DIGITAL FINANCIAL SERVICES ECOSYSTEM IN BIDI BIDI REFUGEE SETTLEMENT
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1.1 Project Background

World Food Programme (WFP) and the United Nations High Commission for Refugees (UNHCR) have made a strategic decision to transition from material aid support to refugees to cash based transfers. This is driven by the increasing cost of delivering food and material aid. Close to US$12,000,000 is spent monthly on food distribution. The decision is supported by research that shows that beneficiaries make smart spending decisions that mitigate against food insecurity.

It is upon this background that implementing partners DanChurchAid (DCA), Mercy Corps (MC) and World Vision (WV) are actively pursuing payments digitization implementation.

This document consists of a mapping of the six pillars of the DFS ecosystem in Bidibidi Refugee Settlement and Host Community. The objectives of the Digital Financial Services (DFS) mapping in Bidibidi were as follows.

1.2 Research Objectives

- To establish the financial lives of refugees and host community: what is their cash mobility ecosystem like and what are their financial coping mechanisms like?
- To establish if there are there financial products and services that would accelerate transition to sustainable livelihoods/income generation.
- To establish if there is a trust in the existing delivery of DFS by Financial Service Providers (FSPs). Are FSPs delivering the right products to the community? And what are the opportunities that exist for the private sector either as providers of financial services, produce off takers and other services.
- To establish the key barriers to accessing financial services channels at affordable costs and link them to broader financial services. Also, establish if any additional research and data is needed in the country to address the key barriers to financial services.
- To establish the type of capacity building at the regulatory level that is needed to engage with the policymakers to address the barriers.
- To establish the type of payment and financial infrastructure is needed to support digital payment innovation in Bidibidi Settlement and surrounding host community.
- To identify projects that can piloted to enhance digital payments.

Research Objectives
1.3 Research Methodology

The approach used was data centric with data being collected from all stakeholders in the digital financial services ecosystem. In addition to primary data collected from the field, we also tapped into expert opinion. Overall, the research process involved questionnaire formulation, data collection, analysis and documentation.

A total of six questionnaires (Focus groups, Policy & Regulation, Customer, Providers, Developmental Agencies, and Distribution) were designed for data collection.

- **Policy & Regulation**: Main target were institutions such as Uganda Communications Commission (UCC), Ministry of Finance, Planning and Economic Development (MoFPED), Bank of Uganda and Financial Sector Deepening Uganda (FSDU).
- **Customers**: Main target were refugees and the host community.
- **Providers**: Main target were providers of digital financial services operating in Bidibidi.
- **Development Agencies**: Target were developmental agencies operating within Bidibidi.
- **Distribution**: For the distribution pillar, the target were mobile money agents.
- **Focus Groups**: Main target were saving groups.

The data collection process took 11 days in Bidibidi Refugee settlement and host community. Additionally, data was collected from key policy and regulation stakeholders over a period of one week. Below is a summary of total responses collected from different stakeholders.
1.4 Current State of DFS Development in Uganda

Digital Financial Services (DFS) refers to the use of digital channels such as mobile phones, cards, computers, and tablets to deliver financial services. In Uganda, the term mobile money is widely associated with DFS because of widespread usage of mobile phones to access different financial services.

Mobile phone usage across the African continent has evolved from being merely a communication platform to include service delivery. The ability of mobile network operators and other stakeholders to innovatively find new uses for mobile phones has greatly changed the way people use mobile phones. Several digital financial services such as payments, credit, savings and insurance have been made possible due to innovations in mobile phone functionality.

Digital financial transactions carried out in Uganda are, among other platforms, carried out on the mobile money platform. Based on data from the Bank of Uganda Annual Supervision Report the number of registered mobile money accounts and value of transactions have been on an upward trajectory since mobile money was introduced in Uganda.

*Source: Bank of Uganda*
As identified by UNCDF’s MM4P Programme, Customers are a key pillar of a Digital Financial Services ecosystem. This chapter consists of an analysis of Users and Non-users of DFS within Bidibidi Refugee Settlement and Host Community. It analyses the livelihood of customers, their financial coping mechanisms, adoption and usage of DFS and barriers to accessing DFS.
KEY CUSTOMER CHARACTERISTICS IN BIDIBIDI REFUGEE SETTLEMENT

As part of the process of mapping out the DFS ecosystem in Bidibidi, key research objectives included establishing the financial lives of customers, their financial coping mechanisms, attitudes towards DFS delivery challenges and barriers faced when using DFS.

**CUSTOMER PROFILING**

- 50% Have primary level as the highest qualification
- 25% Of Women are into farming. A further 24% run small businesses
- 72% Have a monthly income of less than UGX 50,000 per month
- 38% Of Women not engaged in any profession versus 20% for men

**FINANCIAL COPING MECHANISMS**

- $68% Have no money left after paying for expenses
- 45% Of social payments recipients use it for school fees. 30% use it for food
- 38% Use cash-to-MM account to make social transfers
- 49% Are in saving groups. 64% of those who join do so to get loans

**DFS ADOPTION AND USE & CUSTOMER EXPERIENCES**

- 19% Use mobile money as a saving method. 36% own a cash box
- 47% Adopted mobile money in-order to be able to receive money
- 25% Use their mobile device for financial transactions
- 33% Charge personal fees after cash-in transactions against guidelines

**ATTITUDES TOWARDS DELIVERY OF DFS & BARRIERS TO ACCESSING FINANCIAL SERVICES**

- 75% Obtain assistance from MM agents in case of MM issues
- 50% Don’t own a mobile phone
- 72% Of women don’t own a mobile phone. Vs 28% of men
- 52% Are not registered with MM due to lack of registration docs
- 35% Experience network outage problems
2.1 Customer Profiling

**Education Level:** Majority of customers have low levels of formal education. Half of survey respondents have primary level of education as the highest qualification, another 19% have a secondary level education and 28% do not have any formal education.

**Customer Literacy:** Since there is no data on the level of literacy among customers of Bidibidi, the literacy level of South Sudan is used as proxy because most of the refugees in Bidibidi are South Sudanese. Based on data from the World Data Atlas, 56% of the youth in South Sudan are illiterate. Similarly, 89.10% of the elderly are illiterate. Additionally, customers are not completely knowledgeable when it comes to using DFS. For example, up to 46% of customers go to an agent to perform a basic activity such as buying airtime from their mobile money account.

**Income Levels:** Income levels in Bidibidi are mostly low with 72% of surveyed customers earning less than UGX 50,000 and another 14% earning between UGX 50,000 to 100,000 a month. Overall, a combined 86% of surveyed customers earn less than UGX 100,000 a month.
2.2 Financial Coping Mechanisms

**Savings:** Despite the low levels of income earned by most customers, there is a moderate savings culture in the region with 50% of customers indicating that they save. Of the customers who save, 32% of customers save less than 10% of their income and a third save 10% to 20% of their income.

Motivations for saving are mainly to cover basic needs ranging from medical needs, to education, and being able to cover emergency expenses.

**Social Remittances:** Furthermore, 40% of customers receive social remittances.

Forms of social transfers include cash, food, sanitary pads, soap, farming tools and seeds. Customers use social transfers for several purposes. 45% of recipients of social payments use the cash for school fees, other uses include; purchasing food (30%) and covering other basic needs (12%).

**Loans from SACCOs:** 51% of customers of are not in savings groups. Of those that are, the main service used is borrowing followed by sending or receiving remittances. It is important to note that though most people use their saving groups to borrow, the main activity of such groups is saving.
2.3 DFS Adoption and Use

**Usage of Mobile Phones:** Mobile phones in the area are predominantly used for making phone calls. The second most used function is financial transactions, followed by sending messages. The main financial transactions conducted by customers are cash in cash out transactions. 43% of customers indicated that they had conducted cash out transactions and 19% have conducted cash in transactions.

**Usage of Mobile Money:** 47% of customers are motivated to use mobile money to receive money. Other key drivers of adoption of Mobile Money include desire to start saving and to ensure safety of the money.

A significant proportion (45%) of customers within the refugee settlement have not used mobile money services before. A large majority of customers in Zone 1 have used mobile money services, however experience with mobile money in other zones is not as prevalent. As expected, experience with mobile money in the host community is also high. Experiences with mobile money are more prevalent in zone 1 because zone 1 is the first zone that was setup and has had the opportunity to develop faster.

**Reasons for Adoption of MM**
- Desire to start saving
- Safety of the money
- Receiving Money
- Sending Money
- Agency requested for account signing up
- Other Reasons For Use
- Saw others use

**Experience Using Mobile Money**

**Number of Responses**

<table>
<thead>
<tr>
<th>Zone</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1</td>
<td>36</td>
<td>8</td>
</tr>
<tr>
<td>Zone 2</td>
<td>90</td>
<td>23</td>
</tr>
<tr>
<td>Zone 3</td>
<td>70</td>
<td>16</td>
</tr>
<tr>
<td>Zone 4</td>
<td>49</td>
<td>8</td>
</tr>
<tr>
<td>Zone 5</td>
<td>81</td>
<td>27</td>
</tr>
<tr>
<td>Host</td>
<td>74</td>
<td>37</td>
</tr>
</tbody>
</table>

**Use of Mobile Phone**
- Financial Transactions
- Calls
- Messages
- Social Networking
- Internet Browsing
- Other Functions

**MM and DFS Utilized Before**
- Withdrawals
- Deposits
- Money Receipts
- Airtime Purchases
- Money Sending
- Bill Payments
- Money Transfers
- Saving Money
2.4 Customer Attitudes Towards Delivery and Familiarity with DFS

Familiarity with Transactions

<table>
<thead>
<tr>
<th>Familiarity with Transactions</th>
<th>No. of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airtime Purchases</td>
<td>149</td>
</tr>
<tr>
<td>P2P Transfers</td>
<td>146</td>
</tr>
<tr>
<td>Bill Payments</td>
<td>124</td>
</tr>
<tr>
<td>Attempted</td>
<td>5</td>
</tr>
<tr>
<td>Assisted</td>
<td>0</td>
</tr>
</tbody>
</table>

Familiarity with Mobile Money: A lot of customers (59%) are not able to conduct transactions on their own and enlist the help of Mobile Money agents or a relative to transact using mobile money. Customers are most familiar with airtime purchase transactions and least familiar with bill payments. This can be explained but the fact the practice of paying bills using mobile money is not widely adopted in Bidibidi refugee settlement and host community.

Extra Fees Charged by Agents: Despite mobile money guidelines indicating that agents should not charge any fees directly to customers, 33% of customers in Bidibidi have experienced agents asking for payment after cash-in transactions.

Primary Source of Help for Use of Mobile Money: Many customers in the area require assistance from agents to conduct transactions due to low literacy and phone literacy levels. Customers in the region typically do not make complaints or seek assistance from MNO customer service. Instead most customers (75%) seek assistance from mobile money agents. There is therefore need for agents in the region to have adequate training to deal with customer queries.

Trust in DFS: Focus group discussions revealed that customers in the area generally trust Digital Financial Services. However, due to registration issues, some people resort to using Ugandan Nationals' ID's which creates uncertainty with ownership of funds on mobile money accounts.

Challenges with Using DFS: Some of the problems experienced by customers include: technical issues with the service including network failures and service interruptions, failure to receive SMS receipt, sending money to wrong number and not being able to recover it, lack of knowledge on use of service, forgetting PIN, and insufficient funds at the agent’s location.

Extract of Customer Attitudes Towards DFS Delivery in Bidibidi
CASE STUDY: SAVING GROUPS AND ATTITUDES TOWARDS MOBILE MONEY

36% of customers use a savings group. Focus group discussions with savings groups revealed that savings groups also use informal saving methods like cash boxes. Annual savings in savings and lending groups ranges from UGX 150,000 to 1.6 Million.

Based on focus group discussions held with Village Savings and Loan Associations (VSLAs), cooperatives and other groups, funds are kept with a treasurer or in a safe box. Transactions are recorded using a mostly manual record keeping system. For example, the High Mission saving and loans group in zone 3 uses a stem marking approach. With this approach, if someone brings UGX 2,000 the stems are marked once; if UGX 4,000 is brought, the stems are marked twice.

Majority of savings and lending groups are however willing to adopt the use of mobile phones for their group activities but are limited by cost of mobile phones and access to agents. Mobile phones and features tailored to these groups are cited as changes that could increase adoption and use of mobile money. For example, during one of the interviews held, one of the group members asserted that if a product that showed an individual’s saving balance on their mobile phone was available, members would be willing to use digital solutions.

Further, one of the key things that stood out in the focus group discussions was a statement saying, “no matter the mechanism of saving used, most people understand why it is important to save.” Below is a summary of other insights gathered from a few of the groups interviewed using focus group discussions.

Iveta Longun, Female Saving Group in Zone 1
- Record books are kept of deposits made and credit issued.
- Only 30% of members own mobile phones, the rest of the membership is waiting for cheap phones from Nethope.
- When asked on what could prompt the group to use mobile money, a member said, “more group combination products should be made.”

Iveta Longun, Saving Group in Zone 2
- The group manages savings process through a record book and a security mechanism that involves dual control of the money box key and constantly changing the custodian of the money box.

Grace Farmers Saving Group in Zone 2
- The treasurer keeps funds along with the record book.
- “The ability for the members to see their cash balances on the phone” was quoted by a member as a reason that would encourage the group to use a digital wallet for group savings.
- Access to mobile phones would increase uptake and se of mobile money services.

Insights from saving groups
2.5 Barriers to Accessing Digital Financial Services

2.5.1 Agent Proximity

The main mode of transport is by foot which means that refugees walk long distances to find Digital Financial Services (DFS) stations such as Mobile Money booths or agent stations.

There are distinctions within the different zones of the settlement when it comes to accessing agents.

Customers in Zones 3 to 5 travel longer distances to reach an agent. This presents a challenge to adoption of mobile money since most customers must walk to the mobile money agent. Most of the people travelling long distances, such as more than two hours, move from a given zone to Yumbe town council because agents in the zone may not have enough liquidity to cover withdrawal and deposit needs. For example, in one of the interviews held with a customer in zone three, the customer stated that he spends about UGX 12,000 travelling from zone 3 to Yumbe town council using a makeshift taxi. However, on a boda-boda (motorcycle taxi), the cost of a round trip from zone 3 to Yumbe town council can go for about UGX 20,000.

Customers in zone 1 find it easier to access Mobile Money agents when compared to customers in other zones.

![Diagram showing Proximity to Agent and Time Spent Getting to an Agent]
### 2.5.2 Phone Ownership

Mobile phone penetration in the area is still low. Many customers in the Bidibidi (52%) do not own mobile phones, however a majority of those without phones still use mobile money services through an agent, relative, friend or neighbor’s phone. There is a wide gender disparity in phone ownership. For example, 56% of women do not own phones as compared to 28% of men. The primary reason for low mobile phone penetration is due to lack of enough money to afford a phone.

![Phone Ownership by Gender](chart)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Do Not Own Phone</th>
<th>Own Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>Male</td>
<td>28%</td>
<td>72%</td>
</tr>
</tbody>
</table>

**Barriers to Phone Ownership**

- No Need For One: 6%
- No Money for Phone: 35%
- Other Reason: 10%
- No money for airtime: 9%
- No one in household owns one: 6%

### 2.5.3 Other Challenges

Other challenges faced with usage of DFS include network outages, absence of agents at Mobile Money location and agent liquidity constraints.

![Mobile Money/DFS Experiences](chart)

<table>
<thead>
<tr>
<th>Experience</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile network or agent system was down</td>
<td>35%</td>
</tr>
<tr>
<td>Agent was absent</td>
<td>21%</td>
</tr>
<tr>
<td>Agent didn’t have enough cash or float</td>
<td>14%</td>
</tr>
<tr>
<td>Agent charges ineligible fees</td>
<td>7%</td>
</tr>
<tr>
<td>Security concerns at agent location</td>
<td>9%</td>
</tr>
</tbody>
</table>

Other challenges faced include network issues whereby the network or agent’s system is down and lack of sufficient float or cash to perform transactions. Agents typically close shop if they run out of cash or float.
As identified by UNCDF’s MM4P Programme, Distribution is a key pillar of a Digital Financial Services ecosystem. This chapter consists of an analysis of distributors within Bidibidi Refugee Settlement and Host Community. It analyses and profiles distributors, float and Liquity management, commissions, and distribution constraints and barriers.
KEY DISTRIBUTION CHARACTERISTICS IN BIDIBIDI REFUGEE SETTLEMENT

DISTRIBUTOR PROFILING

- 60% Mobile Money agents are in 18-25 age group
- 67% Of agents use capital of less than UGX 2M (EUR 440) to start up the business
- 82% Of mobile money agents receive training prior to commencing work
- 27% Of mobile money agents are women

FLOAT AND LIQUIDITY MANAGEMENT

- 37% Of agents start off the day with UGX 300,000 to UGX 500,000 (EUR 66 to EUR 110) in float
- 55% Of agents start off the day with UGX 1M to UGX 5M (EUR 220 to EUR 1100) in cash
- 55% Of agents rebalance float at least once a day
- 37% Of agents use fellow agents for float replenishment

MOBILE MONEY TRANSACTIONS AND COMMISSIONS

- 53% Mobile Money transactions are most frequent during morning hours
- 40% Of mobile money services offered are P2P transfer & easy load
- 60% Average monthly commission is between UGX 100,000 to UGX 300,000 (EUR 22 to EUR 66)
- 70% Of agents have seen a positive change in commissions from start-up

AGENCY BANKING, DISTRIBUTION CONSTRAINTS AND BARRIERS

- 33% Of mobile money agents have bank accounts
- 21% Of agents run out of float regularly
- 28% Of agents face network outage problems
- 73% Of agents face language barrier problems
Within Bidibidi refugee settlement and surrounding areas, the mobile money agent business is dominated by the young generation with up to 60% of agents being in the 18 – 25 age group and only a minority 7% being above 45 years. Furthermore, most of the people working as agents have an Ordinary Level certificate or lower and combined 66% of agents have either a primary level or O’Level certificate.

Closely allied with the ongoing discussion on agent profiles, up to 73% of surveyed agents are male while 27% are female. Most of these agents (47%) have been operating as agents for a period of one year, another 33% have been in the business for 2 years, the entire duration over which Bidibidi refugee camp has been open.

### Reasons given for becoming mobile money agents

- Need to generate money to meet family obligations e.g. school fees.
- Employment and income generating opportunity.
- There is a scarcity of agents in the area. Becoming an agent thus presents a business opportunity in an unsaturated market.

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**Reasons some agents gave for finding it easy to set up MM business**

- Process of setting up is mostly fast especially if an agent has all the requirements.
- It was fast and easy to set up.
- Relatively easy for one to become an agent even if they don’t own the business. Super-agent model makes it possible for this to happen.
- Presence of MNO dealers such as Nilecom who go to the settlement to recruit and train agents.

**Reasons some agents gave for finding it hard to set up MM business**

- Not enough capital.
- Hard to get a convenient place.
- Low customer base.
- Low volume of transactions.
- Difficulties with card processing.
3.2 Process of Becoming an Agent

Ease of Setting up Business: Overall, 47% of surveyed mobile money agents find it neither hard nor easy to set up a mobile money business, 33% find it hard and 20% find it easy.

Start Up Capital: Most people who start up a mobile money agent business do so with very little start-up capital. Of the surveyed agents, none started the business with capital above UGX 4M. Instead, up to 67% started with capital of less than UGX 2M while 33% started up with capital of UGX 2M to 4M. All surveyed agents quoted personal savings as the source of capital for starting up the mobile money business.

Besides the normal process of registering with a mobile money agent network, certain agents merely purchase an existing agent line from another agent and commence business. Below are general requirements:

- Four passport photos.
- Handwritten Local Council (LC) letter.
- A national identification card or refugee card.
- Acknowledgement form.

Requirements for becoming an Airtel money agent according to the REFASU (Airtel Distributor) General Manager in Yumbe

Additionally, prospective agents are usually given training with up to 87% of surveyed agents saying they received training prior to becoming an agent. Overall, the training is sufficient with up to 92% of trained agents saying the training received was adequate. However, up to 53% of surveyed agents are not monitored by mobile network operators. Based with interactions with these agents, only Airtel currently does the monitoring. With the nature of monitoring work done being as follows: assess progress of agent’s business, assess whether services are being provided, ask if there are any issues and check records.
3.3 Agent Capacity

Mobile money agents in Bidibidi and the host community operate at very low capacities when relative to agents in bigger towns. Overall, 37% of surveyed agents start off the day with UGX 300,000 to UGX 500,000 in float and 55% start off the day with UGX 1,000,000 to UGX 5,000,000 in cash. Agents start off the day with higher cash than float because as previously explained, cash out transactions are more popular than cash in transactions.

Average Beginning Float
- Less than 50,000: 9%
- 50,000 - 100,000: 27%
- 300,000 to 500,000: 27%
- 500,000 to 1,000,000: 37%
- 1,000,000 to 5,000,000: 9%

Average Beginning Cash
- Less than 50,000: 9%
- 50,000 - 100,000: 9%
- 300,000 to 500,000: 27%
- 500,000 to 1,000,000: 55%
- 1,000,000 to 5,000,000: 27%

3.4 Commissions

70% of surveyed mobile money agents asserted that since they started their business, commissions have been positive and improving. The main reason for this is the fact that transactions have been increasing.

Average Monthly Commission
- 100,000 to 300,000: 10%
- Above 1 Million: 20%
- 500,000 to 1,000,000: 60%
- 300,000 to 500,000: 10%

Change in Commission Since Start Up
- Constant: 70%
- Positive: 20%
- Negative: 10%
3.6 Liquidity Management

**Most agents replenish float from fellow agents.**

55% of surveyed agents find it necessary to replenish float daily.

**Channel for Float Replenishment**
- Fellow Agent: 36%
- REFASU or other MNO representative: 37%
- Other: 27%

**Frequency of Float Replenishment**
- Daily: 55%
- Weekly: 27%
- Monthly: 9%
- Bi Weekly: 9%

- 50% find the process more on the hard side – ie. 10% very hard, 40% hard,
- 30% find the process more on the moderate side -30% moderate
- 20% find the process more on the easy side. From the data: 10% easy, 10% very easy

**Channel for Rebalancing Float:**
Mobile Money agents replenish float through fellow agents, dealers and distributors working on behalf of MNOs other ways. The other ways in which float rebalancing is done is through letting float and cash transactions naturally balance out. For example, if an agent has cash and no float, they will only do deposits.

**Frequency of Rebalancing Float:**
Furthermore, since agents operate at very low capacities, they tend to rebalance float very regularly, from the survey, up to 55% of surveyed agents asserted that they replenish float daily. For Airtel, REFASU agents are supposed to deliver float to mobile money agents while for the case of MTN float rebalancing is mostly through inter agent transfers and last mile delivery by dealers such as Nilecom.

**Ease of Rebalancing Float:** To make the float rebalancing process much easier, agents in Bidibidi refugee settlement and the host community feel setting up bank branches or rebalancing centers would help.

To the left are agent perceptions on the float rebalancing process.
3.7 Mobile Money Services Offered

P2P and easy load are the most sought-after services from agent points.

Mobile money agents within Bidibidi refugee settlement and the host community offer all mobile money services. The most popular combination of transactions offered is person to person transfer and easy load (40%). A key thing to note is that all agents offer person to person transactions.

3.8 Distribution Constraints and Barriers

Running out of float and network outages are the most common challenges faced by agents.

There are several challenges faced by agents. The most predominant of which are network outages (28%) followed by running out of float (21%). Language barrier is another key challenge faced by mobile money agents with up to 73% of surveyed mobile money agents stating that they face language barriers. The language barrier is mostly caused by the fact that Yumbe District in which Bidibidi refugee camp is located is a diverse community with several languages being spoken by both the host community and refugees.

Also, the language barrier is made worse by the fact that refugees speak a language which the host community who make up the agent network do not speak.
As identified by UNCDF’s MM4P Programme, Products and Payments are a key pillar of a Digital Financial Services ecosystem. This chapter consists of an analysis of products and payments within Bidibidi Refugee Settlement and Host Community. It examines the different products most commonly used and looks at the most predominant types of payments: person to person, business to person, person to business and developmental agency to person.
KEY STATISTICS OF DFS PRODUCTS AND PAYMENTS IN BIDIDIBIDI

**PRODUCTS**

- **All**
  - Service providers provide airtime purchase and money transactions

- **All**
  - Service providers provide bill & utility payments and ATM banking

- **MTN**
  - Provides paying fees and taxes, MoKash and MoMoPay

- **Airtel**
  - Provides Airtel Weza which is a group wallet

**DEVELOPMENTAL AGENCY TO PERSON (D2P) AND GOVERNMENT TO PERSON (G2P) PAYMENTS**

- **$**
  - 62.5% of agencies are unable to meet demand for social payments

- **$**
  - 72% of social payments are made by cash

- **31%**
  - Of residents lack mobile phones hence cash is used

- **25%**
  - Of network disruptions affect digital solutions

**PERSON TO BUSINESS (P2B) AND PERSON TO PERSON (P2P) PAYMENTS**

- **77%**
  - Of businesses prefer to receive cash payments for goods and services

- **80%**
  - Of P2P transactions are cash out transactions

- **60%**
  - Of cash in transactions are for saving

- **40%**
  - Of cash out transactions are between UGX 200,000 to UGX 400,000 (EUR 44 to EUR 88)

**BUSINESS PAYMENTS, PAYMENT AND FINANCIAL INFRASTRUCTURE NEEDED TO SUPPORT DFS**

- **67%**
  - Of businesses do not use mobile money to make payments

- **43%**
  - Of businesses earn income of less than UGX 200,000 (EUR 44) monthly

- **79%**
  - Of businesses trust mobile money and e-wallets

- **67%**
  - Of businesses feel an increase in number of agents would increase usage of DFS
Currently, there are several development agencies operating in Bidibidi refugee settlement. Development programs have an average duration of 1 year. Renewal is dependent on effectiveness of the program and needs of the community. 72% of surveyed developmental agencies making social payments currently do so using cash while 28% use mobile money. Below is a summary of the technical cash working group cash activities in Bidibidi refugee settlement for select period.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Purpose</th>
<th>Type of activity</th>
<th>Cycle</th>
<th>Start date</th>
<th>End date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Against Hunger</td>
<td>Cash vouchers for seeds</td>
<td>e-Voucher</td>
<td>One off</td>
<td>Feb-18</td>
<td>Apr-18</td>
</tr>
<tr>
<td>Save the Children</td>
<td>Cash for work</td>
<td>Conditional cash transfer</td>
<td>One off</td>
<td>Nov-17</td>
<td>Dec-17</td>
</tr>
<tr>
<td>Save the Children</td>
<td>Microbusiness cash injection</td>
<td>Conditional cash transfer</td>
<td>One off</td>
<td>Jan-18</td>
<td>Jan-18</td>
</tr>
<tr>
<td>Norwegian Refugee Council</td>
<td>Cash transfers to PSNs to access food and basic household needs</td>
<td>Emergency Cash transfers to PSNs</td>
<td>Quarterly</td>
<td>Jan-18</td>
<td>Mar-18</td>
</tr>
<tr>
<td>Norwegian Refugee Council</td>
<td>Cash grants to small scale business groups</td>
<td>Cash grants transfer to small scale business groups/IGAs</td>
<td>One-Off</td>
<td>Jan-17</td>
<td>Mar-18</td>
</tr>
<tr>
<td>DanChurchAid</td>
<td>Asset protection grant for farmers</td>
<td>Asset protection grant</td>
<td>Monthly</td>
<td>Jan-18</td>
<td>Dec-18</td>
</tr>
<tr>
<td>DanChurchAid</td>
<td>Cash voucher for Food</td>
<td>e-Voucher</td>
<td>Monthly</td>
<td>Jan-18</td>
<td>Dec-18</td>
</tr>
<tr>
<td>DanChurchAid</td>
<td>Income generating Activities</td>
<td>Startup capital</td>
<td>One off</td>
<td>Jan-18</td>
<td>Dec-18</td>
</tr>
<tr>
<td>DanChurchAid</td>
<td>Agric inputs support to farmers</td>
<td>Seed and Tool Vouchers</td>
<td>Seasonal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DanChurchAid</td>
<td>Capacity Building of NGO staff on CTP</td>
<td>Trainings on CTP</td>
<td>One off</td>
<td>Jan-18</td>
<td>Feb-18</td>
</tr>
<tr>
<td>International Rescue Committee</td>
<td>Cash for Basic Needs and Business grants</td>
<td>Digital Cash transfer</td>
<td>Monthly</td>
<td>Jan-18</td>
<td>May-18</td>
</tr>
<tr>
<td>International Rescue Committee</td>
<td>Cash for Basic Needs</td>
<td>Digital Cash Transfer</td>
<td>Monthly</td>
<td>Mar-17</td>
<td>Jul-17</td>
</tr>
<tr>
<td>Mercy Corps</td>
<td>Cash voucher for ag-inputs</td>
<td>e-Voucher</td>
<td>One off</td>
<td>May-17</td>
<td>Nov-18</td>
</tr>
<tr>
<td>Mercy Corps</td>
<td>Cash voucher for tillage, ag-inputs, PHH materials</td>
<td>e-Voucher</td>
<td>One off</td>
<td>Jul-17</td>
<td>Apr-18</td>
</tr>
<tr>
<td>Samaritan’s Purse International Relief</td>
<td>Micro Enterprise development</td>
<td>Cash for work</td>
<td>One off</td>
<td>Jun-17</td>
<td>Mar-18</td>
</tr>
</tbody>
</table>

**Reasons Digital Solutions are Not Used**

- Network Disruptions: 25%
- Poor Customer Service: 6%
- Limited Liquidity: 6%
- Identification and Registration Problems: 7%
- Lack of mobile phone: 19%
- Low literacy: 31%

Development agencies who do not use digital solutions to make social payments are limited by the following reasons: network disruptions (25%) and lack of registration requirements (31%) for beneficiaries.
4.1 Products

The following table shows a summary of the main products offered by providers.

<table>
<thead>
<tr>
<th>Product</th>
<th>Features</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airtime Purchase (Easy Load)</td>
<td>Purchase airtime for self or someone else</td>
<td>All</td>
</tr>
<tr>
<td>Sending or Receiving Money</td>
<td>Send or receive money</td>
<td>All</td>
</tr>
<tr>
<td>Bill &amp; Utility Payments</td>
<td>Pay for utilities, fees, fuel etc.</td>
<td>All</td>
</tr>
<tr>
<td>ATM Banking</td>
<td>Withdraw Mobile Money from particular bank’s ATM</td>
<td>All</td>
</tr>
<tr>
<td>Fees and taxes</td>
<td>Pay KCCA fees and taxes</td>
<td>MTN</td>
</tr>
<tr>
<td>MoKash</td>
<td>Loans and saving</td>
<td>MTN</td>
</tr>
<tr>
<td>MoMo Pay</td>
<td>Allows customers to pay merchants at no cost to customer but at a fee to the merchant.</td>
<td>MTN</td>
</tr>
<tr>
<td>Airtel Weza</td>
<td>Group wallet</td>
<td>Airtel</td>
</tr>
</tbody>
</table>

An example of a product that can be used by saving groups in Airtel Weza

4.2 Payments

<table>
<thead>
<tr>
<th>Payees</th>
<th>Person</th>
<th>Government</th>
<th>Business</th>
<th>Developmental Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payers</td>
<td>D2P</td>
<td>D2G</td>
<td>D2B</td>
<td>D2D</td>
</tr>
<tr>
<td></td>
<td>G2P</td>
<td>G2G</td>
<td>G2B</td>
<td>G2D</td>
</tr>
<tr>
<td></td>
<td>P2P</td>
<td>P2G</td>
<td>P2B</td>
<td>P2D</td>
</tr>
</tbody>
</table>
4.2.2 Government to Person Payments

The Government of Uganda supported by Department for International Development and Irish Aid implements Senior Citizen Grant through the SAGE (Social Assistance through Grants for Empowerment) scheme. Under this scheme, beneficiaries receive UGX 50,000 every two months. Payments to beneficiaries are made through MTN Mobile Money.

4.2.3 Person to Business Payments

Most businesses prefer to receive cash payments for their goods or services. This is driven primarily by availability of cash.

77% of surveyed businesses prefer to be paid using cash.

- Option of bargaining is easier when cash payments are used.
- Convenience
- Supplier preference and trust in cash
- Cost effectiveness

Other reasons as to why businesses prefer to use cash for payments
4.2.4 Person to Person Payments: Cash out Transactions

A key observation from the distributor survey was that the value of cash out transactions are higher than that of cash in transactions. While most mobile money agents carry out cash in transactions of less than UGX 40,000, up to 40% of the same surveyed agents carry out cash out transactions of UGX 200,000 on average. This is explained by the fact that refugees in the area receive mobile money in their accounts from friends and family in South Sudan as well as Kampala. From our interactions with mobile money agents, agents do not have the capacity to manage high value demand for withdrawals due to limited cash availability.

4.2.5 Person to Person Payments: Cash in Transactions

Up to 80% of mobile money agents conduct more cash out transactions when compared to cash in transactions.

Cash in Transactions: Up to 60% of cash in transactions are for saving while 40% are for purposes of sending cash. Overall, the volumes of cash in transactions are low with none of the surveyed agents transacting more than UGX 200,000 on average. 27% of surveyed mobile money agents transit an average of UGX 10,000 – UGX 20,000 and 20% transact an average of UGX 30,000 to UGX 40,000.
4.2.5.1 Use of Digital Solutions for Business Payments

**Destination of Payments:** Overall, businesses in Bidibidi are aware of mobile money services with 67% of surveyed business owners using mobile money services. The use of mobile money services is usually for business related activities or personal use. Overall, 58% of business owners use mobile money services for both business and personal reasons while 42% of business owners use mobile money exclusively for business reasons.

**Reason Some Businesses do not use mobile money:** Of the surveyed business owners who do not use mobile money and other digital financial services to make payments, 31% do not use digital solutions because of transaction costs, 17% are limited due to identification and registration issues while 4% allude their non-usage due to liquidity issues in the area.

**Potential for Mobile money being used for digital payments:** Overall, business owners would be able to use mobile money and digital solutions because for the most part, they do have mobile phones. From the survey, 89% of business owners asserted that they do have mobile phones and a 75% are registered to both MTN and Airtel.

Closely allied to the ongoing discussion on possibility of digitalizing business-based transactions, it can be asserted that 79% of business owners do trust mobile money and E-wallet solutions.

A minority 19% of business owners do not trust digital financial services while 2% trust though not entirely. Some of the key reasons for this lack of trust include network disruptions, limited mobile money points, mobile money being expensive for small sums, lack of knowledge about mobile money and sim card issues.
### Business Profiling

**Business Ownership by gender:** Within the Bidibidi Refugee settlement, 68% of business are owned by males and 85% of businesses are young stage i.e. they have been in operation for about 0 to 2 years.

**Business Type:** Additionally, there is a diverse range of businesses operating within the camp and host community. While 13% of business are market vendors, the biggest percentage, i.e. 79% are diverse.

- Grains dealer
- Shopkeeper
- Drug shop
- Clothes vendor
- Veterinary shop
- Grain milling
- Charcoal trader
- Wholesale shop
- Grain miller
- Grinding mill
- Drug shop
- Shop keeper
- Wholesalers
- Bar business
- Variety supplies shop
- Soap making venture
- Bar and soap business
- Restaurant

Due to the financial status of refugees, up to 87% of businesses are financed by loans. Similarly, it is not easy to get financing for businesses with up to 59% of surveyed business owners saying it is hard to get a loan to finance a business. An additional 19% find it very hard and a further 22% find it fairly easy.

Furthermore, most of the businesses operating in Bidibidi are relatively small with 43% of businesses in the area generating monthly income of less than UGX 200,000 and 19% of businesses generating between UGX 200,000 to 400,000. This means a combined 62% of businesses earn UGX 400,000 or less a month.

The use of income earned is mostly distributed between reinvestment and personal needs. The level of reinvestment is mostly high with 41% of business owners reinvesting their income back into the business. An additional 47% of business owners use their income for satisfying basic needs and reinvestments.

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43% of the business community earn income of less than UGX 200,000.
As identified by UNCDF’s MM4P Programme, Infrastructure is a key pillar of a Digital Financial Services ecosystem. This chapter consists of an analysis of DFS infrastructure within Bidibidi Refugee Settlement and Host Community. It analyses network coverage, mobile money infrastructure and mobility infrastructure.
DFS INFRASTRUCTURE IN BIDIDIBIDI REFUGEE SETTLEMENT AND HOST COMMUNITY

ANALYSIS OF EXISTING INFRASTRUCTURE

Africell has set up another mobile tower in Imvepi, a location within proximity to zone 5

MTN was able to replace a mobile tower in Bidibidi with a permanent tower to provide mobile phone connectivity. MTN currently has two permanent sites providing connectivity to the settlement

Airtel has about seven permanent sites which provide connectivity to the settlement

3G network can be accessed within the settlement

Last mile delivery of float and cash to agent locations is made hard and costly due to the poor road network

KEY STATISTICAL HIGHLIGHTS

28% of surveyed mobile money agents quoted network outages as the biggest challenge faced

53% of mobile money agents do not face any challenges when navigating through the mobile money infrastructure

33% of agents find it hard to understand mobile money notifications. These are sent by the MNO in English; a language most rural people can’t read

DEVELOPMENTS NEEDED TO SUPPORT DFS INFRASTRUCTURE

There is need for more network towers to be put up in zone five. This is the largest zone most recent one to be set up

There is need to improve the road network in order to enhance last mile delivery of cash and float to agent locations

There is need for grid connections to encourage spike in economic activities and improvement in livelihood
Infrastructure

5.1 Network Coverage

28% of surveyed mobile money agents quoted network outages as the biggest challenge faced.

Instabilities in the mobile network is one of the biggest challenges faced by mobile money agents. Most often at times, a customer will go to a mobile money agent to conduct a transaction only to be told that there is no network. As can be seen in the chart on the left, biggest challenge faced by 28% of mobile money agents is network related.

In the event there is no mobile money network the common practice is for agents to close their shop and go home for the day.

Several mobile network operators have taken the initiative to improve network connectivity in and around Bidibidi. According to Relief Web, MTN was able to replace a mobile tower in Bidibidi with a permanent tower to provide mobile phone connectivity. This has gone a long way in improving the MTN network connection in the area. According to the survey on which this document is based, MTN is currently the most common network used in the area.

Closely allied to the above discussion, Africell has set up another mobile tower in Imvepi, a location within proximity to zone 5. This has similarly played a big role in boosting phone reception. Though Africell money is hardly present in the area, several people use Africell for call services.

5.2 Mobile Money Infrastructure

33% of agents find it hard to understand mobile money notifications. These are sent by the MNO in English; a language most rural people can’t read.

Overall, agents can offer day to day mobile money services such as purchase of easy load for a customer, cash in and cash out transactions. A few of the agents, i.e. 13% said they found it hard to make bill payments on behalf of customers.

Furthermore, it can be said that the mobile money platform is mostly easy to use. Based on the data, mobile money agents are mostly comfortable with interacting with the mobile money platform with up to 53% of surveyed agents saying they do not face any technology specific challenges. The key challenge faced by up to 33% of agents is understanding notifications sent by the mobile network provider.
5.3 Mobility Infrastructure

Bidibidi Refugee Settlement, which covers about 250 square kilometres of the eastern half of Yumbe district in Northern West Nile is predominantly rural with very limited development.

Field visits to the settlement brought to light the fact that there are fewer mobile money agents in zones 4 and 5. Since zone 5 is wide and Airtel and MTN agents are mostly present at the refugee reception centre, accessing agents is difficult for most people. The main mode of transport is by foot which means that refugees walk long distances to find DFS stations.

Overall MTN and Airtel have two and five permanent sites, respectively, that deliver 3G network to the settlement.

Further, distributors such as REFASU who usually do last mile delivery to mobile money agents find it hard to navigate the predominantly murram road network. The situation is made worse during rainy stations as motorbikes used for last mile delivery find it hard to navigate through the muddy and wet roads.

Last mile delivery of float and cash to agent locations is made hard and costly due to the poor road network.
As identified by UNCDF's MM4P Programme, Providers is a key pillar of a Digital Financial Services ecosystem. This chapter consists of providers operating within Bidibidi Refugee Settlement and Host Community. Focus is put on analysis of existing business models of providers, challenges and barriers and nature of partnerships with banks, if any.
MOBILE MONEY PROVIDERS IN BIDIBIDI REFUGEE SETTLEMENT AND HOST COMMUNITY

**MAIN PROVIDERS**

- **30%** Of surveyed customers use Airtel only
- **45%** Of surveyed customers use MTN only
- **23%** Of surveyed customers use a combination of MTN & Airtel

**PROVIDER BUSINESS MODELS**

- **MTN** extends its services through dealers and master agents like Nilecom and Chims
- **Nilecom** employs agents who it pays a salary. Agent commissions are paid directly to Nilecom
- **Airtel** extends its services through the use of REFASU, a regional distributor for West Nile region
- **REFASU** earns revenues from servicing Airtel money agents

**BARRIERS AND CHALLENGES**

- Small customer base
- Language barrier
- Poor road network
- Poor mobile network

**CAPACITY BUILDING NEEDS**

- Setting up localized rebalancing centres to enhance agent liquidity management
- Expanding agent network especially in zone 5 to enhance customer accessibility to mobile money services
- Credit services to agents to support working capital needs as well as increase operational capacity
6.1 Provider Business Model

Revenue streams for mobile network providers in the area include mobile money services, airtime sales, data, voice, top-ups, and messaging services. Key drivers of revenue for mobile money services is growth in active customers and growth in transactions per customer.

To provide mobile money services, regional distributors and dealers act as intermediaries between the MNO and customers, there are different agent models that a given MNO can adopt in its mobile money service. The Matric Hierarchy Model involves the MNO directly appointing transaction agents as well as appointing master agents to assist with the process of agent recruitment. The master agent model on the other hand involves the MNO selecting and training a network of master agents who in turn oversee recruitment of transaction agents.

As part of their core distribution strategy, Airtel creates geographical territories (East, Central, North and West) for effective service delivery. REFASU handles distribution to West Nile Region acting in a similar manner to master agent handling marketing, float management and recruitment & training of agents.

MTN has a similar strategy involving the use of dealers and master agents such as Nilecom to handle service delivery in the area.

<table>
<thead>
<tr>
<th>Architect</th>
<th>Value Chain Element</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deposit Holder</td>
<td>E-money issuer</td>
</tr>
<tr>
<td>MTN</td>
<td>Stanbic Bank</td>
<td>Banks in nearby towns and dealers such as Nilecom and Chims</td>
</tr>
<tr>
<td>Airtel</td>
<td>REFASU agents</td>
<td>REFASU</td>
</tr>
</tbody>
</table>

For a distributor such as REFASU, revenue streams is twofold, the first is a percentage received on the cash and float value given out. The second is a percentage received from servicing agents with cash and float. For example, if REFASU serviced at least 80% of the agents in Yumbe, they earn an upper tier of 3% of the commission made by agents. Nilecom on the other hand has its own network of agents, agent commissions are paid directly to Nilecom and agents receive a salary.
MTN, Airtel and Africell are the predominant providers in the area though Africell money hardly has any presence.

6.2 Main Providers

Within Bidibidi, the only evident providers of mobile money are MTN and Airtel. Though Africell is present in the area, key focus is on voice revenue as opposed to mobile money.

According to the Bank of Uganda Mobile Money Guidelines 2013, mobile money service providers and other persons are not supposed to engage in anti-competitive practices, contracts, arrangements or understandings that would be likely to substantially inhibit competition in the market. As such, mobile money agents may choose to double as both MTN and Airtel money agents.

6.3 Barriers and Challenges

- Offering digital financial services in a Bidibidi presents a challenge due to the remote and rural nature of the area.
- Providers operating in the region find it hard to break even because of the limited revenues and high operational costs. The active customer base is small, this issue is compounded by low volume of transactions.
- The population has low literacy levels which hinders adoption and use of mobile money. Additionally, mobile phone penetration is still relatively low in this area due to low incomes. This is also exacerbated by language barrier issues.
- Float and liquidity management presents a challenge due to distance from re-balancing points and high transport costs. For example, REFASU agents personally deliver float and cash to agent locations an average of two times a day for every agent. This is very much of a challenge because agents are in very remote areas and most often at times sparsely populated areas. The issue is exacerbated during the wet season when roads are almost impassable. The option of providing float on credit is not currently pursued due to mistrust between REFASU and agents. This is because of the risk of agents not paying for float are high.
- Providers are limited by network & technical difficulties.

Challenges and barriers faced by mobile money providers in Bidibidi
As identified by UNCDF’s MM4P Programme, Policy & Regulation is a key pillar of a Digital Financial Services ecosystem. This chapter an insight into the key players in Uganda’s DFS Ecosystem, the roles they play and the underlying regulation governing mobile money transactions in the country.
CASE STUDY: POLICY & REGULATION AND THE DFS ECOYSTEM IN BIDIBIDI

Overview of The Current Regulatory Framework Governing Mobile Money in Uganda

**Governing Regulatory Framework:** Bank of Uganda (BoU) has set up regulatory guidelines to aid operation of the Mobile Money and Mobile Banking network under the Bank of Uganda Mobile Money Guidelines, 2013. It is important to note that these are just guidelines and they are not legally binding. DFS will be regulated under the National Payments Act which is still a Bill.

However, there are recent developments in the regulatory framework, according to a source at BoU, The National Payments Bill has gone through the policy stage at Cabinet and has been sent to the First Parliamentary Council. There is still some time before it hits the floor of parliament for discussion. Mobile Money Guidelines will form the regulations that will follow the Bill once it becomes an Act. The regulations will be prepared by BoU.

**Recent Developments in KYC:** Know Your Customer regulations present a challenge in increasing customer adoption of mobile money services. For one to be able to register for mobile money, they have to use a National ID card, the registration status of the user is verified by the MNO through a user’s National Identification Number (NIN). In the past, refugees found it hard to register as mobile money agents because of stringent KYCs. Currently, a refugee card is sufficient to ensure registration though from field interactions, not all refugees have refugee cards. However, OPM is currently undertaking a nationwide verification process that is scheduled to end in September 2018.

**Shift from Scratch Cards to Top Ups for Airtime:** UCC is pushing for a shift from using airtime scratch cards to airtime being purchased through a mobile money account. If the move is proven to be successful, there is bound to be an increase in adoption and use of mobile money.

**Tax on Mobile Money Transactions:** According to the tax proposals in the Excise Duty (Amendment) Act 2018, there will be a tax charge of 1% on the transaction value of mobile money transactions i.e. cash out, payments and cash in transactions. This proposed tax applies every time someone carries out a transaction using mobile money. This proposed tax is likely to negatively impact on mobile money usage as it will push transaction charges up.

Development agencies disbursing cash through mobile money will do so at a higher cost. Similarly, beneficiaries will cash out their money at a higher cost.

**Capacity Building Needed at The Regulatory Level to Support the DFS Ecosystem**

- There are no established requirements regarding utilizing systems capable of being interoperable with other payment systems in the country and internationally. This makes money transfers harder for refugees especially to and from relatives in country of origin. There is need for the national payments bill to push for interoperability.
- There is need for a national payments policy that puts emphasis on digital financial services literacy.
- There is need to push for MNOs to customize the mobile money platform in all local languages. This would ensure easier interaction for mostly rural agents.
- There is need to push for greater collaborations between development agencies and MNOs for interventions to be delivered digitally.
- There is need to push for experience sharing of lessons learnt from other refugee camps to development agencies.
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About UNCDF and MM4P
The UN Capital Development Fund (UNCDF) makes public and private finance work for the poor in the world’s 47 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.

MM4P (Mobile Money for the Poor) is working intently with banks, mobile network operators, regulators and users of DFS in challenging markets to help reach millions of additional customers who are currently financially excluded. In doing so, MM4P hopes to prove that these services can be provided responsibly, at a reasonable cost, by sustainable institutions in a well-regulated environment. MM4P uses a theory of change approach to DFS development, which focuses on making shifts between phases of market development, moving from Inception to Start-Up to Expansion and eventually to a mature market known as Consolidation. Through each phase, MM4P considers the entire DFS ecosystem. This means MM4P plans activities at the levels of Policy & Regulation, Infrastructure, Providers, Distribution, High Volume and Customers to improve market conditions and facilitate shifts.

About DCA
DanChurchAid (DCA) is one of the about 25 humanitarian organisations that assist the UN system in Bidibidi. DCA works closely with partner organisations and government structures at different levels, while also doing direct/self-implementation in our humanitarian response to the South Sudanese refugee influx.

About Asigma Advisory
Asigma Advisory is a management and financial advisory firm with a niche in using data analytics to offer business strategy insights. Data is a core pillar of work at Asigma. Asigma develops locally adaptable business strategies for organisations by leveraging their operational experience, and expertise in data analytics and business intelligence integration.
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