

# The Future of Microfinance Industry: Borrowers Facing Challenges Brought by the Technological Advancement

Marlon D. Banares<sup>1</sup>, Ma. Dorothy W. Dordas<sup>2</sup>, Voltaire V. Castro<sup>3</sup>, Rica Neanne D. Perez<sup>4</sup>, Dennis Joy F. Aisporna<sup>5</sup>, Marilou P. Pascual, PhD<sup>6</sup>

<sup>1</sup>Senior Accountant, CS Modern Workforce, Inc.

<sup>2</sup>Accounts Payable & Receivable Specialist, Offshore Business Processing Inc.

<sup>3</sup>EVP for Administration, Owk Group of Companies

<sup>4</sup>Project Development Officer I, Department of Education

<sup>5</sup>Administrative Officer II, Department of Education

<sup>6</sup>Dean, College of Management and Business Technology, NEUST

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**Abstract** – This study examined the challenges encountered by microfinance borrowers as a result of technical advancements. Furthermore, their perspectives on the imminent future state of MFIs were also examined. The results indicated that the majority of borrowers are utilizing printed application forms to apply for loans from MFIs, which are then sent to the MFI offices. The primary issue faced by most borrowers is a lack of proficiency in digital literacy. The majority of individuals lack proficiency in navigating the websites and mobile applications of MFIs. This suggests that vulnerable populations, such as individuals residing in distant regions or those lacking internet access, face a potential danger of being excluded as a result of their limited digital literacy. The data indicate that borrowers anticipate a complete transition to online operations in microfinance institutions within a timeframe of less than five years. Borrowers anticipate that loan applications will be completed via the web pages or mobile applications of MFIs. Loans can be discharged and reimbursed via internet banking or alternative digital platforms like Gcash and Maya.

**Keywords**— Borrowers, Challenges, Loans, Microfinance Institutions (MFIs), Technological Advancement

## I. INTRODUCTION

Microfinancing has played a crucial role in alleviating the lives of low-income individuals and small businesses in the Philippines. It has enabled them to start their businesses, provide for their families, and escape poverty. Microfinance, according to Armendariz and Morduch (2010), is the provision of modest loans and other financial services to low-income people who do not have access to standard banking services. Numerous studies have emphasized the benefits of microfinance in reducing poverty and empowering vulnerable groups. For instance, Kabeer (2001) contends that microfinance can increase household income and improve the standard of living for the poor by enabling them to start their businesses.

However, as the world rapidly embraces technological advancements, the microfinance industry finds itself at a critical juncture. The integration of technology has the potential to revolutionize the way MFIs operate, expanding outreach, improving efficiency, and enhancing financial inclusion. Nevertheless, this digital transformation also poses new challenges and risks for borrowers, necessitating a comprehensive analysis of the future of microfinance in the face of technological advancement.

The rise of technology in the financial sector has led to the emergence of innovative financial services such as mobile banking, digital payments, and online lending platforms. These technological advancements have offered new opportunities for MFIs to overcome traditional

barriers, such as geographical limitations, high transaction costs, and limited access to financial infrastructure. With digital financial services, MFIs can now reach remote areas, provide quicker and more convenient access to loans, and enhance transparency and accountability in financial transactions. As a result, the potential impact of technology on the microfinance industry is substantial, with the potential to reshape the dynamics of borrowing and lending.

However, alongside the promises of technological advancement, there are also concerns about the potential challenges faced by microfinance borrowers. The adoption of digital financial services introduces a new set of complexities that borrowers must navigate. These challenges include issues related to digital literacy, data privacy and security, over-indebtedness, exclusion of vulnerable populations, and the potential for a digital divide to widen socioeconomic disparities. Furthermore, the shift to automated decision-making processes, relying on algorithms and artificial intelligence, raises questions about the fairness and inclusivity of lending practices and the potential for discriminatory outcomes.

Due to these challenges, this study was conducted to know the borrowers' perspective on the future of microfinancing institutions. This also provided recommendations to the institutions relating to these challenges. Specifically, it aims to answer the following:

1. How may the profile of the borrowers be described in terms of age, gender, educational attainment, and ways to apply for a loan?
2. Describe the challenges brought by technological advancement that the borrowers are facing.
3. Describe the perceptions of the respondents on the near future situation of MFIs.
4. Provide recommendations to the MFIs to minimize risks from challenges faced by borrowers brought by technological advancement.

This study can be ultimately beneficial to the MFIs to innovate their products and services, as well as benefit the professors and students in business and finance. This could be a baseline research to further know how far MFIs

can go into digital advancement without losing their borrowers' trust.

## II. METHODOLOGY

This study utilized descriptive research to describe the challenges brought by technological advancements that microfinance faced as well as the perception of the respondents in the near future of MFIs. The researchers utilized a descriptive research method because it was used to obtain information concerning or describing the characteristics of the population or phenomenon that is being studied. This methodology focuses more on the "what" of the research subject rather than the "why" of the research subject (Manjunatha, N. 2019).

The purposively chosen respondents of the study are 100 borrowers of microfinance institutions around Nueva Ecija, Philippines (Salangsang & Subia, 2020). The purposive sampling technique was used. The purposive sampling technique, also called judgment sampling, is the deliberate choice of a participant due to the qualities the participant possesses. It is a nonrandom technique that does not need underlying theories or a set number of participants. Simply put, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience (Etikan, I., 2015).

This study used a set of questionnaires to gather data and it was distributed in person so the researchers can extract honest and reliable responses. Before they gave the survey, they discussed and explained the importance and objectives of the study.

After the data collection, the researchers analyzed the data using frequency counts, percentages, and mean.

## III. RESULTS AND DISCUSSION

### 1. Profile of the Borrowers

Based on the findings gathered, the majority of the borrowers were at age below 25 years old, indicating that the majority of them are in their early working age.

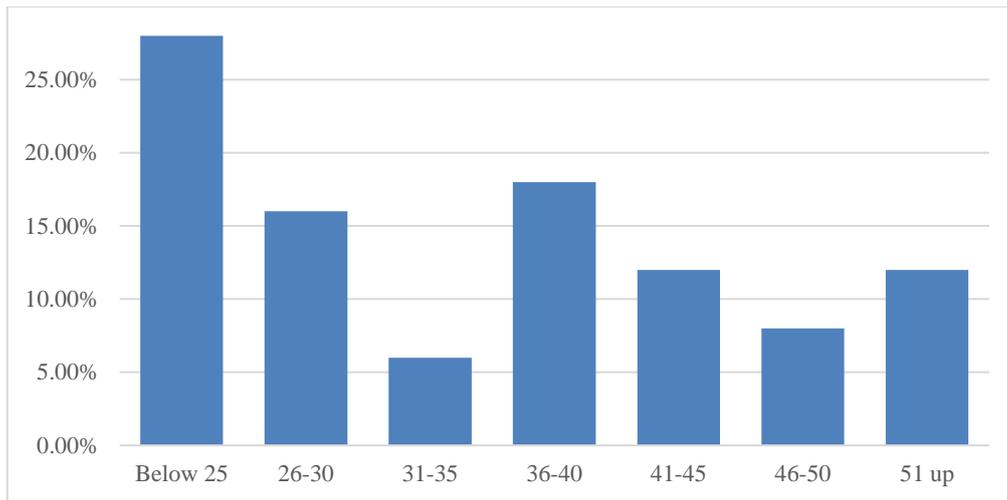


Fig.1. The Age Distribution of the Respondents

Most of them are female and the majority finished their secondary education. According to Khandker (2000), microfinance provides an alternative source of finance for the poor and women. Because they tend to have higher payback rates and use the loans for constructive reasons, studies show that women are more likely to benefit from microfinance programs (Mayoux, 2000). This is based on the assumption that female borrowers will use the loan funds to increase business income and thus improve household welfare (Rebecca N. Coke).

Table 1. The Gender Distribution of the Respondents

|              | <i>f</i> | %    |
|--------------|----------|------|
| Male         | 20       | 20%  |
| Female       | 80       | 80%  |
| <b>Total</b> | 100      | 100% |

Table 2. The Educational Attainment Distribution of the Respondents

|               | <i>f</i> | %    |
|---------------|----------|------|
| Elementary    | 24       | 24%  |
| Secondary     | 60       | 60%  |
| College       | 16       | 16%  |
| Post Graduate | 0        | 0%   |
| <b>Total</b>  | 100      | 100% |

Most of the borrowers (96%) are applying for loans to MFIs through printed application forms. Those forms are then submitted to the MFI offices.

The majority of them also have at least one online platform, such as Gcash and Maya.

## 2. Challenges Brought by Technological Advancement to the Borrowers

The major problem for the majority of borrowers is digital literacy. Most of them are not knowledgeable on how to navigate MFI websites and mobile applications. It implies that there is a risk of exclusion due to digital literacy to vulnerable populations, such as those living in remote areas or those who have no access to the internet.

Table 3. Digital Literacy Distribution of the Respondents

|   | <i>f</i> | %    |
|---|----------|------|
| Knowledgeable to navigate in online platforms       | 48       | 48%  |
| Not knowledgeable about navigating online platforms | 52       | 52%  |
| <b>Total</b>  | 100      | 100% |

Brought also by the lack of digital literacy is the compliance with KYC verification. The majority of the respondents are not knowledgeable on how to respond to KYC verifications through emails. They still prefer to complete it through phone calls.

Another challenge is data privacy and security. Some borrowers are concerned about how the MFIs will keep their personal data and if they can secure it from data breaches. According to Niranjanamurthy & Chahar (2013), security threats include unauthorized data access, use of software that traverses across the network, data theft, and theft of software via illegal copying from the company’s servers. Data privacy and security concerns have led people to show reluctance so the regulatory authorities should put

in place strict regulations in order to ensure that no data security breaches will occur (Amin, 2022).

### 3. Perceptions of the borrowers on the near future situation of MFIs

The findings revealed that the borrowers expect that in less than five years all the processes of MFIs will be done online.

Loan applications are expected by the borrowers to be done through MFIs' web pages or mobile applications.

Release and repayment of loans can be done through online banking or other digital platforms such as Gcash and Maya.

Some government agencies are already using online platforms for loan applications, loan releases, and repayments, such as Social Security Services (SSS) and Home Development Mutual Fund (HDMF).

## IV. CONCLUSION AND RECOMMENDATIONS

### Conclusion

Based on the findings provided, the following conclusions were drawn:

1. A significant challenge for borrowers is their limited digital literacy. As 96% of borrowers apply for loans through printed application forms and face difficulties navigating MFIs' websites and mobile applications, it is clear that a lack of digital skills is a major obstacle.
2. Borrowers express concerns about the security and privacy of their personal data when interacting with MFIs online.
3. Borrowers' expectations for the near future indicate a strong belief in the digitalization of MFI processes. The majority of borrowers anticipate that within less than five years, all MFI transactions, including loan applications, disbursements, and repayments, will be conducted online.

### Recommendations

Below are some of the recommendations of the researchers to the MFIs:

1. To address the issue of digital literacy, MFIs should consider investing in educational programs and training initiatives. These programs can empower borrowers with the knowledge and skills needed to navigate digital platforms, ensuring that they can fully participate in the digital transformation. MFIs can collaborate with community organizations and NGOs and provide digital literacy training within local communities.
2. Aside from conducting training, the MFIs should offer user-friendly interfaces and customer support to assist

those who are less digitally proficient. Providing clear instructions and step-by-step guidance can enhance the borrower's experience and increase their confidence in using digital tools.

3. MFIs should show that they invest in good infrastructure. A well-designed infrastructure includes both hardware and software components, as well as policies and practices, that collectively safeguard data from unauthorized access, breaches, and other security risks.

## REFERENCES

- [1] Aamin, A. E-Commerce Suggestions for Bringing Online Financial Technologies to Pakistan. Retrieved from: <https://portal.customsacademy.edu.pk/assets/uploads/1681819282Akhtar%20Amin%20uploaded.pdf>
- [2] Armendáriz, B., and Morduch, J. (2010). The economics of microfinance. MIT press
- [3] Etikan, I., Musa, S.A., and Alkassim, R.S. (2015). Comparison of Convenience Sampling and Purposive Sampling. Retrieved from [https://www.academia.edu/download/55796997/Comparison\\_Convenience\\_and\\_Purposive\\_Sampling-2016\\_4p.pdf](https://www.academia.edu/download/55796997/Comparison_Convenience_and_Purposive_Sampling-2016_4p.pdf)
- [4] Kabeer, N. (2001). Conflicts over credit: Re-evaluating the empowerment potential of loans to women in rural Bangladesh. *World Development*, 29(1), 63-84. doi: 10.1016/S0305-750X(00)00081-9
- [5] Khandker, S. (2000) Savings, Informal Borrowing, and Microfinance. <https://www.jstor.org/stable/40795612>
- [6] Coke, R. (2022). Microfinance borrower default: Evidence from the Philippines. American University ProQuest Dissertations Publishing.
- [7] Manjunatha, N. (2019). Descriptive Research - JETIR June 2019, Volume 6, Issue 6 - Journal of Emerging Technologies and Innovative Research. From <https://www.jetir.org/papers/JETIR1908597.pdf>
- [8] Mayoux, L. (2000). Microfinance and women's empowerment: Rethinking 'best practice'. *Development Bulletin*, 53, 84-88. Retrieved from: [https://openresearch-repository.anu.edu.au/bitstream/1885/112718/70/DevelopmentBulletin-57\\_2002.pdf#page=77](https://openresearch-repository.anu.edu.au/bitstream/1885/112718/70/DevelopmentBulletin-57_2002.pdf#page=77)
- [9] Niranjnamurthy, M., & Chahar, D. (2013). The study of e-commerce security issues and solutions. *International Journal of Advanced Research in Computer and Communication Engineering*, 2(7), 2885-2895.
- [10] Salangsang, L., & Subia, G. (2020). Mathematical thinking on problem solving and self-regulation strategies of Filipino primary grade pupils. *International Journal of Scientific & Technology Research*, 9(2). ISSN 2277-8616
- [11] Shahidur R. Khandker. (2000) Savings, Informal Borrowing, and Microfinance. <https://www.jstor.org/stable/40795612>

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