The ecosystem of digital financial services is vast, comprising of multiple stakeholders such as technology solution providers, financial service providers, regulators, last mile agents, and users who have varied interests and diverse expertise. In terms of financial service providers, Microfinance institutions (MFIs), who have historically relied upon human-centric models of financial dealings, are beginning to optimize their operations through digitalization. Recent technological and lending model innovations, in conjunction with currency demonetization in November 2016, have been instrumental in MFIs adopting digital solutions to cut costs, improve the organization’s bottom-line, and lower costs for the end-user.

IFMR LEAD, in collaboration with J.P. Morgan, brings forth perspectives from consumers – those who are at the receiving end of digital financial inclusion. This study profiles 12 categories of consumers based on gender, region of work (rural/ urban) and age group, and highlights key patterns of behavior and usage of various digital financial products that vary depending on the nature of regularity of their cash-flows. Based on in-depth quantitative surveys and focus group discussions (FGD) with consumers, and semi-structured interviews with service providers, this research informs service providers of consumers’ willingness and ability to use digital products.

The research suggests there are two factors imperative for developing and successfully implementing a coherent strategy for digitization. The first is the ability of the target consumers from the low-income segment to adopt digital solutions. This is determined by access to banking services, access to credit, access and usage of mobile phones, and digital literacy and awareness. Second is the willingness of consumers, given complete information and awareness of all options, to repeatedly choose digital solutions for their financial transactions. This includes literacy, willingness to adopt, needs assessments and financial behaviour. Based on detailed analysis, the 12 profiles were scored on their ability and willingness to adopt digital solutions and access to financial and digital infrastructure and placed on a quadrant. Placement on this quadrant determines the as well as the potential of each segment and the various steps required to transition each segment to digital services. This handout designed especially for MFIs highlights the status and steps toward digitalization of MFIs operations keeping in mind industry best practices, as well as, presents key findings and recommendations for each customer segment in an MFIs portfolio.

Authored by: Anisha Singh, Prachi Agarwal and Parul Agarwal
Designed by: Indumathi Manohar

To access the complete handbook please visit www.ifmrlead.org.
INTRODUCTION

From a modest start in 1974 with SEWA Bank incorporating the microfinance model in its operations, today the MFI sector in India has come a long way. In financial year 2016, the total lending by MFIs stood at INR 532.3 billion\(^1\), employing 85,888 people across 9,669 branches and serving 32.5 million customers across the country. With this expansion, MFIs have also seen average loan outstanding per customer rise to INR 16,394 in 2016 after a 58% jump since 2014.

Historically, MFIs have heavily relied upon a human-centered model by employing an extensive network of credit officers responsible for mobilizing clients, performing Know Your Customer checks, loan disbursal, organizing financial group meetings, creating and updating amortization schedules, repayment collection, among other tasks, with its clientele. This model has allowed these institutions to target customers across large swaths of rural India despite the dispersed population.

Moreover, personal interactions with the MFI staff has allowed for greater awareness about financial products as well as greater trust in these products by the clientele. In this context, the integration of technology provides an opportunity for the MFIs to better leverage the benefits of their human-centered model in various ways like improving the time spent by field staff (e.g. cash collection using digital platforms can help free the staff’s time allowing for an increased time to be spent on client education and/or loan monitoring) as well as increasing operational efficiency, reducing costs and provide regular alerts (for repayment, new products etc.) to better serve existing customers.\(^2\)

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MFI INDUSTRY & DIGITIZATION

While back end processes are largely digitized by even the smaller MFIs, issues persist. These include the difficulty in merging different elements of MIS for data analysis, as well as the requirement of a new MIS for every new product innovation. In recent years, progress has also been made on digitizing loan disbursals, either through bank deposits, debit card withdrawals or through cheques. Digitizing repayments, however, remain unconquered terrain at scale. Customers of MFIs tend to be largely unfamiliar with digital modes of transacting, and repaying digitally appears to be bottleneck heavy, compared to the traditional alternative of collecting payments during meetings in person. Globally, efforts like those of Vodafone M-pesa have been successful in some countries such as Kenya but not as successful in other countries such as South Africa. This differential adoption sheds some light on the challenges faced by partnerships in the ecosystem such as procedural failures, security concerns, consumer demand, willingness to adopt and literacy and capabilities as well as learnings for sustainable partnerships in terms of consumer protection, financial education, grievance redressal, human touch points and interoperability.

1. Stay competitive: With the recent regulatory approval to Small Finance Banks (SFBs) and the increased push for priority sector lending and financial inclusion for commercial banks by RBI, competition is increasingly intense in the sector. Additionally, by using digital methods, MFIs can provide microfinance plus add-on services such as imparting best business practices, entrepreneurial skilling and financial literacy training more effectively.

2. Protect against external shocks: Digitalization and the use of technology to streamline processes will reduce reliance on cash at the nodes of disbursement and collections and serve to protect MFIs against external shocks such as demonetization as well as make them more agile and adaptable to swift market movements.

3. Cost and process effectiveness: The adoption of digital solutions allows MFIs to cut costs through a variety of channels such as quicker processing times for loan approval and disbursal, reduced costs of physical data storage, reduced risk of cash, and some insulation from external shocks such as demonetization. There are also intangible cost reductions such as the reduction in risk associated with use and transportation of cash.

Back End/ Data Collection

- Digital data collection
- High quality MIS management
- Engagement of large BC network to on-board customers
- Differentiated customer segment approach

Disbursement

- Linking of Aadhar
- Reduction in processing time
- UPI methods to replace NEFT

Repayments

- Pilots on auto debit
- Offline payment collection methods

IMPORTANCE OF DIGITIZATION

1. Stay competitive: With the recent regulatory approval to Small Finance Banks (SFBs) and the increased push for priority sector lending and financial inclusion for commercial banks by RBI, competition is increasingly intense in the sector. Additionally, by using digital methods, MFIs can provide microfinance plus add-on services such as imparting best business practices, entrepreneurial skilling and financial literacy training more effectively.

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INDUSTRY BEST PRACTICES

1. Develop a coherent Management Information System

Management Information Systems (MIS) help a growth-oriented MFI in better planning and management of its customers and data. A coherent MIS can help in addressing various operational concerns, improve efficiency and result in better risk management. Information Systems: A Practical Guide to Implementing Microfinance Information Systems (available upon request) is a technical guide that can help identify and address an MFI’s information system needs.

2. Customer-centric approach

To motivate customers of MFIs to adopt digital methods of transacting, the focus must be on addressing very specific pain points—which differ based on the occupational and demographic details of the customers. These include issues with remittance, financial planning, visiting branch or loan officers for repayments and grievance redressal. For example, considering one of the biggest MFI customer bases in India is rural-to-urban migrant workers, digitally-based remittance-focused offerings can greatly contribute towards increasing financial inclusion in the country.

3. Hand-holding customers

For customers that have limited digital literacy, MFIs must simplify the onboarding process. Building on the human touch model followed by MFIs, credit officers or field agents should be trained and required to consistently motivate and train their customers to use digital platforms. Currently, given the large network of loan officers from varying backgrounds and abilities, it is often time consuming to on-board these last mile agents onto standardized platforms. However, investing in capacity building of these agents will bring about benefits of faster digital adoption from one loan officer to many customers.

4. Experimentation

For MFIs, it is crucial to test out multiple innovations in product design and delivery mechanisms to arrive at the best digital platform fit; this can be supported by MFI associations and self-regulatory organizations. Given that a variety of options are available, MFIs should actively investigate the characteristics, benefits and drawbacks of each and work closely with technology solution providers to customize the product design required to serve their unique set of customers at scale.
In terms of digital platforms, these consumers primarily use debit cards for their financial transactions – it is only the consumers with less volatile income that use other more advanced platforms like internet banking and mobile wallets. The high and medium volatile customers in this segment have low access to financial and digital infrastructure and, low awareness of financial services, moderate digital and numeracy capabilities and high willingness to adopt digital platforms.

**PROFILE OF A TYPICAL FEMALE RURAL MFI CUSTOMER**

**18-25 years**

- **Highly Volatile Income**
  - Average Income – INR 3,595
  - Engaged in Construction, Agriculture
- **Medium Volatile Income**
  - Average Income – INR 5,250
  - Engaged in Retail shops, Tailor shops
- **Less Volatile Income**
  - Average Income – INR 6,843
  - Engaged in Government, Private Employment

**ACTIONABLE STEPS:**

**On-boarding:** MFIs should ensure translation of skill to usage through awareness; the high propensity to pay and moderate literacy and numeracy should be capitalized upon to on-board this segment onto more advanced digital platforms. Awareness is the key to unlocking the potential of this segment; women in this segment prefer to approach shopkeepers for technical support on their mobiles and these outlets can be leveraged to increase awareness and knowledge. This approach will also ensure human touch points that can build trust and act as facilitators between MFIs and customers when loan officers and other staff are not accessible.

**Product design:** Bundling of services relevant to this segment, such as taking targeting credit for education fees and requirements, through partnerships with technology providers to build a holistic product that allows digital repayments as well as payment to educational institutions would be an example of an ideal product to on-board this segment.
This segment of consumers is cash dependent – using informal sources to fulfil their credit requirements. This segment has low access to digital infrastructure, moderate awareness and access to financial services, moderate willingness to adopt digital platforms and lower digital and numeracy capabilities than their younger counterparts.

**ACTIONABLE STEPS:**

**On-boarding:** This segment requires simple techniques, relevant to their daily lives that can be reinforced at regular intervals. Initial handholding of customers is essential to increase their comfort with digital platforms and build their technological knowledge base. This can take the form of interactive sessions organized in group meetings wherein loan officers work with this group closely to familiarize them with the digital solutions and build their confidence over a period of time.

**Product Design:** Products designed for this segment should have simple interfaces with standardized design principles that take into consideration users who are not able to read and feed in cash amounts. To overcome the literacy barriers, repayment collection services for this segment could allow selection of currency note images to total the amount to be repaid.

The consumers in this segment have limited access and use of digital platforms. Even as customers of MFIs and other SHG linked credit programs, their exposure to digital platforms is limited. This segment has low access to digital infrastructure, as well as low willingness to adopt digital platforms and low digital and numeracy. This profile forms a slow response segment for MFIs as even though these women have savings accounts and outstanding credit from MFIs and SHG linkages, they have low access to physical infrastructure, low propensity to pay and very low digital literacy and awareness.

**40+ years**

<table>
<thead>
<tr>
<th>Income Type</th>
<th>Average Income</th>
<th>Engagement</th>
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</thead>
<tbody>
<tr>
<td><strong>Highly Volatile</strong></td>
<td>INR 3,086</td>
<td>Engaged in Agriculture</td>
</tr>
<tr>
<td><strong>Medium Volatile</strong></td>
<td>INR 4,442</td>
<td>Engaged in Animal husbandry, Tailor shops</td>
</tr>
<tr>
<td><strong>Less Volatile</strong></td>
<td>INR 9,635</td>
<td>Engaged in Government, Private Employment</td>
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</tbody>
</table>

**ACTIONABLE STEPS:**

**On-boarding:** Women in this segment would respond better when taught in groups; one strategy could be to provide training during group meetings. Moreover, these women are regular users of basic phones and are acquainted with the basic technology and also have other smartphone owners in the household (eg: husband, children). These household members can be a means through which this segment can improve their familiarity with digital products. For MFIs, this would mean additionally reaching out to another member of the family during the loan disbursal and repayment process and on-boarding them onto the digital platform and ensuring knowledge transfer thereon to women of this age group.

**Product design:** Given the high ownership of basic phones, this segment is likely to respond well, although slowly, to offline solutions provided they get sufficient training and hand-holding; offline products could focus on payment of credit installments through basic phones.

**26-40 years**

<table>
<thead>
<tr>
<th>Income Type</th>
<th>Average Income</th>
<th>Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highly Volatile</strong></td>
<td>INR 3,675</td>
<td>Engaged in Construction, Agriculture</td>
</tr>
<tr>
<td><strong>Medium Volatile</strong></td>
<td>INR 5,428</td>
<td>Engaged in Retail shops, Tailor shops</td>
</tr>
<tr>
<td><strong>Less Volatile</strong></td>
<td>INR 12,692</td>
<td>Engaged in Government, Private Employment</td>
</tr>
</tbody>
</table>

**ACTIONABLE STEPS:**

**On-boarding:** This segment requires simple techniques, relevant to their daily lives that can be reinforced at regular intervals. Initial handholding of customers is essential to increase their comfort with digital platforms and build their technological knowledge base. This can take the form of interactive sessions organized in group meetings wherein loan officers work with this group closely to familiarize them with the digital solutions and build their confidence over a period of time.
In terms of digital platforms, these consumers primarily use debit cards for their financial transactions – it is only the consumers with less volatile income that use other more advanced platforms like internet banking and mobile wallets. This segment has high potential for digitalization as they have high access to digital and financial infrastructure as well as high capability and willingness to adopt digital platforms. An age specific focus is necessary for product innovations for this segment that take into account priority areas for this age group such as savings and payments.

**PROFILE OF A TYPICAL FEMALE URBAN MFI CUSTOMER**

**18–25 years**

**Highly Volatile Income**
- Average Income – INR 4,635
- Engaged in Construction

**Medium Volatile Income**
- Average Income – INR 6,950
- Engaged in Retail shops, Tailor shops

**Less Volatile Income**
- Average Income – INR 10,107
- Engaged in Government, Private Employment

**ACTIONABLE STEPS:**

**On-boarding:** Women in this age group usually engage with skill building institutions such as through vocational training institutions and teacher training institutes. Engaging these institutes to on-board and promote use of digital platforms would inculcate digital skills at an early stage for this segment and allow them easy usage of MFI’s digital product offerings with little assistance and further investment required by MFIs themselves.

**Product design:** As this segment is comfortable with debit card usage, initiatives such as disbursement through prepaid cards are most suited to this segment. This allows women to access funds conveniently and make purchases and without the need to liquidate loan amounts into cash. A prepaid card will also enable women to actively monitor their cash flows and thus empower them to manage funds and encourage savings. Additionally, these prepaid cards can promote creation of a digital credit history for these women through monitoring of usage.
This segment of consumers primarily uses debit cards – majority of this segment is a credit customer with MFIs or SHG bank linkages. Similar to its younger counterparts, this segment has high potential for digitalization as they have high access to digital and financial infrastructure as well as high capability and willingness to adopt digital platforms. The priority focus area for this segment is credit for entrepreneurial purposes as well as financial management and household financial planning.

**ACTIONABLE STEPS:**

**On-boarding:** MFIs can engage with employers of this customer segment to on-board them onto digital platforms at an early stage. As occupations and incomes vary vastly for this segment, it is essential to build a holistic acceptance infrastructure throughout the ecosystem to on-board this segment. Simple measures such as promotional material in the form of pamphlets, IVR calls, SMS reminders and posters could have large effects on increasing adoption and sustained usage.

**Product design:** As this segment is mainly focused on credit for productive use and financial planning, end-to-end digitalization of credit products that involve modules on usage of resources and allocation of funds would provide this segment great value in adopting digital platforms.

These consumers have high preference for cash – the repayment of loans from formal as well as informal sources is done in cash. This segment has limited awareness and ability, but considerable willingness to pay and also has the potential to receive remittances and government benefit transfers digitally.

**40+ years**

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Average Income</th>
<th>Engaged In</th>
</tr>
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<tbody>
<tr>
<td>Highly Volatile Income</td>
<td>INR 5,050</td>
<td>Construction</td>
</tr>
<tr>
<td>Medium Volatile Income</td>
<td>INR 8,691</td>
<td>Retail shops, Tailor shops</td>
</tr>
<tr>
<td>Less Volatile Income</td>
<td>INR 8,397</td>
<td>Government, Private Employment, Domestic work</td>
</tr>
</tbody>
</table>

**ACTIONABLE STEPS:**

**On-boarding:** This group requires more intensive training in community gatherings, eg. small peer to peer transactions over basic platforms that can be practiced during MFI group meetings or facilitated by MFI field staff in other community gatherings through conducting of workshops and interactive sessions. For this segment, it is important to build visual tools to enhance financial and digital literacy in the form of short story videos or in the format of street-plays to engage these women and increase the value proposition for them.

**Product design:** MFIs could partner with third party applications that allow transfer of welfare payments into the same mobile money wallet that allows repayment of outstanding loans. This would heighten the acceptance infrastructure and add value for this segment to transact digitally.
ENABLING THE IDEAL CONSUMER:
Areas of Intervention
PHOTO CREDITS:
istock.com/pixelfusion3d - cover page, farmer, two urban women
istock.com/rvimages - old woman and girl
istock.com/hadynyah - rural woman
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We are enormously proud of the impact we are making in India, a country experiencing rapid growth but where many are at risk of being left behind and where vulnerable populations need our support. J.P. Morgan supports a variety of training programs and initiatives that enable disadvantaged people to acquire in-demand skills and access job opportunities in high-growth sectors and promote broader access to financial products and services.

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IFMR LEAD is an India-based research organization which conducts high-quality, scalable research and evidence-based outreach to promote inclusive and sustainable development in India and other Low and Middle Income Countries.

The team at IFMR LEAD has extensive experience in designing and implementing large-scale impact evaluations which comprise of quantitative, qualitative and mixed method approaches. IFMR LEAD’s research and policy focus areas include Financial Inclusion, MSME and Entrepreneurship, Infrastructure and Governance, Environment and Climate Change, Public Health, Agriculture, and Data Analytics.

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