



INTEGRATION OF FINTECH COMPANIES IN INDIAN MICROFINANCE SECTOR

Dr. Manju Singh¹

Associate Professor,

Mohammad Shariq²

PhD Research Fellow,

Dept. of Commerce, Shyama Prasad Mukherjee Govt. Post Graduate College,

University of Allahabad. UP. India

Abstract:

The journey of the microfinance industry took a great leap after the launching of the Pradhan Mantri Jan-Dhan Yojana (PMJDY) program in 2014. Bank accounts under Pradhan Mantri Jan Dhan Yojna (PMJDY) have increased to 430 million, as of August 2021. The aim towards reaching digital economy was boosted by the country's Digital India program. Digital technology enhances the accessibility and affordability of financial services for the previously unbanked or underbanked individuals. The shift from the conventional banking framework to a digital model was supported by Aadhaar, which gave a supporting ecosystem system to enable technology players to launch electronic 'know your customer' (eKYC) and authentication services. This paper covers the Integration of financial technology in Indian Microfinance sector and discuss the issues faced by fintech companies.

Keywords: *Microfinance, Financial Technology, Fintech Companies*

Copyright © 2022 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial Use Provided The Original Author And Source Are Credited.

Introduction

Microfinance plays an important role in eliminating hunger, reducing poverty, generating income and improving the living standards of the poor in society. Microfinance has allowed the low-income and the vulnerable to access financial products and be more independent and self-sufficient. In the past, MFIs utilized a human-centered approach by employing a crew of credit officers responsible for mobilizing clients, performing Know Your Customer checks, disbursing loans, creating and updating amortization schedules, collection of client repayments and other tasks. Using this model, these institutions are able to reach customers across large segments of rural India despite their dispersed populations. Additionally, personal interactions with MFI staff have resulted in a greater awareness of financial products as well as greater trust in these products by the clients. In this context, the use of technology provides an opportunity for MFIs to maximize their potential such as improving the time spent by their staff on the field (e.g. cash collection using digital platforms can free up the workers' time to spend more time in educating clients and monitoring loans), increasing operational efficiency, decreasing costs, and providing



OPEN ACCESS

EIJR**Electronic International Interdisciplinary Research****Journal****VOLUME-XI, SPECIAL ISSUES- II****MAR - APRIL 2022***Original Research Article*

regular alerts (for repayment, new products).

Microfinance is on the brink of profound transformation, with the integration of digital technologies pushing it towards fundamental changes in its character and organization. In this paper we attempt to explore how fintech companies may assist the microfinance sector in fulfilling its role in development, particularly in India.

Objectives of the Study

1. To explore how FinTech companies are integrating with Indian Microfinance Sector.
2. To discuss the issues faced by FinTech in Indian Microfinance Sector.
3. To discuss the possible solutions for FinTech in Indian Microfinance Sector.

Methodology

A qualitative analysis of secondary data was done to achieve research objectives. The data for this research paper has been collected using secondary data sources such as websites, articles, annual reports, online blogs and various other secondary sources.

Microfinance Sector in India

In India, as in other countries, the modern microfinance industry was sparked by the Grameen Model of Prof. Mohammad Yunus in Bangladesh in the 1990s. Since 2005-06, a number of for-profit Non-Banking Financial Companies (NBFCs) and Non-profit-Microfinance Institutions (MFIs) have entered the micro-credit business, attracting private capital, commercialization, and professionalism. As a result, growth, competition, and scale emerged with a sharp focus on the delivery of micro-credit efficiently and profitably. This period was also marked with challenges regarding customer protection, such as overleveraging, inadequate disclosures, low customer awareness, high pricing, as well as risks of geographic concentration, ghost loans, local-level interferences, and a lack of regulation and oversight.

Currently, there are numerous regulated players in the micro-credit sector - Banks, Small Finance Banks (SFBs), NBFC-MFIs, and NBFCs. With a clear regulatory framework, sound business model, and performance trends over time, as well as potentially high unmet demand, private capital has been brought in to support the expansion. As a result, micro-credit in India is one of the most tightly regulated sectors. It is also one of the biggest micro-credit sectors globally, quite unmatched in terms of its outreach with low-ticket loans, scale, diversity of supply-side, spread, efficiency, performance, customer-protection standards, and contribution of the private sector. The Microfinance industry provided credit to over 5.93 Cr customers with a gross loan portfolio of Rs 2, 59,377 Cr as of 31st March 2021 (Business-standard 2021).

Overall Status of Portfolio, Borrowers and Loan Accounts*

Indicator	31 March 2021
Clients (Cr)	5.93
Loan accounts (Cr)	10.83
Gross Loan Portfolio (Rs Cr)	2,59,377
Loans disbursed (during the year, Cr)	5.17
Loan amount disbursed (during the year, Rs Cr)	1,88,471

*Loans originated after Feb '17.

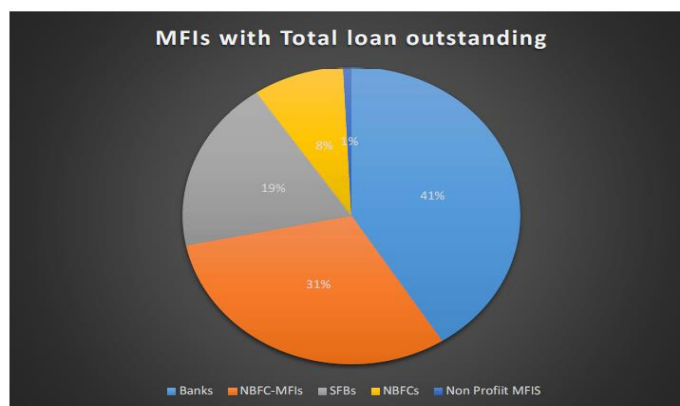
Source: MFIN Annual Report 2021

Classification of Microfinance Institutions

The Indian microfinance sector has undergone tremendous growth in the past two decades both as a result of the increase in the number of institutions providing microfinance and in the amount of credit available to microfinance customers. Microcredit is delivered through a variety of institutional channels viz., (i) scheduled commercial banks (including small finance banks (SFBs) and regional rural banks (RRBs)) lending both directly as well as through business correspondents (BCs) and self-help groups (SHGs), (ii) cooperative banks, (iii) non-banking financial companies (NBFCs), and (iv) microfinance institutions (MFIs) registered as NBFCs as well as in other forms. A categorisation of the microfinance sector is given below:

	Category of MFIs in India	Numbers in Present	Percentage share in Loan Outstanding
a)	Banks	15	40.99%
b)	NBFC-MFIs	86	30.80%
c)	SFBs	8	18.73%
d)	NBFCs	55	8.71%
e)	Non-profit MFIs	33	0.78%

Source: RBI Report 2021



Introduction to Fintech

Financial technology (FinTech) is the combination of the words financial and technology. In broad terms, it can be defined as technology-driven innovations in financial services that can result in new business models, applications, processes, or products that have a material impact on financial services markets, institutions, or provision of financial services. FinTechs utilize technology to deliver innovative financial products and services. As a result, they can reshape India's financial services and financial inclusion landscapes, enabling Inclusive growth and broadly based prosperity.

Currently, the Indian FinTech market is ranked as the third largest in the world after the US and China (EY's Global FinTech Adoption Index 2019). In 2021, the financial services sector in India have an estimated size of \$500 billion this includes \$31 billion in the FinTech market (BLinC Insights 2021). As the country's digitisation accelerates, the FinTech sector is growing rapidly in India.



OPEN ACCESS

EIJR**Electronic International Interdisciplinary Research****Journal****VOLUME-XI, SPECIAL ISSUES- II****MAR - APRIL 2022***Original Research Article*

Fintech In Indian Microfinance Sector

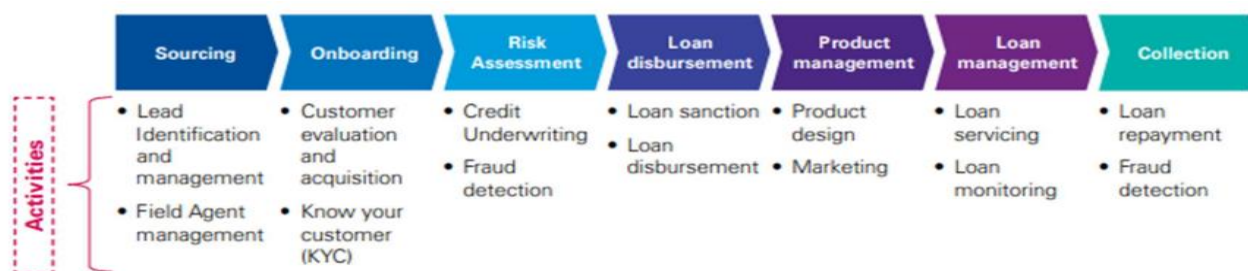
FinTech (Financial technology) is one of the industries experiencing rapid growth. The microfinance sector is largely responsible for the growth in this industry. The Fintech industry focuses mainly on giving technologies to different finance-related activities. Another major change in the past decade was the influx of people into the digital world. People are now immersed in the digital world. From food to water to clothes, all of these can be accessed by using mobile phones from remote areas. Payments can also be made online while at home. Microfinance discussion in India has been dominated by technology adoption since the 2000s. The microfinance sector has actively embraced technology, with NGOs such as Pradan working on pilot programs like Computer Munshi (CM) to improve the quality of bookkeeping in microfinance collectives or e-Gama to establish village information centers in the late 2000s (Srinivas & Mahal 2017). Software such as Management Information Systems (MIS), Loan Management Systems (LMS) and Customer Relationship Management (CRM) are the main forms of software used by MFIs in the 2000s.

In the Rangarajan Committee Report (2008) on financial inclusion, technology-based solutions are emphasized as a tool primarily for reducing transaction costs. It was noted by the Committee that small credit institutions had high operating costs, which fluctuated according to the operating model and cost structure of the institution. In addition, the committee recommended the founding of a Financial Inclusion Technology Fund (FITF) to increase investment in Information and Communication Technology (ICT).

PwC (2017) states that MFIs and fintech companies in India have collaborated on a number of projects including customer onboarding, credit assessment, disbursements, and collections. Among the examples of such collaborations are Entrepreneurial Finance LabEFL, which conducts financial assessments for Janalakshmi Financial Services (an MFI), the partnership between Oxigen Services and Sonata Finance Limited (an MFI), and Artoo, which assists Ujjivan (once an MFI, and now a Small Finance Bank) to onboard customers (PwC, 2017)

Fintech in the Microfinance Lending Value Chain

Microfinance firms are experimenting with and implementing new technology and solutions in order to enhance customer outreach, decision-making, and operations. The way financial services are delivered is being transformed by technology, and the microfinance industry is seeing the same upheavals. This section delves into the numerous technological interventions that are being used to optimise and improve the loan value chain's efficiency. Key component of MFI's value chain include sourcing, client onboarding, risk evaluation, loan processing, product management, credit management, and recoveries.



Source: KPMG Report 2021



Lead generation- An MFI's functional requirements include business development, accurate market identification, lead conversion and administration, and effective use of field agents. Machine learning technology are being used by a number of fintech organisations to enhance lead detection. The utilisation of their product suite, according to a notable fintech with a track record of changing the microfinance lending market, may lead to a considerable boost in conversion rates and a reduction in the cost of client acquisition. Other Fintech companies^{34,35,36,27} have used geo mapping, AI, behavioural science, and analytics to create stackable solutions for

- lead identification, tracking, and monitoring,
- field agent management for setting targets and tracking progress
- Real-time impact monitoring and review.
- Conduct user behaviour analysis in order to provide relevant information.

Product awareness –

By collaborating with existing MFI institutions, fintech startups have been actively working to improve product awareness among microfinance clients in India. The scenario of a next-generation fintech that teamed with a big Indian NBFC to design chatbot templates to provide microloans to women in the lender's target geographic areas is one example of how fintech businesses have been able to produce value. Customers searching for a loan may use the chatbot to get help and find out whether they are eligible. Companies are also releasing app-based solutions that use technologies like virtual reality to help those who are illiterate or have low literacy to understand printed information.

Customer Onboarding –

In collaboration with a fintech company, a large Indian Small Finance Bank has implemented a technology solution that allows for Aadhaar-linked KYC, video ID verification, and verification of e-documents via Digi Locker, as well as the use of AI/ML technologies to detect fraud, customer authentication, and automate the customer onboarding process. A major non-banking financing company (NBFC) has partnered with an Indian fintech firm whose fingerprint scanners have been approved for use in the Aadhaar system. Fintech firms have teamed up with banks and credit bureaus to provide readily integrated identification and document verification systems that can achieve the following:

- Palm and fingerprint verification
- Facial verification
- Multiple ID matching
- Perform verification process against over 100 different national ID cards

Loan Disbursement: Cashless loan payout using NEFT/RTGS/IMPS; Aadhaar Enabled Payment System (AePS) Several MFIs, including a few next-generation start-ups, allow 100% cashless payments. Host-to-host banking for real-time loan disbursements and an Aadhaar-based e-signature functionality are included in the end-to-end microfinance technology solutions.

AePS is a service that allows consumers to utilise UIDAI to access their Aadhaar-enabled bank account and conduct basic banking operations such as withdrawing disbursed loans from micro ATMs and ATMs with



OPEN ACCESS

EIJR**Electronic International Interdisciplinary Research****Journal****VOLUME-XI, SPECIAL ISSUES- II****MAR - APRIL 2022***Original Research Article*

biometric identification.

Product design and marketing –

Partnering with fintech businesses that specialise in Machine Learning algorithms has the potential to intervene early in the customer life cycle and help clients achieve their financial goals. The algorithms may be updated in real time with fresh data to assist the financial institution in forecasting a customer's next purchase and future cash flows, allowing it to promote and place the correct product at the right moment to its clients.

Loan Servicing and Monitoring –

As microfinance consumers have low literacy and technological comfort, most chatbot and voicebot technology is presently being used by field employees to answer questions. Several fintech firms provide text-based intelligent conversational chatbot solutions in a variety of Indian languages to help field agents with common process-related questions. Fintech firms have also disrupted traditional procedures by developing multilingual call centre automation systems that can give MFI clients with round-the-clock customer service and assist in resolving typical customer concerns and issues.

Collaboration with chatbot platforms can assist microfinance organisations improve the financial literacy of their consumers. Users may interact with the chatbot platform to read 'gamified' tales and simple interactive modules to develop financial awareness. As the system learns more about the user's goals, it may adjust its recommendations and send relevant notifications to the user's mobile phone.

Loan payments/collection: With smart technology penetration, such as smartphones, laptops, and tablets, is still relatively low but expanding, there are a variety of choices for cashless payments.

- **Unified Payment Interface (UPI)** - is gaining acceptance among microfinance players at a rapid rate. A technology business that works with merchants and financial institutions in the 'buy now, pay later' area is heavily utilising UPI for consumer credit payback.
- **Aadhar Pay** - enables a user to make a payment with Aadhaar at a merchant. To make a repayment with Aadhar Pay, the borrower can go to a kiosk/business correspondent (BC) location or branch that is equipped with the BHIM Aadhaar App and biometric equipment.
- **National Automated Clearing House (NACH)** - permits the payback amount to be immediately deducted from the account as specified by the customer during the loan application process. The accompanying bounce costs are influencing the use of this resource.

Issues Affecting Fintech In India

Whilst India has been catching up to other nations in terms of Fintech growth, it is obvious that it is still lagging behind. In this industry, India offers a sizable market for expansion. There are a number of obstacles that make it difficult for the Fintech industry in this country to grow and compete with those in more established markets and economies.

The following are some of these factors:

Low Internet Penetration:

In order for the Fintech sector to develop in a country with a population as large as India's, we need adequate connection. However, as we all know, India lacks this. Since the vast majority of the people is still unfamiliar with



OPEN ACCESS

EIJR**Electronic International Interdisciplinary Research****Journal****VOLUME-XI, SPECIAL ISSUES- II****MAR - APRIL 2022***Original Research Article*

cellphones and other electronic devices, internet connectivity is still in its early stages.

Bank Accounts:

India has a big population and a thriving Fintech industry, yet as terrible as it may seem, the most of the country's population lives in rural regions or is poor. Furthermore, many people in India do not even have bank accounts, making Fintech growth difficult in the Indian economy.

Lack of Hardware and More Hands:

This emerging industry is finding it difficult to expand due to a lack of appropriate hardware and knowledge. The success of this industry is primarily dependent on the ability to learn a new language and put it to use. The lack of an easy-to-understand language for the locals has caused a lot of problems for the industry. This not only results in fewer hands and brains working in the field, but it also diminishes the number of people who understand how the new Fintech sector works.

Lack of funds:

The majority of applications in the Fintech sector are the offspring of start-ups. Furthermore, it is general knowledge that start-ups are rarely able to gather enough money for their initiatives. A scarcity of funds, as well as trouble obtaining company loans, is just as terrible as having no concept. India has the potential to become a major Fintech market, however the current funding and money situation does not allow this industry to reach its full potential.

Digital skill Gap: Despite the fact that digital adoption rates and internet connectivity have been continuously expanding across India, there is a lack of personnel who can adapt to the latest digital interventions in the Microfinance value chain. This is partly due to NBFC-MFIs' geographic concentration on rural and semiurban areas, where staffing needs are directly satisfied by recruiting from the locally available pool in areas where major digital skill gaps exist. According to a research, just 18.3 percent of the rural population between the ages of 14 and 29 can use a computer, compared to 48.9% in metropolitan areas.

Regulations: There have been several issues raised about the absence of clear IT rules for MFIs, including business continuity, data protection, security, and cybersecurity, which might lead to security breaches and a customer's lack of trust in sharing personal data with lenders. If enacted, the Personal Data Protection Bill, 2019, which was introduced in the Lok Sabha in December 2019, it would address some of the above problems; MFIs will be compelled to comply and modernise their IT infrastructure accordingly. In order to remain relevant and competitive in the market, fintech businesses will be compelled to make their products comply with the bill. Challenges in establishing a consent-based framework for the protection of personal information, such as the "right to be forgotten," as well as guaranteeing a safe and secure environment

Way Forward

Greater engagement between Microfinance Institutions and fintechs. In the next coming years, banks and financial institutions' capacity to engage with FinTechs on a strategic and business level might become a key competitive advantage. With this in mind, the Reserve Bank of India has urged banks to form partnerships with FinTech businesses, since they might be crucial in advancing the financial inclusion agenda. The PwC 2019 Global Fintech Survey further emphasises that, given the current state of the industry, Financial organisations cannot afford to



OPEN ACCESS

EIIRJ**Electronic International Interdisciplinary Research****Journal****VOLUME-XI, SPECIAL ISSUES- II****MAR - APRIL 2022***Original Research Article*

ignore the rapid pace of technological advancements. FinTech enterprises can boost their competitive position and bring fresh goods and services to market more rapidly by working with them. FinTechs may help banks and financial institutions cut costs, enhance operational efficiency, increase client retention, and generate new income. Appropriate regulatory and supervisory frameworks can guarantee that FinTechs grow in an orderly manner, protecting consumers and other stakeholders' interests.

Data Protection

FinTech firms gather a lot of information about their consumers, which is used for marketing and credit scoring. As a result, in response to concerns about personal data protection and digital privacy in India, the Personal Data Protection Bill 2019 was introduced in the Indian Parliament on December 11, 2019, and it has been referred to a Joint Committee of the Parliament for fine-tuning through consultation with various stakeholders. The successful implementation of this bill will usher in a new era for India's privacy, offer a boost to FinTech enterprises, and increase financial inclusion.

Licensing of Small Finance Banks

The Reserve Bank of India published Guidelines for 'On tap' Licensing of Small Finance Banks in the Private Sector on December 5, 2019, following an evaluation of the performance of current small finance banks and to foster competition. Since Small Finance Banks would benefit from early adoption of cutting-edge technology and would be primarily engaged in basic banking activities and lending to the unserved and underserved, the establishment of more of these banks would boost the FinTech ecosystem in India

Digital advancement

MFI's may consider partnering with the government on digital-literacy initiatives such as the PM Gramin Digital Saksharta Abhiyan to help their consumers become more digitally literate. Lenders must also begin incentivizing, training, and teaching consumers on how to digitise their companies. Borrowers will be able to digitise transactions with the support of trainings in QR code adoption, UPI usage, and digital payment systems, allowing microfinance lenders to shift away from cash-based repayment.

Internet Connectivity

Improved internet infrastructure in geographically challenged regions of India, offering broadband access throughout villages as part of Digital India, and guaranteeing stable electrical supply and quality service are some proposals that the government might prioritise.

Suggestions

1. The implementation of digital finance must be done in phases, with the first step being to establish a customer's habit of utilising financial technological goods and services. Customers may first utilise programmes on their mobile phones that are connected to their MFI accounts to check account balances, receive or transfer small amounts of money, such as to purchase phone cards, to check account balances, receive or transfer small amounts of money. Customers slowly will gain expertise and confidence while utilising digital banking as a result of these processes, and will subsequently proceed to more difficult services such as online savings, insurance, money transfer, and payment.
2. In order to meet the diverse needs of customers, MFIs must first strengthen and expand their core activities



OPEN ACCESS

EIJR**Electronic International Interdisciplinary Research****Journal****VOLUME-XI, SPECIAL ISSUES- II****MAR - APRIL 2022****Original Research Article**

by improving market research capabilities, improving the quality of current products, and introducing new services associated with Fintech applications, such as saving mobilisation, microinsurance services, and collection agents.

3. The State Bank and affiliated authorities should speed up research and development of the legal framework for using Fintech in banking, including microfinance.
4. Improving the quality of human resources is one of the most important and long-term solutions for MFIs in India to develop sustainably. As a result, professional training is necessary to improve human resources.

Conclusion

The digital and technical revolution has changed the way businesses operate in various areas, including the financial and banking industry. What's encouraging is that the Indian government and regulatory bodies have effectively created an entrepreneurial rather than an anti-Fintech environment in India. However, rules and governance in this industry will need to keep up with the rate of innovation, in order to promote secure and transparent growth. Customers' trust and confidence in established banking systems make them less inclined to adopt new technology. Customers must be happy with the privacy and security elements of new technologies for them to be successful. Even if it is easier and less expensive than traditional approaches, it takes time to gain client trust.

References

BLinc Insights2021 available at <https://blincinvest.com/fintech>

Digital transformation: the next big leap in microfinance, PARIDNYA – The MIBM research journal, Vol-5 Issue-1, Dr Vijayalakshmi Srinivas & Ruski Mahal, September 2017 EY's Global FinTech Adoption Index 2019, available at https://www.ey.com/en_in/ey-global-fintech-adoption-index

FinTech for Inclusion: Challenges and Opportunities, Roundtable discussion organized by Business Today in collaboration with PwC, BT Print Edition: December 16, 2018. Available online at <https://www.businesstoday.in/magazine/the-hub/fintech-for-inclusion-challengesandopportunities/story/294454.html>.

https://www.business-standard.com/article/economy-policy/microfinance-loan-portfolio-grows-11-9-as-on-march-end-says-mfin-121063000942_1.html

<https://bfsi.economictimes.indiatimes.com/news/fintech/indias-fintech-market-size-at-31-billion-in-2021-third-largest-in-world-report/88794336>

India FinTech Report 2019, available at https://mediainnecircle.com/wpcontent/uploads/2019/03/FintegrateReport_ExecutiveSummary_Final.pdf

KPMG in India analysis of the technology trends in microfinance

MFIN Annual report (2020-21). Available at https://mfinindia.org/assets/upload_image/publications/AnnualReports/MFIN AR 2020-21 3.9.2021.pdf

MFIN Micrometer report Q2 FY 2020, Last accessed on 14/03/2022



OPEN ACCESS

EIJR

Electronic International Interdisciplinary Research
Journal
VOLUME-XI, SPECIAL ISSUES- II
MAR - APRIL 2022
Original Research Article

MFIN (various years). Micrometer. Microfinance Institutions Network. Available at <http://MFINindia.org/resource-center/MFIN-publications/>

PwC Global Fintech Report 2019 available at <https://www.pwc.com/gx/en/industries/financialservices/assets/pwc-global-fintech-report-2019.pdf>

PwC. (2017). Microfinance in Asia: A mosaic future outlook.

Rangarajan, C. (2008). Report of the Committee on Financial inclusion. Ministry of Finance, Government of India

Raj & Upadhyay, 2020. Role of FinTech in Accelerating Financial Inclusion in India. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3591018

Rejuvenating microfinance in India – embracing digital 2021 available at <https://assets.kpmg/content/dam/kpmg/in/pdf/2021/03/microfinance-digital-fintech-mfi-technologyfinance.pdf>

Sa-Dhan (2020). The Bharat Microfinance Report 2020. Sa-Dhan. New Delhi

Sa-Dhan (2019 a). The Bharat Microfinance Report 2019 a. Sa-Dhan. New Delhi

Cite This Article:

*Dr. Manju Singh¹ & Mohammad Shariq², (2022). Integration of Fintech companies in Indian Microfinance Sector, **Electronic International Interdisciplinary Research Journal**, XI (Special Issue - II) Mar-April, 76-85.*