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Through the financial support of the Bill & Melinda Gates Foundation, MicroSave is conducting a four-year research project in the following eight focus countries as part of the Agent Network Accelerator (ANA) Project:

**Africa**
- Kenya
- Nigeria
- Tanzania
- Uganda

**Asia**
- Bangladesh
- India
- Indonesia
- Pakistan

Research findings are disseminated through The Helix Institute of Digital Finance. Helix is a world-class institution providing operational training for digital finance practitioners.

[www.helix-institute.com](http://www.helix-institute.com)
The research focuses on operational determinants of success in agent network management, specifically:

- Quality of Provider Support
- Agent & Agency Demographics
- Core Agency Operations
- Liquidity Management
- Business Model Viability
Pakistan Overview

Pakistani agents are defined by the unique Over-the-Counter (OTC) methodology they use, which gives them a direct relationship with customers and therefore influence over providers. The high level of competition has fractured the digital finance market between multiple players, which commonly share agents. While transactions per agent are low compared to leading East African markets, revenues are healthy, and when combined with low reported operational costs, mean almost all agents profitable.

- Competition among providers means they need to compensate agents well, and also means support systems like liquidity management are quite convenient for agents. However, despite this, many agents still report being untrained, which could pose a significant barrier to network evolution.

- The market dynamics in Pakistan are changing and providers are rapidly registering customers, which will likely spur new product development and decrease the amount of power agents hold in the transactional dynamic.

- While there are a lot of market players, they are mostly using the same model to offer the same products over the same channels. This means that the allocation of resources in the ecosystem is often very redundant and therefore sub-optimal.
A Short History Of Digital Finance In Pakistan

The State Bank of Pakistan (SBP), Banking Policy & Regulations Department, issues Branchless Banking Regulations on March 31, 2008.

In June 2007 the Banking Policy & Regulations Department (BPRD) of the SBP released its Policy Paper on Regulatory Framework for Mobile Banking in Pakistan.

ZONG and Askari Bank Limited launched ‘Timepey’ in December 2012.

In April 2010, UBL a commercial Bank launched UBL Omni a branchless banking service.

In April 2013, HBL launched HBL Express to become the fifth player in Pakistan’s rapidly expanding branchless banking market.

In September 2013 Ufone launched its branchless banking services under the brand name ‘Upaisa’.

Mobilink and Waseela Microfinance Bank Limited (WMBL) launched Mobicash in November 2012.

February 2010 Easypaisa Mobile wallet is launched.

In April 2012, Mobilink and Waseela Microfinance Bank launched ‘Mobicash’.

Warid Telecom and Bank Alfalah commercially launched branchless banking service ‘Mobile Paisa’ in July 2014.

Telenor Pakistan a major mobile network operator & Tameer Micro Finance Bank (Tameer Bank), majority-owned by Telenor, launched the EasyPaisa branchless banking platform in October 2009.

In 2011 Easypaisa Mobile wallet is launched.

Sources: Various sources and annual reports of service providers.
Agent and Agency Demographics
The Research Is Based On 2,080 Nationally Representative Agent Interviews

Achieved Sample

- Metro: 685 (33%)
- Other Urban: 409 (20%)
- Rural: 986 (47%)

Data collection occurred in November and December 2014 using a random route methodology.

Sample Profile*

<table>
<thead>
<tr>
<th>Total Sample Size</th>
<th>Ownership Of DFS Business</th>
<th>Exclusivity</th>
<th>Dedication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owner</td>
<td>Operator</td>
<td>Exclusive</td>
</tr>
<tr>
<td></td>
<td>1,926</td>
<td>154</td>
<td>703</td>
</tr>
<tr>
<td></td>
<td>93%</td>
<td>7%</td>
<td>34%</td>
</tr>
</tbody>
</table>

*Note: This table is shown to give you an idea of the resulting sample sizes along with some of its major dimensions. Metro is the Pakistan Bureau of Statistics definition of ‘self representative cities.’ These are cities with a population of more than 500,000 and includes the following: Karachi, Lahore, Rawalpindi, Faisalabad, Peshawar, Multan, Sialkot, Sardoga, Gujrawala, Multan, Bhawalpur, Sukkur, Hyderabad, and Quetta. For more definitions on other locations, please refer to the Appendix.
Agent market share 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. 8 agents reported serving ‘other’ providers, which are not presented in this analysis.

Pakistan is a fiercely competitive market. Compared to East Africa and Bangladesh, the market is fractured with no single dominant player.

Mobicash has rapidly expanded in a year’s time and is now catching up to Easypaisa with almost one-fourth of agents in Pakistan.

New players have already penetrated into the rural areas and this most likely can be attributed to the OTC value proposition offered.

*Agent market share 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. 8 agents reported serving ‘other’ providers, which are not presented in this analysis.
Two-Third of Agents Have Been Operating For One Year Or Less

Agent sharing (non-exclusivity) is a widespread phenomenon, and agents are shared by a median of three providers*.

88% of agents indicate that they foresee themselves continuing as agents in a year, indicating high levels of satisfaction. ANA research shows that this is typical in countries with low population penetration (5.5% active mobile money users) which are still ripe for growth and future profits.

* This figure refers only to active agents which are defined as making at least one transaction in the last 30 days. However, this was question was introduced in the second week of the survey, hence this does not consist of the entire 2080 sample size.
Pakistan Has Low Levels Of Exclusivity And Dedication

Tanzania has comparable levels of exclusivity to Pakistan. However, unlike Pakistan, Tanzania has high dedication levels suggesting that the multiple revenue streams coming from serving different providers allows an agent to be dedicated to the DFS business. However in Pakistan, the majority of agents are non-dedicated, which may stem from agents being mainly built from the existing GSM distribution network.

Exclusivity In ANA Countries

Exclusivity is more pervasive in rural areas (39% versus 26% in metro and 32% in urban areas), as well as in Khyber Pakhtunkhwa (61%) compared to other provinces.

Dedicated Agents In ANA Countries

Notably lower when compared to ANA Research East African countries.
Core Agency Operations
Over the Counter (OTC) : The De Facto Mobile Money Market

**The Model**

### Cash-In
- **Sender**
- **Agent 1**
- Sender shows National Identity Card (NIC) to agent, along with receiver’s NIC number, and amount to be sent. Sender enters confidential PIN to complete transaction.

### P2P Transfer
- **Agent takes cash from Sender and initiates transfer.**
- **Confirmation SMS is sent to the receiver.**
- **E-Value**
- **Agent’s e-float goes to selected provider’s pooled account.**
- **Sender communicates the confidential PIN to receiver.**

### Cash-Out
- **Agent 2**
- **Receiver**
- Agent asks receiver for NIC. Receiver puts in confidential PIN.
- Agent gets e-float from the provider’s pooled account and gives cash to receiver.
- **Receiver gets confirmation SMS of e-float received.**

Since the transaction does not involve a wallet, Agent 1 effectively chooses the provider for each transaction and therefore carries a lot of power in their relationship with the provider making compliance harder, and driving transactional commissions higher.
Three Fourths of Agents Cannot Register Customers For Accounts

Of the 25% of agents who can register customers for mobile accounts, about 84% of them are registering customers.

Agents report opening a median of 7 mobile accounts per month. Hypothetically, if every agent actually registered customers, approximately 1.1 million customers would be registered per month.

43% of bank agents compared to 17% of MNO agents are able to register customers, as well as 27% of rural agents compared to only 22% of their urban counterparts.
**Reasons For Not Opening Mobile Wallets**

While specific leading providers have launched registration campaigns, these types of promotional campaigns are still far from the norm, and would be required to drastically shift the ecosystem to mobile wallets.

21% of agents offered account registration services.

Only 26% agents see mobile accounts as competition to their OTC business which indicates there is the potential to promote registration directly through agents.

* 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 question was asked only to those people who reported not opening mobile accounts (i.e. 79% of sample).
Daily Transaction Levels* Are Lower Than ANA Research Countries

Median daily transactions are very low when compared to the baselines taken in Bangladesh (15), Kenya (46), Tanzania (31), and Uganda (30). However, with high rates of non-exclusivity in Pakistan, mean transactions are split between more providers and therefore appear lower.

### Median Daily Transactions

Agents reported a median of 1 transaction on a slow day and 10 transactions on a busy day.

80% of agents conduct less than 30 transactions a day – only a handful of high performing agents are driving the market in almost every geography. These agents (transactions>30) do a median of 57 transactions per day.

### Median Transactions Per Day

<table>
<thead>
<tr>
<th></th>
<th>Median Transactions Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>7</td>
</tr>
<tr>
<td>Other Urban</td>
<td>8</td>
</tr>
<tr>
<td>Rural</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
</tr>
</tbody>
</table>

*Transactions are per day by selected provider, not overall volumes for the agency outlet. Numbers include airtime.
Largest Stated Barriers To Doing More Business*

With increasing competition, the agent network is expected to grow. Agents take a median of 5 minutes to reach the nearest agent serving the same provider to them, indicating there is a high density of agents.

While float rebalancing is efficient, this may point to opportunities for service providers to offer liquidity on credit. Though only 3% of agents took out loans, all of them took the loan to obtain liquidity.

Intermedia shows that only 7% of Pakistanis have ever used DFS.

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too many agents competing for business</td>
<td></td>
</tr>
<tr>
<td>Lack of resources to buy enough float</td>
<td></td>
</tr>
<tr>
<td>Individual clients demand for service is irregular</td>
<td></td>
</tr>
<tr>
<td>Lack of awareness of service among customers</td>
<td></td>
</tr>
<tr>
<td>Too busy to do anymore business</td>
<td></td>
</tr>
<tr>
<td>Regulation restricts what customers ask me to do</td>
<td></td>
</tr>
<tr>
<td>Doing more business means more risk of fraud</td>
<td></td>
</tr>
<tr>
<td>Too often have only either cash or e-float</td>
<td></td>
</tr>
</tbody>
</table>

Note: 12% of agents reported facing ‘no challenges’.

*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 Lack Of Offerings Means Potential For Product Innovation

With high OTC P2P payments, the opportunity to integrate DFS with other financial services is greatly reduced. Products are limited to one-time transactional financial services. This has resulted in limited products offered by service providers, as well as limited the ability for a sophisticated ecosystem to develop. Nevertheless, some providers are offering free cash-in/out services along with other features to mobile wallet customers to incentivize the usage of the wallet.

In non-OTC P2P markets as East Africa, almost 100% of agents offer cash-in and cash-out services (wallet based).

Credit will likely play a large role in the future in alluring customers to register for services.

This presents a huge opportunity for DFS. The Ministry of Finance has stressed the importance of government payment digitization.*

*While service providers in Pakistan focus on G2P payments, we believe agents may have mistaken the G2P term for cash-out services. This may be reflected in the number of agents that report they offer cash-out services, given that mobile wallet usage rates are low in Pakistan. Islamic donations are known as Zakaat. For definition on OTC, please refer to the Appendix.
We Need More Diverse Services Offered Over A Broader Geography

Actual Active Agent Outlets

These tills are in agent outlets that already have a till offering the same basic services via another provider, and are hence redundant.

There are less than 100,000 unique active agent outlets in Pakistan.

- 97,642, 48%
- 61,858, 30%
- 44,573, 22%

Active Outlets
Duplicative Active Tills
Dormant Tills

In December 2014, The SBP Newsletter reported 204,073 agents, but when we account for the 44,573 inactive tills, and the 61,858 tills in outlets that already have one, we calculate there are only 97,642 active agent outlets in Pakistan.

Each unique outlet offers the same basic services for different providers who each have set-up redundant training, monitoring and liquidity management systems to serve them.

*SBP uses a 90-day definition for active agents, while Helix uses a 30-day definition for calculating duplicative tills. Active Outlets represents the number of distinctive physical locations offering services, and Duplicative Active Tills are the additional tills that reside in those locations beyond the first one.
56% of agents who experienced robbery reported these incidents to providers and 82% found the provider “not at all helpful.” As a result of robbery, 34% of agents have set limits on the cash they hold.

64% agents who experienced fraud reported these incidents to providers and 72% of them found them “not at all helpful.” As a result of fraud, 23% of agents have set limits on the cash they hold.
Business Model Viability
Median Profits Are Lower Than Other Research Countries*

Overall, the lowest percentage of agents are not profitable as compared to ANA research countries (Bangladesh 4%, Kenya 17%, Uganda 14%, and Tanzania 5%).

69% of agents earn less than $100 per month; however, 77% of agents are non-dedicated indicating alternate revenue streams.

Median Monthly Profit (US$) 2014

<table>
<thead>
<tr>
<th>Country</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>66</td>
</tr>
<tr>
<td>Other Urban</td>
<td>74</td>
</tr>
<tr>
<td>Rural</td>
<td>49</td>
</tr>
<tr>
<td>Country Median</td>
<td>58</td>
</tr>
</tbody>
</table>

Median profits are higher than Bangladesh ($51) but are low compared to Kenya ($70), Tanzania ($95) and Uganda ($78).

* Profit is calculated by subtracting expenses from total earnings from all the providers served. Only agents that reported both earnings and expenses are included here. The sample size is 905 agents.
**Comparison Of Median Profits* By Existing Dimensions**

**Median Profit (US$)**

- **Dedicated Agent**: Median Profit = 57 US$
- **Non-Dedicated Agent**: Median Profit = 58 US$

**Median Profit (US$)**

- **Trained Agent**: Median Profit = 66 US$
- **Untrained Agent**: Median Profit = 49 US$

**Median Profit (US$)**

- **<1 year**: Median Profit = 43 US$
- **1 year**: Median Profit = 62 US$
- **2 year**: Median Profit = 74 US$
- **3+ year**: Median Profit = 82 US$

**Median Profit (US$)**

- **Exclusive Agent**: Median Profit = 29 US$
- **Non-Exclusive Agent**: Median Profit = 87 US$

*Profit is calculated by subtracting expenses from total earnings from all the providers served. Only agents that reported both earnings and expenses are included here.*

Mature agencies are making higher profits.

Non-exclusive agents have multiple revenue streams serving different providers. However, providers may also approach high performing non-exclusive agents.
With A Competitive OTC Market, Agent Revenues Are High

Median Revenues from all providers per month ($US current prices)

<table>
<thead>
<tr>
<th>Country</th>
<th>Median Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>$64</td>
</tr>
<tr>
<td>Other Urban</td>
<td>$74</td>
</tr>
<tr>
<td>Rural</td>
<td>$49</td>
</tr>
<tr>
<td>Country</td>
<td>$59</td>
</tr>
</tbody>
</table>

More than 90% of agents report being satisfied with their commissions.

GNI per capita (PPP)-US$403

Note: The source of Gross National Income (GNI) is the World Bank World Development Indicators.
Serving More Than One Provider Is A Significant Contributor to Monthly Revenue

The average number of providers served by non-exclusive agents is four in other urban areas while is it three in metro and rural areas.

55% of exclusive agents are in rural areas.

Countrywide, 58% of commissions come from serving one provider.

Dependence on a single provider is accentuated in the rural areas.

In urban areas, a majority of the income is due to non-exclusivity.

<table>
<thead>
<tr>
<th>Location</th>
<th>Median Revenue from all Providers per month ($US)</th>
<th>Median Revenue from a Single Provider per month ($US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>$64</td>
<td>$29</td>
</tr>
<tr>
<td>Other Urban</td>
<td>$74</td>
<td>$29</td>
</tr>
<tr>
<td>Rural</td>
<td>$49</td>
<td>$34</td>
</tr>
<tr>
<td>Country</td>
<td>$59</td>
<td>$34</td>
</tr>
</tbody>
</table>
Operating Expenses In Pakistan Are Much Lower Than ANA Countries

Not only are operating expenses low, but they remain the same across the geographies and for dedicated and non-dedicated agents. The lower costs can be attributed to doorstep liquidity delivered by providers, in addition to the majority of agents (77%) running parallel businesses.
Top Challenges To An Agent’s Business*

Though agents are profitable, high agent density and low median transactions per agent may be causing this perception.

Only 47% of agents called a call center one time in the last month.

More than half the agents interviewed reported that providers marketing hasn’t been very effective in educating customers about 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. Other include barriers such as poor marketing, insufficient cash held, and low client base. 17% of agents reported not facing any challenges.
Agents Predominantly Report Higher E-Float Needs Than Cash

Agents require more cash in rural areas and more e-float in urban: this reflects a remittance flow from urban to rural areas and may indicate G2P payments taking place in rural areas.

Even though cash-outs occur more than cash-ins, the requirement for e-float is slightly higher. Both metro and urban areas are driving this need; additionally agents may have established cash management systems through bill payment services or their parallel businesses for non-dedicated agents.
62% Of Agents Have Liquidity Delivered To Them

Only 24% of agents need to travel to rebalance. Additionally, for those that have their liquidity delivered to them, on average they receive a visit twice a week.

The majority of agents are not denying transactions because of liquidity issues. In a non-exclusive competitive OTC environment, agents may use a competitor’s platform to conduct transactions.

<table>
<thead>
<tr>
<th>Rebalancing Points</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Agents who always travel</td>
<td>24%</td>
</tr>
<tr>
<td>Mean travel time taken for rebalancing*</td>
<td>20 mins.</td>
</tr>
<tr>
<td>Mean distance travelled for rebalancing*</td>
<td>6 Km</td>
</tr>
<tr>
<td>Frequency of cash in per month (buying e-float)*</td>
<td>10</td>
</tr>
<tr>
<td>Frequency of cash-out in per month (selling e-float)*</td>
<td>10</td>
</tr>
</tbody>
</table>

Mean time and distance calculated only for those who reported travelling for rebalancing.

Multiple selection was allowed and one agent could choose more than one rebalancing point.

* These values are calculated as weighted means of the different methodologies participants reported (eg. bank branch, ATM, other agents).
Agents Top Barriers To Managing Their Liquidity

It will be important to analyse the frequency and magnitude of these fluctuations as demonstrated by this analytical framework.

Providers are now lending to merchants which does not require bank account transfers and are also offering IBFT* services where agents can use accounts of other banks.

Though only 3% of agents took out loans, all of them took the loan to obtain liquidity.

*Inter Bank Fund Transfer
Quality of Provider Support
The Quality Of Agent Support Is High, But There Are Targeted Areas For Improvement

Training:
62% of agents have received training with an average duration of two hours. This percentage is the lowest compared to the baselines taken in ANA research countries – Bangladesh (68%), Kenya (92%), Tanzania (79%), and Uganda (94%).

Almost all agents received training from their provider. In Pakistan, Business Development Officers (BDOs)—representatives from MNOs and Banks are responsible for training an agent, and 81% of agents are visited by a BDO.

Of those trained, only 21% agents have undergone a refresher training.

Operational Support:
76% of are visited, and of those visited, 25% are visited daily and 65% are visited at least weekly and 19% monthly, which indicates a good monitoring support model.

Nevertheless, the fact that a high number of agents do not receive refresher trainings can lead to a lack of understanding on products, processes, and systems. Additionally, untrained agents will make it more difficult for providers to offer a sophisticated product suite, as these products generally require an agent to understand the products.
Agent revenues on the outlet level are on par with other research countries on a PPP basis, and almost all agents are profitable.

Liquidity is brought to most agents’ doorstep, so agents are rebalancing often and not generally denying transactions due to lack of liquidity.

Approximately half of agents are in rural areas, showing the notable reach of the networks.

Agents are unconcerned about fraud in Pakistan compared to the other research countries.

While most agents have been operating for a year or less, they are optimistic, with 88% predicting they will be an agent in a year.
Networks must be more segmented, while some providers will want to focus on defending their top agents against competition, others will want to focus on identifying the best agents for registering customers, or offering more complex products.

Agency relationships must be deepened so that everyday is not a battle for their allegiance. Loyalty programmes, owned agent outlets, and extending credit to agents can be used to do this.

The redundancy must be reduced. Agencies are offering the same products in the same outlets, yet for all different providers with individual systems for training, monitoring, and liquidity management. Consolidation, partnerships and niche specialization need to become more prominent.

Transition from OTC will likely involve different agent demographics for registration, more alluring products to offer, and better trained agents to sell more complex products and help serve customers.
Appendix
## Appendix: Definitions

### Definitions

<table>
<thead>
<tr>
<th>Locations</th>
<th>Metro</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This is the definition of the Pakistan Bureau of Statistics’ self representative cities. These are cities with a population of more than 500,000 and includes the following: Karachi, Lahore, Rawalpindi, Faisalabad, Peshawar, Multan, Sialkot, Sargoda, Gujrawala, Multan, Bahawalpur, Sukkur, Hyderabad, and Quetta.</td>
</tr>
<tr>
<td>Other Urban</td>
<td>These are cities with a population of less than 500,000.</td>
</tr>
<tr>
<td>Exclusivity</td>
<td>Exclusive Agents</td>
</tr>
<tr>
<td></td>
<td>Agents who work for only one service provider.</td>
</tr>
<tr>
<td></td>
<td>Non-Exclusive Agents</td>
</tr>
<tr>
<td></td>
<td>Agents who work for more than one service provider.</td>
</tr>
<tr>
<td>Dedication</td>
<td>Dedicated Agents</td>
</tr>
<tr>
<td></td>
<td>Agents whose only income source is through digital financial services.</td>
</tr>
<tr>
<td></td>
<td>Non-Dedicated Agents</td>
</tr>
<tr>
<td></td>
<td>Agents who have other income sources in addition to digital financial services.</td>
</tr>
<tr>
<td>OTC</td>
<td>OTC P2P</td>
</tr>
<tr>
<td></td>
<td>These are Over the Counter transactions that are facilitated by the agent focusing on person to person transfer.</td>
</tr>
<tr>
<td></td>
<td>Bill Payment</td>
</tr>
<tr>
<td></td>
<td>These are Over the Counter transactions that are facilitated by the agent focusing on bill payment.</td>
</tr>
<tr>
<td>Till</td>
<td>The device used to carry out agent transactions, either using a mobile phone or a POS (Point of Sale) machine.</td>
</tr>
</tbody>
</table>
Thank You

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