DIGITAL FINANCIAL INCLUSION OF STARTUPS THROUGH FINTECH ADOPTION

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ABSTRACT

Digital financial inclusion, facilitated by fintech adoption, is increasingly recognized as a vital driver of economic growth and entrepreneurship. This study delves into the nuanced relationship between fintech adoption and the digital financial inclusion of startups in India, with a focus on the MSMEs sector.

In the backdrop of India's ambitious goal to become a developed nation by 2047, the integration of the country's smallest businesses into the digital ecosystem is imperative. Despite the pivotal role played by MSMEs in the Indian economy, many remain in the unorganized sector, hindering their access to formal financial services and government welfare schemes. This credit gap severely constrains their growth potential and hampers overall industry development.

Fintech, epitomizing the innovative use of technology in financial services, offers a promising avenue for addressing these challenges. Fintech-enabled financial inclusion encompasses the digital access and utilization of formal financial services, particularly through mobile phones and computers. In recent years, fintech payment platforms have emerged as a popular alternative to traditional banking methods in India, offering accessibility, affordability, and usability to startups and small businesses.

This study not only examines how startups leverage fintech solutions to overcome financial barriers but also sheds light on the broader discourse of financial inclusion. By understanding the intricate relationship between fintech adoption and digital financial inclusion, it elucidates how technological innovation empowers emerging businesses and contributes to economic growth.

Furthermore, the research explores the challenges associated with fintech-led payments and digital lending adoption among small merchants. By identifying these obstacles, policymakers *and stakeholders can devise informed strategies to promote fintech adoption and enhance financial inclusion for startups and small businesses in India.*

Through empirical analysis and qualitative insights, this study aims to provide actionable recommendations for fostering a more inclusive financial landscape, where startups can thrive and contribute meaningfully to India's economic development.

Keywords: *Digital financial inclusion, Fintech adoption, Startups, MSMEs, Economic growth*

INTRODUCTION

Financial inclusion is the process of providing people and Businesses that had not previously been able to access these products with cheap, relevant financial solutions (Ernst & Young, 2019). Digital access to and use of formal financial services by excluded and underserved populations is termed as Digital financial inclusion.

One of the main pillars of the Indian economy is the MSMEs sector, but most of them remain in the unorganized sector, because of which it is challenging to monitor their employment and income metrics and determine whether they qualify for government subsidies and welfare schemes. A big credit gap has an impact on the industry and small businesses are badly affected This divide severely limits small firm's ability to reach their full growth potential (Contributors, 2023) If India is to reach its goal of becoming a developed nation by 2047, the country's smallest businesses will need to participate in the nation's digital ecosystem. India's financial services industry is working to expand awareness and merchant acceptance of digital payments.

Fintech-enabled financial inclusion, or digital financial inclusion, refers to Digital access to and utilization of formal financial services, such as through mobile phones and computers with proper Internet connectivity (Khera et al., 2201). Digital financial inclusion of startups through fintech adoption is a crucial aspect of fostering economic growth and supporting entrepreneurship. Fintech, short for financial technology, refers to the innovative use of technology to provide financial services.

In recent years, fintech payment platforms have emerged as a popular alternative to traditional payment methods in India. It goes beyond traditional banking services and provides accessibility, affordability and usability of a broad range of financial services through fintech channels. Startups gain prominence in the evolving fintech-led financial inclusion landscape Understanding the intricate relationship between fintech adoption and digital financial inclusion of startups is essential to shed light on how start-ups leverage fintech solutions to overcome financial barriers and gain access to a wider array of financial services. Second, it contributes to the broader discourse on financial inclusion by examining the role of technological innovation in empowering emerging businesses.

The study also aims to explore the challenges associated with fintech-led payments and digital lending adoption among small merchants in the study area. The findings of this study could inform policies and strategies to promote the adoption of fintech and enhance financial inclusion for small merchants in India.

LITERATURE REVIEW

Financial inclusion

Digital financial inclusion or fintech-enabled financial inclusion refers to Digital access to and usage of formal financial services, such as through mobile phone (both smart and non-smart phones) and computers (to access the internet). This concept includes services provided by fintech companies and financial institutions (Khera et al., 2021). Its goal is to guarantee that everyone has access to official financial services, not just those at the top of the country's economic pyramid but also those who are most frequently left out, such as low-income households and small businesses owned by families. The most popular financial services among low-income families and small family companies include payment, transfer, remittance, savings, and credit services.

Over 200 million micro, small, and medium-sized businesses and over 2 billion individuals worldwide have very limited access to the most fundamental formal financial services and products. To meet day-to-day living expenses in terms of savings, credit, payments, and insurance, fundamental financial services and products are required (World Bank, 2017) The fact that individuals with the least resources pay the highest costs for financial goods and services is one of the inequities in today's society (Soriano M.A., 2017).

Financial inclusion in developed and developing nations is positively impacted by digital finance through Fintech enterprises. In terms of stability and financial inclusion, digital money presents a few challenges. (Ozili P. K, 2018). E-commerce-related challenges for financial inclusion such as trust, illiteracy, unfamiliarity, a cash-dominated society more importantly in rural areas insufficient digital infrastructure and lack of skills etc. (Saxena & Goyal, 2022).

Fintech

Fintech's potential to broaden financial inclusion has recently received attention from institutions and organizations having a stake in the issue, despite the fact that they also acknowledge that it presents new difficulties. Financial inclusion in particular and the Sustainable Development Goals (SDGs) in general may both benefit from fintech, according to the International Monetary Fund (IMF) and the World Bank. The Bali Fintech Agenda, which was established in 2018, consists of 12 components that examine fintech challenges holistically, many of which are relevant to this study and especially focus on financial inclusion (Bank for International Settlements, 2020).

The use of technology to improve and provide financial services is known as fintech (Yahaya & Ahmad, 2019). Which make use of technological advancements like blockchain, artificial intelligence, big data analytics, and mobile apps to provide quick, easy, and reasonably priced financial solutions (Wewege & Thomsett, 2019).

Fintech for Payments

The payment process is simple when compared to other financial products and services. Payment specific fintech companies are the most innovative and quick to implement new capabilities. They cater both consumer and retail segment as well as wholesale and corporate segments (BNY Mellon, 2015). Digital wallets, P2P payment applications, and mobile led payment solutions are among the facilities provided by fintech companies which allow individual and businesses to send and receive payment securely and easily (Gomber et al., 2018).

(Ledi et al., 2023) have discovered a significant and positive correlation between small and medium business performance and the adoption of digital financial services, such as mobile money and QR code payments. These findings imply that firms can profit from using digital services (such mobile money and QR code payment). Thus, innovation in this field and its surely translate business performance.

Fintech Payment Applications

Top 10 Fintech (Online) Payment Apps in India

1. Bharat Interface for Money (BHIM)

2. Paytm

3. Amazon Pay

4. Bharatpe

5.Cred

6. Samsung Pay

7. Airtel thanks

8. Google Pay

9.PhonePe

10. Freecharge

Source: https://www.psbloansin59minutes.com/knowledge-hub/10-best-online-payment-apps-in-india-2023

Fintech lending

Presently two billion individuals and 200 million small enterprises in emerging nations do not have access to savings or credit and they frequently pay a high price for a limited service. The rapid spread of digital technology has created a unique opportunity that enables the successful delivery of financial services at significantly lower prices, hence promoting financial inclusion and yielding notable productivity gains throughout the economy (World Bank, 2017).

Innovative fintech models around the world are reshaping the way MSME's can access capital for expansion and working capital for day-to-day operations. Considering that MSMEs lack the capacity to produce financial reports to enable financial institutions to assess their repayment capacity and default risk, they are deploying quick and agile technologies to get an accurate understanding of their cash conversion cycle and alternative credit scoring techniques in order to know the creditworthiness of the business owners. Fintech's scope extends beyond financing and capital to encompass diverse domains, including digital payment services and financial regulatory bodies (Gomber et al., 2017).

Fintech's facilitate MSMEs a chance to obtain the necessary business capital as it offers MSMEs a more comprehensive source of funding without depending on banks or other traditional financial institutions through alternative financing platforms like online lending platforms, crowd funding, or peer-to-peer lending (Putri et al., n.d.). fintech landscape can help MSMEs to grow digitally and become part of the digital economy while fulfilling the credit gap. (Kurnia Rahayu et al.,2023) Due to their smaller size, MSMEs tend to be more flexible and can quickly adjust to changing market trends (Zahrah & Wijaya, 2019)

As per the report by Worldline, in Q2 2019, the highest volume and the value of transactions were clocked at merchant categories including Grocery, Restaurants, Petrol Stations, Apparel Stores and Specialty Retail. Ant Financial introduced the 3-1-0 formula which translates to 3 minutes to decide, 1 minute to transfer the amount and 0 human touch, through which more than 532 Million loans have disbursed (Ratan Vatsa, 2020).

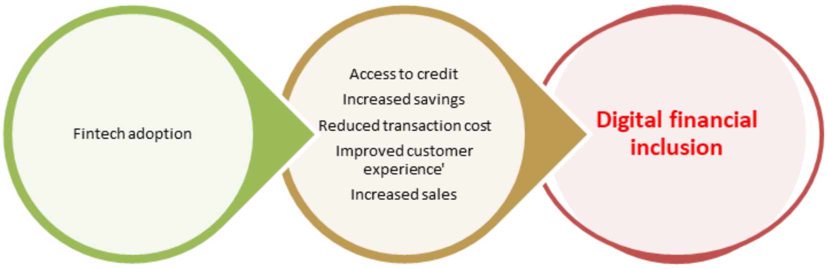
(Frost et al., 2022)Found that underserved small businesses have gained expanded access to digital lending through fintech firms who were unserved by the traditional banks previously. Alternate data of owners and business transactions is screened by fintech firms for loan disbursement through digital mode hence making way towards financial inclusion.

CONCEPTUAL FRAMEWORK

This study used the Technology Acceptance Model (TAM) as reference for the study which was established to assess the conceptual model of the user's objective or the degree to which information systems or new technology has been developed. The Theory of Reasoned Action (TRA) establishes the model. The model is regarded as the most persuasive and widely used hypothesis depicting an individual recognition data structure (Lee etal.,2003). Researcher took accessibility, affordability, safety and growth with financial inclusion into account. This notion is essential to the research because it shows how small business owners have integrated contemporary technologies into the way they run their operations. This is particularly true when small enterprises employ financial technology to move money, which makes fintech transactions faster, safer, and easier to access.

Independent Variables are Fintech adoption factors, Access to credit, Customer demand, Cost effective transactions, Speed & Convenience and Peer influence.

Independent Variables are Digital payments & DFS, Digital lending/ Loans, Improved customer experience, Retained customers, Reduced transaction cost and Reduced time &change issues.



Definitions and assumptions related to start-ups

Small scale fixed store merchants. "Fixed store merchants" are Startups that execute enterprise activities outside the household, typically in market areas, within fixed premises/permanent structures. This group excludes street vendors and home-based businesses (E Ligon, et al.2019).

Small merchants are businesses that fall under the MSME category, specifically micro and small enterprises, that accept digital payments as part of their daily transactions.

The definition of MSMEs has been revised several times over the years, and the current definition, as of 2021, is as follows:

1. Micro enterprises: Businesses with an investment in plant and machinery or equipment of up to INR 1 crore (approximately USD 134,000) and an annual turnover of up to INR 5 crore (approximately USD 670,000).
2. Small enterprises: Businesses with an investment in plant and machinery or equipment of up to INR 10 crore (approximately USD 1.34 million) and an annual turnover of up to INR 50 crore (approximately USD 6.7 million).
3. Medium enterprises: Businesses with an investment in plant and machinery or equipment of up to INR 50 crore (approximately USD 6.7 million) and an annual turnover of up to INR 250 crore (approximately USD 33.5 million).
   Source: https://msme.gov.in/faqs/q1-what-definition-msme)

Working definition of Startups (Small merchants)

Small merchants as businesses that fall under the MSME category, specifically micro enterprises that accept digital payments as part of their daily transactions.

RESEARCH GAP

As fintech is still in its nascent stages, existing literature tends to focus on isolated aspects rather than offering a holistic understanding of how fintech adoption influences the overall dynamics of startups (Micro enterprises and their inclusion in the digital financial landscape. The absence of comprehensive studies in this domain creates a significant opportunity for researchers to explore the synergies and complexities involved in fintech's role in driving startup growth and fostering digital financial inclusion.

This research gap underscores the need for a nuanced examination that goes beyond individual components, providing a comprehensive and integrated perspective. By bridging this gap, the researcher can contribute valuable insights into the transformative potential of fintech in empowering startups, facilitating their growth, and promoting financial inclusion in a digital era.

PROBLEM STATEMENT

The problem at hand revolves around a visible gap in fintech research that is holistic study on the interconnections among fintech adoption, startup growth and digital financial inclusion. This research gap prevents a comprehensive understanding of how fintech influences the developmental trajectory of startups and their integration into the digital financial ecosystem. The study aims to provide insights into how fintech can facilitate Micro enterprises (small merchant) financial inclusion. Addressing this gap is paramount for gaining insights that can guide strategic decisions for startups, inform policymakers, and contribute substantially to the evolving field of fintech research.

NEED AND SIGNIFICANCE OF THE STUDY

This study is imperative as it addresses a critical gap in existing fintech research by comprehensively examining the interconnected dynamics of fintech adoption, startup growth, and digital financial inclusion. The current literature predominantly focuses on fintech roles in general, neglecting a holistic understanding of fintech's transformative impact on startups. By bridging this gap, the study contributes valuable insights into how startups leverage fintech for sustained growth and inclusion in the digital financial landscape. The significance lies in informing strategic decisions for startups, guiding policymakers in fostering inclusive financial ecosystems, and advancing the broader field of fintech research. The study's findings may help to shape the narrative around fintech's role in promoting financial inclusion for emerging businesses, thereby influencing both academic discourse and practical interventions in the evolving fintech landscape.

RESEARCH QUESTIONS

1. What are the key factors influencing the adoption of fintech payments by small merchants in HDMC region?
2. How does the acceptance of fintech payments among small merchants in Hubli-Dharwad relate to their financial inclusion, specifically in terms of access to credit, savings, and other financial services?
3. What are challenges do small merchants in HDMC region encounter in adopting fintech payments and loans?

OBJECTIVES OF THE STUDY

1. To identify the factors that influence the adoption of fintech payments by the small merchants in HDMC region.
2. To examine the relationship between fintech payments acceptance and digital financial inclusion of small merchants encompassing Access to credit, savings and other financial services.
3. To identify the challenges and opportunities associated with fintech adoption among small merchants in HDMC region.

HYPOTHESES

1. **H0**: There is no significant association between the identified factors and the adoption of fintech payments by small merchants in the HDMC region.
2. **H1**: There is no significant relationship between fintech payments acceptance and digital financial inclusion of small merchants, including access to credit, savings, and other financial services.

METHODOLOGY

Sampling: The study will use a purposive sampling technique to select small merchants in Hubli Dharwad who have adopted digital payments for their daily transactions.

Population: All small merchants operating in HDMC Region,

Target Population: Small merchants in HDMC region who are actively using digital payments.

Sample size: Purposive sampling was employed to select 100 small merchants from the target population who are actively using digital payments.

Study's population encompasses all small merchants in HDMC region, while target population narrows the focus to those specifically using digital payments. The sample, collected through purposive sampling, consists of 100 small merchants from this target population.

Data collection: To collect data for the study, a combination of quantitative and qualitative methodologies will be used. A standardized questionnaire will be distributed to small merchants to acquire quantitative data. Secondary sources, such as related literature, ministry websites, and RBI bulletins, will be used to acquire qualitative data.

Data analysis: The quantitative data will be analysed using descriptive statistics.

Variables:

Independent variables

Fintech payment acceptance

Dependent variables

Digital Financial inclusion indicators such as

- Digital Access to credit,
- Savings
- Use of other Digital financial services

Ethical considerations: The study will adhere to ethical considerations such as informed consent, anonymity, and confidentiality of participants.

DATA ANALYSIS, FINDINGS AND DISCUSSION

Introduction

This chapter is related to the analysis of the collected data with the help of software's such as SPSS, excel etc. Data was analysed as per the aim of the study and based on the interpretation's conclusions were drawn.

Demographic Information

The data was collected from both male and female merchants involved with Micro enterprises. Table 1 indicates the combination of respondents in terms of Gender, age frequency, education level as well as the sector to which they belong.

Table No 1		Count	Column N %
Gender	Male	71	71.0%
	Female	29	29.0%
Age	less than 25	11	11.0%
	between 25-35	49	49.0%
	between 36-45	29	29.0%
	between 46-60	11	11.0%
	Above 60	0	0.0%
Education	Primary	6	6.0%
	High School	32	32.0%
	PUC	40	40.0%
	Graduate	22	22.0%
	PG and above	0	0.0%
Which sector does your business operate in?	Retail	43	42.6%
	Hospitality	28	27.7%
	Services	29	28.7%
	Others	0	0.0%

Source: Compiled by Researcher

Gender Respondents

Table 1 shows the proportion of respondents where more male respondents (71%) than female respondents (29%) indicating a gender disparity in Micro enterprises participation in HDMC region.

Age group of the respondents

Table 1 indicates the age group of the respondents, with 49% falling between the ages of 25 and 35, 29% falling between the ages of 36 and 45, 11% falling between the ages of less than 25 and 11% falling between the ages of 46 and 60. A clear evidence that the majority of micro firms are handled by entrepreneurs between the ages of 25 and 35, representing a large portion of youth population.

Level of Education

The study required respondents to disclose their level of education, with the majority (40%) falling under the category of PUC level, followed by 32% falling under the category of Highschool, 22% being graduates, and 6% having Primary schooling, indicating that the respondents were well-versed on the topic of research and thus provided relevant data for this study.

Sector

Table 1 shows nature of business of the respondents under this study. A majority of the respondents are Retailers (42.6%), followed by service sector (28.7%) and finally 27.7% are from hospitality sector. This shows the coverage of different sectors (Merchants) in Micro units thus the information received was broader in nature covering different sectors which is useful in further analysis.

Study variables

Researchers have identified certain variables through literatures are being studied fulfil the objectives.

Fintech payment methods

The researcher attempted to determine the most often utilized kind of Fintech payment methods, and the results are shown in Table 2 below. Respondents were asked to indicate the methods they utilized to accept money (Multiple). The options at hand were Mobile wallets, UPI, QR Codes and POS. The results of the respondents are displayed as follows.

Table 2	**Method**	**N**
Fintech Payment methods	Mobile wallets	11
	UPI	39
	QR Codes	100
	POS	4

Source: Compiled by Researcher

It was established that QR code is the most preferred method used by merchants in the study area, followed by UPI, mobile wallets and POS

Factors influencing Fintech Adoption

The researcher sought to establish the most influencing factors for Fintech payments adoption and the results are presented in Table 3 below. Respondents were asked to indicate the factors influenced (Multiple) to accept fintech payments.

Table 3 Factors influencing fintech adoption				
		Responses		Percent of Cases
		N	Percent	
Factors influencing fintech adoption	Customer demand	90	40.9%	90.9%
	Cost effectiveness	20	9.1%	20.2%
	Speed	45	20.5%	45.5%
	Access credit	45	20.5%	45.5%
	Peer influence	20	9.1%	20.2%
Total		220	100.0%	222.2%

Source: Compiled by Researcher

From Table 3 it was established that Customer demand is the most influencing factor for fintech payment adoption followed by Speed& Convenience, Access to credit, Cost effectiveness and peer influence.

Impact of Fintech Adoption on Business

The researcher sought to know the impact of fintech payment adoption on the business enterprises and the results are presented in table 4 below. Respondents were asked to indicate the factors influenced (Multiple) to accept fintech payments.

Table 4				
Fintech adoption impact on business		Responses		Percent of Cases
		N	Percent	
Fintech_adoption_impact_on_business	Increased_sales	40	13.9%	40.8%
	Improved_customer_experience	73	25.3%	74.5%
	Reduced_transaction_cost	32	11.1%	32.7%
	Access_to_credit	55	19.1%	56.1%
	Increased_savings	60	20.8%	61.2%
	Change_issue_resolved	28	9.7%	28.6%
Total		288	100.0%	293.9%

Source: Compiled by Researcher

From the above Table 4, it can be inferred that fintech adoption has benefitted the merchants.73% of the responded that fintech adoption has improved customer experience, 60% told that their savings have increased, 55% of the opinion that it help them to gain access to fintech lending, 40% said their sales have increased, 32% told they are able to reduce the cost, and 28% of the respondents also of the opinion that their change related problems have solved.

Fintech adoption challenges

The researcher sought to know the challenges the merchants face while using of fintech payment methods on the business enterprises and the results are presented in table 5 below. Respondents were asked to indicate the Challenges they face (Multiple) in accepting fintech payments.

Table 5 Fintech adoption challenges		Responses		Percent of Cases
		N	Percent	
Fintech adoption challenges	Technical issue	26	29.2%	40.0%
	Connectivity problem	51	57.3%	78.5%
	Security concern	12	13.5%	18.5%
Total		89	100.0%	136.9%

Source: Compiled by Researcher

From the above Table 5, it can be inferred that fintech adoption has several challenges to the merchants. Where 51% of the respondents said that Connectivity is main problem they face, followed by technical issue (26%) and 12% fear of security related to their financial data.

Overall Experience

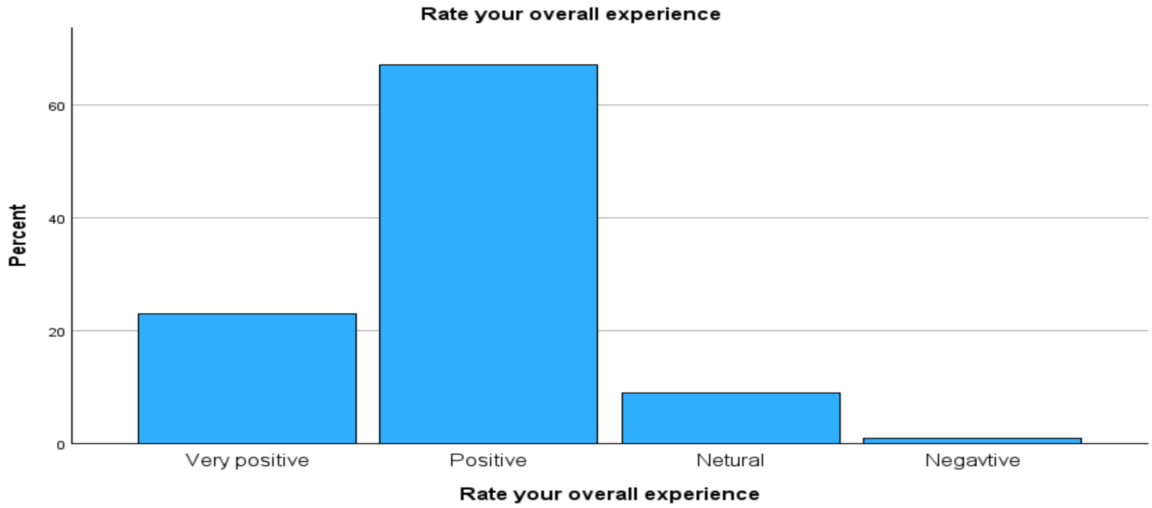
The researcher sought to know the merchants experience with usage of fintech payment methods. Respondents were asked to tick mark any one option in the questionnaire in the 5-point Likert scale form. The outcome has been presented in the below table.

Table 6 Rate your overall experience

	N	%
Very positive	23	22.50%
Positive	67	65.70%
Neutral	9	8.80%
Negative	1	1.00%
Very negative	0	0

Source: Compiled by Researcher

Figure#1



Source: Compiled by Researcher

Figure 1 shows the majority of the respondents comprising of 65.7% have marked positive experience with fintech usage and 22.5% are given very positive response while 8.8% are neutral and just 1% of the respondents are given negative response with fintech experience.

Access to Credit

The researcher sought to know the merchants access to credit from fintech firms and other digital mode lending with the usage of fintech payment acceptance method QR code which creates digital footprint for the transactions taken place, and merchants were asked to response YES or NO options. The outcome has been presented in the below tables.

Table 8 Does QR code helped your business gain access to credit

	N	%
Yes	83	83.00%
No	12	12.00%
Unanswered	5	5%

Source: Compiled by Researcher

From the above Table 8 it is clear that 83% of the respondents are of the opinion that Fintech payment through QR code help them to gain access to credit, while 12% told that they haven't gain access to credit and rest % were neutral on this question.

Fintech/ Digital lending

The researcher sought to know the digital lending or fintech credit facilities availed by the merchants and they were asked to respond in the open-ended question. The outcome has been presented in the below tables.

Table 9 Digital Loans

	N	%
Taken	62	60.80%
Not taken	38	37.30%
Unanswered	2	2.00%

Source: Compiled by Researcher

From the above Table 9 it is clear that 62% majority of the respondents have already received the fintech credit and 38% have not yet taken the loans. It is good sign that fintech is filling the credit gap which these small enterprises were facing.

Recommendation

The researcher asked merchants about will they recommend fintech to other small merchants and asked to respond in YES or No format. The outcome has been presented in the below tables.

Table 10 Would you recommend fintech to others

	N	%
Yes	93	93%
No	7	7%

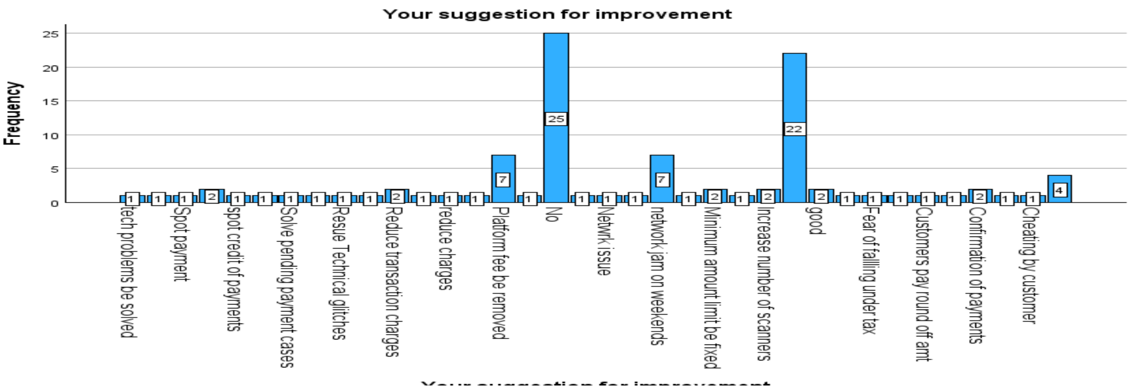
Source: Compiled by Researcher

From the above Table 10 it is clear that 93% majority of the respondents willing to recommend the fintech adoption to other merchants based their experience while just 7% denied the same due some negative experience.

Merchant’s concern/ Suggestion for improvement

The researcher asked merchants about their concern or any suggestion for further improvement in fintech and open-ended question was asked to write their opinion. The outcome has been presented in Figure 2.

Figure#2



Source: Compiled by Researcher

From the above figure 2, the concern of merchants and their suggestion are compiled as majority of them said (25%) no suggestions, but 22% said it is good while others had some issues and suggestions like platform fee be removed, payment should be confirmed, spot credit of payment, network issue be resolved, reduce transaction cost, reduce interest rate on fintech lending, provide digital literacy to small merchants etc.

FINDINGS AND DISCUSSION

The study focused on two specific objectives namely fintech adoption factors and its effect on small businesses, and to sought relationship between fintech adoption and digital financial inclusion while considering start-ups growth in the HDMC region.

From the above study it found that there is significant association between the identified factors and adoption of fintech payments by the small merchants in HDMC region. Hence null hypothesis is rejected and alternative hypothesis is accepted that is “There is a significant association between the identified factors and the adoption of fintech payments by small merchants in the HDMC region.”

From the above study researcher tried to find the relationship between fintech adoption and digital financial inclusion of and through merchants’ survey and responses it can be concluded that fintech adoption fulfilled the digital financial inclusion parameters such as access to digital credit, savings, and other digital financial services. Hence second Null hypothesis is also rejected and alternative hypothesis is accepted that is “There is a significant relationship between fintech payments acceptance and digital financial inclusion of small merchants, including access to digital credit, savings, and other digital financial services”.

Major findings of the study related to fintech adoption factors such as, Customer demand made the merchants incorporate fintech payments acceptance otherwise customers may switch to others it helps them retain the old customers and to gain new customers hence increased the sales.

Some of the merchants adopted fintech payments in the hope of getting access to fintech credit so they are making customers to make online payment only.

Some of the merchants incorporated fintech for the speed and convince of the business transaction which helped them during peak hours of sales where specially change related issue is solved to great extent.

Fintech adoption impact on small businesses

Majority of the merchants have positive experience with its adoption many have befitted interims of increase in sales leading to increased revenue, improved customer experience, reduction in transaction cost, increased savings and building digital footprint for their transactions which helped them gain access to fintech and big tech credit. Majority of the respondents have taken loans from the fintech firms such as Bharatpe, Phonepe and Paytm and kinara capital etc.

Accepting digital payments helped many merchants to make digital payments to their suppliers and many other digital financial services are being used by merchants such as recharge to mobile phone, paying utility bills, school/college fees of their children’s etc.

Some of the challenges merchants come across in fintech usage is connectivity problem, technical issues, pending payments, delayed credit of amount to their accounts in some cases after 24 hours (phonepe), platform fees etc.

Many customers still lack digital literacy where they are proven to be cheated by the customers, sometime customers show the payment slip older one and escape.

SUGGESTIONS

To Merchants

Acquire digital literacy, which is crucial in this digital age, and the government should also take steps to impart small business owners' digital literacy.

Make sure to double-check the received payments and your account balance, and maintain accurate accounts of receipts and payments which is facilitated by fintech payment applications.

To Fintech firms

Instantaneous payment confirmation to merchants, User-Friendly Interface, provide security measures, immediate payment credit to the merchant's account, reduce transaction cost, reduce interest rate on fintech lending, provide digital literacy to small merchants etc

Although the government is working hard to encourage the use of fintech in India through initiatives like Digital India, the cashless economy following demonetization, the introduction of e-KYC, the GST, and many others, it is still necessary for the government to provide adequate digital infrastructure that will support small businesses as well as fintech companies, which are the driving force behind India's digital financial inclusion.

MANAGERIAL IMPLICATIONS OF THE STUDY

The study on "Digital Financial Inclusion of Startups through Fintech Adoption" has several important managerial implications for businesses and policymakers. Here are some key implications based on the abstract:

1. **Promotion of Fintech Adoption for Startups:**

a. **Businesses:** Startups should consider embracing fintech solutions to enhance their financial inclusion and overall growth. This could involve incorporating fintech payment apps, optimizing payment infrastructure, and leveraging fintech services to improve financial access for their employees and customers.

b. **Policymakers:** Policymakers should encourage and support the adoption of fintech among startups through regulatory frameworks that promote innovation and financial inclusion. This might include creating incentives, providing regulatory clarity, and fostering a supportive environment for fintech startups to thrive.

2. **Development of Robust Fintech Ecosystem:**

a. **Businesses:** It's crucial for startups to be part of a thriving fintech ecosystem. This may involve collaboration with fintech companies or investing in developing their fintech capabilities to stay competitive and offer innovative financial services.

b. **Policymakers:** Policymakers can foster the growth of a robust fintech ecosystem by creating an enabling environment for fintech startups, facilitating partnerships between traditional financial institutions and fintech firms, and ensuring data security and privacy standards are met.

3. Data-Driven Decision-Making:

a. Businesses: Startups should recognize the importance of data in fintech adoption. Leveraging data analytics and insights from fintech services can help startups make informed decisions, optimize their financial strategies, and identify growth opportunities.

b. **Policymakers:** Policymakers can promote data sharing and access within regulatory bounds, ensuring startups have the necessary data infrastructure to make data-driven decisions while safeguarding privacy and security.

4. Financial Inclusion and Social Impact:

a. **Businesses:** Startups should view financial inclusion as a means to achieve social impact. By providing accessible and inclusive financial services to underserved populations, startups can contribute to broader societal goals while also expanding their market reach.

b. **Policymakers:** Policymakers should emphasize the social benefits of fintech adoption by startups, especially in reaching marginalized communities. Programs and initiatives that promote financial literacy and inclusion should be encouraged.

5. Regulatory and Compliance Considerations:

a. Businesses: Startups need to be aware of and adhere to the regulatory requirements associated with fintech adoption. This includes compliance with data protection laws, payment regulations, and consumer protection measures.

b. **Policymakers:** Policymakers should ensure that regulations are clear, up-to-date, and adaptable to the evolving fintech landscape. They should also provide guidance and support to startups in navigating regulatory challenges.

6. Continuous Monitoring and Evaluation:

a. **Businesses:** Startups should continually assess the impact of fintech adoption on their growth and financial inclusion efforts. Regular monitoring and evaluation can help them refine their strategies and adapt to changing market dynamics.

b. **Policymakers:** Policymakers should establish mechanisms for monitoring the effectiveness of fintech adoption initiatives among startups, gathering feedback, and making necessary adjustments to policies and regulations.

CONCLUSION

In conclusion, this study underscores the fundamental importance of digital financial inclusion and its significant role in fostering the growth of startups and achieving broader financial equality within a nation. Fintech, with its rapid expansion and technological innovations, has emerged as a vital catalyst for startups operating across various sectors. India's remarkable success story in fintech adoption, characterized by its robust payment infrastructure and widespread use of fintech payment applications, serves as an exemplary model for global emulation. The study's primary and secondary data collection methods have provided valuable insights into the relationship between fintech adoption, startup growth, and digital financial inclusion. The empirical evidence presented reaffirms the positive correlation between these variables, indicating that fintech adoption not only spurs the growth of startups but also facilitates financial access for underserved individuals and businesses. For both businesses and policymakers, this study offers practical lessons and implications. Startups are encouraged to leverage fintech solutions to enhance financial inclusivity and fuel their growth trajectories. Meanwhile, policymakers must work to create an enabling regulatory environment that supports fintech innovation while safeguarding consumer interests and data security. Moreover, the study underscores the significance of data-driven decision-making, advocating for continuous monitoring and adaptation in response to evolving fintech dynamics. Ultimately, the integration of fintech into the financial landscape emerges as a key driver of inclusive economic development, a critical step towards achieving financial equality on a national scale. Aldo, according to the study's findings, fintech adoption significantly impacted business growth when each predictor variable was examined separately. However, fintech adoption had a substantial positive link with the growth of small businesses and digital finance inflation of startups in the HDMC region. Finally, the research findings indicated that a rise in the utilization of fintech positively impacts small business expansion and financial inclusion.

Limitations and way for Future Research

The research only covered adoption factors of fintech and its impact on business growth hence relationship with digital financial inclusion, the study area selected was a city and fully busy market areas with huge business transactions therefore further researcher can check the same factors and effect in rural and semi urban areas and considering many variables and statistical calculations.

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