes of transactions.

Customers may still **lack an anchor product** that could enhance the level of adoption of DFS in Zambia. This calls for comprehensive market research to explore prospective anchor products suitable for the Zambian market.

Providers may want to adopt a **shared agent model**, as this will increase the revenue for agents and perhaps their motivation.
Thank You

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