

Assessment of Transaction Pools  
For Digital Financial Services Sector in Ethiopia

Report prepared for Enterprise Partners

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## Introduction

To implement the assignment *Assessment of Transaction Pools for Digital Financial Services Sector in Ethiopia* Enterprise Partners commissioned a team of researchers from L-IFT. The field work for the assignment took place from early January until mid-June 2017. This document is the final report and serves as the conclusion of the assignment.

### Organisation of the report

The report consists of seven chapters and several annexes that can be accessed online. The report starts with the Executive Summary. Then the background information of the assignment is presented. Chapter 3 concisely presents the methodology. Chapter 4 presents the findings from the field research. Chapter 5 presents the conclusions and chapter 6 the recommendations. Subsequent portion of the report include several annexes, which provide more detailed data and findings.

### Acknowledgements

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## Acronyms

AEMFI	Association of Ethiopian MicroFinance Institutions	M&E	Monitoring and Evaluation
API	Application Programme Interfaces	MC	MasterCard (Worldwide)
ATA	Agricultural Transformation Agency	MCF	MasterCard Foundation
ATM	Automated Teller Machine	MCIT	Ministry of Communication Information Technology
B2P	Business-to-Person (payments)	MFI	Microfinance Institution
BB	Branchless Banking	MFS	Mobile Financial Services
BMGF	Bill and Melinda Gates Foundation	MIS	Management Information Systems
BTCA	Better than Cash Alliance	MM	Mobile Money
CBE	Commercial Bank of Ethiopia	MM4P	Mobile Money for the Poor
CBS	Core Banking System	MNO	Mobile Network Operator
CGAP	Consultative Group to Assist the Poor	MOFEC	Ministry of Finance and Economic Cooperation
CICO	Cash In / Cash Out	MOU	Memorandum Of Understanding
COP	Community of Practice	NBE	National Bank of Ethiopia
DAG	Donor Assistance Group	NFIC	National Financial Inclusion Council
DC/DR	Disaster Centre / Disaster Recovery	NFIS	National Financial Inclusion Strategy
DFID	Department For International Development	OTC	Over The Counter
DFS	Digital Financial Service	P2P	Person-to-Person (transfer)
EIB	European Investment Bank	P2G	Person-to-Government
EIFTRI	Ethiopian Inclusive Finance Training and Research Institute	POS	Electronic Funds Transfer/Point of Sale Device
e-PSNP	Electronic PSNP	PPP	Public Private Partnership
EOI	Expression of Interest	PSNP	Productivity Safety Net Programme
ETB	Ethiopian Birr	PSP	Payment Service Provider
EU	European Union	PSS	Premier Switch Solutions
FCA	Federal Cooperative Agency	R&D	Research and Development
FMCG	Fast Moving Consumer Goods	RFS	Rural Financial Services
FI	Financial Inclusion	RUFIP	Rural Financial Intermediation Programme
		SACCOS	Savings and Credit Cooperatives



FIC	Financial Inclusion Council	SHF	Small Holder Farmer
FIs	Financial Institutions	SIDA	Swedish International Development Agency
FSP	Financial Service Provider	TA	Technical Assistance
G2P	Government-to-Person (payments)	TSP	Technology Services Providers
GDP	Gross Domestic Product	UN	United Nations
GSMA	GSM Association	UNCDF	UN Capital Development Fund
GTP1	Growth and Transformation Plan One	UNDP	United Nations Development Programme
GTP2	Growth and Transformation Plan Two	UPSNP	Urban Productivity Safety Net Programme
IFAD	International Fund for Agriculture and Development	USAID	U.S. Agency for International Development
IFC	International Finance Corporation	VAS	Value Added Services
ILO	International Labor Organization	VCA	Value Chain Analysis
KYC	Know Your Customer	WB	World Bank
LDC	Least Developed Country	WFP	World Food Programme

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## Terminology

Terminology in this report uses the following terms. They primarily follow the definitions used by the Digital Frontiers Institute. Those marked with \* are from “How To Succeed In Your Digital Journey: A Series Of Toolkits For Financial Service Providers” which was developed by UNCDF and PHB Academy.

\*AGENCY BANKING - Clients can transact on their mobile wallet and FI account either directly themselves or be assisted by a third party (e.g: agent). Note that deposits (cash in) and withdrawals (cash out) require an agent as intermediary.

AGENT - An authorized representative of a financial institution, often a retail store or retail chain, which offers cash in and cash out (and sometimes account registration) services to clients of that financial institution.

\*ALTERNATIVE DELIVERY CHANNELS - Comprises new distribution channels that have developed over the past 10-15 years: internet banking services, mobile banking services, agency banking services (as opposed to traditional distribution channels such as brick & mortar and ATMs).

B2B Business to business, a category of payments between businesses.

B2P (or B2C) - Business to person/consumer, a category of payments whereby businesses pay individuals, for instance, wages.

CICO (CASH IN CASH OUT) - Usually used to refer to an agent who accepts deposits and withdraws from clients of a financial institution.

\*CORE BANKING SYSTEM (CBS) - A core banking system is the back-end data processing application/software for processing all transactions that have occurred during the day and posting updated data on account balances (source: Gartnera).

DIGITAL FINANCIAL SERVICE - The broad range of financial services accessed and delivered through digital channels, including payments, credit, savings, remittances and insurance. The digital financial services (DFS) concept includes mobile financial services (MFS). (Source: afi-global.org)

DIGITAL MONEY A form of money in which there is no physical representation such as notes or coins; this broad term would include bank money, e-money as well as cryptocurrency.

ELECTRONIC MONEY (OR EMONEY) Value stored electronically which is accepted by users other than the issuer.

FINANCIAL INCLUSION A state in which households and businesses have access to and can effectively use appropriate financial services (CGAP).

\*FINANCIAL SERVICE PROVIDERS (FSPs) -Comprises banks, MNOs, and financial institutions providing financial services to clients.

\*FLOAT - The balance of e-money, or physical cash, or money in a bank account that an agent can immediately access to meet customer demands to purchase (cash out) or sell (cash in) electronic money. (Source: CGAP, 2016).

G2P Government to person payments, a category which includes social transfers, social pensions and salaries to civil servants.

KYC (KNOW YOUR CUSTOMER) A set of rules and procedures which ensure that a financial institution understands and monitors the transaction profile of its customers over time for suspicious patterns.

\*MANAGEMENT INFORMATION SYSTEM (MIS) - A MIS is the entire back office system, including portfolio management, and reporting. It is broader than CBS, which is for capturing and processing the data. As described by World Bank, a MIS is a system that helps management make, carry out and control decisions. It captures and stores data, processes data to produce meaningful and relevant reports, and supports operations by enforcing defined processes and providing an audit trail. (Source: CGAP, 2012b).

\*MOBILE BANKING - We define it as financial transactions performed via mobile technologies by the client him/herself, directly on the client's Financial Institution account (eg: account balance check, loan reimbursement, etc). Note that deposits (cash in) and withdrawals (cash out) still require an agent as intermediary.

\*MOBILE FINANCIAL SERVICES (MFS) - Refers to financial services provided to clients through alternative distribution channels (mobile, internet, agents) that have developed over the past 10-15 years. Refers to financial services provided to clients through mobile phones and mobile devices (eg: tablets). The term is gradually being replaced with DFS, which is broader and covers other distribution channels

\*MOBILE NETWORK OPERATOR (MNO) - A company that has a government-issued license to provide telecommunications services through mobile devices. Mobile penetration rate is measured by the number of SIMs in circulation as a percentage of the total national population number. (Source: CGAP, 2016)

MOKASH/DIGITAL SAVINGS AND CREDIT - One of the Use Cases explored in this report is Digital Savings and Credit. This is a mechanism through which customers can sign up for a bank savings account through their mobile wallet. They can apply for small, short-term loans through their mobile phone. Approval or rejection of these loans is instantaneously. The first large-scale example is M-Shwari of M-Pesa in Kenya. However, in this report we often refer to 'MoKash', which is practically the same as M-Shwari but offered in Uganda and rolled out recently (see [annex 16](#) "Digital savings and loans" for further details of these products).

NETWORK EFFECT (also called network externality or demand-side economies of scale) is the effect described in economics and business that one user of a good or service has on the value of that product to others. When a network effect is present, the value of a product or service is dependent on the number of others using it.



**\*OVER-THE-COUNTER (OTC) TRANSACTIONS** An OTC transaction occurs when clients hand cash to or receive cash from agents, who execute transfers electronically on behalf of senders and receivers. In such transactions, clients do not need to have their own e-wallets. (Source: CGAP, 2016)

**\*POINT OF SALES (POS)** A payment terminal, also known as a Point Of Sale terminal, credit card terminal, or Electronic Funds Transfer is a device which interfaces with payment cards to make electronic funds transfers.

**P2P** Person to person, a category of payments between individuals, which would include remittances.

**PAYMENT USE CASE** - A description of an individual payment that identifies the payment's store of value, the payment instrument used, and the channel through which payment instructions are issued.

**PROFILE** In this report the term 'Profile' is used in the sense of a group of people with mostly the same circumstances and where many characteristics, needs and pain points are similar. 'Profile' in customer centric design is often named 'Persona' but that term refers to even more homogeneous groups of people.

**REMITTANCE** - A category of payment instruction usually used to transfer funds P2P; may be international or local.

**SMS (SHORT MESSAGE SERVICE)** - A store-and-forward mobile data protocol used to exchange messages of less than a defined number of characters; also known as text message.

**USE CASE** - A practical application of digital finance that solves a pain point for those using it. Use cases can be simple or advanced and very specific. An example of a simple 'Use Case' is a digital payment over distance for solving pain points around remittance payments.

**USSD Unstructured Supplementary Services Data:** a data-only, session-based, person-to-computer, 2G mobile data channel which is sometimes used to carry mobile payment instructions.

## 1. Executive Summary

The assignment, *Assessment of Transaction Pools for Digital Financial Services Sector in Ethiopia*, investigated current and potential Digital Financial Services transaction volumes and values through a primary potential users research with a view to recommend how to stimulate uptake and scaling of Digital Financial Services. The research investigated “profiles” (population segments). The profiles were interviewed about their current transactions and which transactions are most likely to convert to digital.

### 1.1. Methodology

The research followed a qualitative experimental research methodology. Throughout four months the researchers interacted repeatedly with a small number of representatives for each of the five selected profiles. While the first interview was a structured questionnaire as well as a discussion, towards the third and fourth interaction scenario discussions took place and experiments were implemented of opening mobile money and sending and receiving with mobile money.

### 1.2. Findings from profiles

The primary research was conducted on five profiles: garment factory workers, smallholder farmers, university students, electronic Productive Safety Net Programme (PSNP) beneficiaries, and rural and urban merchants. It resulted in the following insights:

#### 1.2.1. Income features

The five profiles received income varying from 118 ETB to 26,667 ETB per month with an average monthly income of 639 ETB for ePSNP recipients to 10,500 ETB for merchants. A number of them received their income on a bank-account (three out of five profiles). Income arrives monthly (or less frequently) meaning that the profiles studied access their income through relatively large lump-sums rather than frequent small amounts.

#### 1.2.2. Expenditure features

The three main expenditures were a) food at home, b) clothes and shoes, c) transport. The expenditures of all profiles took place in cash, meaning that all the bank-account income was converted to cash before spending. Much of the expenditures take place in small amounts but high volumes. For instance, sugar is bought by the spoonful, literally, on a daily basis.

#### 1.2.3. Financial inclusion

A large portion of the selected profiles had bank-accounts<sup>1</sup> and used their accounts regularly for receiving salary or cash transfers. Most profiles withdrew all income from their bank-accounts as soon as it arrived. Some then deposited some of the savings in a separate

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<sup>1</sup> This high level of financial inclusion was due to the profiles chosen and the respondent selection. It does not reflect the Ethiopian population.

account which they considered more private. The five profiles leave very modest deposits in the financial system, despite having a bank-account at their disposal.

#### 1.2.4. Pain points

The main pain points were:

- Financial Services were not currently deemed “reliable”. This was partly due to technology failures, and which resulted in lack of trust in the financial institutions.
- Distance to access financial services is currently high which results in high transaction costs despite free services and time usage.
- Lack of privacy in current cash based transactions.

#### 1.2.5. Price acceptance

Price of the current offer of financial services is not experienced as a major pain point but all profiles experienced substantial costs due to other elements such as travel costs, time spent and inconvenience and would therefore accept higher prices for good alternatives that resolve these costs and inconveniences. High-income people may be used to very low prices for financial services and may not be prepared to pay (e.g. students). Low-income people are used to high prices and are consequently prepared to pay high prices for a good digital service. As a result, the low-income profiles would adopt DFS at prices higher than the current offer.

#### 1.2.6. Use cases / product development

The use cases that look most promising are:

- Digital savings and loans services (a product like M-Shwari in Kenya or MoKash in Uganda) (see [Annex 16](#) “Digital savings and loans” for details on MoKash)
- Transferring money over distance (a P2P transfer product) without having to go to a town / bank branch to Cash In / Cash out
- Sending programmed payments - sender deposits periodic lump sum and the receiver is credited weekly fixed amounts, e.g. for children boarding in secondary school

#### 1.2.7. Studied profiles have appetite for DFS

The following matrix summarizes the DFS possibilities per the studied profiles:

Profile	Interest in taking up MM	Economic activity	Currently excluded	Willing to pay	Financial & technology literacy	Top use cases	Score
Garment factory workers	1	1.5	1	1.5	2	P2P at distance via mobile wallet MoKash Saving with interest but no inconvenience	7
Small holder	2	1.5	2	2	0	P2P at distance via mobile wallet MoKash Payments for agri produce	7.5

farmers						Programmed payments (bulk payment when sold harvest but weekly payments to children away from home)	
Students	1	2 (later)	1	0	2	MoKash Programmed disbursement remittances Receiving remittances	6
ePSNP	2	0	2	2	0	Buying assets on credit, paid off with future PSNP payment Using existing electronic payment to save independently and confidentially Airtime payments	6
Merchants	2	2	1	1	2	Becoming an agent and offering complementary products to clients (domestic remittances) Option to open CICO services Record system for credit to customers Automatic collection of rent for letting out rooms Digital stock keeping app, also to check on staff	8

Colour-code: Dark-green = good for DFS, Orange = reasonable for DFS, Red = Unsuitable for DFS, Lighter green: between reasonable and good, (higher score is better)

### 1.2.8. Expected drivers for DFS:

The primary drivers for DFS are not the same as in other countries which often focus on security. In Ethiopia the main messages which are communicated, should focus around:

- a. Reliable
- b. Convenience:
  - Proximity / accessibility
  - Opening hours / convenience
- c. Privacy

### 1.3. Conclusions

- Ethiopia's DFS ecosystem development differs in a number of aspects from other countries in the region, and Ethiopia is therefore expected to follow its own path to set up and grow digital financial services.
- The five profiles studied for this assignment showed good potential for digital financial services. The current transaction pools that were found to take place feature a number of characteristics and pain points which make several of them suitable for switching to digital financial services.
- The main pain points as well as appetite for products were comparable across the profiles studied.

- If appropriate and reliable services will be offered to end users, these may develop deep and broad usage. If the offer is unreliable or inappropriate little uptake is expected.
- Price acceptance is quite high, despite the current low prices, particularly for low-income people.
- Digital savings could be the driver of DFS adoption as well as the anchor product for other DFS services.
- Building trust will be a *sine qua non* for successful DFS.
- Adoption will depend on communities wanting adoption.

#### 1.4. Recommendations

The Assessment of Transaction Pools study, culminates with the following recommendations for Financial Service Providers:

1. Develop an **Ethiopian style Digital Financial Services**. Ethiopia should find its own way as its situation is distinct from existing countries with scaled DFS.
2. Offer a **suite of services** from the beginning. Rather than build DFS on a single product, Ethiopia would best develop comprehensive DFS eco-systems with multiple quality products offered along-side from the beginning. One of the immediate products that need to be developed a digital savings, as this has appeal for users and is a driver for banks.
3. **Cashless kebeles** Work in geographic clusters. Avoid costly country-wide agent networks with low usage. Instead ensure that in local economies most of the population take up the services and use services for both receiving, sending, paying and being paid. Work through cashless islands, probably the kebeles are best units.
4. **Focus on low-income customers** as these are currently served inadequately and they are willing to pay substantial fees if receiving quality service that is reliable.
5. **Merchants are both a channel and customers**. To achieve buy-in from merchants treat them like customers and ensure to offer an attractive complementary business to them.
6. **Gain trust by directly involving communities** in design and promotion, particularly for designing the products and services but also for the onboarding system.
7. **Pay attention to customer onboarding** In a situation where trust is a major reason to stay away from financial services, good onboarding by trusted people will play a crucial role in users early experiences and their chance to become deep users. Ensure first user experiences are seamless and satisfying. Offer this experience through a trusted local person as promoter and coach.
8. **Follow a dynamic experimental approach** tested at small scale. Due to Ethiopia's distinct situation, experiences from other countries may not be relevant. To create

experiences soon about what works and what does not, an experimental approach is recommended.

9. Pay substantial **attention to customer on-boarding** and customer usage.
10. **Reward deep usage** Customers, agents and promoters should all be rewarded for deep DFS usage in their community rather than rewarded for CICO transactions.
11. **Next steps**, before starting experimenting with cashless kebeles, includes having five items in place:
  - a. Well-designed digital savings services
  - b. Reward system for intensive usage of digital savings and other products
  - c. Carefully worked out technology system with double checks-and-balances
  - d. Customer care system that can be reached and that responds fast
  - e. System of identifying and training up trusted community persons



## 2. Background

### 2.1. Pre-ambles

Transactions are part of everyday life, whether that is buying a Makiato, paying utility bills, taking a taxi ride, or making a withdrawal at an ATM: we are constantly exchanging a value of money for a product or service. Currently in Ethiopia, the vast majority of these transactions are cash based. However, there is a global move towards digitizing transactions as there are benefits across the economy, from increasing convenience, speed or dependability for customers to increasing financial inclusion, making organizations more efficient and increasing the tax base. Likewise, people keep their money in a range of forms, from storing money in a jar in the kitchen, keeping it in one's underwear or holding it at the bank and these may also be converted to digitized savings bringing a number of benefits to the users themselves, the financial service providers and the economy as a whole.

Ethiopia has some very distinct features in its current transaction volumes, its pain points and people's perceptions. Ethiopia also has a unique set of savings mechanisms. These, in combination with the bank-led DFS environment, and the state of technology and the single provider of telecom services, makes that Ethiopia has a strongly different departure situation for digital financial services as compared to other East African countries. As a result, approaches that were successful in other countries may not necessarily work in Ethiopia. The process to shift to digital, whether at the individual, organizational or national level, is far from simple ([Annex 1](#)). There can be a lack of understanding of the benefits, mechanics or securities of digital payments. There can be resistance to change. There may not be capacity or capability to go through the project management lifecycle, and there may be information gaps, which are particularly important when making the business case to go digital.

The Ethiopian government is in the process of implementing some major digital payment programs, most notably e-PSNP and ATA input vouchers. However, in a bank led regulatory environment<sup>2</sup>, it is important that Financial Institutions (FIs) are central to the "shift". While there have been some pilots by FIs, to date these have largely been urban and relatively small scale.

This report demonstrates from the users' perspective what transaction pools and which money management practices exist. The report also explores which transaction pools and money storage would benefit from becoming digital. These are explored through examining five "profiles" (segments of potential user groups), looking at their current financial

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<sup>2</sup>A mobile financial services business model (bank-based or nonbank-based) in which the bank is the primary driver of the product or service, typically taking the lead in marketing, branding, and managing the customer relationship.

practices, their challenges and pain points and desired changes. This leads to conclusions and recommendations on how FSPs could move forward with the DFS opportunities.

## 2.2. Ethiopia's economic context

Ethiopia has one of the fastest growing economies in the world, registering impressive GDP growth ranging between 8% and 12% over the last decade. This impressive growth has benefited from the Government's Growth and Transformation Plan (GTP) 1 2010-2015<sup>3</sup>.

The Government is following GTP2<sup>4</sup> which is an integrated 5-year development plan, from 2015-2020, which aims for 11% GDP annual growth, to achieve the Sustainable Development Goals and attain middle-class income status by 2025. To realize these goals, the government is investing heavily in large-scale social, infrastructural and energy projects.

To reach the GTP2 targets, "Gross domestic savings (expressed as a percentage of GDP) is required to go up from 21.8 percent in 2014/15 to 29.6 percent by 2019/20". This will in turn contribute to reaching the 6-fold increase in loans to US\$73Bn to meet the financial requirements of the private sector, and public enterprises. It is for the above reasons why the target of 80% financial inclusion has been set to help reach these targets, and which is up from the current 21.8% (Male – 26.4% and Female 17.5%) (table 1). Thus, there is a need to efficiently mobilise deposits. According to Ethiopia Socioeconomic Survey 2015/16, 32% of individuals reported saving (males 37%, females 28%) in the formal or informal financial sector, and which increases to 48 percent at the household level. This compares unfavourably to 78%<sup>5</sup> in Uganda and 84%<sup>6</sup> in Kenya.

Table 1 - Level of Financial Inclusion

	Individual	Any household member
Rural	11.6%	22.3%
Small Town Urban	38.2%	58.2%
Large Town Urban	54.0%	74.1%
Country	21.8%	35.2%

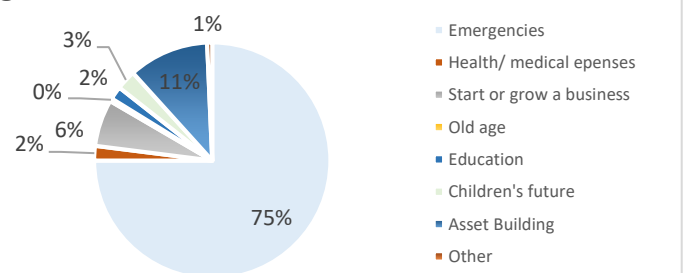
Source: CSA

## 2.3. Digital Financial Services

DFS has the potential to help in reaching the financial inclusion targets in a financially sustainable way, as they allow FSPs to increase outreach and mobilize deposits but without the investment costs involved in rolling out a branch and ATM network.

Deposit mobilization can be achieved through digitizing the currently largely cash

Figure 1



<sup>3</sup><http://photos.state.gov/libraries/ethiopi> Source: CSA

<sup>4</sup><http://hahudaily.com/2015/09/29/ethiopias-second-growth-and-transformation-plan-gtp-ii/>

<sup>5</sup><https://www.independent.co.ug/ugandas-financial-inclusion-success/>

<sup>6</sup><http://www.twaweza.org/go/sauti-ke-2016-financial-inclusion>

based economy, and having communication messages which resonate with the targeted segments (Figure 1).

Implementation to date has had relatively limited success.




**Mobile banking:** Most banks (but not MFIs) provide mobile and internet access to existing clients, through web, USSD and apps. Usage remains low.

**Commercial Bank of Ethiopia** who have a 35% market share are in the process of setting up an agent network which is not yet active.

**United Bank** has set up an agent network that had 450 agents. However, only a quarter are still active as they struggled to create customer awareness. Going forward, it is likely they will rely on outsourcing the management of their agent network. They have recently started interoperability with M-BIRR.

**Dashen Bank** bought the m-FINO mobile and agent management platform, but it is only partly implemented. It only deployed 23 agents and their operations have stagnated pending a strategic review.

Table 2 - Banks and TSPs

Providers	Registered Customers	Agents / merchants	Service	Products Offered
Lion Int bank, CBO, Somali MFI	700,000	5,000 agents, 800 merchants		HelloCash P2P, HelloDoctor, Bill-Pay, Selam Bus, E-TOP UP
ACSI, DECSI, OMO, OCSSCO, ADECSI, Denat Global, PEACE, Vision Fund	PSNP payees 500,000 / "core" customers 200,000	1,400 branches, 2,300 agents		Interoperable P2P, BillPay, E-PSNP, E-Top UP, OTC transfer
Payment Provider				
Kifiya	1.65m	65 Lehulu centres, 100 Mobile bill payments, 1,500 bus terminals, 9,500 - retailers		Utility bill payment, TV tax, traffic penalties. Micro Insurance, branchless banking

Source: Key Informant Interviews

**BuusaGonofaa** (MFI) was previously supported by UNCDF through the Microlead programme. They have 80 POS associated with 10 branches. The MFI's own staff goes to busy market locations and use the POS in off-line mode for scheduled loan collections. They are looking at launching a "doorstep deposit" service.

### 3. Methodology

#### 3.1. Study objectives

Keeping in mind that Ethiopia follows bank-led regulation this study has the objectives of helping FSPs understand the potential opportunity for DFS, through:

1. Estimating individual income and expenditure
2. Estimating individual's current transaction volumes
3. Describing transaction mechanisms used today and identifying pain points and price points
4. Assess future demand and willingness to pay

#### 3.2. Field research focusing on potential users

**Profile focus** The methodology for addressing the study objectives consisted of zooming into five segments of the overall market of potential clients. These segments were selected for their representativeness of a specific group of clients and allows for examining characteristic features in terms of financial behaviour and demand for financial services. They were selected for being likely adopters of digital financial services. These segments are named "profiles" throughout this report, to indicate that they portray a certain population group with specific features (table 3).

Table 3 - Summary of primary data profiles

Profile name	Reason for selecting	Population it represents	Number of individuals interviewed	Location interviewees
Garment factory workers	Migrated from rural areas and paid regular salaries making them likely to send remittances home. Young, female, active people likely to be early adopters.	Expected that factory workers will be 1.5 million by 2020 <sup>7</sup>	6	Bole Lemy, near Addis Ababa, originating mostly from rural Amhara
Small holder farmers	Large group of people with limited access to financial services but producing to a certain extent for the market	8 to 9 million households who produce limited proportion of agric produce for market (there are about 80 million people in rural areas, 90% of these are small holder farmer, 60% SHF producing for the market, assuming 5 members per household)	8	Humbo Woreda, Woleyita
Students	Young, dynamic, education	There will be an expected	6	Four study at Hawassa

<sup>7</sup> Verbal communication from Enterprise Partners staff.

	people who have access to information and are therefore early adopters as has been seen in other countries	1.8 million students by 2020 <sup>8</sup>		university (2 originate from Addis Ababa and 2 from rural locations) and two at Addis Ababa university, 1 from Gondar, 1 from rural location
ePSNP recipients	Large number of people who are already receiving payments in digital form and could therefore be likely adopters of other digital financial services	9.5 million people receive PSNP payments. Currently 2 million people receive digitally, but in next 2 years it is expected all PNSP payments will convert to digital.	6	ePSNP kebele closest to woreda centre, Boricha Woreda (1 hour drive from Hawassa town)
Merchants	Represent SMEs which are an important drive force for change and development and therefore likely to adopt innovative financial services. Moreover, merchants could become agents which is a crucial element in the provision of digital finance, while as merchants they could be clients of digital finance as well.	An estimated 4 to 700,000 individual merchants exist currently with expectations to increase to a total of up to 1.6 million	12	Two are from a rural center of Wendogenet Woreda, cash crop area, near Hawassa. Two are from Boricha Woreda center. This area has both cash crop and the remote parts are considered food insecure. One very rural merchant is from a ePSNP kebele in Boricha. Two women from Addis, both near airport (outskirts of the city). Four in Dangila, Amhara region, small urban centre in rural area.

### 3.2.1.1. Respondent selection

The selection of the individual respondents per profile was done based on expectations which type of people within the profile would be relatively likely to adopt digital finance. The reason for that choice was that in this early stage of digital finance, Ethiopia needs to understand what early adopters' needs are, and what would drive them to adoption. Within each profile the consultant team considered what would be likely early adopters. These were as follows:

Once the early adopters are on-board (table 4), focus should shift to the mass market and how to move these to follow suit. As a result, the profile findings are not representative for the entire profile segment. Considering that the sample for each profile was very limited, the findings should be considered early indications of the demand of likely early adopters.

<sup>8</sup> See for details section 4.9.1.2. of this report.

Table 4 - Characteristics of early adopters

Profile	Characteristics of likely early adopters	Resulting difference with average in profile
Garments factory workers	Working relatively longer at factory (average tenure is just a few months) Making a career, e.g. become supervisor	Higher income than average Older age Higher education than average
Small holder farmers	Having more interaction with the market, i.e. producing cash crops Living in a food-surplus area Living near a road	Wealthier than the average farmers More informed than average farmers Probably more education than average farmers
Students	Living away from home Receiving remittance (in addition to the government loan)	From richer background than average university students
ePSNP beneficiaries	Less remote areas Near to food-surplus areas so more possibilities to have market interaction	From areas relatively richer than average PSNP areas PSNP recipients who may themselves be as poor as average PSNP people but with relatively richer neighbours than average PSNP recipients
Merchants	Dynamic and successful at their business, actively thinking about developing into new areas, primarily from food-surplus areas. However, majority was rural centres rather than urban.	Richer or larger than average merchants, located in places that are relatively more prosperous than average locations.

The sample for this study is a valuable and logical sample when investigating potential digital finance uptake. However, the sample is significantly different from Ethiopia's average population. Particularly the level of financial inclusion of close to 90% of the respondents is unrepresentative of Ethiopia's overall population where almost 80% are financial excluded. This uncharacteristic high level of financial inclusion is due to both the selected profiles and the focus on "likely early adopters" within the profiles.

#### 3.2.1.2. Interview sequence

The five profiles were interviewed repeatedly over the course of four months. The interviews consisted of three stages:

- 1. Initial face-to-face interviews:** detailed interview about income, expenditures, financial inclusion, savings, loans and remittances, pain points and how to deal with these.
- 2. Follow-up telephone interviews:** repeated telephone conversations requesting additions to the first interview and testing early ideas for use cases. Better understanding of pain points and deepening the relationship.
- 3. In-depth interviews on use-cases:** Two to three hour conversations, mostly in pairs, to discuss about potential digital financial services and whether the respondent would use these, if so, what would be an acceptable price, and what would be expected advantages.

For the first and third phase of the research a word-by-word transcript was produced and translated into English. For the profiles of the ePSNP recipients and the farmers the interviews were first transcribed in the local language and then translated sentence by sentence into Amharinya. Then the Addis Ababa staff translated that into English.

The interviews with ePSNP recipients and the farmers were done in the local languages, which means that these interviews were conducted by local L-IFT staff (someone living near the Woredas Boricha and Wodegenet and one near the Woreda Humbo) under close supervision of L-IFT's Addis Ababa staff as well as the team lead.

To process the data, matrices were designed and then the matrices were filled by scouting for the right information in each respondent's transcript.

For details about the interview questions, please refer to [Annex 21](#) to consult the exact questions that were asked during the various interviews.

### 3.3. Limitations and Constraints

The number of respondents that could be interviewed for each profile was very modest with just six to 12 respondents per profile. This limited sample results in the findings providing indicative information which should be studied in greater detail and at a larger scale before acting on it. This method has been chosen because it provides some rich insight in the behaviour of (potential) clients in an efficient manner. Relatively to other methods, the approach is more flexible. As interesting information emerges the research can redirect emphasis and focus on the more promising findings. Moreover, this methodology provides actionable findings relatively fast as compared to other approaches.

As is common with most studies, the respondents may not have disclosed all the data about income and even about expenditures they may not have provided a complete picture. The reason for this is that a number of people may have been worried that the study results would be reported to the government and stating all income could lead to increases in taxes charged. Some respondents may also have had challenges remembering all their income and expenditures. To remember all financial details for an entire year is no easy task. There may also have been elements in income or expenditure that people were uncomfortable to talk about, particularly if these were not altogether legal. Particularly items like smuggling or growing intoxicating crops is commonly concealed.

For some repeat interviews, we could not meet the people. For instance, one merchant's business had been closed down by the government and the merchant did not answer his phone anymore.

Due to the various languages spoken by the respondents, particularly languages spoken by relatively small populations of SNNPR region, the study needed to use two-tier translation



(e.g. from Sidaminya to Amharminya and then from Amharminya to English). This indirect translation may have led to some nuances being missed or some meaning having been somewhat altered.

For details about the interviews conducted for this assignment, the literature reviewed and the people interviewed, please refer to [Annex 21](#), [22](#) and [23](#).



## 4. Market information findings

This chapter on Market Information presents the findings from the primary research in six sections: income, expenditure, financial inclusion, pain points, expected prices and price sensitivity, use cases. Then the chapter zooms into the specifics of each profile according to these five topics.

Transactions are mentioned across these sections. How income is received, through which channel, how large the sizes are, are mentioned under “income”. Payments made by the profiles is mentioned under expenditures and deposits are mentioned under “financial inclusion”.

### 4.1. Income findings

Table 5 - Income findings

Profile	# respondents	Locations	Aver. reported monthly income (median) (ETB)	Min monthly income (ETB)	Max monthly income (ETB)
Factory workers	6	Bole Lemi	2,376 (1,288)	1021	2645 (max would be 6815 ETB if including that person's spouse's income of 5000 per month)
Small holder farmers	8	Humbo	2,830 (1,841)	175	8772
Students	6	Hawassa and Addis Ababa	2,111 (1875)	500	4542
ePSNP recipients	6	Boricha, SNNPR	639 (502)	117	1453
Merchants	12	SNNPR (Wendogenet, Boricha), Amhara (Dangila), Addis Ababa	10,522 (6700)	2000	26,667

For greater detail on income features, please refer to [Annex 10](#).

The largest income (table 5) is clearly of merchants (net business return), which was to be expected. This average income is more than 16 times that of the smallest reported average income, namely of the ePSNP recipients. The other three profiles, factory workers, smallholder farmers and students, are roughly in the same income band. However, for small holder farmers considerably more people are supported with this income. For factory workers and students, typically only one person is supported from this income while smallholder farmers typically support several children. Remarkably, smallholder farmers report quite low expenditures as compared to their income.

The income recorded for these five profiles was mostly focused on one main income source. In other African countries more mixed incomes have been found for comparable professional groups, with particularly farmers earning income from numerous other sources than just farming. The main income source for garments workers is their formal employment salary which represented 98% of the income. For farmers, the main income is their crop sales which represented 54% of their income (if including livestock and horticulture sales, both also part of farming, then farming would represent 95% of the farmers' income). For students the main income comes from parents' remittances (88%). For ePSNP recipients the PSNP stipend is the largest portion of their income (35%). For merchants their own business is the largest chunk of their income (77%).

Income is both received via bank channels and in cash. The garments workers receive all their income into their bank-account. Farmers receive only income in cash. Students receive primarily via their bank-account (88% and 12% in cash). ePSNP recipients get 47% electronically and 53% in cash. Merchants reported to receive only 3.1% of their income via their bank-account and 96.9% in cash.

Concerning the origin of the income, whether a person, a business or the government paid, this varies from profile to profile. The garments workers get paid by a business. Farmers get paid both by persons and businesses. Students get paid primarily by persons and for a small portion by the government (and they receive in-kind support in the form of cafe and dormitory from the government). The ePSNP receive almost half their income from the government and the other half from persons. Merchants receive practically all their payments from persons and a small portion (3%) from government institutions. Even on income, significant volumes are Person to Person and much of it takes place in the informal sector. The merchants' income only concerns Person to Business payments. See [Annex 20](#) for summary table.

#### 4.1.1. Income transaction features

Across the five profiles studied, income arrives largely in sizeable lump sums. One student received money in just three payments per year. Farmers may have three or even fewer income moments in the year. ePSNP recipients also receive their stipend in practice in just three or four payments. Of the five profiles, only merchants had daily income flows.

For those who have "lumpy" income, the main money management challenge is to make the "lump" last over a long period of time. Microfinance is typically focused on challenges related to the reverse of lumpy income, namely converting small deposits into a useful, large lump-sum. As one farmer from Humbo stated: "I have no purpose for small, frequent amounts of savings. I need to deposit large chunks of money.... Growth cannot be achieved through little amount of gradual savings and loans but through a large amount of savings and loans."

For information about the source of income, please consult [Annex 2](#).

### Human errors in collected data

The data presented in this chapter depend on individual interviews including the very first interview when the respondents and researchers met for the first time. The researchers did their very best to get as precise and correct data as possible, but inevitably a number of errors are likely to be included. For instance, respondents may not remember all their income, or all their expenditures. The exact amount of the reported figures may have suffered from forgetting. In addition, some respondents may have mis-reported some items for various reasons. They might have feared the tax office would find out and charge them taxes, or they might have assumed that a higher or lower income would entitle them to some government support.

As a result, some profiles have reported higher expenditures than income. While this is technically possible (e.g. when someone withdraws savings and spends that, their expenditures would exceed their income), these differences are more likely due to errors in reporting than in true higher expenditures for a year period.

## 4.2. Expenditure findings

Table 6 - Expenditure findings

Profile	Monthly average (median)	Monthly expenditure range (min-max)	% spent on food	% spent on clothes& shoes	% non-cash	Paid to P/B/G
Garments workers	2,136 (1,1538)	725- 5603 ETB	25%	6%	2% (remittances)	Food at home B Toiletries B Food outside B Clothes P & B Transportation P&B Mobile phone credit P&B Rent P Water G Cooking fuel P&B Electricity P Remittances P
Small holder farmers	1,080 (1,191)	473-1712 ETB	30%	22%	1.4% (1 farmer, 1500 ETB bank-transfer for remittances )	Food at home P& B Toiletries B Food outside B Clothes P & B School expenses B Transportation P&B&G Mobile phone credit B Water G Cooking fuel B Electricity P Remittances P
Students	2,292 (2,280)	677-3893 ETB	52%	12%	0%	Food at home B Toiletries B Food outside B Clothes B School expenses B Transportation P&B&G Mobile phone credit B
ePSNP	674 (682)	394-949 ETB	43%	12%	0%	Food at home P&B Toiletries B Food outside B

Profile	Monthly average (median)	Monthly expenditure range (min-max)	% spent on food	% spent on clothes& shoes	% non-cash	Paid to P/B/G
						Clothes P&B School expenses B Transportation P&B&G Mobile phone credit B Water P&B Cooking fuel B Electricity P Mobile phone battery P Fertilizers and seeds G
Merchants	16,463 (4,490)	1875-18200 ETB	30%	8%	Private expenditures 0% Business expenditures +/- 60%	Food at home P&B Toiletries B Food outside B Clothes B School expenses B Transportation P&B&G Mobile phone credit B Rent P Water P&G Cooking fuel P Electricity P&G Remittances P

For more details about expenditure findings, please refer to [Annex 9](#).

While the bulk of the expenditure volumes are to businesses (table 6), these are primarily to informal, unregistered businesses, e.g. people hawking and selling on the market. Therefore, in fact, the expenditures are predominantly paid to the lowest end of what may be named “businesses”.

House rent and energy costs are less formal payments than may be expected. House rent is predominantly paid to private land-lords/ladies. Energy costs are often paid to one individual in a village who then takes care of the payment to the government.

#### 4.2.1. Expenditure transaction features

The poorer people are, the more likely they make their purchase in very small amounts. An ePSNP household will buy sugar literally by the spoonful. Even though they may receive their income in lump-sums, they avoid buying an entire kg of sugar as the family may not be able to discipline themselves in the consumption. However, cost per weight is considerably higher when buying in such small daily units.

When investigating the transactions, such as payment frequency, payment sizes, it becomes clear that people typically have small daily expenditures on food, from as little as half a birr to payment sizes of around 120 ETB. As mentioned above, poorer people are more likely to buy food in very small quantities, richer may buy a bottle of oil that may last a month, while poor people buy an amount of oil for one or two days. Other expenditures are much less frequent. Travel is likely to be weekly. Mobile phone top-up is also mostly weekly. Clothes may be bought once or twice a year and remittances may be received once a year only.

Altogether the pattern is that income arrives infrequently in surprisingly large sums while expenditures are frequently in small sums. [Annex 20](#) provides detailed information about the transaction characteristics across the five profiles.

#### **4.3. Financial inclusion and bank based transactions**

The five profiles studied proved to be relatively financially included<sup>9</sup>. For four profiles all respondents had either a bank-account, an MFI account or an electronic account (ePSNP). The only profile that were mostly financially excluded respondents were the smallholder farmers. Half of the smallholder farmers had no account and two of these were dormant accounts.

Usage of the accounts was mostly quite regularly with most profiles using their account at least monthly.

In practically all profiles there was the tendency to withdraw all payments as soon as they arrived. Very few left part of their income in the account until needed. This was partly for trust issues. Some garment factory workers display an interesting pattern which illustrates the trust issues with payment accounts. These factory workers receive their salary on a CBE account that they call “salary account”. They consider this account not to be theirs but for the factory. As soon as their salary arrives, they withdraw it in its entirety from the salary account and some then deposit the money into their “savings account”, which is also a CBE account. They reported that the factory sometimes takes the salary back if you do not withdraw it. They heard about this from other factory workers. The same feature was seen with students, who claimed that the government sometimes takes the student payments back if the students leave these unused in the account. The ePSNP recipients also withdraw all their money at once but in their case they are not truly aware that they have an electronic account and that it is possible to leave money in the account that can be accessed later.

Altogether the study demonstrates that having an account at a bank or MFI does not lead to leaving balances in the account. Financial Service Providers are interested in increasing deposits. For increases in deposits, it is clear that more needs to be done than simply giving everybody a bank-account.

In addition to using formal financial services, some of the five profiles also made use of informal mechanisms of Equb, Edir and savings groups but in SNNPR this is relatively less prevalent than in the rest of the country. All farmers were part of Edir but none had Equb. Just over half of the merchants were part of Equb. None of the students and ePSNP respondents were part of either Edir or Equb.

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<sup>9</sup> See last paragraph of 3.2.1.1. explaining that the way the sample was selected (both in terms of selected profiles and the focus on the likely early adopters within the profiles) resulted in an unrepresentative level of financial inclusion.

The majority of the five profiles had savings accounts. Most of them were also using these savings accounts for receiving payments and withdrawing these, with a minority having dormant accounts. In addition, none of them had stopped using informal savings mechanisms. The ePSNP recipients deposited most of their savings in formal mechanisms (three-quarters) but they had little choice in this. Students deposited around two-thirds in formal savings mechanisms. Merchants deposited roughly half of their savings in formal accounts. Farmers only held one-tenth of their savings in formal accounts. [Annex 19](#) presents in detail the savings behaviour of the five profiles.

For more details about financial inclusion findings, please refer to [Annex 11](#).

## 4.4. Pain points findings

### 4.4.1. Issues with financial service providers

**Trust and transparency:** The key financial management pain points that people reported were about services not being reliable, trustworthy or transparent. The typical example of this is ATMs that do not deliver the money while the amount is deducted. For poor people this type of situation could not be resolved and some lost significant sums of money (e.g. 1200 ETB for one garment factory worker) while more educated people (students) reported to achieve that the error was corrected. Trust and transparency issues are particularly related to financial institutions and no trust issues were reported by users of informal financial services such as Equb.<sup>10</sup> Respondents mentioned to trust the local shop and other merchants but merchants reported to have trust issues with staff. Due to trust issues, many withdraw all funds from financial institutions immediately after their arrival.

**Distance and transport costs:** Other pain points were related to access to financial services. Particularly people in villages live far from financial services and transport is costly, with return fares across 25 kms reaching 47 ETB.

**Opening times** of financial services was a pain point, particularly for garment factory workers due to their full-time working hours including Saturday.

**Access to FI loans:** Particularly merchants mentioned that accessing loans from formal FIs was very hard. They had somewhat more success getting loans from microfinance institutions. In [Annex 17](#) there is a short discussion on credit worthiness of e-PSNP beneficiaries.

**Technology failure and down-time:** ATMs failing to deliver the money is a wide-spread problem. “System down” in banks is also common. In villages banks may have monthly periods of 2 to 3 days when the system is down. Access to mobile network may also have

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<sup>10</sup> To nuance the trust issues for informal financial services, there was one case where one garment worker mentioned that he is not in an equb because there is no one he could trust to form such a group.

interruptions up to several days but walking up a hill can usually obtain signal and solve that.

Further findings on pain points can be found in [Annex 18](#).

**Savings:** The five profiles studied were to a large extent financially included, due to the selection criteria<sup>11</sup> applied. Nevertheless, they also continued to save in informal forms (table 7).

Table 7 - Savings deposited of selected profiles

Profile	Average annual savings deposits (transaction sizes)	Portion deposited in formal financial institution(s)
Garment factory workers	About 2100 ETB per annum average	About 1/3
Smallholder farmers	About 600 ETB per annum average	About 1/10
Students	About 3500 ETB per annum average	About 2/3
ePSNP recipients	About 500 ETB per annum average	About 3/4
Merchants	About 110,000 ETB per annum average	About 1/2

#### 4.4.2. Issues with personal financial management

**Privacy:** Across the various profiles lack of privacy was mentioned as a pain point. People would like to take loans without others knowing and they would prefer others not knowing whether they receive a payment, e.g. for selling agricultural produce. When they receive a payment children and neighbours may put claims on this money.

**Self-discipline:** Several respondents mentioned to have self-discipline issues. It was reported that savings kept at home would easily be spent. Students reported to have challenges to make their money last until they received their next payment.

**Cash-flow:** Some farmers mentioned cash-flow issues with challenges to send money to their children regularly while their income was in occasional lump sums. The ePSNP recipients, partly because arrival of their payments was unpredictable, needed to borrow at elevated costs from their local shop to make ends meet.

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<sup>11</sup> See Section 3.2.1.1. the explanation about profile selection

Figure 2 – Comments about interest in DFS, price expectations and pain points



Small holder farmer

I would use mobile money, because it saves energy and costs. I have 12 birr each way on the bus. If I send someone else I pay their bus and also their tea.

But I am worried about the phone. I don't know how it works. It may not be in Amharic. I need someone to show me.

If I can send money in my lunch-break and my parents pick up in our village, I can pay 50 birr to send 160 birr.

I have no time, everything that saves time, I can pay for it. Sending from phone is best for me.

But I need someone to show me, someone I trust and who I can go to and ask. If I have a problem, I need help to solve.



Garment factory worker



Students

The CBE account is quite good, ATM is something that solves most of my issues. I don't like to pay much.



## 4.5. Expected prices and price sensitivity

### 4.5.1. General attitudes towards prices

There were significant differences across the profiles regarding their attitude to prices. The poorer people were prepared to pay higher fees, particularly when considering the percentage of the value of transactions. The richer or more educated respondents were more price sensitive, particularly students.

Poorer people and people in rural areas are “price-takers”, or people who will accept the prices as they have no choice and need to use the service at the price offered. (Table 8) They are used to paying high fees, e.g. a commission on buying 5 ETB mobile phone airtime will have 1 ETB additional fee, i.e. 20% on top of the normal commission a merchant gets on selling mobile phone credit. Students and merchants would not accept those prices and are more aware of exact prices and price offers, and know where to get airtime at the advertised price.

Table 8 - Price acceptance of selected profiles

Profile	Price acceptance
Garments workers	1.5 high (light green)
Small holder farmers	2 very high (dark green)
Students	0 low (red)
ePSNP	2 very high (dark green)
Merchants	1 quite low (orange)

The darker greens are considered insensitive to prices, i.e. accepting high prices. Red, on the contrary indicates that they would not accept prices higher than what is currently paid.

### 4.5.2. Fees sending money and transactions compared to loan/savings interest

Across most profiles, people make a distinction between fees for a service and interest for a loan. The respondents with large loan demands (particularly the merchants) expected to pay low interest rates on loans.

“I need a loan of 350,000 birr. I applied with OMO. They refused. I can pay 35,000 interest. If 200,000 loan, I can pay 20,000. I need two, three years. I can pay 4 or 5,000 birr per month.” *A merchant*

(This means the merchant expects to pay an effective interest rate of about 10% over a period of two to three years, i.e. just 3.5 to 5% per annum.)

**Transferring at distance** Their expectations of fees to send money, for instance, is relatively high, with fees of 50 ETB per 350 ETB sent, or 20 ETB to send 180 ETB and 300 ETB to send 10,000 ETB. Transport costs for people from rural areas are so high to reach a bank, which effectively is the alternative costs to sending money. M-BIRR, HelloCash and CBE could charge close to these travel costs if the service would be very close to home of both sender and receiver through increased outreach and accessibility of agents. Sending over longer

distances appears to be even less price sensitive as compared to sending over 10-20 kms. Obviously the alternative of carrying the money personally over longer distances is even more costly as transport fees increase the further you take the bus.

Figure 3 - Acceptable fees for sending money

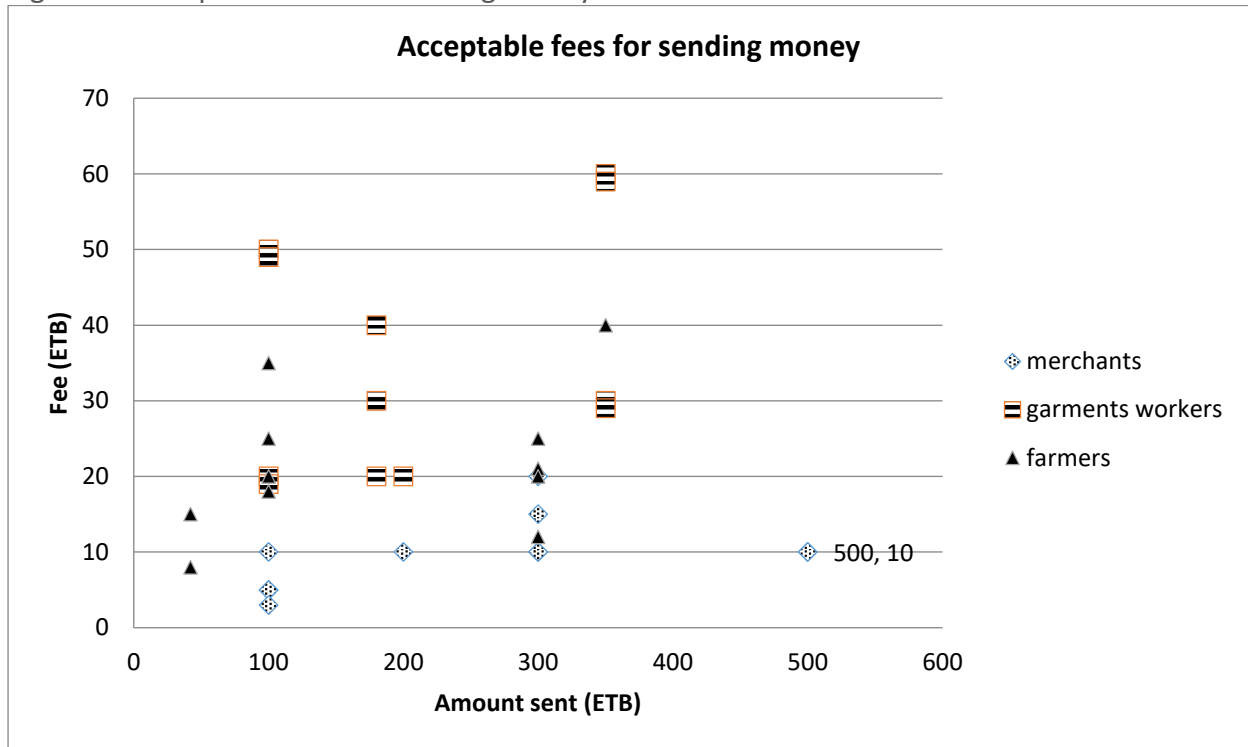


Figure 3 presents the fees that three of the profiles are willing to pay for sending smaller amounts of remittances. Garments workers reported to accept higher fees, which is understandable as they send over larger distances and have high alternative costs.

Figure 4 - Acceptable fees for sending money to suppliers (merchants)

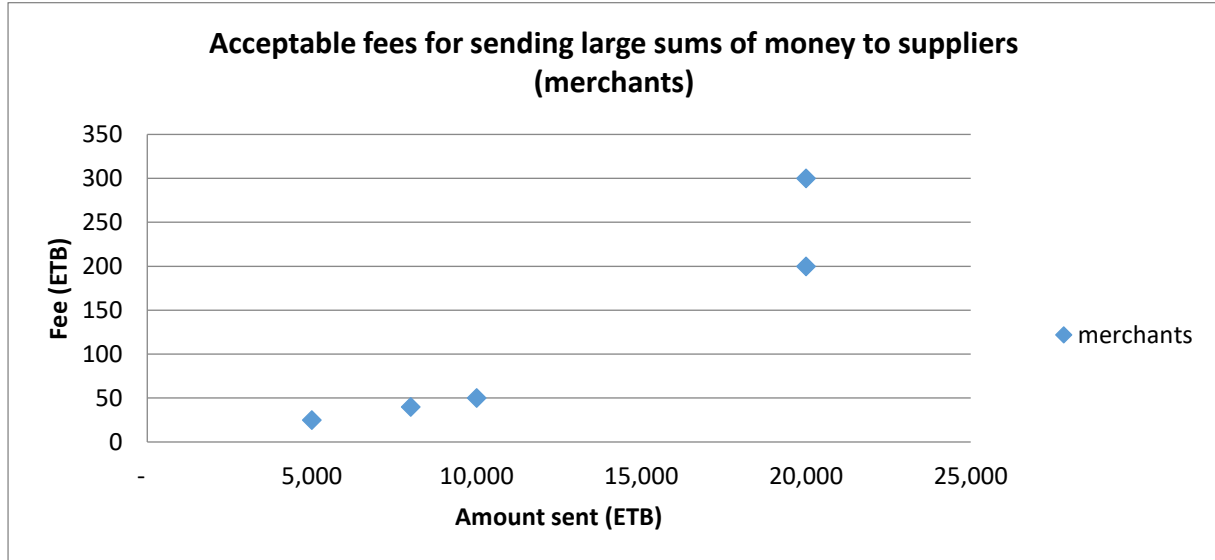


Figure 4 is what merchants expect to pay for sending larger payments to suppliers with digital finance.

**Cash-in / Cash-out** Even for cash-in and cash-out, people would understand that there was a fee attached and repeatedly stated that fees would be acceptable as long as the service is completely reliable.

People were prepared to pay modest fees for programmed mobile money transfer services, for example a way to send a weekly amount of money to children automatically from a lump-sum deposited by parents. See Figure 6 in section 4.6.4.2 for a worked out example of how this product would work.

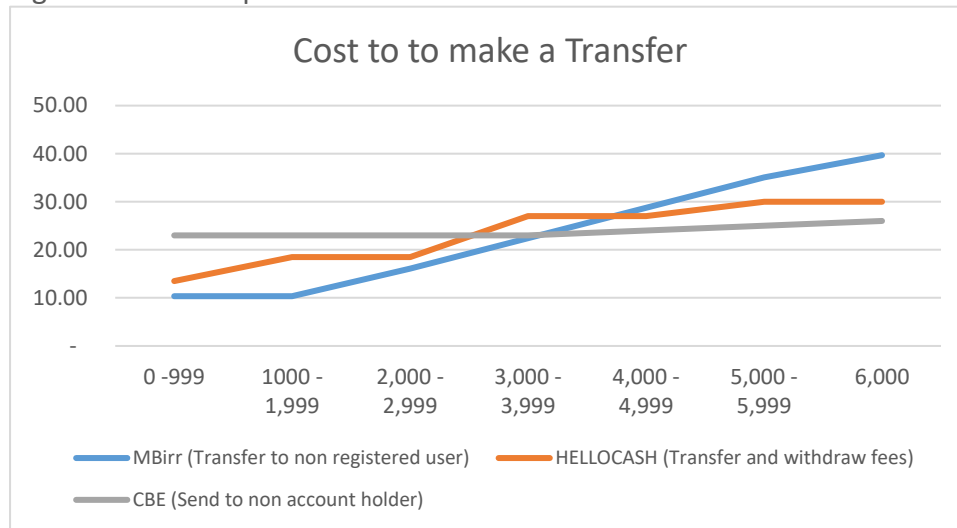
They would also like to get reports about what was spent, how savings progress, loan administration of clients (for merchants).

**Savings interest** The attitude to interest rates provided a number of surprises. Particularly the poorer people would accept good savings services without any interest rate, if the service is perfect and completely trustworthy. Students and merchants would expect interest rates on savings at the level the banks currently offer.

**Loan interest** There is little price flexibility regarding loan interest. The often mentioned interest for loans should be 15% per annum and in the perception of the respondents that should be an absolute percentage rather than a percentage per a time-period. Whether a loan is for a month or 2 years, a total interest rate of 15% is considered reasonable. Here again the poorest respondents expect to pay higher interest rates. They commonly pay 20 to 25% per month and a digital loan with that fee would be more attractive than shop credit due to the privacy. The objections against interest rates may be partly due to people's lack of ability to calculate interest rates and their understanding of the need to pay the person who has to make the money available.

Some Muslim respondents mentioned to be unable to pay interest or receive interest, as this is against their religion. These Muslim respondents mentioned to hope that normal banks would offer specific interest-free savings and interest-free loan options. They are willing to pay fees for loans or get non-interest rewards on savings.

Figure 5 - current price offer on transfers



Source: Company websites

Table 9 - Cost comparison of transferring money on CBE, M-BIRR and HelloCash

	Tier Bands (ETB)						
	0 - 999	1000 - 1,999	2,000 - 2,999	3,000 - 3,999	4,000 - 4,999	5,000 - 5,999	6,000
MBIRR (Transfer to non registered user) <sup>12</sup>	10.35	10.35	16.10	22.42	28.75	35.07	39.68
HELLOCASH (Transfer and withdraw fees) <sup>13</sup>	13.50	18.50	18.50	27.00	27.00	30.00	30.00
CBE (Send to non account holder)	23.00	23.00	23.00	23.00	24.00	25.00	26.00

Source: Company websites

#### 4.5.2.1. Key learnings about prices

1. Current prices offered for sending money are considered low as compared to the alternatives (transport costs) particularly across longer distances.

<sup>12</sup> <http://www.m-birr.com/pricing.html>

<sup>13</sup> <http://hellocash.et/personal/pricing>

2. People are prepared to pay high prices for a fully reliable, trustworthy, confidential service. They would not switch to a cheaper service if it was less reliable.
3. Interest rates are frowned upon and mistrusted, not only by Muslims. Even if they are of very reasonable level, people expect to be cheated with interest.
4. People have a fee-based way of thinking. They do not see that interest should be paid per period and instead expect the same total amount of interest for one month as for one year.
5. People are willing to pay fees for financial services including fees for depositing and withdrawing funds, for getting overviews of expenditures and for programming payments.
6. Financial service providers could experiment with communicating the costs of their services and interest in terms of absolute prices or fees. This may help to build customers' trust as they would understand this pricing better.

## 4.6. Use cases

### 4.6.1. Introduction to use cases

The term “use cases” for digital financial services refers to different products and services of digital finance to solve specific everyday challenges customers face in their financial management. While mobile is a channel, mobile money as a store of value, in the sense of keeping money in a mobile wallet, is a use case.

For the current assignment of Transaction Pools for Digital Financial Services, the consultants have tested a range of “use cases” with the five profiles. In this section we present the early indications regarding which use cases have the greatest appeal. We concentrate on a limited number of use cases with indication of some variation in how the use case is explained and applied. Please refer to [Annex 12](#) to [15](#) and [Annex 24](#)

for greater detail and presentation of use cases that did not resonate.

### 4.6.2. Use cases related to personal money management

#### 4.6.2.1. Saving on mobile money and receiving funds on mobile money

The possibility of saving and receiving payments through mobile money resonated positively with all five profiles.

The poorest profiles, ePSNP recipients and farmers, mentioned to have currently no effective savings mechanism (this was particularly the case of ePSNP). A great advantage of saving or receiving on mobile money would be for farmers that it is fully private as nobody can see the money arriving, contrary to cash where children and neighbours see you have received cash and then put demands on these funds. One farmer explained “When my children see I sell beans or other produce to a trader, they come and ask for money for all sorts of things.” The other significant advantage is that cash “burns in your pocket” whereas holding money in a mobile wallet can discipline spending. For ePSNP recipients the mobile

wallet would be attractive if they get full control over the money and if nobody else could access it, e.g. for deducting payments for fertilizers which currently happens with their ePSNP payments.<sup>14</sup>

#### Electronic PSNP payments

PSNP stands for Productive Safety Net Payments. This is a cash transfer provided by the government to the poorest households in food deficient woredas of the country. The programme is intended to prevent famine. It provides a stipend to the eligible households during the lean season when they are likely to run out of food. In the early years, from 2005 until 2010, these payments were made mostly in the form of food. As this is the most costly form of providing such a safety net, due to transport costs and more complex logistics, Ethiopia has already changed to paying most of this support in cash. In 2015 it started to make the PSNP payments electronically in four pilot woredas, hence the name ePSNP. In 2016 an additional 13 woredas started with electronic payments. In the woreda where we interviewed electronic PSNP recipients, they receive the stipend through M-BIRR agents who are linked to OMO MFI. When the PSNP payments are made in cash (or indeed in food) there are commonly reports about the recipients not receiving their full payments and being forced to pay for some local initiatives or to save part of the payment. The electronic payments, apart from being more efficient, are partly intended to overcome these deductions. However, due to the fact that the electronic PSNP payments are not yet truly controlled by the recipients the unwanted deductions have not yet stopped, but appear to have reduced.

According to the respondents consulted, money saved in mobile wallets do not need to earn interest rate. For them it is more a priority that the mobile wallet works perfectly, reliably and does not have any technology failures and strictly no money should ever disappear. Being able to completely trust the service is the main driver for uptake, rather than interest earned.

#### 4.6.2.2. Receiving loans through mobile money with amount of loan entitlement depending on intensity of usage

The possibility of accessing small short-term loans via mobile money resonated positively with all five profiles. The mechanism that the track-record of saving and withdrawing would be the basis for calculating the maximum loan entitlement was easily understood by all. To a certain extent they are already used to such a system via the MFIs where a certain amount needs to be saved before a loan can be accessed. (Refer to [Annex 16](#) for further details on how these digital savings and loans services work.)

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<sup>14</sup> While ePSNP recipients are supposed to have a mobile wallet which only they can access, in practice some agents paying out the money from the mobile wallet first pays the government agency which collects payments for fertilizers or other purposes. In addition, some agents deducts some money for savings from the payment and pays that on behalf of the ePSNP recipient to the MFI.

These small loans sounded attractive because the loan will be issued almost immediately after requesting it. People mostly have experiences of long waits for the decision about a loan and then often being rejected. It was also attractive that these loans could be accessed late at night, in case of an emergency (students, farmers, most of them). Altogether getting a loan from a formal financial institution was met with excitement as these loans are currently very rare. Obtaining a loan from a FI has significant advantages over shop credit, particularly because this loan would be private while the shop owner may talk about it to others. The fact that the user would know the entitlement to a loan amount, even without yet accessing, was also attractive. By knowing their loan entitlement, people would know what they could access in case of emergencies which would give peace of mind. The fact that these loans would be private and nobody needed to know about it, contrary to, for instance, shop credit, was another crucial advantage mentioned across all profiles.

Quite elevated interest rates would be considered acceptable, i.e. equal to what people pay to shop owners at the moment (10 to 30% per month). However, many expected these loans to be for 3 to 4 months at practically the same total interest rate as for one month.

While they all understood clearly the mechanism of saving to get access to loans, the expectations may be unrealistic about how much loan could be accessed. Some mentioned that if they would save 1000 ETB they expected to get entitled to 10,000 ETB loan.

#### **MoKash, M-Shwari and other digital savings and loans mechanisms**

This use-case is based on the MoKash product offered by MTN and Commercial Bank Africa (CBA) in Uganda since August 2016. The product is usually referred to as “digital credit”.

The product offers customers the possibility to build up a credit-score with a formal financial institution through their activities in their mobile wallet, both in terms of value and volume deposited and the height of the balance as well as activity on their mobile phone, e.g. frequency, regularity and value of buying airtime.

The product is relatively straightforward to offer for banks, even though it is used by many people who have not been financially included before. The essence is automatic credit scoring based on the mobile wallet and mobile phone transactions. The product can be offered fully automated as customers are assessed through an algorithm rather than manually making for much faster and probably more neutral credit evaluation. The platform handles the entire administration through software. Altogether this is a highly scalable product.

In Kenya there are already about five different digital credit products on the market, reaching several millions of clients just 1 and 2 years after its original launch. In Uganda and Tanzania CBA reached over one million subscribers within 100 days of its launch.

#### 4.6.2.3. Tracking expenditures

The consultants tested the idea of providing mobile money users with access to their track-record and analysis of their expenditures and income. Particularly students were interested in this service and some would even be prepared to pay a modest fee for this service. Others also mentioned to have interest in getting a better understanding of their own expenditures through such an application.

#### 4.6.3. Money transfer and payments at distance

##### 4.6.3.1. Sending remittances from and to local/village shops

Sending remittances right to and from where people live, through small shops that act as agents, has a significant demand. The demand is high from smallholder farmers who send to their secondary school children who are schooling too far away to travel home. Garment factory workers send to their parents in villages at distance from bank branches (they send just 2% of their income but a better service may increase that) are also interested in this service. Merchants who both send to studying children and to suppliers for their business are interested in sending money digitally over a distance.

##### 4.6.4. Drivers for uptake of this service

1. The proximity of the location to send and the location to receive (should be at walking distance)
2. The complete reliability of the service (no money disappearing, prompt information when money arrives, no downtime)
3. Privacy of sending (nobody else would know the amounts sent)
4. Opening hours or possible to send from mobile phone (particularly for garment workers)

Remarkably, university students, typically active drivers for mobile money remittances in other countries, show less appetite to adopt digital finance than the other profiles. They appear reasonably content with the current remittance channels. They receive their money on their CBE bank-account, both from the government and from their parents. The service is adequate and having few costs, branches are nearby their university and ATMs are available throughout their university town. However, their parents may be interested in taking up mobile money as transfer option, since some parents live at distance from a bank branch.

##### 4.6.4.1. Paying directly to providers

The consultants tested whether people would have demand for sending money directly to shops or hospitals through digital channels. Practically all the respondents showed an interest in the service. Particularly parents of secondary school children would like to send funds directly to school, to photocopy shops and to hospitals. This way the parents would know for sure that the money arrived and be used for the purpose it was intended for, i.e. children not pretending to need something and using the money for other purposes. Equally sending directly to where the money will arrive ultimately also avoids the children losing the



money. Only in very few cases would people have trust issues with paying a provider and preferred to pay to their relative directly. This was the case for one person when discussing the use-case of sending money to her husband for building materials, rather than to the shop selling roof plates.

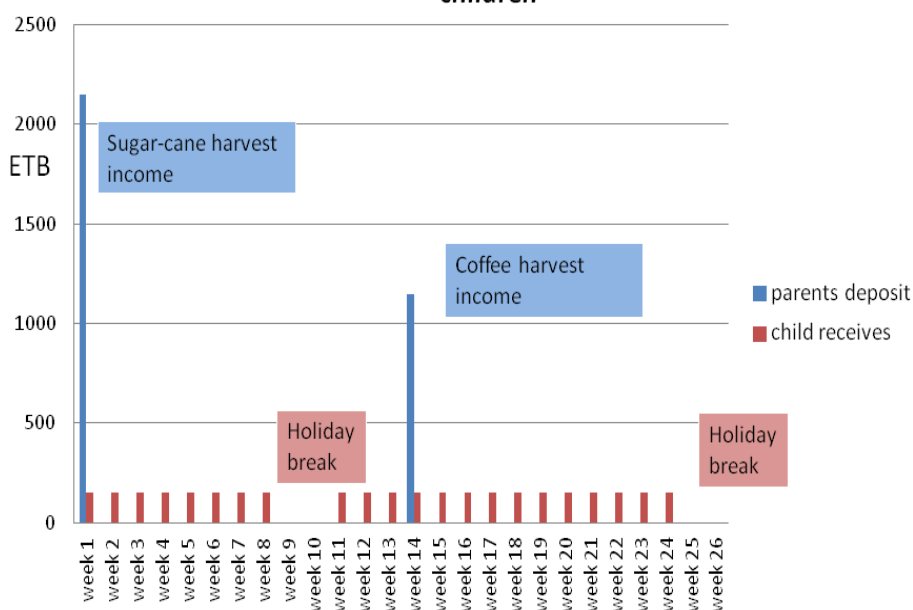
However, when asked the recipients of these remittances, e.g. students, whether their relatives would appreciate to be able to send directly to them, unsurprisingly, they felt that their relatives would prefer to send them the money directly.

#### 4.6.4.2. Sender deposits periodic lump sums while receiver gets weekly spending money

Several respondents reported in their first interviews that they have challenges sending money weekly to their secondary school going children. Farmers normally have irregular income with infrequent larger sums arriving during specific seasons. The children, on the other hand, needed a small amount of money every week and parents found it a worry to remember and organize for the money to arrive on time. They also had challenges to ensure fund availability at times when they had not received any income.

To address this challenge, service providers could offer senders the option to deposit larger sums which would then be released to the recipient in set weekly amounts. The following graph would represent how such an automatic payment mechanism would work for a farmer who receives payments in lumps for sugar-cane and coffee harvests while she wants her son to access a weekly amount of 150 ETB (figure 6).

Figure 6 - Example of programmed weekly transfer of parents to children  
**Example of programmed weekly transfer to secondary school children**



The consultants tested this idea on farmers, merchants, students and garments workers, and all respondents were very enthusiastic about this option. Practically all farmers, merchants, and students said they would like to use this. Several were prepared to pay an additional fee for this service, on top of the usual transfer and withdrawal fees. The only group that was less interested in this option were the garments workers. They would send money to younger siblings, but the fixed weekly amount was considered inappropriate for their situation. First of all they did not want to impose money management on their siblings (sisters and brothers were able to decide themselves when they needed the money) and they feared that the weekly amount would create an obligation that they may not be able to fulfil. The garments workers wanted to continue sending only when they had some surplus.

#### 4.6.5. **Becoming an agent**

The twelve merchants who were part of the study, were offered a number of additional use cases related to their position as a business. The first use-cases were around the opportunity of the merchant becoming an agent. The remaining were related to using digital finance for improving their business (i.e. the merchant's business itself as a customer for digital finance).

##### 4.6.5.1. **Providing Cash-In and Cash-Out services (CICO)**

Of the twelve merchants interviewed, ten were interested to become a mobile money agent. These merchants spanned the whole gamma of merchant types in terms of size, location and type of products and services offered (groceries stores, mobile phone stores, restaurants, coffee house, hotel, grain trader, cosmetics/underwear, pharmacy).

Reasons why merchants were interested in becoming a merchant included:

1. A good fit with their other business (they already have people coming to their store, they have ways of handling cash already, it may result in more customers for other business)
2. A service which would have a good demand (many people need a trustworthy and convenient financial management system and need to send money, so they expected take-up to be good)
3. Benefit for their own business (by receiving payments digitally for the shop or cash-out services they would have digital money to pay their suppliers digitally which would save them travelling with cash to the suppliers, digital payments may lead to better control of staff and may help with stock management)

##### 4.6.5.2. **Providing on-boarding and product information services**

One crucial component of digital finance is that clients receive good information about the services and become literate in how to use the services. Particularly take-up of more complex products (e.g. the increasing loan amounts which can be accessed based on savings behavior) require extensive explanations and education of users.

The consultants investigated whether the merchants felt they would be good at offering this service and whether that would be a business opportunity for them. Most of the merchants felt that they were particularly well-placed for educating customers because they are trusted and already give advice about money and management to their customers. For instance, a cosmetics and underwear merchant explained that she already advises her customers about usage of hair products, skin improvement and fashion advice, so giving financial management advice would be easy. Moreover, her business only has a limited number of clients per day and there was ample time for her to provide this type of information. A restaurant owner also confirmed the match with his business. He already speaks to all the customers in the restaurant, chats with each of them. These talks would be ideal to explain about digital financial services. “While people are waiting for their food to arrive they like to chat and people are always interested in new things.”

Most merchants felt they could do this awareness raising for free and a commission of 10 ETB per person onboarded would be a welcome extra. They expected that the time invested in explaining would be rewarded with additional CICO business.

#### 4.6.6. **Business management services**

##### 4.6.6.1. **Automatic collection of payments**

Several merchants also had some rooms or houses that they rented out.

The consultants tested whether automatic collection of the rent would be a useful service. This would work as follows. The person renting would sign that the monthly (or weekly) rent due would be deducted automatically from the tenant’s account (bank or mobile money) as soon as their salary arrived, and paid into the landlord/-lady’s account.

The merchants confirmed that it was a great challenge to collect the monthly rent payments. This costs a lot of time and effort to convince people into paying. Most of the people renting have permanent employment, so they receive their pay on a weekly or monthly basis. Some of the merchants said they were prepared to pay substantially for this service, say 5 to 10%.

##### 4.6.6.2. **Stock management**

One of the merchants’ largest pain points was around staff and trusting staff with the stock. Most merchants had negative experiences with staff, even if the staff were close relatives, with staff selling stock without recording the sale and pocketing the money themselves or staff taking the actual stock.

To address this pain point, a digital application could be developed through which merchants could manage their stock more easily and could make the stock management more water-tight.

Merchants confirmed that this would be a very helpful service. They would prefer to move from note-book based stock administration, to a more automatic form through a mobile

phone. E.g. when new stock arrives, to scan the lot into the mobile phone and then for each sale scan the products as outgoing. If the digital application would also help them to check stock by listing how much should still be there for each type of good (e.g. after returning to the store and taking over from staff) that would be a useful service.

#### 4.6.6.3. Cashless branches

Several merchants mentioned that they wanted to expand their business. Practically all of them were dreaming of opening a new branch or several branches. Some wanted to open the same type of business at some distance (e.g. for a grocery store), while others wanted to open shops nearer by with different products or services (e.g. a restaurant owner wanted to start a photo and photocopy shop and another style restaurant). The main impediment for opening additional shops is the issue of finding reliable staff.

To address this pain point, the merchants together with the consultants dreamed up the possibility of a merchant opening cashless branches. The main branch would then have a digital Cash-in and Cash-out service. At this location all the clients could come and convert their cash into digital money. In the other branches the clients could pay only with digital money, so that staff would not have access to any cash.

The three merchants who discussed this option in detail, all found this a very attractive and feasible proposition. Surprisingly enough they did not find it too complicated, neither for their own management nor for their customers to understand that they would need to pay cash in one location and get the service in another. The merchants expected that these cashless branches could be the start of a cashless high street/woreda centre. People would find it exciting if their location would be a front-runner in digital money.

#### 4.6.7. Asset acquisition

##### 4.6.7.1. Saving up or loan for mobile phone

The ePSNP recipients mentioned significant pain points around their inability to save up for acquiring important assets. They typically live hand to mouth and this means that they spend all their money on daily necessities and to service short-term bridge loans for food stuffs. The oft mentioned asset ePSNP recipients would like to acquire was a mobile phone.

The consultants developed a product idea through which ePSNP recipients could use their PSNP payments as a channel to acquire a mobile phone. The example was illustrated with the one-but cheapest phone commonly available costing 350 ETB. The two options offered were:

1. Setting money aside in the mobile money (saving) from several PSNP payments to accumulate and when saved enough pay for a mobile phone with the accumulated savings (each month 100 ETB and 4<sup>th</sup> month 50 ETB)
2. Acquiring the mobile phone upfront and paying for this with that month's PSNP payment and three subsequent PSNP payments

All PSNP recipients wanted to use this mechanism to obtain a mobile phone. Each of the six ePSNP recipients interviewed preferred option 2., acquiring the phone through a loan with future PSNP payments. They felt that the loan should not cost more than 50 ETB interest for the 350 ETB price. This works out as 6.7% interest per month.<sup>15</sup> Part of the reason why people preferred the loan option may be their experiences that their PSNP money is accessed by others e.g. for repaying fertilizers received the previous season or for social contributions such as the Renaissance Dam and they may fear that these savings in PSNP may likewise disappear. Moreover, these PSNP recipients were all from SNNPR which in other studies showed to be more credit oriented, less savings oriented than other regions.

It may appear unfeasible for ePSNP recipients to take loans for acquiring assets. After all, PSNP recipients are the poorest of a poor country. Nevertheless, the consultants deem this feasible due to the guaranteed future income stream of PSNP recipients. See [Annex 17](#) for further details.

#### 4.6.8. Building a cashless ecosystem

Many of the respondents mentioned firmly that uptake of digital finance would only really work if all people were using it. People were keenly aware that it would not make sense for them to adopt digital finance on their own. They understood that shops needed to accept the digital payments, friends should be using digital finance, and all should be able to trust this form of money and understand how it works.

Together with the respondents, the consultants dreamed up how this universal uptake could take place. The key elements in this would be a) appropriate and good quality customer acquisition/awareness raising, b) stimulating customers to use intensively. While these two elements may seem obvious to the readers of this document, it is remarkable that people who had never experienced digital finance and had only recently heard about it for the first time, understood that these were so crucial that they constitute *sine qua non* conditions for digital finance. Therefore, these two elements are also discussed as use-cases.

##### 4.6.8.1. Customer acquisition

While merchants themselves believed that they would be ideal channels for onboarding, the future customers explained that they would be most likely to sign up for the service through a trusted member of the public who would not necessarily be a merchant. All respondents explained that they would only decide to use digital finance if someone they knew would explain to them how it works. That person should then still be accessible repeatedly (so should live close-by or should travel on the work-bus with them or similar) to help if the customer may have forgotten how something works or would like to learn something more. It was crucially important as well that customers could communicate problems (e.g. money

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<sup>15</sup> The first month, when the phone is given, the ePSNP recipient already pays 100 ETB, so is remaining with a loan of 250 ETB which is paid off in three monthly payments.

disappearing) to this person who could then follow it up with the provider rather than the customer taking it up with the provider.

People said that giving a monetary incentive to sign up, e.g. 10 ETB starting money, would not be a good method to onboard them. They would rather mistrust such an offer and avoid it. If money is being offered, there is probably something wrong with the service.

The knowledge of that promoter would be a key driver for uptake. If the person promoting it would not be able to answer all the questions, that would be a reason to not sign up and wait and see how others' experiences were.

#### **Differentiate between CICO tasks and customer onboarding/ support tasks**

In most countries it is taken for granted that merchants combine the function of providing cash-in and cash-out services with the task of signing up new users and supporting these users in their early digital finance journey. It is assumed that a merchant with a busy shop, restaurant or other retail service both has the time and the skills to carefully explain the exact workings of such a novel service as digital finance. Moreover, these are also considered the go-to person when something goes wrong and customer care is needed.

In reality only a minority of merchants have all the required skills and the interest in this type of work. Clients, even in countries like Kenya, signal that many merchants are disinterested, and do not take enough time to explain how everything works and what is all possible.

As can also be seen in this study, merchants have typically quite healthy profits and some of the more time-consuming aspects of explaining digital finance may just not be offering them realistic returns as compared to the rest of their business.

For that reason the consultants propose to experiment with separating CICO and customer care tasks. A non-merchant figure in the community, e.g. an older woman who already provides guidance and advice may be more successful at the customer care tasks. E.g. explaining how the system works, providing support and advice during the early months of customers' digital finance journey and supporting customers when they have issues, such as failed transfers, unexplained charges, or complaints, may be in better hands with a trusted village member than with a merchant.

#### **4.6.8.2. Intensive users' rewards**

While on-boarding is an important step, it is only intensive usage of digital finance that will create a true digital finance eco-system.

Together with the respondents, the consultants explored the options for stimulating people to use their digital money, once they were onboarded.

Several respondents were positive about playful rewards such as periodic lottery tickets. Even though chances of winning were very small, the excitement of seeing the results and the surprise of getting a lottery number would be attractive to a number of respondents.

Other respondents said that increasing the interest rate would stimulate people to accumulate more and more balance on their account<sup>16</sup>. Particularly if this amount would increase steadily they would also find it fun to see the percentage creeping up.

They all agreed that the entitlement to an increasingly high loan amount would also work as a good incentive, particularly if users could check what their loan entitlement was (similar to checking the airtime balance for free on Ethio Telecom).

Details of findings can be found in

- Garment factory workers [Annex 3](#) Smallholder farmer [Annex 4](#)
- Students [Annex 5](#)
- e-PSNP recipients [Annex 6](#)
- Merchants [Annex 7](#)

#### 4.7. Drivers of Digital Finance Adoption from 5 profiles' point of view

Digital finance tends to be driven in other countries by the following factors (table 10). We evaluated these according to the five profiles:

Table 10 - Considered benefits and their applicability to the 5 profiles

Considered benefit	Findings from the market study
Proximity	Many of the interviewed people mentioned having to travel to reach financial services. This travel takes time, is inconvenient and costs considerable amounts of money. This would be one of the main benefits for Ethiopia.
Speed & timeliness	Practically all respondents who used the P2P services by the CBE were content with the timeliness and only one case mentioned that it took too long (the money got lost for 3 days). As CBE is offering the service very cheaply, it is unlikely higher speed would attract clients.
Security	Rarely mentioned: the merchants mentioned to have some concerns travelling distances with large amounts of money (this would be across 20 to 40 kms). However, nothing had happened to any of them yet. Could be a mild driver for merchants and larger actors but overall not a strong driver.
Privacy	Confidentiality of the account is an important attraction of DFS for different types of people. Small holder farmers appreciated the privacy in front of their neighbours and children, e.g. when they receive payments for cash crops sold. Otherwise neighbours might ask for a loan and children may nag for some sweets. Equally, for sending money to children smallholder farmers appreciated the privacy that nobody in the village would know how much they send. ePSNP respondents were very enthusiastic about this, more from a point of view of being able to control their account and protect their account from infringements by local authorities for “taxes” and contributions and

<sup>16</sup> This finding contradicts what was earlier found that farmers said they did not need an interest rate on their digital savings. However, people often have contradicting opinions and in this case it were more students and merchants suggesting that a tiered interest rate would encourage depositing more.

	payments for fertilizers they had not wanted.
Cost (convenience)	Costs of current services are considered very reasonable, apart from the travel costs to reach financial service providers. Different groups have different levels of cost sensitivity. Garment workers consider costs but for long-distance transfers are prepared to pay. Farmers and ePSNP recipients are used to have very high transaction costs, e.g. cost to travel to market and cost having to pay authorities. The typical mobile money costs would not deter them and these groups do not use CBE services and have no easy access to these either.
Financial inclusion	Merchants, garment workers, students are all financially included. Several merchants and most garment workers even have more than one account. Farmers and ePSNP recipients are effectively financially excluded. (ePSNP recipients are formally financially included, but they do not have access to their M-BIRR accounts and the savings account they are given could not be touched until they would graduate). These two groups were very interested in true financial inclusion and particularly in the digital variety of that.
Transparency	Merchants were very interested in the transparency potential of using digital for their business. They were worried about being cheated. ePSNP recipients were highly enthusiastic about the prospect of having an account that they would have full control over, nobody else could touch and that they could verify frequently (e.g. check balance, see when money arrives, see how much had been withdrawn). They were willing to travel 12 kms for cashing out on such an account as compared to their current form of receiving payments.

As mentioned above, based on the five profiles studied the consultants expect the following four conditions to be crucial to set digital financial services in motion in Ethiopia:

1. The complete reliability of the service (no money disappearing, prompt information when money arrives, no downtime, transparency)
2. Convenience:
  - The proximity of the location to send and the location to receive (should be at walking distance)
  - Opening hours or possible to send from mobile phone (particularly for garment workers)
3. Privacy of sending (nobody else would know the amounts sent)

If the first condition of a completely reliable service is met, most profiles are willing to pay substantial fees. If this condition is not met, it is unlikely there will be meaningful uptake.



## 5. Market pointers for building digital financial services

Building on the previous chapter “Market Information” this chapter presents five elements that emerged as important building blocks for developing digital financial services in Ethiopia. The first section is “perceptions and experience with financial institutions” and zooms into trust of these institutions. The second section looks at the “community” as an early adopter. The third section discusses about communicating digital finance and people’s financial literacy. The fourth section is about products and providing a product range from the start. The final section looks at incentives and stimulating usage and depth of usage.

### Perceptions of and experiences with Financial Institutions

In the course of the field research, through various situations, the respondents shared their experiences with banks and MFIs. Numerous cases of failing ATMs were reported. It frequently happened that the ATM did not give any money while the request amount was deducted from the account. When taking the case to the closest branch, some respondents managed to get their deduction corrected on their account, while others could not get the bank staff to take any action. It appeared as if the students, more educated and from more influential backgrounds, could usually get their unfair ATM deduction reversed, while garment workers mostly could not. One of the garment worker’s respondents lost a complete salary of 1200 ETB, while the bank staff would not do anything and told her to go to the police.

Altogether all profiles reported they experienced banks and MFI staff to be unfriendly and careless. Long queues were common in the branches. Respondents mentioned lengthy and unclear bureaucratic processes, even when the bank itself made a mistake.

The ePSNP recipients stated that they were forced to save each time they received a government payment. The respondents said that the MFI staff told them that these savings were kept safe for them until the household would “graduate”, which means the moment that the government payments stop for that household. These savings were put into a traditional savings account with a paper savings book and paper receipts, rather than kept in the digital account on which the ePSNP recipients receive their payments. Of the seven cases we verified, none of the ePSNPs had their receipts complete for all the savings that were deducted. Some only had receipts for half the value they saved. It is unlikely that they will be able to receive their savings back without the paper proof, so the savings lacking receipts can be considered lost. According to the respondents they had not lost any receipts, but were not given all the receipts or got receipts with insufficient amounts on them. It was unclear why the savings were not kept on the digital mobile wallet, which would have had the advantage that no paper receipts are needed. Apart from the errors in the receipts, the fact that the ePSNP recipients were forced to save and that they could not access until graduation, leads to strong mistrust of the MFI and unwillingness to use this

savings account voluntarily. Offering clients to decide the savings amount and enabling clients to withdraw savings at will, might result in satisfied clients and larger deposits.

#### **Unexpected extra money arrived in a student's account**

One of our student received 500birr more than usual in his account and he thought his family has sent him more and was excited about it and withdrew all of it and used it. After 3 weeks when he went to the bank, he was told that his account was blocked because he has taken money that doesn't belong to him, they accused him of stealing money, they told him that he had taken the public's money and that this act is penalized; he said that he was treated like a criminal. After 3 days they fixed the problem themselves and asked him to finish some paper work to unblock his account, he said it was tiring because he had to go to another branch where he originally opened the account, talk with the manager, explain, sign a lot papers etc. then they deducted 500birr from other money that was sent to him. He told us that he was mistreated for a thing that he didn't do and didn't know about and he couldn't use his bank account for 3 days and he really needed money in those days. He said he was really mad at the moment but his family at home and abroad know this account and since CBE is found everywhere, since it's really accessible, he is still using it. If mobile money can solve these kinds of problems, if it guarantees for these not to happen then he said he will definitely use it.

Merchants, on the other hand, complained about the service levels, long waiting times and unwilling staff. Merchants explained that they needed to have an account with the largest financial institution, even though they found its service poor. For as far as they could avoid the largest bank, they did and used several other smaller, private banks.

Merchants claimed they would be able to provide a much better client experience if they would be bank-, MFI- or digital-agents. Indeed, two merchants reported they were de facto already acting as an extension of the bank. One merchant received and sent money from his bank-account on behalf of people from his neighbourhood. He would like to start doing that formally and earning a commission.

Another merchant with multiple and profitable businesses reported that he normally keeps all his reserved in cash in the business. However, the CBE branch in front of his main business periodically lacks liquidity. Then the branch requests him to deposit his reserves into his bank-account, to replenish their liquidity.

Altogether, across all profiles trust in the financial service providers was low and the poorest and least educated, the ePSNP and garment workers experienced most breaches of consumer rights. As a result, people withdraw as soon as they receive money in their account. If digital finance proves to be reliable and gains widespread trust it can attract many users, both for deposits and money transfers.

#### **Importance of community**

Throughout the interviews, people explained to us how they are part of their community. Rather than deciding as an individual whether they would adopt digital money, they would consult their community and follow what the community would do. If the community would adopt, they would, if the community would wait with adoption, they would also wait.

This is a common dilemma of digital finance, where before scale has been built nobody sees the benefit from adopting but scale cannot be built without substantial numbers of people adopting. One of our respondents, a smallholder farmer whom we paid some incentive via a new mobile money account, was very nervous about being the first user in his village. It scared him, he told us.

This adoption challenge exists in most countries. In the East African countries with successful mobile money, such as Kenya, Tanzania, Uganda, the route to adoption has been primarily via “first adopters”. A few innovation minded people who as individuals tried the service and were pleased with it, were the first adopters. Because in these three countries mobile money built on “send money home” it spread by itself from the early adopters to their family in the village who received the money they sent and from there gradually to more and more people.

In Ethiopia the communities may be the best unit for “first adoption”. If mobile money would be embraced one community at a time, and the community leaders would actively promote its usage to all members, spread may be faster and efficient. If financial service providers and mobile money would achieve “cashless kebeles” one to three agents would be sufficient to serve the community of that “cashless kebele”. It would be quite feasible to build the infrastructure kebele by kebele. If a good portion of a kebele community will indeed adopt and if the kebele economy increasingly take place in digital form, the agents in that kebele will be able to have reasonable scale of their services.

### **Explaining digital finance and financial literacy**

To explore the potential demand for digital financial services, this research had to explain in detail how mobile money works and describe use cases for mobile money. After the two to three interviews each, all our respondents across all profiles, could understand the concepts very well. They themselves identified the practical advantages and disadvantages and even made suggestions themselves for use cases to solve some of their personal challenges.

As a team we were surprised how quickly people grasped the abstract and complex system of digital money. It particularly awed us that they understood the mechanism before having seen it with their own eyes. Even the respondents without mobile phone could understand how a mobile phone would be the user interface. They did not regard lacking a mobile phone as an impediment to use mobile money. They were convinced they could still manage and control their digital money through a SIM-card alone, by inserting their SIM into a neighbour’s or friend’s phone.

Even the respondents who were illiterate, felt confident that they would be able to use it. They each mentioned one or two trusted village members who would show them or would do the transactions for them.

Altogether, we did not encounter real financial illiteracy. On the contrary, the way people thought about their finances and followed financial strategies, was quite sophisticated. In our view lack of uptake is due to outsiders promoting these services and insufficient explanation how the products work for people's real needs and priorities.

### **Which products and services to offer**

During the interviews we explained to people about mobile money and how the users can deposit into a mobile wallet, withdraw from it, send from it or pay bills with it. While all these transactions were attractive, most respondents first focused on the "value storage" feature of the mobile money. Most of them remarked how it would be useful to put the money safe in the wallet, out of reach of others. Later they could use these savings to pay a shop, send to a child schooling at distance, pay the hospital or pay a farm worker. By itself, the respondents started talking of mobile money as a savings or money storage mechanism. Even though most of our respondents already had bank savings accounts, they were not using these for saving (for trust reasons and because distance made it impractical to withdraw).

Based on these findings, this research suggests to communicate the mobile wallet as "mobile savings" and to stress from the beginning the savings possibility. We also suggest that the digital savings will be the anchor product of digital finance in Ethiopia, the way "send money home" remittances was Kenya's anchor product.

In addition to digital savings, our respondents were enthusiastic for a range of use cases. In fact, practically all use cases found approval with most. The enthusiasm for digital money stemmed from the plethora of applications. The diversity of options appealed: people are keen on a comprehensive financial management mechanism.

Therefore, the team recommends to not focus on one or two products, but already offer some range from the start. In addition to the anchor product of digital savings, offer **money sending/receiving** (which can be used at distance and nearby, e.g. for paying shops), **small digital loans** for which users build entitlement through savings history and "**programming money**" i.e. that farmers who earn a lump-sum deposit this and the money is paid out gradually (see section 4.6.4.2. above).

With this set of products, we expect a kebele's economy can quickly convert a substantial part of its economy to digital.

## How to promote uptake of digital financial services

*This sections repeats some points made in the previous chapter as it was thought useful to have these listed together here.*

The respondents made a number of recommendations which would stimulate uptake of Digital Financial Services.

***Work through a trusted community member*** The respondents said that uptake would depend on good explanation from a trusted person, known previously. This person should not only explain and help signing up, but should also do some “hand holding” for the first few times mobile money was used. Moreover, the respondents recommended that they should also be able to report failures to such a person and that she would help to get any lost money reimbursed. Both women and men thought this person could best be a woman who is known in the community as a trustworthy person. This person should not be the digital or bank agent, because an agent may not have enough time to explain. Moreover, it should be possible to go somewhere to report an agent’s misconduct, if such would occur.

***Provide incentives for usage*** The respondents did not recommend financial incentives for signing up. This would make people suspicious and lead them to expect a hoax. Instead, incentives should be used to stimulate intensive usage, after people had already signed up. The respondents thought it would be effective to stimulate more saving by giving higher interest rates on savings as the savings balance increased. For Muslims, on the other hand, an explicitly interest-free savings account would appeal and our Muslim respondents expected such a halal account would attract intensive usage.

It would also help to give small non-financial rewards, that could be used for discount services in the future, similar to airlines’ airmiles systems. In such a system the mobile money user would get some points each time they made a deposit in their savings account and points for how long they left it in their account, as well as points for each time they send digital money, they receive in digital form or for instance when they pay digital loans on time. With these accumulated points they could then receive free or reduced withdrawal fees, free or reduced transfers fees, etc.

The respondents also suggested that the trusted woman installed to promote digital finance could play a role in intensifying usage. If she would get rewarded the more her community used their digital financial services, she would actively help and encourage all to use DFS.

The proposed “small digital loans” is a product that would also stimulate more intensive usage, because entitlement to the loan increases the more someone uses their digital money. Even people who would not take any digital small loan would still appreciate to see the increasing amount of digital loan they were eligible for. Just knowing that they could take the digital loan for an emergency, even in the middle of the night, is a benefit in itself. It gives people a safety net, which is a comforting idea for them.

***Showing loyalty to the community by using digital money*** The respondents also recommended to emphasize the community in promoting usage of digital money. People would respond if using digital money would help their community. If they would understand that digital money makes their kebele economy more efficient, that would incentivize them to use digital money more frequently and in more situations. It might even help to gradually lower digital finance costs for a community that becomes increasingly more cashless.

***Commissions to agents according to intensity of usage instead of agent transactions*** Similarly it would work to reward agents for the level of usage, instead of a commission per transaction that the agent manages. Agents now only earn from money going in and out of accounts through them. As a result agents have an interest for frequent cash-in and cash-out instead of the money sticking in the cashless system. But to transition to a cashless community cash-in and cash-out transactions are actually impediments to the digitization process. The more digital money stays digital and does not get converted into cash, the more benefits it has. Agents will soon understand that when their kebele has become completely cashless, their cash-in/cash-out services are no longer needed. So it is important to reward agents for cashlessness, otherwise they may work against the digitization. For the banking system digital money is attractive for increasing the deposits into the banking system, but agents in the current reward system have no earnings from these deposits and will therefore not encourage it.

## 6. Conclusions

The main conclusions are:

1. **Ethiopia distinct DFS situation** Ethiopia is a country that differs in a number of aspects from other countries in the region, e.g. in its bank led regulation, having a single, state-owned MNOs. It is therefore required to follow its own path to grow digital financial services and this assignment identified five uniquely Ethiopian approaches that are likely to lead to success..
2. **Good appetite for DFS across several population groups** The five profiles studied for this assignment showed all five good potential for digital financial services. The current transaction pools that were found to take place feature a number of characteristics and pain points which make them suitable for conversion to digital financial services such as a digital savings mechanism through which transactions can take place, short term loans and programmed finance to manage cash-flow.
3. **Similar pain points across transaction pools** The pain points in people's financial management are less related to specific transactions and are more general barriers around trust, transparency, reliability and privacy. The barriers that people experience in managing their finances apply across several transaction pools and across profiles.
4. **Once DFS is adopted deep usage expected** In Ethiopia the consultants expect people to stay away from all digital services until they are convinced about its reliability, its transparency and its privacy. This means that a slower adoption rate can be expected. On the other hand, once the public has been convinced about these core features, the consultants expect a more comprehensive uptake of DFS services, with customer converting a larger portion of their financial management to digital as they are welcoming a comprehensive money management system..
5. **DFS best be digital savings driven** While most successful DFS countries initially focus on P2P, airtime and bill payment transactions, Ethiopia shows early appetite for digital savings, and more generally digital management of finances through a digital savings account as an anchor product. Financial service providers are particularly interested in capturing savings that are currently held outside the informal financial sector, so this route to digital finance adoption through a savings anchor product would both match preferences of demand and supply.

### 6.1. Conclusions from market information

For this study five profiles were investigated. The profiles with highest appetite for DFS adoptions were those with lower income: small holder farmers, ePSNP recipients and

garments workers. Merchants were primarily interested in DFS for becoming an agent or to complement their business in other forms. Students were relatively less likely to adopt as compared to other countries.

#### 6.1.1. **Income and financial inclusion**

While a substantial portion of the studied profiles receive income into a bank-account, they soon withdraw via an ATM and transact primarily in cash. This can illustrate that the way financial institutions currently offer their services, does not meet demand for products that meet their customers' needs. The reasons for not leaving deposits within the financial institutions and withdrawing payments immediately after they arrive, is, to a large extent, caused by lack of trust in financial institutions. Negative experiences with ATM withdrawals are a major cause for this trust issue, particularly of poorer, less financially educated people. Lack of access to loans, both for merchants and farmers, is another cause for disillusionment with the current range of financial services.

#### 6.1.2. **Expenditures**

Across all profiles, the largest expenditure components are on primary needs i.e. "food at home" which represents between 35% and 48% of each profile's expenditures. For most profiles, the second most common expenditure was "clothes and shoes", and the third, "transportation". Expenditures of these transactions currently take place entirely with cash. For garment factory workers and merchants rent also features as a large expenditure (second largest for both these groups) which also happens in cash.

#### 6.1.3. **Pain points**

The main pain points high-lighted by the five profiles were:

1. Privacy, control and transparency
2. Reliability and lack of trust of financial institutions
3. Convenience, proximity, transportation costs and opening hours

In Ethiopia security and price were less prominent as pain points, as compared to other countries. Security, in the sense of theft and robbery, was not a significant problem either where it is a major driver in other countries.

#### 6.1.4. **Price Acceptance**

At the current pricing structure, most of the five profiles would adopt DFS. If anything, the current prices are low. Rather than concentrating on price, FSPs should fully focus on service reliability. When reliability is proven, customers will be willing to pay substantial fees.

It should be noted, there are many aspects to consider when setting prices, from the business case to how to position the product or service in the market. Thus, depending on who you talk to the perception of price will vary greatly. See [Annex 8](#) for which / where / how / for how much, the price will be set from different perspectives.



#### 6.1.5. Adoption drivers

The appetite for digital financial services is considerable. If financial service providers are able to satisfy the following conditions, digital financial services stands a reasonable chance to become established and then grow in both volume and value of transactions:

1. The services must be fully reliable and be able to win everybody's trust. In case there are technology or other failures (e.g. some money disappearing), the provider should offer immediate and easy to access solutions and rectify whatever went amiss (the situation of mistrust caused by the ATM challenges should not be repeated).
2. The services should focus on addressing pain points around privacy, help with disciplining in savings and cash-flow management, including access to convenient saving and loans.
3. People must have access to full and detailed information when on-boarding and they require guidance and coaching during the early months of using digital financial services.
4. Due to elevated transport costs, agents need to be available within walking distance from the customers.

Early adopters in Ethiopia may well be different from early adopters in other countries. Poorer people in Ethiopia have a relatively high appetite for digital finance as they do not yet have adequate services from formal financial service providers as shown by the number of SACCOs, self-help groups, VSLAs and the ongoing popularity of Equb and Edir.

Merchants are also keenly interested in adopting digital financial services and can be both clients (for receiving payments) and CICO agents.

#### 6.1.6. Use cases

The digital finance use cases that appear to have the most promising demand, include:

1. **Digital savings** Offer a digital savings account as anchor product, instead of a mobile wallet. Apart from the savings feature and interest paid, the digital savings account would have the same functionality of a mobile wallet.
2. **Small digital loans** (similar to Mokash and M-Shwari) that offers a safe place for deposits, and through intensive usage the subscriber can gradually build a credit score that makes them eligible for an instant, short-duration, micro-loan.
3. **Transferring money over distance**, particularly to students at secondary school or university. It will be important that cash-in can take place at walking distance from the sender, and cash-out can take place at walking distance from the receiver. This same service can be used for paying closer by, e.g. to local shops and services.

4. **Programming payments** For parents to send steady amounts to children studying away from home. Parents can deposit a lump sum that the bank will forward in fixed amounts at regular intervals to the student.

## 6.2. Conclusions pointers of digital finance adoption

### 6.2.1. Trust in digital finance

The low usage of formal financial services, even amongst those who have bank- or MFI-accounts, is due to lack of trust, unreliable service, lack of customer care and lack of recourse when things go wrong. For digital finance the current service levels of the financial service providers presents an opportunity. If DFS manages to provide a good user experience, gives a reliable service with quick and easy ways of getting corrections when things go wrong, people will be attracted to the service in large numbers.

### 6.2.2. Importance of the community

Even more than in other countries, the respondents rely on their community for their information and for deciding whether to adopt digital finance and other innovations. This situation may provide an opportunity and addressing the community for adoption rather than individuals may work out as a good strategy. Rather than identifying one profile of early adopters, spread could be via “cashless kebeles” that convert kebele by kebele.

### 6.2.3. Understanding digital services and financial literacy

If explained patiently in line with potential users’ reality and if explained by a trusted, local person, even people without any schooling can comprehend how digital financial services will work and can imagine the benefits and drawbacks clearly. The respondents’ level of sophistication in financial management was surprisingly high. If the explanations are given sufficient time with references to people’s reality, they can understand it and recognize the advantages.

### 6.2.4. Products with potential and range of products

Practically all the profiles found practically all the digital finance use cases attractive. They also found the diversity of application of digital finance appealing. To enable users to enjoy multiple products from the start, it may be a good idea to start offering a package of about four products, with digital savings as the anchor product, money sending and receiving, small digital loans, and programmed finances (cashflow management tools).

### 6.2.5. Ideas for promoting uptake and intensive usage

Apart from working through a trusted, local person, uptake may be driven through incentives. These incentives could be an airmiles style system where intensive usage would be rewarded with extras and lower fees. People’s loyalty to their community can also be invoked where using digital finance would be a way of demonstrating their commitment to their community’s economy. Both the trusted local person promoting and supporting early users and the agents should also receive incentives according to intensity of usage rather than signing up and cash-in and cash-out transactions.

## 7. Recommendations for Financial Service Providers

### 7.1. Develop an Ethiopian style DFS

The consultants recommend that Ethiopia finds its own way in DFS since their situation is distinct from those countries where DFS has successfully scaled. Which exact DFS path will prove successful cannot be foreseen. However, the consultants have the following recommendations that have the possibility to be successful, if these are applied alongside each other.

### 7.2. Offer a suite of services from the beginning with digital savings as the anchor service

Rather than focus on sending and receiving money (P2P) as the initial product to build the DFS ecosystem, the consultants recommend to offer a wider, more comprehensive suite of services simultaneously

1. Digital savings as an anchor product that also facilitates the other products
2. Sending money and receiving money: transfers at distance as well as close-by
3. Programmed payments
4. Micro loans as a reward for intensive usage

The consultants recommend to initially focus on designing **convenient and attractive digital savings** by offering digital savings as the digital anchor product instead of a mobile wallet. Increased deposits due to the digital savings will bring about buy-in from financial institutions and make offering digital financial services an attractive business proposition for them and the secure, private savings service will attract customers.

### 7.3. Work in geographic clusters

Achieve scale by working with cashless islands where a substantial portion of the local economy is converted to digital. These **cashless kebeles** can be achieved by approaching communities as a whole and convince leaders and community members to become the early adopters and showing how the local community can become efficient from digital transactions.

With considerable upfront costs of setting up and maintaining an agent network, it is vital that there are sufficient digital volumes flowing through the agents so that they earn commission, otherwise the agents will discontinue and follow other business opportunities. As such, it is a significant challenge and expense to work across large portions of the country at the same time. It is therefore suggested to work in limited geographic areas, e.g. in clusters of kebeles or woredas, as this provokes the “ecosystem effect” i.e. if an agri business wanted to pay farmers with mobile money, then those same farmers would ideally be able to pay for health care, schooling, retail etc using mobile money, rather than cashing out. It is also important agents have a relative balance between cash in and cash out transactions, otherwise they will encounter liquidity challenges. For example, it would be a good strategy where ePSNP payments are made, to also have a deposit inducing product.

#### **7.4. Focus on low-income customers**

The consultants recommend to first focus on low-income segments such as smallholder farmers, ePSNP recipients and factory workers. These people are currently not served or served in sub-standard forms. They are willing to pay substantial fees in exchange for good quality, fully reliable services.

While the consultants recommend to segment the market strongly and address different segments with distinctly designed services, the consultants recommend to not focus on one or few segments only but to serve most segments of communities in selected geographic locations.

#### **7.5. Regard merchants both as customers and as potential channel**

Merchants are key to successful DFS as they will need to be the channel and the interface with the customers. Rather than regard them only as a channel, it is important to understand merchants and their needs and treat them as clients who use DFS for their business. To successfully onboard merchants as agents, it is crucial that DFS strengthens the merchants' core business.

#### **7.6. Gain trust by directly involving communities in design and promotion**

The consultants propose to concentrate efforts on ensuring that the users regard the digital financial services as a trusted service that is part of their community and that they can influence. Make use of existing community structures and bonds for the promotion and onboarding of new clients. The consultants also recommend that product development is done in close consultation with the communities and that their recommendations for design, price structures and communication of the product are incorporated wherever feasible i.e. follow a Human Centered Design approach to product development.

#### **7.7. Pay substantial attention to customer on-boarding and customer usage**

The consultants recommend to devote considerable attention to the on-boarding, guidance and support during the first months of customers' experience. Experiment with different approaches. Particularly test whether advisory services and customer care can be provided by non-agents, e.g. trusted members of the community. Experiments need to include

- a) training and reward systems for the trusted community members who will offer customer care,
- b) training and appropriate services for merchants who become agents,
- c) experiment with selecting different types of merchants (to find out which type of merchants are more successful: smaller/larger, female/male, types of goods or services).

### 7.8. Reward customers, promoters and agents for deep usage

Design a reward system that will incentivize customers to keep significant balances on their digital accounts and otherwise use digital finance intensively. These rewards do not need to be purely financial but can be playfully designed and fun. Equally, both the agents and the trusted community women who promote digital financial services should get the right incentives and be rewarded for intensive usage of DFS of their community, rather than based on cash-in and cash-out transactions.

### 7.9. Follow a dynamic experimental approach tested at small scale

As Ethiopia's environment is rather distinct, it is relatively unsure which use-cases will succeed and can gain scale. The consultants therefore recommend to experiment dynamically with offering a number of use-cases at a limited scale, limited product development i.e. prototypes. It is important to involve the potential users directly in the design of these products as well as in how to communicate and roll out the products. It is recommended to intensively monitor early user experiences and go through numerous rounds of readjusting the alpha- and beta-versions of the product.

It is recommended to quickly move from product ideas to product tests and "fail fast" in order to launch an adjusted product that comes closer to people's preferences. FSPs are discouraged to first try and get the product exactly right on the design table and launch it at large scale, with still considerable risk of failing. This approach is more costly and results in time losses. Experience from other countries is that it is hard to foresee exactly how a product will fare with the public.

### 7.10. Recommended next steps for Financial Institutions

While the consultants recommend an experimental approach, the following should be in place before even experimenting:

- a. Well-designed digital savings services
- b. Reward system for intensive usage of digital savings and other products
- c. Carefully worked out technology system with double checks-and-balances to correct in case of mishaps
- d. Customer care system that can be reached and that responds fast and appropriately
- e. System of identifying and training up trusted community persons who will promote usage.

Once these are in place, we recommend you to identify a limited number of cashless islands in a location where you can intensively monitor and coach. You probably best start with two to three locations from which to learn, adjust and improve the service. Wait until these show uptake before expanding to additional locations.



Ensure that your staff or researchers can be present in your cashless islands frequently and can genuinely follow and understand people’s experiences, learn how people use the digital savings, what blocks them from using and dynamically try out adaptations and modifications in your promotion and communication methods.

Give an active role to the community in these experiments. Make the community and their leaders partners and make their creativity and experience work for your digital finance transformation. Once you have built up comprehensive and appealing set of services and promotion approaches, test these out at a slightly larger scale (say ten cashless islands) to confirm their broader applicability.