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1) Summary

Microfinance institutions have traditionally relied on manual, labor-intensive processing of their loans. This processing helped MFIs to further the inclusion of clients that were not considered creditworthy by banks due to the perceived high-risk profile of informally operating enterprises, or not considered profitable due to the small ticket size. With this approach MFIs were able to maintain relatively low costs of risk, which, together with high interest rates, made microlending a profitable business for many (although, admittedly, many MFIs were not seeking profit-maximization).

The Covid epidemic highlighted the shortcomings of an approach that relies largely on face-to-face interactions. More generally, this business model has increasingly come under strain due to:

- cost of risk pressure – from frequent economic crises and increasing market saturation,
- margin pressure – from exchange rate volatility and increased competition for clients
- staff cost pressure – as inflation drives up the cost of qualified staff

The competitive pressure stems from new entrants - FinTechs using radically simplified structures and new technology to increase outreach. Banks are trying to use some of the same technologies to make inroads in the micro segment, and with their larger scale and big investment budgets, the impact is being felt.

MFIs frequently struggle to respond to this technological challenge. While some institutions remain too cautious and underinvest, others squander valuable capital (and time) on investment that is not well aligned with strategic needs. In this paper we outline how MFIs can take the first analog steps to prepare themselves for digitalization – and how these steps can already unlock some of the benefits associated with digitalization. We cover three main topics, each with basic and advanced approaches:

- The Digital Sales Process: Lead Management
- Streamlining Decision-Making – Credit Scoring and Rating Tools
- Internal Process Digitalization

In a worst-case scenario, MFIs risk being left behind as victims of their own low efficiency as banks and FinTechs gradually encroach on their traditional markets. On the other hand, for MFIs that take timely measures, there is significant potential to improve outreach, profitability and customer service.

Streamlining Decision-Making – Credit Scoring and Rating Tools

The concept of using scoring to automate credit decisions creates a lot of "buzz" in the microfinance industry. The possibility to substitute the painstaking data gathering and financial analysis of loan officers by an algorithm without sacrificing credit quality would be a game changer– dramatically decreasing the

[1] The views expressed in this paper represent the personal opinions of the authors and should not be read as the institutional views of I.D. Inspiring Development GmbH. For questions or comments, please contact the authors:
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cost per loan and allowing for improved profitability or more competitive interest rates. Scoring systems already work well in advanced, formalized markets, where standard data is available and reliable – for example salary information for consumer loans. For microentrepreneurs the picture is more complex. Many MFIs have experimented with scoring, but in most cases with mixed results – first of all because MFIs typically don't collect and store data about clients in a systematic way, but rather in paper files, if at all. Secondly because the basic demographic data that is available (gender, age, region etc.) does not have sufficient predictive power to base a useful scoring algorithm on. And finally, because the algorithms might create a profile of clients that are likely to default – but fresh data collection for new applicants is still needed to determine which profile fits a new applicant.

Fintech entrants sometimes bypass this question by accepting the flaws of these the most basic scoring mechanisms – essentially setting a very high risk appetite, where high default rates are compensated by very high pricing. There are good reasons why MFIs would not want to follow this path – so what are the options available?

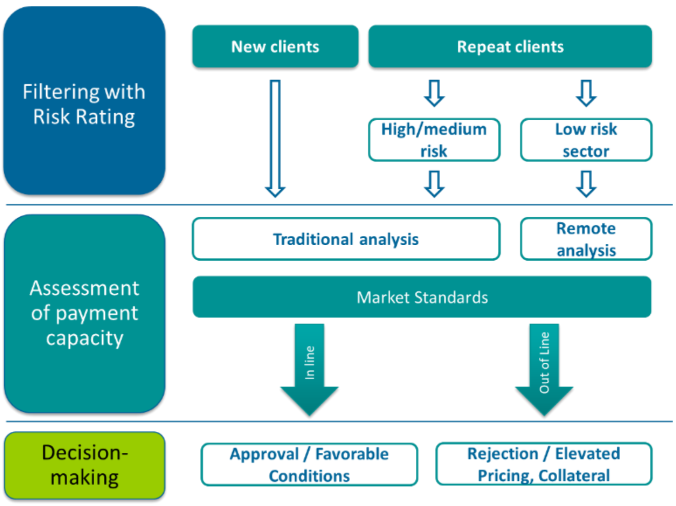
For most MFIs the quality of data that would allow for automation of credit decisions is not available. Instead, they can create simple scoring or rating systems based on their own expert judgement, or on a simple statistical correlation. These simple tools can play an important role in terms of filtering loan applications, supporting the decision-maker, and speeding up loan processing. What might these simple tools look like?

A typical system might employ four elements – self-declaration of the client, sector risk rating, market standards, and a traditional Loan Officer analysis.

- Clients submit a simple financial declaration, containing for example the value of stock, assets, debts, monthly income and expenses.
- The client is assigned a risk rating based on elements such as credit history, loan amount requested, sector (for example – during the pandemic pharmacies may have been automatically assigned low risk, whereas cafes were assigned high risk)
- Low-risk applications are processed with a simplified, remote analysis. High-risk applications are rejected outright or forwarded to a Loan Officer for a traditional on-site visit and analysis.
- The market standards show what a typical client looks like in each sector – defining the typical turnover and monthly profit of a taxi driver, the gross margin of a clothes trader in the market etc. Applications in line with market standards are approved. Otherwise, collateral or pricing may be increased, or the loan rejected.

Such a system has the advantage of being relatively quick and inexpensive to set up and do not require advanced data analysis skills. It can significantly increase efficiency by saving a

Figure 1: Rating and Market Standards



valuable resource – Loan Officer time. A well-designed system will have little or no deterioration of credit risk compared to the traditional setup. In the process of designing the system each institution would start to build up the capacity to store and analyze data that can later serve as a steppingstone for a more advanced approach.

In the more advanced approaches, MFIs attempt to create a statistical scoring algorithm with sufficient predictive power to be used as an automated decision tool. To do this they try to fill the data gap by accessing quality data from various suppliers, or by building new platforms of their own that can supply this data. Some examples include:

- Taxi apps like Uber can be used to check the monthly earnings of taxi drivers
- Food delivery apps like Wolt or Grab account for an increasing share of sales for many restaurants
- Credit bureaus may offer scores based on credit history with banks or other providers
- Mobile money apps can provide data on payments from customers and to suppliers

These platforms are increasing their penetration fast and creating new opportunities for data-based scoring. MFIs may enter into partnerships with app providers and purchase data or promote their loans via the platform. The platforms also provide risks for MFIs – they may choose to use their data to start lending operations themselves – becoming new competitors for the MFIs. As a result, some MFIs have started to set up platforms of their own – for example marketplaces where their clients can trade and the MFI collect data.

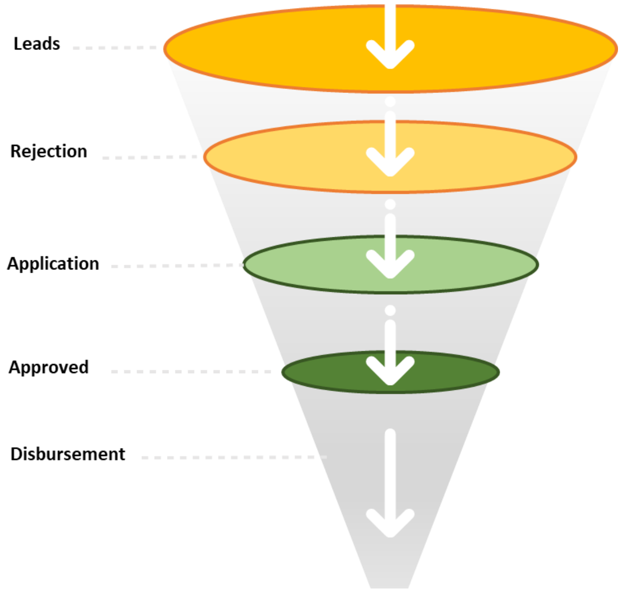
The advanced approaches require resources – to negotiate with data providers or setting up own platforms is a major effort. As a result these are typically available only to the larger and more sophisticated MFIs. Taking the steps listed in the basic approach will allow MFIs to reap some benefits already now, while preparing their institutions for the time when more advanced approaches materialize.

Organizing the Digital Sales process: Lead management

The Digital Sales process covers the generation of a lead and converting that lead into a loan application. The traditional way for MFIs to generate leads is for Loan Officers to visit markets or workshops, distributing leaflets and talking to potential clients individually – perhaps supported by radio announcements or advertisements on billboards.

Traditionally the main performance indicator for MFIs is loan disbursements. Loan Officers are evaluated and rewarded on the basis of the number of loans disbursed during the month, and few questions are asked about the number of leads they generated in the process – as long as the results materialize. This approach has served MFIs well for years, so what is the problem with it? The first problem is that organizations that track only the output (i.e. the loan disbursements) realize too late in the process that there are problems in lead generation and that the “acquisition funnel” is emptying. Once loan disbursements slow down, Loan Officers are sent back to the markets to generate new leads. This cyclicality is inefficient and disbursements don’t reach their full potential. The second problem is that the traditional forms of lead generation are expensive. With salaries on the rise, walking around in the market is no longer a cost-efficient tool.

Figure 2: Acquisition Funnel



So, how do successful MFIs tackle this problem today? We will present a spectrum ranging from basic to advanced approaches. First of all, the MFI takes responsibility for lead generation and management in order to ensure that the loan officer has enough leads to work on at all times. This may include digital marketing as mentioned, purchasing leads from others, or purchasing databases of microentrepreneurs and cold-calling each one, thereby converting some of them to leads. The MFI systematically tracks conversion rate of leads into applications for each loan officer. This indicator gives a deeper understanding of the efficiency of the sales process and ensures a steady workflow.

At the basic end of the spectrum leads are managed using simple tools. Some organizations manage the lead flow manually in spreadsheets, others use more advanced features like connecting the spreadsheets with links and macros. By doing this, MFIs are able to mimic the features of more advanced Customer Relationship Management (CRM) systems without committing to big investments. Such basic setups can be designed and implemented in a matter of weeks, providing a quick-and-dirty solution for companies who want to experiment with new approaches and learn from them.

In the long run, however, the basic approaches have certain shortcomings: less stable, more error-prone, a weaker integration with the core system that will not allow for a seamless end-to-end process, and the need for regular manual intervention. Therefore, companies that have reached a certain size and maturity often gravitate towards flexible, but more expensive low-code platforms that can provide a customized CRM solution to fit each MFIs processes and reporting needs and are able to interface with a core banking software.

The steps taken at the basic end are important steppingstones allowing for low-cost experimentation, an agile approach, and for the MFI and decision-makers to learn about the new approaches before committing to a particular platform.

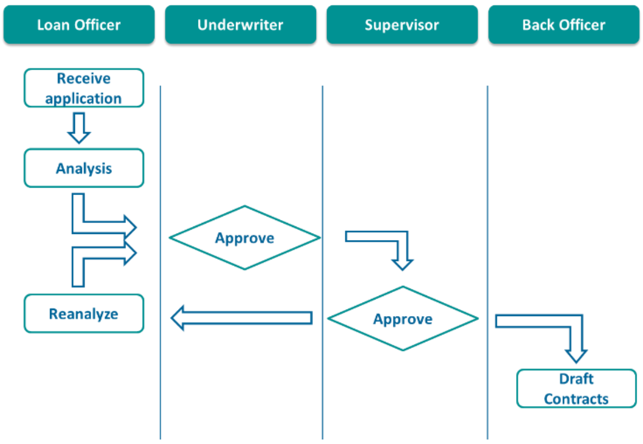
Internal Process Digitalization

Digitalizing the internal processes ties together the sales process and the decision-making processes into a seamless end-to-end flow. With all three elements in place, MFIs can measure and increase efficiency substantially, using KPIs like “time to yes” and “time to cash”. These popular buzzwords reflect the need for faster turnaround times to remain competitive, but digitalizing internal processes also help MFIs to reduce costly manual work and minimize errors.

Traditionally, processes in MFIs have used paper applications forms and resumes, filled by hand. Data from the forms would be manually entered into the core system. This process was time-consuming and error prone. A loan file moving through the approval process would be physically handed from person to person and tracking the file required time-consuming phone calls or in-person discussion with colleagues.

As above, there are simple approaches for MFIs with limited budgets to begin the process of internal process digitalization. Process mapping is a low-cost way to identify areas of inefficiency in current processes and organization. This involves mapping out each step of a process in a systematic, graphical way, and identifying areas that can be automated using existing systems or improved even without digitalization – for example by removing redundant controls, excess signatures or paper forms. Quick wins like these can help MFIs speed up their workflows, reduce manual labor, and minimize errors, and can have a surprisingly big effect. The process mapping is also a necessary precondition for a successful implementation of more advanced systems. Without mapping and defining the desired, efficient process, implementing a software solution will just lock in the old inefficient processes.

Figure 3: Process Mapping



At the advanced end of the spectrum, MFIs increasingly invest in comprehensive software solutions offering Business Process Management (BPM). BPM solutions help to streamline lending activities by transforming fragmented and manual processes to automated workflows. For example by automatically forwarding the received loan application and resume data to the next available underwriter, forwarding it to back office for contract drafting, and to the front office for gathering client signatures – in this way streamlining the full lending cycle end-to-end. It also facilitates communication between stakeholders and eliminates e-mail, phones, chats among employees. Managers have the ability to monitor the performance of business processes in real-time and intervene as needed. Ideally the BPM solutions integrate fully with CRM solutions and the core system, allowing the MFI to organize Marketing, Sales, and Service in one platform in an efficient and user-centric way.

Conclusion:

MFIs are increasingly under threat from new market entrants that excel at using new technologies. While some MFIs may not yet have the skillset or the investment budget to implement the most advanced solutions immediately, there are important analog steps MFIs can and should take now. These steps include:

- Taking control of lead management
- Implementing rating systems and market standards to speed up analysis and decision-making
- Systematic mapping and revision of core processes.

These steps help to prepare the MFIs for the more advanced digital solutions to come and to harvest some of the benefits associated with digitalization even before making major investments.