



Study on Repayment Collection through Digital Mode by MFIs



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Director's Message



Traditionally the Indian MFI industry is reliant on cash transactions. However, post demonetisation MFIs started shifting towards cashless transactions and began to explore their existing operations with innovative and user-friendly technology. The need for digitised payment channel further impetus during pandemic. Despite adoption of multiple payment channels, the scale of adoption is not so encouraging. As of March 2021, 65 percent of MFIs loans disbursement were cashless. The figure is poor as far as repayment is concerned, as only 28 percent of active loans are collected through cashless mode.



The present study “*Repayment collection through digital mode by MFIs*” attempted to examine the various models of digital repayment practiced by MFIs and extent of adoption of digital mode of repayment by clients. It measured the efficacy of digital repayment system at MFI and client level as also diagnosed the factors hindering the adoption of digital repayment system and cost of digital transformation.

The findings of the study are based on responses of 50 micro borrowers from 10 branches of two MFIs, viz. *Muthoot Microfin* and *Satya MicroCapital Ltd* across two states Kerala and Uttar Pradesh respectively besides a case study of Fusion Microfinance. Further, given that the Microfinance ecosystem consists of MFIs who vary vastly in size and legal form, the study also explored digital options for smaller MFIs who do not have the wherewithal to invest in digitisation.

The study found that digital repayment system has positive impact at both MFI and client level. At MFI level, investment in digital infrastructure led to automation of many business processes and streamlining of operation of the MFIs as a whole. It has increased their client outreach, better monitoring of branches and faster loan appraisal. While, at client level it reduced the risk of carrying cash, improved promptness by MFIs in addressing clients' complaints, resulted in increase in clients' satisfaction. Digitisation also built confidence among clients in adopting digital financial services (DFS) at their own business and day-to-day life. The study also diagnosed the challenges in adopting digital payment systems both at the lender and client level. At the lender level challenges were mostly infrastructural and technical. At the client level, challenges were poor smartphone access, lack of digital financial literacy, fear of fraud, insufficient account balance, mismatch in demographical information leading to failure in KYC verification etc.

The study recommended more feature phone based payment system, offering offline payment options, investment in digitisation and partnership with FinTech service providers and for smaller MFIs, leveraging third party agent networking model.

The study has been conducted by the team of Centre for Research on Financial Inclusion and Microfinance (CRFIM) at Bankers Institute of Rural Development (BIRD), Lucknow. I congratulate them as also thank all the stakeholders and agencies for their responses and experiential inputs for the study.

I sincerely hope that findings and recommendations of the study are useful for policy making and designing suitable digital platforms for on boarding the micro borrowers in MFI space.

Shankar A. Pande
Director



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The study is the result of extensive field work and documentation by Shri Tamanud Ghosh, Research Officer, BIRD, Lucknow, ably supported by other staff of BIRD. We acknowledge their efforts and record our appreciation for the insights and data brought in through the report.

Deepmala Ghosh
CRFIM In-charge

Executive Summary



Microfinance is an economic tool, designed to promote financial inclusion which enables poor and low-income households to aspire for a better quality of life. The Indian microfinance sector is served by a wide range of service providers such as Banks, NBFC – MFIs, NBFCs, SFBs etc. As on 31 March 2021, there are more than 262 micro lenders of various categories that are serving the combined microcredit portfolio of Rs. 2,52,181 crore. Of which, NBFC & NBFC-MFIs accounts for 41% of total credit portfolio in the sector. Over the past two decades, the Indian microfinance industry has witnessed phenomenal growth. In India, MFIs currently operate in 28 states, 5 Union Territories, and 595 districts. Despite the positive trajectory, Indian MFIs have suffered various crises, first in 2010 in Andhra Pradesh, which transformed the sector with the introduction of regulatory norms imposed by RBI and later in 2016 by demonetization and most recently in 2020, Covid-19 pandemic challenge.

The sector is mostly labour intensive. MFIs deploy an extensive network of field staff who are responsible for mobilizing clients, performing KYC verification, loan disbursal, organizing financial group meetings, repayment collection with its clientele. As of March 2021, about 61 percent of the total workforce deployed in the sector are field staff. However, post demonetization, the sector explored to digitize their existing operations with innovative and user-friendly technology. Lots of digital channels, viz. Aadhar based payment systems (AePS, APBS, BHIM Aadhar Pay) UPI, NACH, Mobile wallet, banking cards were introduced along with the traditional cash transaction. During the year 2020 -21, 65 percent of MFIs disbursements are cashless. However, the figure is not progressive as far as repayment is concerned. As on March 2021, only 28 percent of active loans are collected through cashless mode (Sa-Dhan, 2021).

The present study attempts to examine the various models of digital repayment practiced by MFIs and extent of adoption of digital mode of repayment by clients. The study also diagnosed the factors hindering the adoption of digital financial services and the cost of digital transformation, the underlying idea being possibility of adoption by smaller MFIs.

The study is carried out among 50 micro borrowers from 10 branches of two MFIs, viz. *Muthoot Microfin* and *Satya MicroCapital* Ltd across two states Kerala and Uttar Pradesh respectively. In addition, a case study of Fusion Microfinance was also carried out. The findings of the study are based on MFI level, branch level, and client-level data. The findings of the study are as follows:

MFIs adopted multi-pronged digital approaches, viz., Aadhar Enabled Payment system (AePS), Payment through BC/ Customer Service Points, Unified Payments Interface (UPI) such as Google Pay, PhonePay, Paytm, and NACH

Investment in digital infrastructure led to automation of many business processes and streamlining of operation of the MFIs as a whole. It has increased their client outreach, better monitoring of branches and faster loan appraisal.

Disbursements are cashless but repayments- Muthoot only 1% while Satya 73 % in digital mode

92 % repayments through BC point and other payment system such as internet banking, debit or credit card and Airtel Payment Banks.

Investment in Digital infrastructure is cost prohibitive for smaller MFIs
Overreliance on Smartphone based solutions despite low penetration
Offline or Feature Phone based solutions not adequately explored

Digitisation helped MFIs in providing credit plus services and reduced risk of carrying cash.
Clients benefitted through reduced risk of carrying cash and prompt service from MFIs
Lack of awareness among clients and inadequate balance in bank a major hindrance

- The primary objective of the study was to examine the various digital modes of repayment adopted by MFIs and their applicability and potential for adoption in terms of cost and other factors. Though proportion of repayment through digital mode is still low in the MFIs under study, the study found that the investment in digital infrastructure led to automation of many business processes and streamlining of operation of the MFIs as a whole. It has increased their client outreach, better monitoring of branches and faster loan appraisal.
- The cost of investing in digital infrastructure is prohibitive for smaller MFIs but the study explored various collaborative models which can be adopted by them to leverage technology and streamline their operations.
- The study found that in order to serve the comprehensive needs of the clients, MFI adopted multi-pronged digital approaches, viz., Aadhar Enabled Payment system (AePS), Payment through BC/ Customer Service Points, Unified Payments Interface (UPI) such as Google Pay, PhonePay, Paytm, and National Automated Clearing House (NACH). In addition to these, MFIs invented android based digital payment system to facilitate the cashless transaction of their clients, *Mahila Mitra Application* (developed by Muthoot) , *Satya Client Connect Application* (By Satya) and *mShakti* (by Fusion). Each digital payment system has its unique feature to serve the clients. AePS has enabled MFIs to offer door-step digital repayment of loan installments during the center meetings through Aadhar authentication. While BC/ Customer Service Points helped MFIs to convert physical cash collected from clients into e-money through the agent's PPI wallet. UPI based transactions are client operated fastest payment system.
- A comparative analysis amongst the various digital payment system in MFI and clients perspective revealed that AePS is most trusted and requires minimum input from clients. It offered doorstep

digital transaction during the center meeting. Although, owing to restriction on center meetings due to imposition of lockdown, clients availed the facility of paying loan installment through nearby BC agents. However, such a method involved spending a significant time to repay their installment. Customers are required to spend about 2 hours per month, which was about one-fourth of their daily wage.

- Alternatively, UPI is the fastest, 365x24x7 accessible, authenticated digital platform. However, poor internet connectivity, lack of digital financial literacy, low smartphone penetration among rural borrowers are hindering the success of UPI-based transactions.
- From the MFI perspective, ECS/NACH is the most cost-effective digital payment option. It requires one-time consent from the client and the availability of sufficient funds in account during the date of the transaction. However, MFIs offer ECS only for the individual loans having higher ticket sizes.
- Despite adoption of various digital payment systems by MFIs, the level of digitization¹ varied across the MFIs. In the sample, MFIs preferred to disburse the loan in a fully cashless manner by transferring money directly to the client's account through IMPS/NEFT. But they are still reliant on cash transaction in case of repayment. Only one percent of the total collection over the last year in Muthoot was in digital form. However, it was 73 percent in case of Satya.
- Among the various digital channels, repayment through nearest Customer Service Point or BC Point (CSP/BC Point) followed other channels such as *Satya Client Connect* application, debit card, net banking and Airtel Payment Banks are the most preferred mode of digital platform. They together account for 92 percent of total digital transactions, (655.96 crore out of 710.99 crore), (53 percent through CSP and 39 percent through other payment channels). Movement restriction of clients and restriction on conduct of physical center meeting due to imposition of lockdown, poor smartphone penetration among rural borrowers, and lack of digital financial literacy were the leading reasons for such high dependency on BC/CSP. Repayment through AePS during the center meeting occupied the third most preferred digital payment option. About 5 percent of total digital payment (37.34 crore out of 710.99 crore) have been performed through AePS.
- Further, an analysis of time spent per transaction vis-à-vis various repayment channels revealed that on an average a client is required to spend about 26 minutes per transaction for repaying loan installment digitally. This was the highest (33 minutes) for customers who availed the services of nearest BC agent/CSP and lowest (7 minutes) for UPI based transaction. This indicates a higher opportunity cost for clients for repaying through CSP/BC point.
- It is observed that Fintech enables MFIs in digitizing the operational process by providing an end to end solution. All 03 MFIs developed a comprehensive technology value chain through Fintech, which includes client sourcing, client application, credit appraisal, loan sanction, disbursement, loan collection & utilization, product design and also employee attendance & payroll management. However, such digital transformation is an ongoing activity and an expense for MFIs. The study found that Satya is required to invest annually Rs. 1.15 crore, out of which, 69 percent

1 Digital transaction out of total transaction



are recurring expenditures and the remaining 31 percent are fixed costs.

- The digital transformation initiatives in Indian MFIs accelerated during post demonetization and the sample MFIs are yet to claim the measurable value creation of digitization in their business and profitability. However, it has eased their operational process and has brought positive changes in the system. The study measured the efficacy of digitization in MFIs using some operation efficiency parameters, viz. risk associated with carrying cash, incidences of fraud and snatching money, reconciliation task at branch level, duration of the center meeting, clients' satisfaction, clients' confidence in adopting digital financial services in their day to day life. To measure these, five points Likert's scale was used. It is observed that at MFI level, digitisation mostly benefited MFI by reducing the risk of carrying cash and incidences of fraud and snatching money. It also reduced reconciliation tasks at the branch level, duration of the center meetings, indicating the availability of quality time for the branch for loan monitoring and client education. In the pre-digitization phase, branches were required to count daily collection at least 3 to 4 times.
- At the client level, digitisation also reduced the risk of carrying cash, improved promptness in addressing clients' complaints, results in improvement of clients' satisfaction. Further, digitization improved clients' confidence in adopting digital financial services (DFS) at their own business and day-to-day life. About 48% of sample clients adopted DFS in paying their mobile or telephone bill, 40% were paying their electricity bill through mobile phone, 36% accepted digital payments, and 18% were also paying merchant through digital mode, 8% remitted money digitally.
- The study also diagnosed the challenges in adopting digital payment systems both at the lender and client level. At the lender level challenges were mostly infrastructural and technical. At the client level, challenges were poor smartphone access, lack of digital financial literacy, fear of fraud, insufficient account balance, mismatch in demographical information leading to failure in KYC verification etc. It is found that almost all (98%) clients have access to mobile phones. Out of which, 65% are owning smartphones. MFI clients are mostly women, but ownership of mobiles was either with the husband or male adult members of the households.

Suggestions:

On the basis of the findings, the study has come up with suggestions for the policymakers to improve the digitalisation of MFI activities. The study suggests the following:

- **Feature Phone based Payment System:** Despite poor smartphone penetration among rural borrowers, MFIs are overemphasized on it for UPI based digital payment system. Hence, it is suggested to explore other feature phone based transaction such as USDD (Dialing *99#) and feature phone based UPI. NPCI is also working with a number of Tech companies to roll out more feature phone based payment service soon².
- **Offering Offline Digital Payment Option:** Poor internet connectivity in remote rural areas is one of the key challenges faced by MFIs in offering digital payment system. Recently, NPCI developed new

2 <https://www.bloombergquint.com/economy-finance/offline-payments-the-next-big-push-for-digital-transactions>, 10 August 2020

version of RuPay cards that allow contactless offline payment at PoS (Point of Sale) in the areas with limited network facility. MFIs may adopt such offline based payment system to facilitate the digital transaction of their clients'. RBI is already encouraging pilot projects for introducing card and wallet based solutions similar to UPI and mobile transactions with USSD code. A few pilots have already started. NABARD may consider piloting offline payment solutions through FIF.

- **Invest in Digitization and Forge Partnership:** Based on the requirement, MFIs may come out with a cost-effective digital channel for offering a digital payment system. Instead of direct investment, smaller MFIs may utilize services of FinTechs, viz. *Spice Adikari* (Cash Collection Point³ developed by Spice Money Ltd) or Airtel Payment Banks, Fino Payment banks etc. MFIs and Fintech may work out together on the transaction cost. A number of Fintechs are offering Kiosk based one stop solutions in states like Bihar, UP where digital literacy or ownership of Smartphones may not be high.
- **Incentivise clients for availing digitized option:** To encourage the customers in adopting digital platforms in repaying their loan installments, MFI may offer subsidy in the loan, preferably in the last installment.
- **Awareness, Training and Capacity building of clients:** In order to promote digital financial services among borrowers, the MFIs may conduct training and awareness programmes for their employees as well as clients.
- **Waiving off of bank transaction limit for AePS:** Despite RBI's direction, a few banks have imposed monthly transaction limit for AePS transaction, which is one of the key challenge that MFIs are facing while offering doorstep repayment through AePS. Hence, it suggested to waive off or enhance such limits for rural micro borrowers.
- **Offering affordable loans for purchasing mobile:** MFIs may offer affordable loans to their clients for the purpose of purchasing mobiles. It will eliminate the gender gap in ownership of a smartphone among the clients and improve the smartphone penetration as well. The uptick in digital transactions may further boost the availability of sufficient funds at clients' bank account, which was one of the key challenges faced by MFIs in offering digital payment systems.
- **Use of Data:** Now-a-days, data plays a key role in assessing pricing, new product design, credit risk management, improving operational efficiencies and the trend is slated to accelerate. MFIs have long struggled with digitizing and managing customer data. Hence, it is suggested, Fintech companies may come forward with advanced analytics to MFIs as value-added services.

3 Where agents, customers and representatives of financial agencies can deposit premiums, EMI etc. It is free for individuals and *Adikaris*. However, financial agencies required pay a charge of 0.25 percent per transaction.