

THE STATE OF DIGITAL MICROFINANCE IN BANGLADESH

A DIGITIZATION SNAPSHOT | 2019



TABLE OF CONTENTS

Executive summary	01
The microfinance industry at a glance	08
Current transaction digitization levels of MFIs in Bangladesh	14
Reasons why MFIs are digitizing - benefits and opportunities	20
Challenges associated with the process	27
Recommendations for the industry	32
Conclusion	36
Methodology	37
Endnotes	38
Acknowledgements	39

EXECUTIVE SUMMARY

In Bangladesh, microfinance has been extensively used as a tool to target poverty alleviation

The term "microfinance" refers to the full set of financial services that target poor and low-income households. Microfinance has been an instrumental tool in disseminating loans and capital for those unable to apply for formal banking and financial services due to income and credit barriers. As of 2017, BDT 1,207.54 billion (~USD 14 billion)¹ has been disbursed to 33 million people as loan through MFIs. Interest rates offered by MFIs are relatively higher compared to rural agent banking channels, with effective interest rates charged by MFIs ranging between 20-27% and the latter typically charging interest rates between 9%-16% on loans.

Microfinance industry snapshot

Particulars	2017-18 (Projected)	2016-17	2015-16	Change between 2016-17 (in %)
Number of reporting NCG-MFIs	510	510	530	-3.77
Number of employees	249,096	239,689	230,637	3.92
Number of branches	19,740	19,166	18,609	2.99
Number of members	40,840,741	39,216,816	37,657,462	4.14
Number of loan receiver during the year	34,542,859	33,367,557	32,232,244	3.52
Number of outstanding borrowers	34,394,600	32,446,130	30,608,042	6.01
Loan disbursed during the year (BDT Billion)	1,526	1,207.54	955.77	26.34
Loan outstanding (BDT billion)	970.59	770.47	611.61	25.97
Members net savings (BDT billion)	414.28	349.06	294.11	18.68

Source: Microfinance Statistics Yearly Comparison (2016, 2017) (including Grameen Bank), CDF

Digitizing transactions is gradually becoming a priority among MFIs

Microfinance institutions have been in Bangladesh for close to four decades and have impacted the lives of millions of people living in low income bracket households but digitization was not a priority in the sector up until the last decade. Transforming needs of its main client base and technology leapfrogging ability of the general populace is influencing MFIs to rethink their operations and how digitization could create access

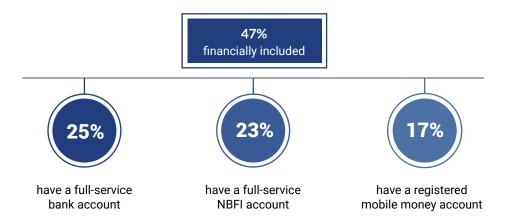
for them beyond their traditional channels and how it could also positively impact the lives of millions of borrowers. MFIs' two main operations, i.e. loan collection and disbursement are the points where digitization creates the greatest impact. Transaction digitization in the MFI sector has emerged mostly in two forms i.e. Mobile Financial Services (MFS) and banking services. Both of these services are often referred in the industry as 'mobile money'. Digital savings is also a main target service of MFIs and is a strong incentive behind digitizing transactions.

Transaction digitization is a fairly new concept for most MFIs but not an alien one. MFIs acknowledge the ability of transaction digitization to create greater efficiency and transparency and also recognize that digitization is beneficial for their clients as well.

According to recent Financial Inclusion Insights (FII) data (2018), around 47% of Bangladeshi adults are financially included with 17% having a registered mobile money account, 25% with a full-service bank account and 23% with a full-service Non Bank Financial Institutions (NBFIs), which includes MFI accounts. These figures show encouraging leaps in financial inclusion and technology adaptability of the population.

Financial Inclusion in Bangladesh - 2018*

(Shown: Percentage of Bangladesh adults, N=6,000)



*Overlap representing those who have multiple kinds of financial accounts is not shown

Source: Bangladesh Quicksights Report, Financial Inclusion Insights (FII), 2018

Low income women living in rural communities are a key beneficiary of digitization

Among benefits such as increased efficiency and cost savings, empowerment of women is an instrumental decision making factor for MFIs digitizing transaction. Around 18% of women in rural areas now have an active digital stored-value account, which means they have money in a digital format.

Of the 47% adults who are considered to be financially included i.e. having an account with an institution that provides a full suite of financial services, 18% are women with a low income. Of the unregistered mobile money user base who conduct over the counter (OTC) transactions without a registered account, 40% are women². This shows women are adopting digital money fast and there's an opportunity here for MFIs to help millions of women utilize the benefits of digital money to better their lives.

MFIs that have piloted transaction digitization have experienced a lot of positive reviews from women clients. According to respondents from MFIs, transaction digitization has enabled women to:



Keep better track of their finances



Save without having to worry about security of cash



Send money for business purposes much faster



Create social recognition for using digital finance services

- Women borrowers could track their savings and spending without having to log them in a notebook. This helped in preplanning savings and basic expense management.
- It was much more secure compared to cash. Previously they had to either keep cash stashed at home without any security, spend it on excess raw material for their business and convert the saving to asset format or give the money to their husband or a senior family member as savings. Having the cash in a digital format meant they had stronger ownership of their savings.
- The ones who were habituated with MFS, could send money more effortlessly. It saved them travel time, time they could now devote to their businesses.
- Given that women have a close knit community in rural areas, the ones who were using mobile money became advocates of the product and other women borrowers started requesting digital payment options instead of cash. Digitizing their money in general created a sense of empowerment among women clients in the community.

Just a 15% transaction digitization would positively impact

4.5 million women borrowers

Of the total 39.2 million MFI members³, roughly 35 million are women and in the financial year 2016-17, around 33 million borrowers received a loan, of which roughly 30 million were women (estimated). Given the positive benefits experienced by women borrowers in pilot programs, this is an immense opportunity for MFIs to transform the lives of millions of women business owners in Bangladesh by just digitizing transactions. Industry experts believe close to 2% of women clients are now unofficially using mobile money to make repayments and are utilizing Digital Financial Services (DFS). Even if just a 15% transaction digitization is achieved this year, the industry could transform the lives of close to 4.5 million women in a matter of months.

Digitizing transactions has resulted in higher efficiency for MFIs

Microfinance institutions that have piloted transaction digitization has cited four main benefits to the change as digitizing transaction:



- Loan collection A process that took 2.5 hours on an average now takes around 30 minutes (5X efficiency increase).
- Cash management 30% time saved in cash management by branch employees (1.4X efficiency increase).
- Loan disbursement When loan disbursement was not limited, MFIs could disburse loans in a matter of 2 hours on an average, a task that would take them a whole working day before digitization (6X efficiency increase).
- Processing documents Digitization has saved time in data entry, file
 management and in BRAC's pilot program an average BDT 1.5 million
 (~USD 179,000) was saved in a year just on paper and printing.
- **2. Increases internal control**, with drastic reduction in malpractices in pilot branches. BURO reports that after digitizing branches, their reports of malpractices fell to just 1 or 2 instances per month on an average.
- 3. Increases accessibility, as credit officers were now more free to pursue business development in unexplored areas. Digitizing transactions meant that some of credit officers' duties were now obsolete and now they could be utilized to target unexplored client segments and areas.



Loan disbursement



Loan collection



Cash management

- **4.** Meets consumer demand, as clients themselves were now requesting options to pay digitally. On an average they'd save at least USD 3 monthly on travel cost just by opting to pay digitally.
- **5.** Can potentially reduce interest rates, as MFIs can take advantage of greater reduction in administrative costs due to digital deposit collection and savings mobilization. Improved internal control and process efficiencies can further reduce internal costs, which may contribute in lower cost of borrowing.

Major challenges in the transformation are addressable by focusing on operations

Digitizing transaction is not without its challenges either, the transformation process generally has four main levels of challenges:

Operational challenges in the form of increased cost due to additional charges of digital transaction and lack of IT infrastructure. Increasing the volume of business is the best solution to recuperating some of the costs and building custom platforms for MFIs is the logical action for most DFS providers or MFIs who are willing to fill the vacuum.

Management challenges in the form of obsolescence of some of credit officers' tasks is a challenge expressed by all MFIs. However, they believe this can be solved through transforming the general activities of credit officers and redesigning center meetings.

Client level challenges due to lower accountability of clients to pay after digitization is a fear expressed by MFIs. However, there have not been any recorded cases of clients not paying or paying late due to digitization. Low tech literacy of clients is also a practical challenge to digitizing transaction.

Lastly, regulatory challenges in the form of cash-out ceiling of BDT 10,000 (~USD 119) per day for DFS account is a major roadblock to using digital transaction for disbursement. On an average a MFI loan size could be from BDT 50,000 (~USD 595) to BDT 100,000 (~USD 1,190) and a client would have to visit the agent or ATM for ten days if they wanted to withdraw BDT 100,000. This is not an efficient system and is a hindrance to scaling up wage disbursement. Certain regulatory revisions are needed to allow the industry to operate efficiently and target greater financial

10,000

(approximately
USD 119) cap on
cash-out limit per day
is a challenge to
implementing
digital loan
disbursement

inclusion. Developing the ecosystem of merchants that use DFS would also mean borrowers would be able to use the loan digitally and require less cash-out. Due to the cap on cash-out, MFIs are not being able to utilize digital loan disbursement and fully reap the benefits of digitization. Having to disburse loan through cash means added cost components hinder the cost efficiency advantage of digitization. If cash-out limits are removed, there's a chance MFIs could keep the money within the DFS ecosystem by both disbursing and collecting loans digitally. This would possibly help them reduce the overall cost of borrowing.

This white paper focuses further on opportunities of digitizing transactions, what are the benefits of digitization that can be gained through the process and what are the challenges that need to be addressed in order to successfully digitize transactions.

RECOMMENDATIONS FOR THE INDUSTRY

Although transaction digitization in MFIs is only at its infancy, there's tremendous opportunity of positively impacting the lives of millions of borrowers, especially women, by utilizing the learnings from pilot programs. In order to successfully digitize transactions, MFIs need to:



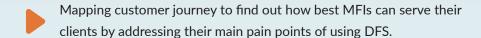
Design operations in a way that captures the efficiencies of digitization by:

- Implementing change management process and transforming the ways credit officers operate. Changing roles would create greater opportunities for business development.
- Introducing payment aggregators and capable IT service providers who can bridge the technological gap between MFIs and DFS providers.



2. Improve the value delivered to clients by:

Reinventing the way center meetings are conducted. Although center meetings have been instrumental in the past for loan collection and creating accountability among borrowers, there's an opportunity of transforming the traditional center meetings to knowledge dissemination hubs.





3. Strengthen the digital ecosystem and address key regulatory bottlenecks by:

- Working extensively with DFS providers to create proof of concept and best practices for digitizing clients. Developing the ecosystem will mean borrowers will have more avenues to utilize their loans digitally and will have less cash-out requirements.
- Advocating regulatory bodies to create policies that are more supportive of growth. Gradually increasing the cash-out limit will be useful for implementing digital loan disbursement.

THE MICROFINANCE INDUSTRY AT A GLANCE

Modern microfinance in Bangladesh has expanded its scope from home-based activities and self-employment to savings and insurance, microenterprises, and productive employment and has helped in diversifying borrowers' economic activities. Although historically agriculture has remained the highest loan recipient sector, trade and business sector based borrowings are gradually increasing, indicating an increasing diversification of economic activities.

The sector employs around 231,000⁴ people as of December 2017 and is regulated by the Microcredit Regulatory Authority (MRA), which was incorporated under the "Microcredit Regulatory Authority Act 2006" for regulating the establishment and operation of NGO-MFIs in Bangladesh. Grameen Bank is out of the jurisdiction of MRA as it was operated under a distinct legislation- Grameen Bank Ordinance, 1983. In 2013, Bangladesh parliament passed the 'Grameen Bank Act', which replaced the previous ordinance, authorizing the government to make rules for operating the bank on day to day basis.

Sector-wise disbursement of loans by MFIs in 2016-17



Source: Microfinance Statistics 2016-17, Credit and Development Forum (CDF)

Loan disbursement has been increasing over the last decade

Microfinance Institutions (MFIs) have captured a rapidly growing segment of the Rural Financial Market (RFM) in Bangladesh. Microcredit programs (MCP) in Bangladesh are implemented by various formal financial institutions such as nationalized commercial banks and specialized banks, specialized government organizations and Non-Government Organization (NGOs). Although more than a thousand institutions are running microcredit programs, only 10 large microcredit institutions and Grameen Bank represent 87% of total saving and 81% of the total outstanding loan of the sector.

^{4.} Bangladesh Microfinance Statistics 2016-17, Credit and Development Forum, 2017.

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Organizations	Percentage of loan disbursement contribution by MFI	Members received loans durings 2016 - 2017	Loan disbursed durings 2016 - 2017 (in BDT million)	Loan disbursed durings 2016 - 2017 (in USD million)
Grameen Bank (GB)	17%	8,308,379	207,890	2,475
BRAC	22%	5,220,302	266,629	3,174
ASA	22%	7,538,641	269,586	3,209
BURO Bangladesh	5%	1,028,821	54,393	648
TMSS	3%	876,849	33,057	394
SSS (Society for Social Services)	2%	576,609	27,625	329
Jagorani Charka Foundation	1%	397,644	15,402	183
Uddipan	1%	337,291	13,589	162
PMUK (Padakhep Manobik Unnayan Kendra)	1%	327,288	14,440	172
SAJIDA Foundation	1%	153,840	12,415	148
The remaining MFIs together	24%	8,601,893	292,511	3,482
Total	100%	33,367,557	1,207,538	14,375

Source: Bangladesh Microfinance Statistics 2016-17, Credit and Development Forum

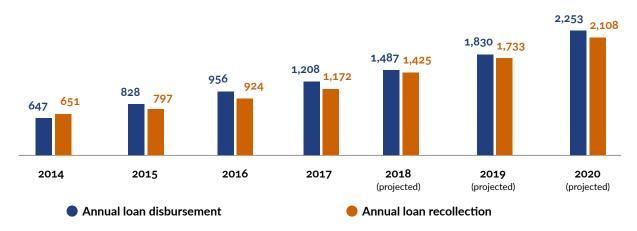
Based on the amount of outstanding loan in 2016-17, ten NGO-MFIs including the Grameen Bank have been marked as the top ten MFIs operating in Bangladesh.

Most of the major MFIs are self-sustaining, and they get their lending funds from a combination of their own profits, deposits, and loans from bank. Organizations like Palli Karma-Sahayak Foundation (PKSF) and Private Commercial Banks (PCBs), Specialized Banks (SBs), State-Owned Commercial Banks (SCBs), Jubo Unnayan Adhidaptar, Pally Daridra Bimochan Foundation (PDBF) have funded 619 MFIs during 2016-17 in the form of loans. A total amount of BDT 95,532 million⁵ (~USD 1.1 billion) was disbursed to the MFIs.

The increasing loan disbursement trend shows demand for loans will keep on growing with increasing economic development and activity. If current CAGR of 23% holds, the projected loan disbursed in 2018 was around BDT 1490 billion (~USD 17.7 billion) and is around BDT 1830 billion (~USD 21.8 billion) in 2019 and will continue to grow at a similar rate.

^{5.} Bangladesh Microfinance Statistics 2016-17, Credit and Development Forum, 2017.

Annual loan disbursement Vs. Loan recollection (BDT billion)



Source: Bangladesh Microfinance Statistics 2016-17, Credit and Development Forum; 2018, 2019 and 2020 figures are projected

Competition for MFIs are on the rise

Microfinance providers charge interest rates that are significantly higher than commercial banks for covering greater operating costs, and the higher costs of lending. MFIs' operating costs are higher than other financial institutions because they work with poor, rural communities that borrow small amounts. Small loans take longer to process. In the absence of a credit bureau, employment history or the collection of collateral, MFIs provide a high-touch service that sends thousands of Field Officers (FOs) to the doorsteps of their clients to make sure they are able to cope with the requested amount of credit. MRA has set the current interest rate cap for MFIs at 27%. There is also rising competition from agent banking channels as they penetrate deeper into rural areas and offer loan interest rates similar to those of retail banks that range between 11-16%, and even as low as 9%-9.5% for agricultural loans as mandated by Bangladesh Bank (although there is an additional processing fee)⁶. The proportion of agricultural loan disbursement through commercial banks' own channels is expected to increase due to government policy, and this can potentially eat into the capital available for MFIs⁷.

Commercial banks are pushing for greater agent banking presence in rural and peri-urban areas

Agent banking, one of the renowned mechanisms for providing banking services to the unbanked got introduced in Bangladesh in late 2013. Since its launch, the service has gained significant traction among the underserved population within a short span of time. By the end of September 2018, the number of accounts for agent banking reached 2 million. At present, 18 banks are licensed to provide agent banking

91% of the agents and 92% of the outlets⁸ are situated in rural areas, which explains the rapid spreading of agent banking in the rural areas of the country. Bangladesh Bank mandate says that the ratio of the number of sub-agents/outlets of a bank will be 2:1 for rural and urban area. That means a bank must have at least 2 rural agent banking outlets to have 1 urban agent banking outlet. Hence, banks are highly aggressive in their expansion plans in rural areas as it would enable them to open urban branches, which are the most profitable.

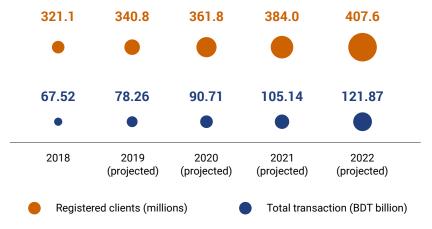
Operation modalities of MFIs are being gradually digitized

When MFIs started their operations, digitization was not a priority due to lack of digital infrastructure, lack of consumer adoption and higher costs. This scenario has changed drastically over the last decade with mobile internet proliferation and advent of DFS based services. Initially, there were only a selected few like BRAC willing to test transaction digitization in their operations and piloted a few of their branches. Clients are increasingly becoming attuned to digital services and prefer transactions done through DFS providers.

The MFS industry has been instrumental in driving greater digitization

There are currently 18 banks that have the license to provide mobile financial services nationally with about 887 thousand agents all over the country. As of December 2018, they are catering to the need of about 67.52 million registered clients, among which 37.31 million are active accounts. Everyday transactions of about BDT 10.36 billion (~USD 123 million) are taking place within these banks, agents and clients, making Bangladesh one of the top countries in terms of MFS usage. An average transaction of BDT 316 billion (~USD 3.8 billion) is being conducted each month, growing at an average CAGR of 2%°.

MFS growth trend 2018-2022 (projected)



Source: Bangladesh Bank and LightCastle projections

^{8.} Guidelines on Agent Banking, Bangladesh Bank, 2018.

^{9.} Mobile Financial Services (MFS) comparative summary statement, Bangladesh Bank, Accessed on: 02.03.2019

BDT 10.36 billion (~USD 123 million) avg. daily transaction

18 Banks with MFS

37.31 million Active accounts

886,473 Agents

67.52 million Registered clients

Source- Bangladesh Bank, December 2018

Even though, there are a handful of MFS providers in the market now, bKash and Rocket are the two leading mobile money providers in Bangladesh. The MFS arena is mostly dominated by bKash (BRAC Bank Ltd.), which is the pioneer of MFS in Bangladesh. bKash owns more than two-third of the entire market share in Bangladesh. Followed by bKash, Rocket (Dutch Bangla Bank Ltd.) has captured a fair share of the market in a very short time. The most common product offerings of MFS includes account opening, cash-in, cash-out, money transfer, bill payment, salary disbursement and foreign remittance. The fee structures of the most commonly used services according to providers are as follow:

MFS vs banking comparative analysis Digital financial services bKash Rocket Free Account opening Free Cash-in at agent Free 0.9% or BDT 5 (~USD 0.06) Cash-in at bank branch N/A BDT 10 (~USD 0.12) Cash-out from agent 1.85% 0.9% or BDT 5 (~USD 0.06) 2% [minimum withdrawal Cash-out from ATM Free amount is BDT 2,000 (~USD 23.8)] Cash-out from bank branch N/A BDT 10 (~USD 0.12)

Source: "The Mobile Moment of Banking" December 2017, IDLC¹⁰

CURRENT
TRANSACTION
DIGITIZATION
LEVELS OF MFIs
IN BANGLADESH

Top MFIs are piloting transaction digitization with varied approaches

MFIs now see the changing client landscape, how transaction digitization would create greater accessibility for them and how increased efficiency is increasingly becoming crucial to maintaining a high operation heavy business in a competitive environment. The need for digitization has become prevalent from both the supply and demand sides as well. Although some MFIs like SHAKTI and BRAC initially piloted loan disbursement through DFS, they had to scale down disbursement as a regulatory mandate was published by the Bangladesh Bank, restricting the daily and monthly amount that can be withdrawn through a DFS account.

BRAC Bangladesh, being one of the market leaders and coming second to Grameen Bank, has a market share of around 22.08% based on loan disbursed. According to the Credit and Development forum¹¹ in 2017, it disbursed the highest amount of loan to micro-enterprises. It has seen a rising trend in terms of both number of clients and number of branches. In 2017, BRAC disbursed loans of about BDT 267 billion (~USD 3.17 billion) to over 6 million customers all over the country. BRAC currently has more than 2,144 branches situated at different parts of the country. Both BURO Bangladesh and SAJIDA Foundation have achieved positive trend in terms of number of members, branches, loan disbursement and market share compared to the previous year. The current number of branches of BURO Bangladesh is over 712, which is serving about 1.5 million customers all over the country and have disbursed loans worth over BDT 54 billion (~USD 648 million) in the past year, holding a market share of 4.5%. SAJIDA Foundation serves more than 2.4 million customers with about 188 branches all over the country. It disbursed more than BDT 12 billion (~USD 148 million) as loans last year holding a market share of around 1.03%.

Top microfinance institution comparative analysis

MFI	Number of members (2016-17)	Market share as % of total number of members	Number of branches (2016-17)	Market share as % of total number of branches	Loan disbursed approx. BDT in million (2016-17)	Market share as % of total loan disbursed (2016-17)
BRAC Bangladesh	6,120,107	15.61%	2,144	11.19%	266,629 (~USD 3,179 million)	22.08%
BURO Bangladesh	1,449,085	3.7%	712	3.71%	54,394 (~USD 648 million)	4.5%
SAJIDA Foundation	2,45,539	0.63%	188	0.98%	54,394 (~USD 648 million)	1.03%

Among those that have piloted DFS, everyone had a different experience with the process, showing that there's an opportunity of streamlining the process by introducing best practices taken from the pilot institutions.

BRAC Microfinance's transformation journey



Average digitized loan size:
BDT 30,000
(~USD 360)



Number of branches digitized: 32 branches



Number of digital savings clients: **200,000**



No. of active digital wallets **842,914**



Total digital-enabled DPS accounts **745,200**



Women with digital -enabled DPS accounts 727,688



No. of Credit Officers using digital devices 12,000+



Total digital savings BDT 3.47 billion (~USD 41.4 million)



Details

The digitization of BRAC's financial products is driven by a strategic framework, which emphasizes four guiding pillars at the user level, namely trust, ease of convenience, ease of understanding and adapting to a digital ecosystem for the clients. For BRAC, efficiency and transparency are the key driving factors for the digital transformation at the corporate level.

3 years after its first pilot, BRAC now uses a digital system, based on tablets and MFS, for DPS installment collection from their clients. BRAC has partnered with bKash – the largest MFS provider in Bangladesh and a subsidiary of BRAC Bank, for collecting deposits from their members. BRAC is presently offering hands-on teaching to community members on DFS usage and has local Customer Service Assistants (CSAs) to assist in account opening and other issues¹². Currently around 200,000 clients use the service for monthly savings deposit, and over 12,000 credit officers are using tablet devices for loan recovery management. In addition, BRAC has established seven microfinance branch offices in southeast Bangladesh where loan collection and savings deposit mobilization are almost entirely digitized. The motive behind this was to reach the financially excluded community residing in the remote islands, riverine islands, and wetlands, which are more inaccessible.

Currently, as an alternative lending model, BRAC has partnered up with a start-up, ShopUp, that works with f-commerce women entrepreneurs. ShopUp sanctions loans automatically using their own algorithm and the loan is then disbursed to the bKash wallets of the borrowers. The borrowers make the repayments through the start-up from their profits.

Modality

Savings: Members can send installments directly to the bKash wallet number provided to them by BRAC.

Loans: Credit officer goes to village meetings, takes cash from individual borrowers in the group, enters amounts into tablet in bKash interface and the payment is recorded. Once the cash repayment has been made, the client immediately receives an SMS confirming the transaction and this has replaced the need to maintain manual transaction booklets.



SAJIDA Bangladesh's experience with digitization



Average digitized loan size:

BDT 24,000 (~USD 300)



Number of branches digitized: 5 branches



Number of clients served digitally: **10,000 clients**



Average digital monthly transaction:

BDT 5 crore (~USD 600,000)

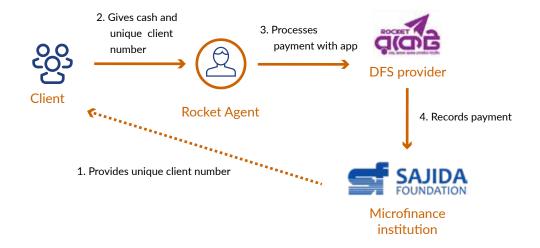


Details

SAJIDA has started digitizing their collection and payments with Rocket (DBBL). By the end of December 2017, SAJIDA Foundation had five cashless branches operational under a pilot project titled 'OPTIX', which served more than 8,000 clients, cumulatively transacting around USD 600,000 each month. The project demonstrated that borrowers were much more adaptive to the system than earlier expected. Female borrowers especially preferred to pay through Rocket agents instead of through FOs in group meetings. The ease of payment was much higher for them, as the system negated their need for travel. SAJIDA worked with BFA to build a custom 'bridge' between the DFS provider's API and their own API to make the system more integrated 13. Additionally, SAJIDA had piloted loan disbursement in 15 branches but had to discontinue due to the cash-out cap. However, they're using bank checks to disburse loans now in the spirit of remaining cashless.

Modality

Client goes to Rocket agent, gives them their unique client number and then pays the agent. The agent processes the payment through their app based on the unique client number provided for each client.



^{13.} Pioneering Cashless Microfinance in Bangladesh, SAJIDA, 2018.

BURO Bangladesh ready to digitize transactions

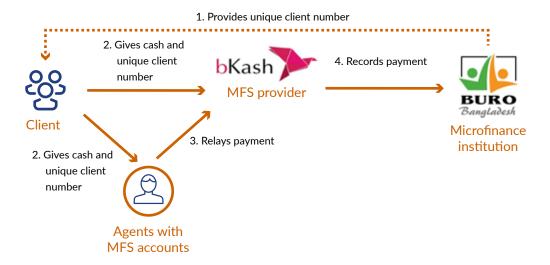


Details

For BURO Bangladesh, digitizing transactions has been pivotal in reducing malpractices by ensuring greater transparency and accountability. BURO has partnered with bKash to open its company account and train their borrowers to send money using a specific code. The code helps BURO track installment payments much more efficiently. BURO had initially piloted with another MFS provider but had failed to scale up their operations due to lack of resources. It started a new partnership with bKash in November 2018 to digitize payments of 1.7 million households under BURO. Due to this MoU, instead of having to pay 1.85% for each transaction (sending money or cash-out), the client will be paying 1%. bKash is also building a custom software interface, through which BURO will be able to maintain and track their client transactions. Tentatively 15 branches were being planned for the pilot phase starting in March 2019, with plans to convert all of their branches in time.

Modality

BURO provides a unique identifier number to clients, which clients will use to make payment to BURO through bKash. Clients use their own MFS account or pays through an agent's account to BURO's company MFS account and records their transaction.



REASONS WHY MFIs ARE DIGITIZING -BENEFITS AND OPPORTUNITIES

Although there are systematic challenges to digitizing an industry that has been traditionally high touch and highly field operation driven, the need for transaction digitization is clear among most MFIs as the benefits mitigate some of the more pressing challenges the industry faces. Among the major benefits of transaction digitization, increased internal control, increased time savings, increased accessibility to markets and increased efficiency in general, are the top line reasons expressed by most major MFIs on why they are willing to digitize.

1. Increased efficiency

Most MFIs that have piloted a DFS based system have experienced time savings in their operations. From time savings in loan collection, cash management to processing documents, digitization has helped translate some of these time savings into cost savings as well. Admittedly, transaction digitization has also added an additional digital transaction cost component to the already high cost of operations. However, MFIs believe increased volume of business would help plough back the loss in revenue due to the additional cost.

Situation	Before transaction digitization	After transaction digitization	Major beneficiaries
Time spent in loan collection	Before digitization, 2 to 2.5 hours (including travel) would be needed to be devoted by each credit officer to do manual data entry and collect loans each day.	This collection time has reduced to on an average of 30 minutes, resulting in a 5x increase in efficiency. Mobile money payments are instantaneous and in case of BRAC's tablet based system, the time is spent mostly to do data entry by credit officers.	Branch management

Situation	Before transaction digitization	After transaction digitization	Major beneficiaries
Time spent in cash management	Credit officers, branch managers and accountants are all involved in cash management, according to SAJIDA's study of their prospective mobile money implementation branches. 31% of credit officers' time, 11% of branch managers' time and 46% of accountants' time are occupied by cash management.	After implementation of mobile money, SAJIDA reduced their number of credit officers in some branches and increased portfolio of existing credit officers, effectively utilizing their capacity. BRAC experienced a 30% time saved in pilot branches, resulting in a 1.4x increase in efficiency, due to transaction digitization and usage of mobile money (according to internal study).	Branch management
Time spent in loan disbursement	Monthly meetings would typically take a day's work (10 to 12 hours) for loan disbursement and due diligence.	Before the regulation blocking withdrawal of more than BDT 10,000 (~USD 119) by end-client, for those that had implemented mobile money based disbursement, the time had reduced to 2 hours on an average, resulting in a 6x increase in efficiency. Although mobile money payment was instantaneous, due diligence and processing still took some time.	Branch management
Cost of branch operations	Major cost components of branch operations were salary, stationaries, and logistics among others.	Due to implementation of mobile money, an additional cost component was added. For SAJIDA this was a 1% charge on any financial transaction conducted through mobile money. SAJIDA believes a 6% reduction in overall cost achieved through a combination of increased revenue and other reduction of cost components would offset the additional 1% cost.	Organization, branch management

Situation	Before transaction digitization	After transaction digitization	Major beneficiaries
Processing documents	Processing of documents (for digitization and for account creation) was initially lengthy and taxing for branch employees	Currently 40% of MFI branches have a computer at the minimum and 45.9% have an internet connection. These numbers are slowly increasing as not all MFI operations are computerized yet and require significant investment. However, BRAC has reported that after digitizing their pilot branches, on an average BDT 1.5 million (~USD 179,000) was saved on just paper and printing.	Branch management

2. Internal control

MFIs have expressed that increased digitization, in general, has created a greater locus of internal control for them. As micro-finance is a high touch business, the operations are respectively highly widespread with around 19,000 branches and 239,000 employees nationwide. In a centralized system with limited digital support, it is difficult to have a clear overview of the business and plan growth accordingly. A web-based loan management system (LMS) gives MFIs real-time snapshot of the business and automation of loan collection through DFS saves time and reduces malpractices.

Situation	Before transaction digitization	After transaction digitization	Major beneficiaries
Number of malpractices reported	A few COs/FOs did not report cash collection properly, siphoned installments and also created delays in processing to utilize cash collected for personal use.	BURO reports that after digitizing their processes, instances of malpractices reduced to just 1 or 2 instances per month in pilot branches.	Organization, branch management

3. Increased accessibility

Digitization of loan collection meant field officers were now free to pursue more business development and increase their portfolio. The field officer would now be able to devote their time on spreading their network of customers and target areas that were inaccessible before. This would give MFIs more access to areas to increase their business.

Situation	Before transaction digitization	After transaction digitization	Major beneficiaries
Number of members per credit employee	Number of members handled per credit employee on an average was 254 ¹⁴ in 2016-17.	Although some of the duties of credit employees are gone due to implementation of mobile money, MFIs expect the number of members handled per credit employee to increase beyond 254 as now credit employees will be utilized more for business development.	Organization

4. Consumer demand

BURO reports that clients initially came to the field officers and started asking for MFS payment options as it'd save them travel time and cost. It was also more conspicuous for women borrowers who were not comfortable attending center meetings on a regular basis or disclosing their business dealings to their family. Other MFIs experienced similar requests from clients to transform their payment systems to something less time consuming.

^{14.} Microfinance statistics 2016-17, Credit and Development Forum (CDF), 2017.

Situation	Before transaction digitization	After transaction digitization	Major beneficiaries
Cost of travel of client	Clients typically need to spend BDT 100 to 120 (~USD 2) on an average for travelling on e-bike, CNG autorickshaw or rickshaw from home to branch/collection center within a 15-20 km radius per trip.	This cost has been eliminated for those that have been sending money through mobile money. So on an average a client with bi-weekly payments saves around BDT 250 (~USD 3) per month just by paying through mobile money. There's also inherent time savings that clients can devote to their businesses, which results in incremental cost savings as well.	Client

5. Possibility of improved interest rates

The interest rates of MFIs have shown an upward trend since its inception in Bangladesh. As the government was concerned about low income borrowers having to pay a hefty sum of interest, an interest cap of 27%¹⁵ per annum was announced by MRA in 2010. The average effective annual interest rate charged among established MFIs now range between 24% to a maximum of 27%. Thus the cost of borrowing for MFI borrowers is significantly high compared to other industries. A large portion of the interest rate is composed of high administrative expenses and other cost vertices for MFIs such as contingency reserves, provision for bad debt, tax expenses, the credit rating of client and capitalization rate contribute to the high cost to lend. A comprehensive costing of microfinance lending has not been done yet, to the best of our knowledge. However, global experience to date indicates that digitization has the potential to decrease costs and in turn decrease high interest rates.

Digital microfinance can lead to operational efficiencies since MFI staff no longer have to spend time filling out paper forms¹⁶ before entering data into systems, while introducing automated processes and using digital currency for transactions reduces staff fraud, errors and the risks associated with handling cash and repayments. In fact, the MFI, FINCA Tanzania, after introducing mobile banking channel had managed to decrease their per transaction costs by 60% and 30% compared to brick-and-mortar and agent banking channels¹⁷.

^{15. &}quot;Digital Financial Services: Opportunities for MFIs", Helix Institute, 2015.

^{16.} Digital Transformation of Microfinance and Digitization of Microfinance Services to Deepen Financial Inclusion in Africa, Alliance for Financial Inclusion, 2018.

^{17.} Alliance for Financial Inclusion, 2018.

From a client perspective, microfinance through DFS providers can deliver a better customer experience and provide quick responses while offering similar services to those at branches, improving customer retention and loyalty¹⁸. Similarly, customers are likely to save more since digital tools become easier to use and access for customers, making the formal saving process more convenient and increasing the likelihood that customers will save. An example of this is Diamond Bank of Nigeria, which saw 74% of account holders transact monthly and 30% transact weekly with loan officers visiting them using Digital Finance Applications (DFA), which is an improvement over their traditional processes¹⁹.

All of the above are likely to contribute to both lower interest rates and lower interest rate spreads for digital MFS providers compared to traditional brick-and-mortar and agent-banking models of MFS.

MFS credit has still not been introduced in Bangladesh. So, the question of whether or not it will be a matter of convenience for both borrowers and lenders still remains. For example, in Kenya, after MFS providers introduced credit systems, MFIs such as Choice Microfinance, Century, Daraja and Maisha faced negative repercussions²⁰. They went on a loss-making streak due to the higher convenience factor of MFS credit, which eventually drove up non-performing loans on one hand and diminishing savings on the other. If MFS providers of Bangladesh decide to launch themselves in the microcredit market, there is a risk of similar outcome.

On the other hand, if MFIs could provide credit through MFS providers then the likelihood of MFS providers to encroach in the microcredit market on their own would be diminished. This way the administrative hassles for both borrowers and lenders would decrease and the synergy among MFIs and MFS is likely to strengthen. That being said, this would require the provision for digitizing the entire due diligence procedure, which is also an extra investment element for both MFIs and MFS – an investment which may be justified considering the probable positive outcomes.

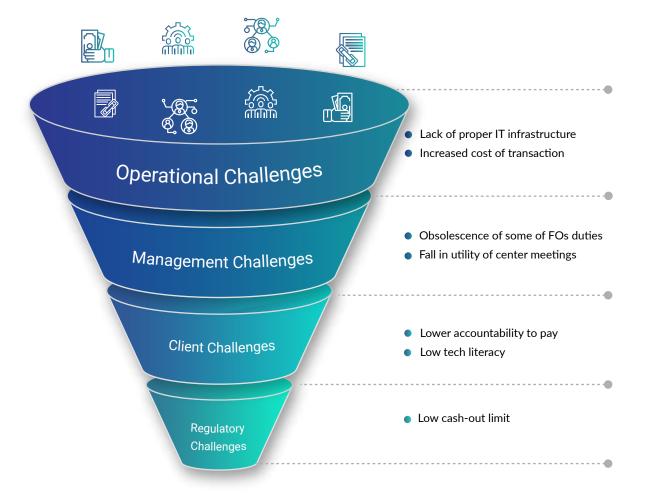
^{18.} Women's World Banking study, 2014.

^{19.} Mobile lenders drive microfinance entities to early grave, Standard Digital, 2019.

^{20.} Circular by the Microcredit Regulatory Authority (Bangladesh), 2010.

CHALLENGES ASSOCIATED WITH THE PROCESS

There are inherent challenges to the process faced by most of the MFIs that have piloted transaction digitization. The major challenge is transforming the basic traditional process of loan disbursement and collection in a manner that does not cause resistance from management or from the clients. Broadly, the transformation has challenges on four major levels for loan collection: operation, management, client and the regulatory policies.



Operational challenges



Cost of transaction is crippling for MFIs and borrowers

When borrowers receive their loan through MFS they have to pay the standard cash out charge set by the provider. bKash, the leading MFS providers in Bangladesh, charges 1.85% of the total cash out amount. As majority of the MFI borrowers belong to the lower income group, this withdrawal charge is significant for most. However, BURO expressed that a lot of their clients are already bearing this cost and are willing to pay via MFS if it saves them time. BURO's new contract with bKash effectively brings down the 1.85% cost down to 1%.

Additionally, MFIs that have been using mobile money platforms for loan disbursement and recollection, have a charge associated with their transactions. SAJIDA has to pay 1% charge to Rocket for any transactions made on their platform. This charge, although seemingly small, is a huge challenge as margins are already razor thin with high operational expenses and interest cap. An additional interest charge of 1% on both loan and interest, roughly adds 10% in expenses to the overall portfolio according to SAJIDA. However, the cost associated with cash handling operations has gone down. SAJIDA believes an increase in the volume of business will offset the increased cost

Lack of proper IT infrastructure is challenging for bridging MFIs and DFS providers and disbursing loans digitally

Lack of a capable digital financial aggregator is a challenge faced by all first adopters of the system. Due to the lack of an aggregator, MFIs have to invest in an intermittent system that acts as a bridge between the DFS provider's API and the MFI's system. This requires significant investment from MFIs and it is challenging to build systems that are tailored to each MFIs.

In addition, such a universal aggregator can also enable MFIs to disburse loans digitally, which could keep the money within the DFS ecosystem and reduce the costs associated with cashing out.

Management challenges



Decision-makers need evidence of local cost savings

The large up-front costs for digitization may be prohibitive for some MFIs, and managers need evidence of substantial cost savings and affirmative return on investment in order to take the decision to digitize. However, to our knowledge, a comparative costing of traditional microfinance lending versus digital MFI lending has not been carried out in Bangladesh to date.

On the other hand, global experience to date indicates that there are significant cost efficiencies to be had from digitizing. Indeed, BRAC microfinance has named cost savings as one of their key impetuses for digitization and one of the first-movers, if they can generate a positive return on investment in terms of cost efficiencies, this can pave the way for other MFIs in Bangladesh.

Field officers' duties are in need of revision

Due to the implementation of transaction digitization, field officers experience a lot of idle time as loan collection time has reduced. SAJIDA in their pilot program let go of one employee in one of their pilot branch due to idle resources. In other branches however, they increased the portfolio of each field officer to offset the idle time and create a higher volume of business. As digitization inevitably reduced the extensive need of field officers, it becomes a challenge to find ways to best utilize idle resources.

Client challenges



Branch employees have expressed that borrowers' accountability to repay the loan has decreased

FOs argue that center meetings are at the heart of its operations and the lack of it reduces the accountability of borrowers to make payments. According to FOs, they now do not have direct control over the members, which often results in delayed loan repayment by the borrowers. Although instances of borrowers defaulting have not been recorded as of yet, MFI managements agree that they do need an alternative medium of engaging their borrowers and reduce default risk.

Regulatory challenges



Low cash-out limit remains the major bottleneck to implementing digital loan disbursement

Due to a recent revision of regulatory policy, the cash out limit has been capped at BDT 10,000 (~USD 119) per day to implement AML/CFT policies. As an average loan size for most major MFIs ranges from BDT 50,000 (~USD 595) to BDT 100,000 (~USD 1,190), it is impossible to withdraw this amount at a feasible time and cost. SAJIDA has somewhat tackled this issue by providing bank checks to their borrowers for disbursement. However, other MFIs like BURO and Shakti have faced the challenge and have focused more on collection than disbursement at the moment. The fact that DFS providers are unable to disburse digitally is driving up their costs of digitizing. If MFIs could also disburse loans digitally, they could keep their money within the DFS ecosystem and potentially reduce costs.

Mobile wallet is still hard to open and maintain

Opening a mobile wallet requires extensive KYC documents and involvement of both agent and borrowers. Most borrowers do not have proper documentations and are not willing to invest the time to make them as there is no greater need. However, according to FII 2018 report, the number of people with necessary ID for DFS is now around 86%, meaning readiness of consumers has increased very fast. KYC process requires a lot of physical documentation processing due to regulatory requirements, which can be equally challenging for service providers. With the introduction of digitization, service providers can now process documents and relay information to regulatory bodies faster.

RECOMMENDATIONS FOR THE INDUSTRY

The industry challenges to digitizing transactions are common across most MFIs and can be addressed if a few key bottlenecks with the process can be addressed. Restructuring operations to best reap the benefits of digitization is the first necessary step that needs to be taken by MFIs to ensure a smooth adaption of the system. This needs to be followed by the committment that the value created by digitization is actually benefitting the client base. Lastly, improving the overall digital ecosystem and reducing regulatory bottlenecks will be key to ensuring sustainability.

Design operations to capture all the efficiencies of digitization:



Implementing change management process by MFIs is key to ensuring long-term sustainability of digitization

Field level officers and management are entrenched in their traditional process of loan disbursement and collection and are often resistant to change. FOs might be reduced in different branches due to the reduced need of borrower maintenance, but digitization means each FO is now capable of handling a larger portfolio. Job responsibilities would need to be redefined to accommodate the FOs and transform their current role to a more volume target driven model.

SAJIDA tackled this challenge by redirecting the focus of their FOs on higher client acquisition targets, as now there was more downtime for the FOs. Their focus have to be directed more towards client acquisition and collection from defaulters, as opposed to the traditional loan collection and disbursement methods. This would entail retraining of FOs and acclimatizing them to the digitization process.

Loan Disbursement through DFS

The fact that MFIs are only collecting repayments and not disbursing loans digitally drives up their costs significantly – both in terms of operational costs of maintaining local branches as well as in terms of transaction costs and cash-out costs associated with the payment receipts through DFS. However, in order for digital disbursements to receive wider acceptance, the cash-out restrictions imposed by the central bank will need to be revoked and the burden of cash-out fees on the beneficiaries should be diminished by developing a wider merchant ecosystem. Although digitization has the potential to reduce high interest rates, the full benefits of digitization are not being realised by MFIs (who have digitized) due to restrictions on cash-out limits. This restriction drives up costs significantly and MFIs are not being able to deliver the full value of digitization to their clients.



Introduction of payment aggregators and capable IT service providers is a necessity

Payment aggregators in similar markets have been crucial in alleviating the issues of one-to-many system transactions. Currently, there are only a few IT companies such as DataSoft and SouthTech, having capabilities of building financial IT infrastructure, but no payment aggregators exist in the market. Introduction of payment aggregators would be beneficial for the market, but on the flip-side, it's also important to note that addition of an aggregator also adds an additional cost component to the expenses.

An additional benefit to be derived from bridging of MFIs and MFS providers is the consolidation of the KYC process – MFIs would then be able to use their existing KYC on clients for MFS account opening and eliminate the need for a new one.

Improve value delivered to clients through digitization:



Center Meetings need to be reinvented by MFIs

Center meetings are at the heart of client management for most MFIs. Although digitization negates the need for periodic center meetings, it does not substitute the need of keeping borrowers engaged. Without center meetings, borrowers are isolated and are less accountable to pay their dues. Center meetings need to be transformed to serve a different purpose than cash collection and disbursement.

MFIs can utilize center meetings now to disseminate financial literacy, instill technology adoption among its borrowers by hosting technology usage training and seminars. MFIs can repurpose their FOs to act as proponents of financial services in a greater capacity. The fact remains that center meetings are an essential tool and cannot be abandoned, but can be transformed to serve a different purpose.



Customer journey mapping after digitization is instrumental to improving processes

Customers are the most key component of the digitization process. If clients are not receptive of the system change, the transition will fail to take effect. SAJIDA started with MFS but had to shift to a banking service provider as the user experience of its clients were not satisfactory. From a complicated USSD based interface to a stringent KYC requirements for opening an account, users faced several roadblocks in adoption.

In order to assess the challenges with individual systems, MFIs need to understand the customer pain points and address them periodically to make the transition process much more smooth. Digitization of loan collection and disbursement offers a solution for MFIs to curtail their high operating costs and compete against commercial banks moving into rural financial markets. However, this can only be achieved if borrowers are habituated and satisfied with their services.

Strengthen the digital ecosystem and address key regulatory bottlenecks:



Ecosystem development is key to ensuring consumers are habituated

One of the key challenges of DFS is that the ecosystem of merchants is not yet developed in sync to the demand. Meaning, consumers are not being able to spend digitally and are having to cash-out for any foreseeable transactional needs. A focus by DFS providers on developing the ecosystem of merchants will mean clients will be able to directly spend their loans digitally, allowing MFIs to ramp up their digitization of loan disbursement. Otherwise, the bottleneck of cash-out limit will keep on hindering the disbursement process.



Greater advocacy for policy reform is needed

Collectively, MFIs and MFS providers are actively trying to advocate a policy revision on the prohibitive cash-out limit. However, this reform may take time as the MFS industry is relatively new to the country and regulatory bodies will take stringent measures to ensure a proper regulatory structure is in place as the industry grows.

CONCLUSION

Microfinance sector has experienced a steep growth curve since its humble beginning back in the 1970s. Despite performing strongly in terms of credit disbursement and loan repayment, a number of drivers may cause a tectonic shift in the sector's future growth trajectory.

Broad based economic development with resulting decline in absolute poverty levels, may alter the nature of credit requirements from traditional borrowers. Penetration of alternate banking channels such as agent banking, will further complicate the competitive scenario.

The country's graduation as a middle-income nation would also help squeeze donor funding for MFIs. The MFIs must, therefore, find ways to streamline operations, preferably using technology, with a view to inculcating efficiency, ensuring transparency and reducing overhead costs.

DFS based payment mechanism for loan disbursement and repayment can potentially provide the impetus needed for optimizing the cost structure. However, the sector must overcome certain challenges and inertia for mainstreaming this initiative.

METHODOLOGY

The information given in the white paper was gathered by conducting in-depth interviews of 17 industry professionals from top and mid-level management from RDRS, SAJIDA Foundation, BRAC Bangladesh, BURO Bangladesh and Shakti Foundation. The industry professionals are engaged in transaction digitization piloting and have extensive experience in the MFI industry. Additionally, 5 interviews were conducted of professionals working in the development sector and the Microcredit Regulatory Authority to gain further insights about the ecosystem. The paper also contains referred content gathered through literature review of relevant content published by development organizations, MFIs and regulatory bodies. All referred content are cited throughout the report and in the following endnotes.

ENDNOTES

- 1. Microfinance Institutions are referred to as MFIs.
- 2. Mobile financial services are referred to as MFS.
- 3. Digital financial services are referred to as DFS.
- 4. 'Field officer' and 'credit officer' are terms used interchangeably throughout the report.
- 5. 'Mobile money' refers to both MFS and banking services that are available in a mobile app.
- 6. Loans for farmers to be cheaper, The Daily Star, 2018.

https://www.thedailystar.net/business/bangladesh-bank-determined-agriculture-loan-interest-rate-to-be-cheaper-1635829

7. New policy to sheild farmers, The Daily Star, 2018.

https://www.thedailystar.net/business/bangladesh-bank-low-interest-loans-for-agricult ure-new-policy-shield-farmers-1668949

- 8. Bangladesh Microfinance Statistics 2016-17, Credit and Development Forum, 2017. http://ww.cdfbd.org/new/Bangladesh_Microfinance_Statistics_2016-17.pdf
- 9. Millennium development goals: Bangladesh progress report-2015, UNDP, 2015. https://www.undp.org/content/undp/en/home/librarypage/mdg/mdg-reports/asia-pacific.html
- 10. Pioneering Cashless Microfinance in Bangladesh, SAJIDA, 2018. https://optixproject.org/briefs/pioneering-cashless-microfinance-in-bangladesh
- 11. "Digital Financial Services: Opportunities for MFIs", Helix Institute, 2015.
- 12. Bridging the gap in financial inclusion, BRAC, 2019.

Available at: innovation.brac.net/wp-content/uploads/2019/03/Mobile-money-booklet.pdf

- 13. Alliance for Financial Inclusion, Digital Transformation of Microfinance and Digitization of Microfinance Services to Deepen Financial Inclusion in Africa, 2018. https://www.afi-global.org/sites/default/files/publications/2018-08/AFI_AfPI_Special% 20Report_AW_digital.pdf
- 14. Women's World Banking study, 2014.

https://www.womensworldbanking.org/wp-content/uploads/2014/03/WomensWorld-B anking-A-BETA-Way-To-Save.pdf

- 15. Standard Digital, Mobile lenders drive microfinance entities to early grave, 2019. https://www.standardmedia.co.ke/article/2001309493/mobile-lenders-drive-microfinance-entities-to-early-grave.
- 16. Circular by the Microcredit Regulatory Authority (Bangladesh), 2010. http://www.mra.gov.bd/images/mra_files/Circular/circularoninterestrate-english.pdf

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