

INSIGHTS ON PAYMENT PRACTICES IN BANGLADESH:

A Look at the Mobile and Financial Habits of Dnet's Aponjon Program Agents

This report was prepared by Dnet (a non-profit Social Enterprise institution, www.dnet.org.bd) through a field study in Bangladesh funded by USAID's mSTAR project (Associate Award AID-OAA-A-12-00073), managed by FHI 360. The study was conducted in May 2014 with the customer acquisition agents of Aponjon Program (mHealth service on maternal and child healthcare) run by Dnet.

August 2014



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DISCLAIMER

The views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the U.S. Government

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EXECUTIVE SUMMARY

This study, conducted by Dnet under a grant provided through USAID's Mobile Solutions and Technical Assistance (mSTAR) project, captures how customer acquisition agents for Dnet's Aponjon Program are using mobile phones. Aponjon is an mHealth initiative focused on maternal and child healthcare. A mix of quantitative and qualitative methods were used for this study, which had a sample size of 178 agents, selected from a total population of 1,029 agents. Of the 178 agents selected for the study, 86 are cash recipients (referred to as "cash users") and 92 are mobile money recipients (referred to as "MFS users")¹. Nine focus group discussions and 29 key informant interviews were conducted with the agents. Excel and Google analyzer were used to analyze the data and create graphs of the findings. Participants' opinions were analyzed on multiple questions using a Likert Scale. Key findings of the study are detailed below:

1. 84% of participants use a feature phone, and 5% access the internet using a mobile device. Interestingly, while more cash users owned smartphones (21% vs. 12%), they were nine times less likely to use mobile internet. Cash users were also significantly less likely than MFS users to use their phones for services beyond just voice.
2. The majority of MFS users (88%) use mobile financial services to receive money, whereas cash users (71%) collect money from their affiliated local office branch manager. 97% of MFS users felt that mobile financial services are convenient, whereas 78% of cash users stated that hand-to-hand cash transactions are convenient.
3. On average, it takes cash users approximately two hours (86 minutes of travel plus 33 minutes of wait time) to withdraw their payment from an affiliated local office. In monetary terms, Dnet estimates the time value to collect each payment equals a total of Tk. 51 (Tk. 37 for travel time and Tk. 14 for wait time). Concerns about the time required to collect cash and the cost of travel were noted as disadvantages of using cash by a significant portion of cash users (47% and 71%, respectively).
4. 62% of cash users (n=86) have knowledge of MFS. Interestingly, more than 20% of cash users expressed positive feelings about receiving payments via MFS because they viewed it as safe, secure, convenient and easy to operate. More than half of all participants learned about MFS through television advertisements and/or conversations with colleagues.
5. While both types of participants noted that they save money, the percentage was much higher among cash users (88%) compared to MFS users (40%). Awareness of interest rates offered by banks appears to be the reason for the difference.

The study revealed that there is substantial potential to improve the capacity, knowledge and awareness of MFS among cash users, particularly among those individuals who recognized some of the benefits of MFS.

This report was prepared by the following Dnet staff, with input from FHI 360:

1. Md. Forhad Uddin, Chief of Impact
2. Atik Ahsan, Impact Specialist
3. S M Atiqur Rahman, Impact Associate

¹ MFS refers to mobile financial services, which includes a number of services, including mobile money transfers

1 | BACKGROUND

mSTAR is a broad, flexible, and responsive technical assistance and action learning program that fosters the rapid adoption and scale-up of mobile money, mobile technologies and mobile data solutions, in developing countries. The project seeks to increase access and use of mobile technologies in the daily practices by the poor, civil society, local government institutions, and private sector stakeholders. The mSTAR project began activities in Bangladesh in September 2013. It is being implemented by FHI 360 with funding from USAID/Bangladesh and USAID/Washington.

Dnet, a non-governmental social enterprise organization in Bangladesh, is implementing and coordinating the MAMA Bangladesh initiative, branded locally as 'Aponjon', to reduce maternal and child mortality using mobile phone services. Aponjon deploys agents across the country to increase subscriptions to the mobile phone service; agents receive an incentive payment based on the number of customer acquisitions they make. Aponjon pays incentives to their agents using different means. Due to the popularity of MFS in Bangladesh as well as its potential to increase efficiency, Dnet applied for and received a fixed-obligation grant from the mSTAR project to integrate mobile financial services into its Aponjon program. As part of the grant, Dnet is also documenting learning from this transition.

To begin, Dnet conducted a study on MFS and cash payment practices by customer acquisition agents, who willingly participated and shared their opinions. The purpose of the study is to understand the advantages, disadvantages, and convenience of cash versus mobile financial services. Based on the results, Dnet is developing a plan to integrate and scale mobile financial services in their operations for the Aponjon Program.

2 | STUDY DESIGN

2.1 | Study Objectives

1. To understand mobile phone usage among Aponjon agents
2. To understand the diversity of available payment transaction channels and service providers being used by Aponjon agents
3. To understand savings and credit practices among Aponjon agents

2.2 | Study Approaches

A mix of quantitative and qualitative methods were used in this study. A sample survey, focus group discussions (FGDs) and key informant interviews (KIs) were conducted with the target population. The primary target of this study was Aponjon agents. To conduct the sample survey, a questionnaire was prepared with a mix of close ended and open ended questions. As part of the survey, checklists were used to highlight key MFS issues to discuss during the FGDs and KIs. Using Google Docs, the questionnaire was posted online to record and preserve survey data.

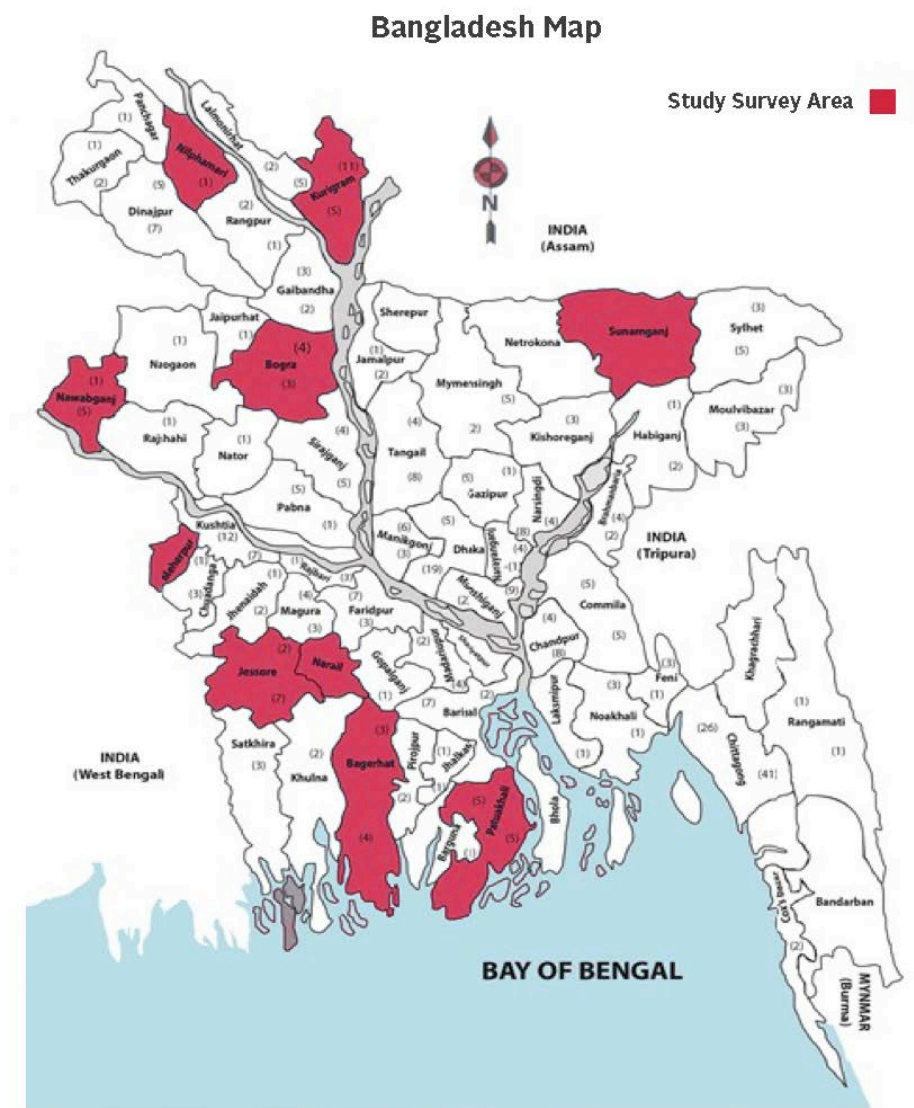
2.3 | Study Population and Sampling Method

The population size was 1,029 health agents, of which 552 agents are cash users and 477 are MFS users. A stratified random sampling technique was applied to select study participants. A total of 178 agents were selected for the sample survey, which was selected from two different strata (86 agents are cash users and 92 are MFS users). Agents were randomly selected from the agent database. The sample size was calculated using Raosoft's online calculator (see www.raosoft.com/samplesize.html), which provides a confidence level of 95% and a margin of error of 10%. Dnet selected 5% of sample agents from each strata to address any potential sample selection error. Calculation details are presented below:

Agent category	Study population	Margin of error	Confidence level	Estimated sample	Add sampling error	Estimated required sample size	Survey conducted (actual)
Cash user	552	10%	95%	82	5%	86.1	86
MFS user	477	10%	95%	81	5%	85.05	92

2.4 | Study Period and Location

The study was conducted from May 4-13, 2014 in ten districts of Bangladesh (see map).



2.5 | Data Collection

Nine experienced data enumerators were hired for the study. Dnet provided a 2-day training for the data enumerators on the objectives and methodology of the study, details about the questionnaire and checklist, ideal communication methods to reduce bias, and ethical considerations. The data collection was conducted in two steps. Step 1 involved both Dhaka and regional Aponjon staff scheduling interviews. Step 2 involved the data enumerators visiting participants and conducting in-person interviews. The data enumerators captured responses to the questionnaire on paper and entered them into the Google Doc after returning to the Dhaka office. Nine FGDs and 29 KIs were conducted and analyzed.

2.6 | Data Verification and Analysis

During the surveying, a core research team member visited the study area to monitor survey techniques and data quality. Data quality was also verified by reviewing audio recordings with participants. The data was analyzed using Google Data Analyzer and Excel. Dnet used a five point Likert Scale to analyze participants' satisfaction levels with a given statement.²

² McLeod, S.A. (2008). Likert Scale, retrieved on 25 May 2014 from <http://www.simplypsychology.org/likert-scale.html>

2.7 | Bias Reduction

To reduce biases, the data enumerators were trained to conduct the interviews with an open-mind, and to remain non-judgmental and respectful of participants regardless of the responses given.

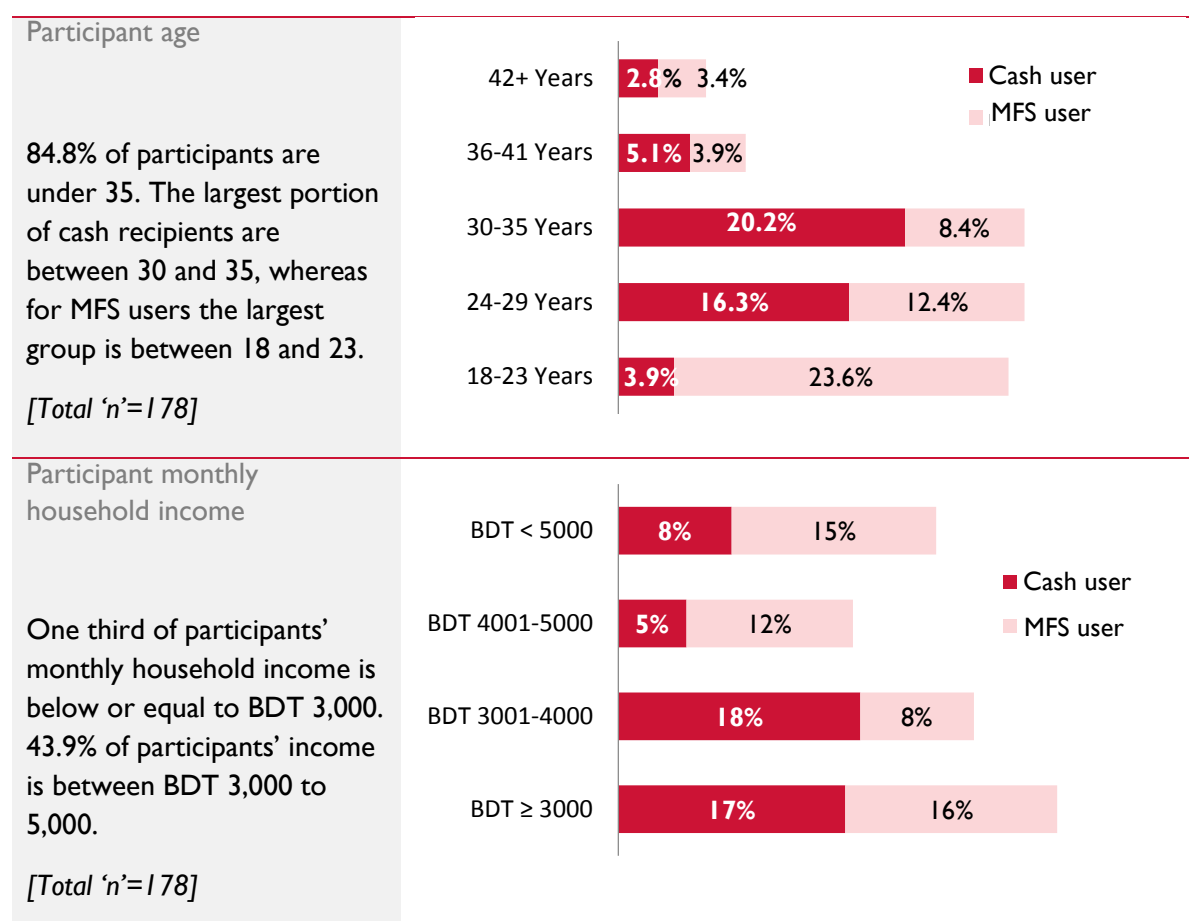
2.8 | Ethical Considerations

Dnet ensured that participants understood the purpose of the study, the process of data collection, and data protection matters prior to receiving their consent to participate. Dnet took deliberate measures to guarantee that participants were not exposed to risk. In addition, Dnet restricted access to the raw data and all data was maintained in confidential files.

3 | STUDY FINDINGS

3.1 | Participant Profile

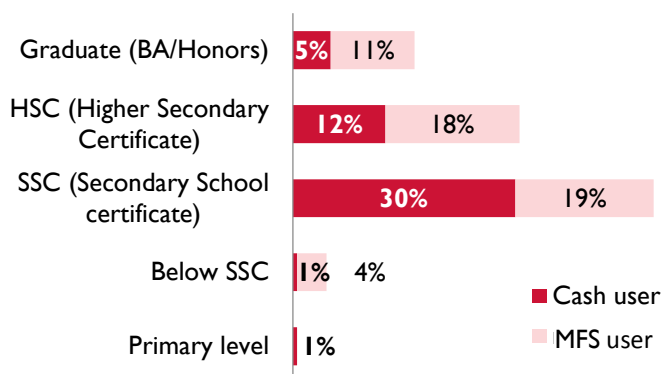
Dnet conducted the study with Aponjon service agents, referred to as 'participants'. Agents increase subscription for Aponjon's service by identifying customers and helping them register. Aponjon pays their agents incentives in cash or via MFS, based on their preference. Participants of the study are categorized into two groups: 'cash users' and 'MFS users'. The profile of study participants is illustrated below.



Participant education status

95% of participants have an education level of SSC (Secondary School Certificate) or above.

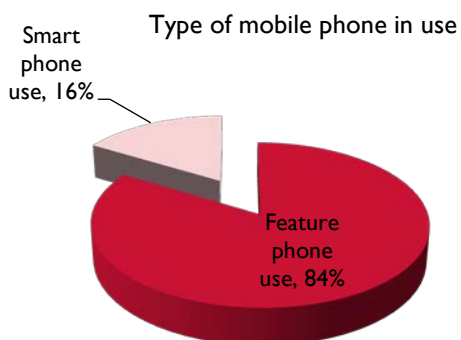
[Total 'n'=178]



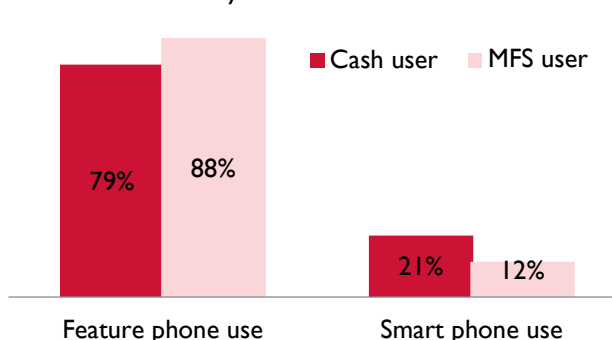
3.2 | Mobile Phone Usage

3.2.1 | Usage by Device Type

All participants own either a feature phone or smartphone. Of 178 total participants, 84% use a feature phone. 88% of MFS users own a feature phone while 12% own a smartphone. Of cash users, 79% own a feature phone and 21% own a smartphone.

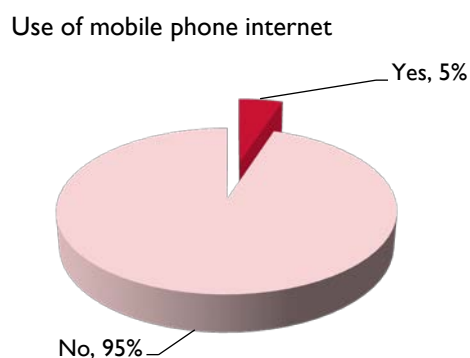


Comparative status on type of mobile phone used by cash and MFS users

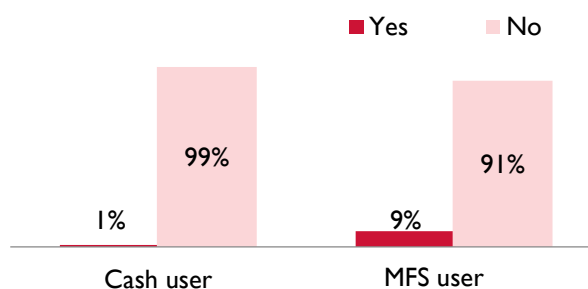


3.2.2 | Usage for Internet

Among total participants (n=178), only 5% access the internet using their mobile phones. The internet usage rate was higher among MFS users than cash users.



Comparative status between cash and MFS users on the use of mobile internet



3.2.3 | Usage by Purpose

Participants use their mobile phone for six reasons other than voice calls. Using a Likert scale, a score of five (5) was assigned for frequent use, three (3) for moderate use, and one (1) for occasional use. Among cash users, the vast majority of participants did not use their phones for any of these purposes. The most common usages were to take photos (38% of participants) and send/receive SMS (23%). Only two cash users made use of their phones to send photos, and none of them downloaded videos, sent/received email, or sent money. This appears to have been primarily due to a mix of limited awareness, lack of interest, and the additional cost associated with these features.

Among MFS users, the most commonly used features were sending money (100%), sending/receiving SMS (66%), and taking photos (48%). A smaller number of MFS users used their phones for downloading videos (24%), sending/receiving emails (10%), and sending photos (8%).

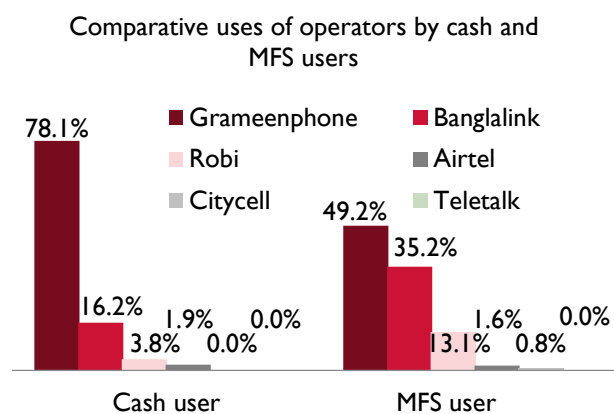
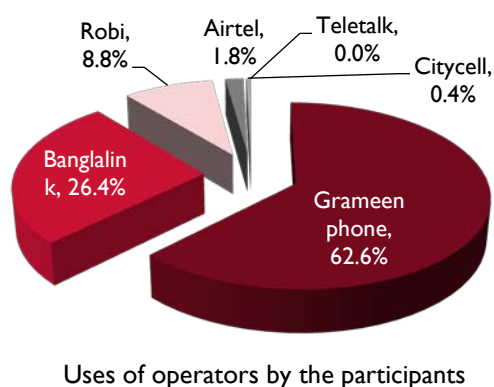
The average frequency of use for each of those services, excluding non-users of the feature, can be found in Table 1 on the following page.

Table 1: Mobile phone usage (among actual users)

Type of use	Cash user	MFS user	Combined
Send and receive SMS	2.6	2.8	2.8
Take photos	2.8	3.0	2.9
Send photos to others	2	2.1	2.1
Download video	N/A	2.8	2.8
Send and receive email	N/A	2.3	2.3
Money transaction	N/A	2.7	2.7
Total average	2.7	2.8	2.7

3.2.4 | Usage by Network Operator

Participants mostly use Grameenphone, Banglalink, and Robi. Grameenphone is the most used, followed by Banglalink and Robi. 94% of cash users use Grameenphone and Banglalink.

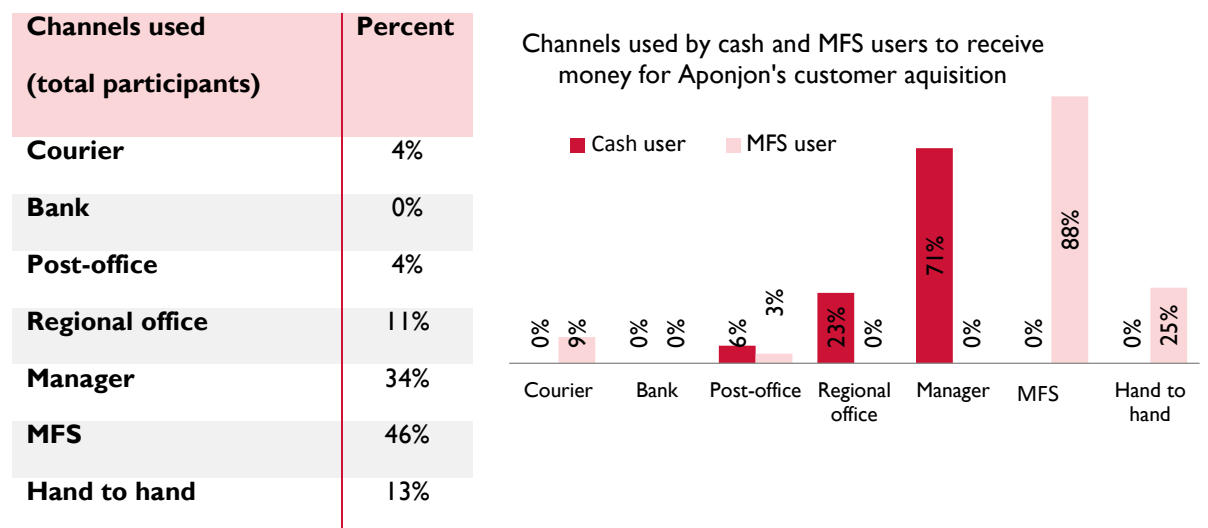


3.3 | Monetary Transactions

3.3.1 | Monetary Transaction Channels

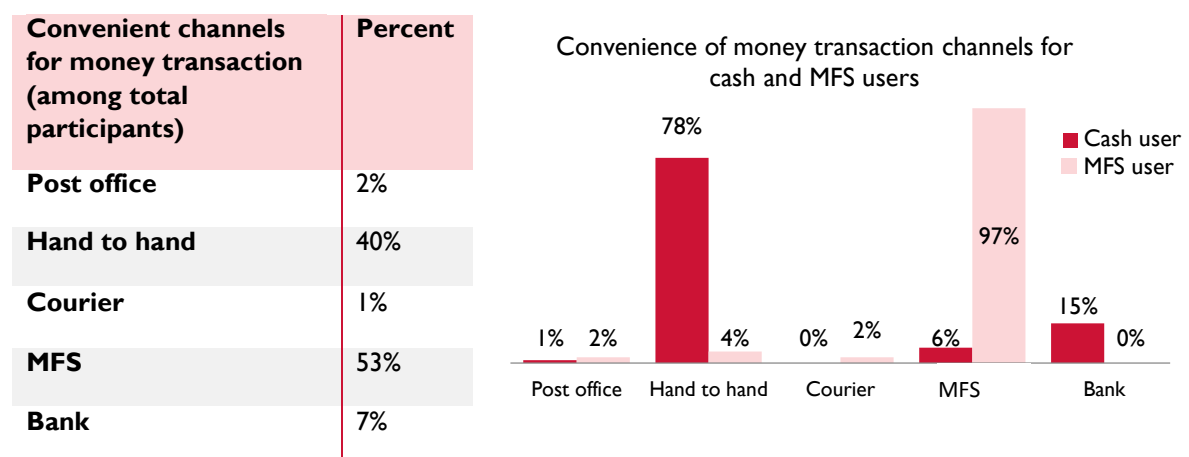
Monetary Transaction Channels in Practice

Participants use multiple channels to receive payments for acquiring customers. Among total participants (n=178), 46% use MFS and 34% receive cash from branch managers. None of the participants use a bank to receive a payment from Aponjon. Cash users use three channels for receiving money: branch managers, regional offices, and post offices. MFS users receive payment via MFS, courier, the post office, and hand-to-hand channels.



Monetary Transaction Channels by Convenience

Agents noted that MFS and hand-to-hand channels are the most convenient way for them to receive Aponjon's customer acquisition incentive. MFS was listed as the most convenient channel for the majority of MFS users (97%), whereas only 6% of cash users consider MFS convenient. Hand-to-hand transaction is the preferred channel for cash users.



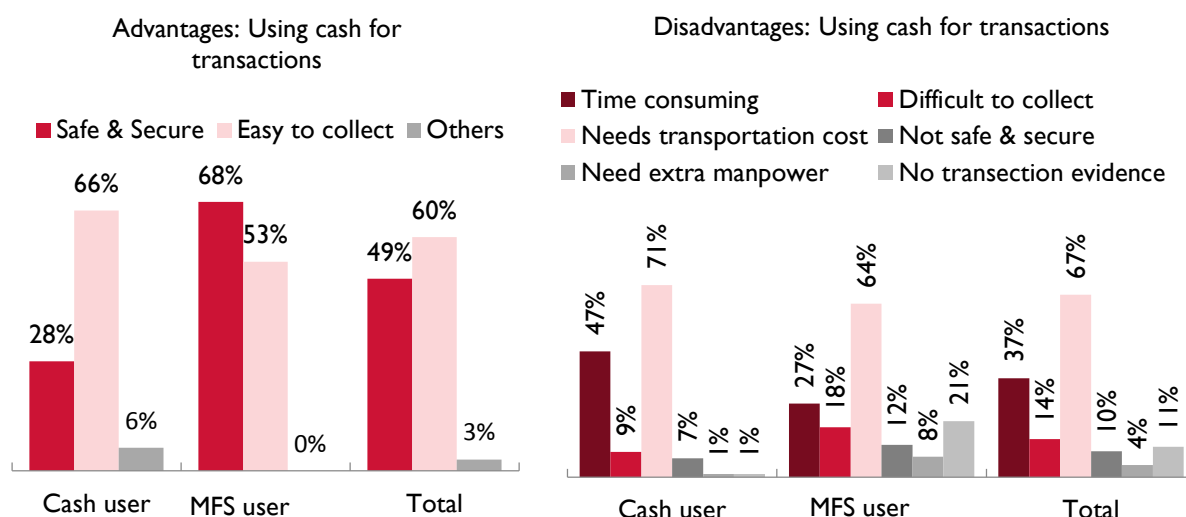
3.3.2 | Cash Transactions

Experience and Opinion

Participants shared multiple advantages and disadvantages to using cash for monetary transactions. Of all participants, 60% cited that cash was easy to collect and 49% said it was safe and secure. Most of the cash users (66%) stated that cash transactions were easy to collect, as they are familiar with the procedure. Interestingly, the majority of MFS users (68%) cited that cash transactions were safe and secure.

"Money transaction from the bank is very painful. Sometimes the bank officials behave quite rudely and their attitude seems I am guilty that I came here to transact money." Laboni Khatun, Meherpur district

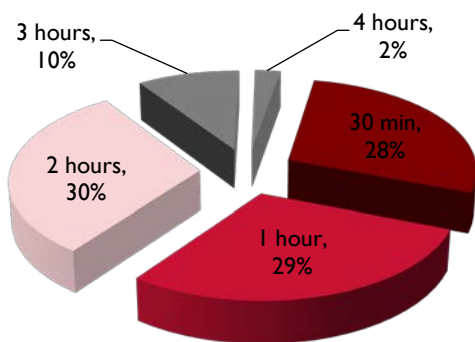
Participants identified six disadvantages regarding cash transactions. Approximately two thirds of all participants mentioned that cash disbursements involve extra transportation costs. Further, approximately one third of participants stated that cash transactions are time consuming. 10% of participants suggested that cash transactions are not safe or secure because there is no receipt to provide evidence of payment. The disadvantage percentages were similar both for cash and MFS users (see figures below).



Time Spent to Receive Payment

Approximately 90% of cash users spend 30 minutes to 2 hours travelling to collect payment from the various cash collection points. 84% of cash users wait 30 minutes at the collection point to receive payment from Aponjon. To receive each payment, participants spend approximately 2 hours on average including travel and wait. The monetary value of this time engagement is equivalent to Tk. 51 based on average Aponjon agent wages. In addition to the indirect cost of TK. 51, there is also the direct cost of transportation, but collecting this data was beyond the scope of the survey.

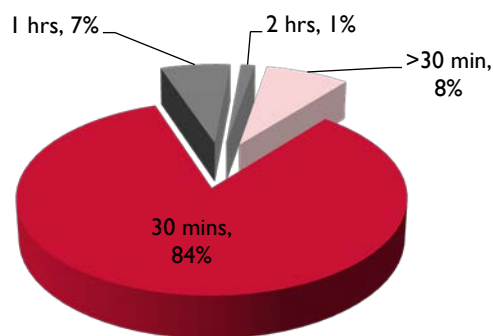
Time spent traveling to receive money



Average travel time for collecting money from the source for each payment: 86 mins

Average cost for 'travel time' to collect money for each payment: Tk. 37

Time spent waiting to receive money



Average waiting time for collecting money from the source for each payment: 33 mins

Average cost for 'waiting time' to collect money for each payment: Tk. 14

3.3.3 | Mobile Financial Service Transactions

Knowledge and Usage

Among total cash users (n=86), 22% use MFS already, 62% know about MFS, and 38% have no knowledge. 100% of MFS users (n=92) know about and use mobile finance for personal use.

[Total 'n'=178]

Cash user	Know about and use MFS [22%]	100%	Know about and use MFS [100%]
		90%	
	Know about MFS [40%]	80%	
		70%	
		60%	
		50%	
		40%	
		30%	
	Have no knowledge about MFS [38%]	20%	
10%			
		MFS user	

Reasons for using MFS

Participants identified eight ways that they use MFS. Of those, sending money, receiving money, and receiving salary/TA/DA were the most popular. When asked about the type of financial support MFS providers should provide, participants expressed that they expect monthly saving schemes (17%) and credit repayment (22%) to be offered. Using MFS for shopping, utility bill payments, and airtime top-up was only done by MFS users. It is worth noting that although cash users are not MFS account holders, however, they use MFS through their friends, family members, and agents' accounts.

Table 2: Reasons for using MFS

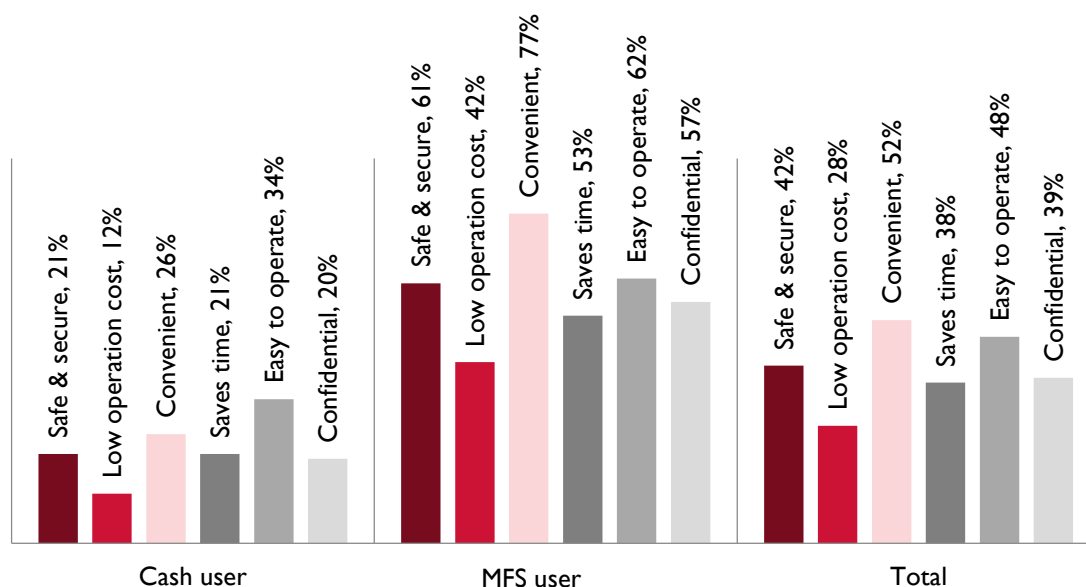
Purpose of use	Cash user	MFS user	Total
Salary/TA/DA	5%	55%	47%
Shopping	0%	2%	2%
Utility bill payment	0%	10%	8%
Airtime top up	0%	3%	3%
Receiving money	58%	29%	34%
Send money	53%	30%	34%
Cash out	47%	50%	50%
Saved money on phone	0%	12%	11%

Experience and Opinion

Participants gave multiple answers on the advantages and disadvantages of using MFS for monetary transactions. Cash users who receive cash from Aponjon and use MFS for personal use emphasized that MFS is easy to operate, convenient, safe and secure, and has a low operating cost. MFS users who use MFS to receive payments from Aponjon and for personal use noted that it is convenient, easy to operate, safe and secure, and confidential. MFS users also mentioned that there are fewer ways to solve problems when using MFS, and they sometimes encountered problems when withdrawing money.

"When the SMS comes to my mobile, the account balance increases instantly and I become fascinated to see the SMS in my mobile." Laboni Khatun, Meherpur district

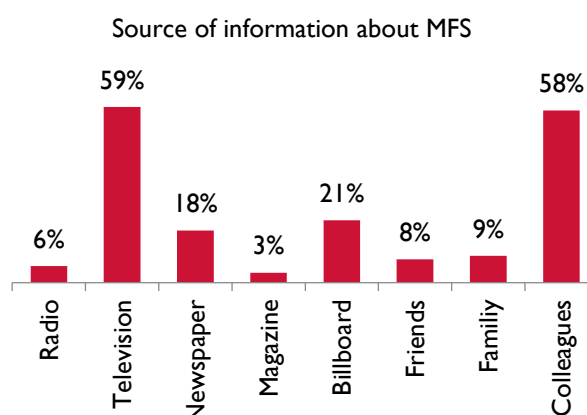
Experience and opinion on MFS by both types of users (Cash and MFS)



Information Sources

Participants cited that they learned about MFS from different sources. Television (59%) and colleagues (58%) were the most popular source of information about MFS for all participants.

[Total 'n'=178]



Opinion on Agent Services

Six criteria were identified to determine the accessibility of MFS agents (see Table 3). Most of the participants (ranging from 62 to 72%) agreed on the first five criteria. 23% of participants disagreed with the criteria 'agents usually have sufficient money to cash out'. In the FGDs, participants also noted that MFS agents sometimes refuse to cash out due to low liquidity.

Table 3: Opinion on service provided by mobile finance agents

Accessibility criteria		Strongly agree	Agree	Disagree	Strongly disagree	No response
1	Agents are easily accessible	35%	34%	6%	2%	23%
2	Agents are open to client's concern	29%	43%	1%	1%	26%
3	Agents are helpful in account opening and use	36%	36%	0%	0%	28%
4	Agents have sufficient knowledge about the service	21%	41%	3%	0%	35%
5	Agents deal fairly with cash out amounts	19%	42%	2%	2%	35%
6	Agents usually have sufficient money to cash out	8%	36%	20%	3%	34%

Usage Pattern

97% of participants use MFS for domestic purposes and 3% for remittances. Besides receiving their Aponjon payments, 67% participants use MFS monthly, 10% use MFS once every three months, and the remainder use it infrequently.

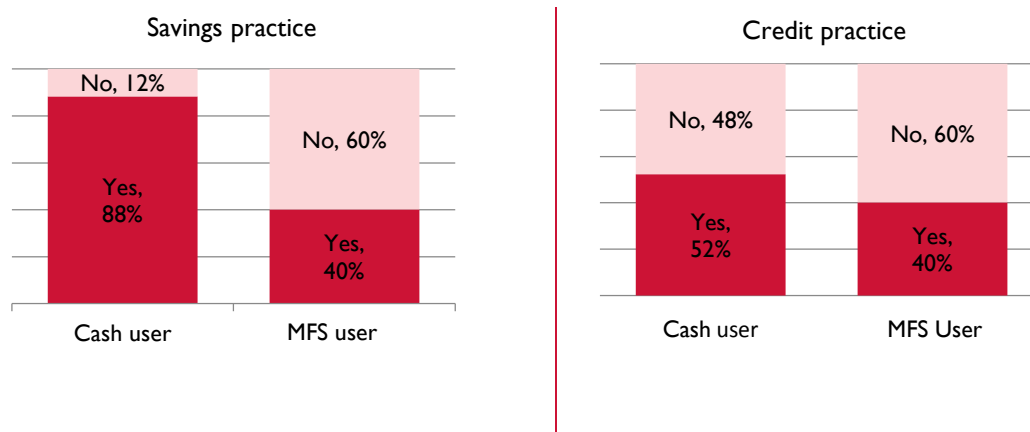
3.4 | Savings and Use of Credit

Out of the total (n=178), 63% of participants engage in savings and 46% use credit with different local financial institutions and relatives. Both the savings and credit practices were found higher among cash users rather than MFS users. Among cash users (n=86), savings practice (88%) was higher rather than credit practice (52%). Among MFS users, similar proportions

"We can keep our own money into the mobile and can withdraw it whenever we need."

Kajol Rekha, Meherpur district

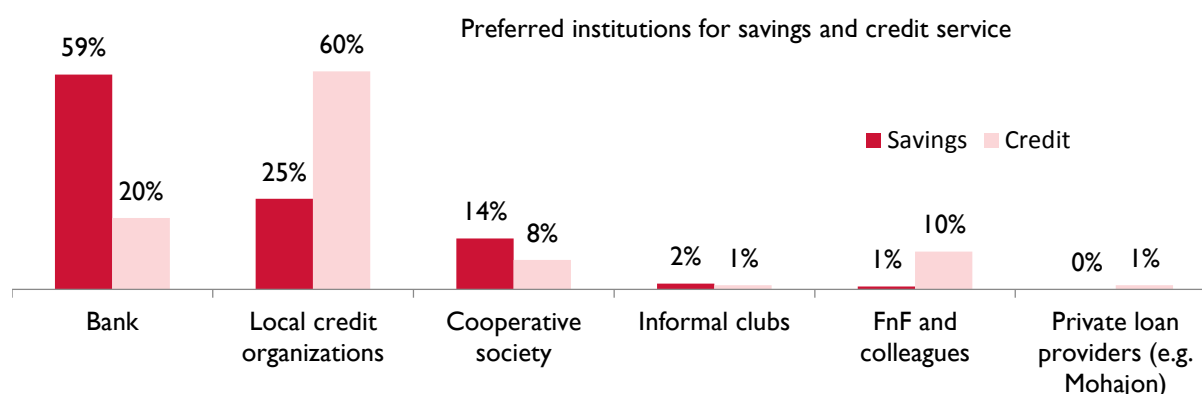
were found for both savings and credit practices. The savings practice rate was higher among cash users than MFS users because of the awareness of interest offers by traditional banks.



3.4.1 | Choice of institutions for savings and credit service

Savings: Most participants preferred banks (53%) for saving, but some preferred local credit organizations (25%) and cooperatives (14%). Only 6% of participants are using MFS to save money.

Credit: Most participants preferred local credit organizations (60%) as a source of credit, but some preferred the bank (20%) and friends and family (FnF) and colleagues (10%).



4 | CONCLUSION

This study demonstrates the advantages and disadvantages of cash and mobile finance as experienced by Dnet's customer acquisition agents. While cash users spend more time to receive their payments, they have higher savings rates than MFS users. This is worth future consideration to better understand why this is the case. Further, the study highlights that many cash users are not aware of MFS, which means that increased awareness activities could be beneficial to increasing the use of MFS among Aponjon agents.

Acknowledgements

Dnet would like to express gratitude to FHI 360 for their exemplary support and suggestions throughout the study. Dnet is also thankful to both USAID/Bangladesh and FHI 360 for the funding support to conduct this study. Dnet thanks the study participants who voluntarily responded to the survey questions. Finally, Dnet is grateful to the field level data collectors for their cooperation during the assignment.