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# A STUDY OF THE ROLE OF FINANCIAL TECHNOLOGY IN FIRM GROWTH: THE CASE OF INDIAN MSMEs



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**Abstract**

**Purpose:** The purpose of this paper is to examine the role of Financial Technology on registered Micro, Small and Medium enterprise of India. The paper reveals the viewpoint of MSME sector on Risk Management, Financial needs, and Use of Technology. The paper also revealed the respondents' behavioural intention for adopting Financial technology as well as preferences and acceptance for using financial technology. Also, the impact of financial technology acceptance on firm growth is studied.

**Design/methodology/approach:** The paper was based on a descriptive and inferential research design for which original data is collected using a close ended questionnaire. The measurement items used in the questionnaire were derived from previous studies carried out in developing countries.

**Findings:** The Financial technology has changed the ecosystem of Indian MSMEs as well as Banking Sector. The Financial technology acceptance rate among the MSMEs is high as 49.2% respondents consider themselves as Early Adopters. MSMEs believes that financial products and services available to them through traditional banks does not sufficiently meet their business's needs (6% non-adopters, 24% early-adopters and 18% moderate-adopters) which echoes the need of alternate finance. Further 2% non-adopters, 47% early-adopters and 46% moderate-adopters strongly agreed that using technology is vital for Business Financial needs. Also, Financial technology acceptance has significantly positive impact on their growth in terms of Turnover, Profitability, Market share, and Productivity.

**Originality/value:** This empirical study contributes to the novel understanding of the acceptance and preference of MSME sector towards Financial technology and studies the impact of Financial technology acceptance on Firm growth.

**Keywords:** Financial technology, MSMEs, Perceived benefit, Satisfaction, Trust, Government Support, Firm growth

**Category:** Research paper

## 1. Introduction

The fintech sector has grown tremendously over the past few years and is expected to continue growing (Aggarwal and Stein, 2016). S&P Global Market Intelligence reports that from USD 11 billion in 2010 to USD 218 billion in 2019, investments in fintech firms and start-ups have grown significantly. Increased internet usage and better digital infrastructure are driving the growth of the Indian fintech market (Husaini and Lean, 2022), but a lack of customer confidence in digital payment methods and the growing threat of cyber and data security are limiting market expansion (Morse and Raval, 2008).

India is an emerging market with a high growth and high potential market, and it boasts the world's fastest growing fintech market (Abbasi et al, 2021). India and China had the greatest global adoption rates of fintech (87%) as of March 2020 among emerging markets (EY global fintech adoption index, 2019). The average adoption rate across the world, however, was 64%. The growth of the digital economy has been greatly aided by technology. Indian banks and financial service providers have steadily used technology to increase their reach, customer service, and operational effectiveness as a result of a developing market and technical advancements (Deloitte, 2017).

By improving their working capital and competitiveness (Deb and Baruah, 2022),

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organisations that have used fintech have seen increases in their productivity, market share, and turnover (Soni et al, 2022). Without the use of technology, organisations cannot function (Shrivastava et al, 2019). Technology significantly affects competitiveness and profitability and contributes to it (Panos and Wilson, 2020). Additionally, a company's ability to respond to and adapt to technological change is essential to its success (Singh and Gaur, 2018). Today, Fintech is utilised throughout all economic sectors, including MSMEs. Since FinTech solutions offer a wide range of functionality and features, are accessible round-the-clock, are easy to set up, operate, and use, they are popular with MSMEs in all markets, whether developing or developed (Hasan et al, 2020). According to turnover, investment in plant and machinery, and employee, the definition of an MSME varies by country to country. Consumer Fintech services and MSME Fintech services are not the same markets (EY global fintech adoption index, 2019). MSMEs, for instance, employ online payment processors and mobile point of sale (mPOS) payment terminals to collect payments, whereas customers use alternate services to pay for goods, like in-store mobile phone payments (Soni et al, 2022). The MSME sector is currently investing a significant amount of money in technology development or upgrades as well as adopting cutting-edge solutions to their various company activities, including their financial activity. Financial technology companies that operate in a variety of industries are dynamic participants in the technology industry. Financial Technology, like other Non-Banking Financial Companies (NBFCs), is regulated by the RBI and must adhere to the mandates, norms, and frameworks established by the competent authorities. They are able to provide unique Micro, Small, and Medium Enterprises (MSMEs) loan services due to their flexibility and capacity to innovate. It enables small firms to obtain critical support that traditional banks may be unable to provide.

The financial sector has undergone a huge digital transition as a result of the Covid-19 epidemic. In the face of adversity, the pandemic has also played a vital role in the expansion of MSMEs employing digital payments and the testing of new-age fintech models. MSME entrepreneurs are becoming more comfortable managing their financial affairs online. As a result, customer expectations have shifted, and demand for digital MSME lending services has risen. Though earlier studies emphasising the importance and role of fintech, this study is one of a kind since it mixes MSMEs and fintech. This research is significant for the following reasons in addition to adding to the body of information in the scientific community: First, this study expands on the scant prior research on MSMEs' perspectives on risk management, financial demands, and technological utilisation in business. Second, the preference and acceptance of MSMEs for financial technology will also be highlighted by this study. Third, this research was among the first to show how acceptance of financial technology affects business growth. Changes in MSMEs' Turnover, Profitability, Market Share, and Productivity are used to gauge an economic revenue.

The following section includes a summary of related studies in section 2 and the development of objectives and hypotheses in section 3. Section 4 provides a visual representation of the conceptual model. Section 5 provides an overview of the variables, instruments created, and methods used. Sections 6 and 7 provide a detailed explanation of the analysis and results of the study. Then, in the concluding section, we discussed the results' ramifications as well as their limits and potential future study directions.

## 2. Literature Review

### *2.1 Financial technology*

Fintech was first used to refer as advancements in the back end of the financial industry. Currently, the term "fintech" refers to a group of smaller businesses that employ digital technology to add value for their customers (Riemer et al, 2017). Technology-driven financial innovation has a long history. The 1950s saw the inaugural introduction of credit cards. Automated teller machines (ATMs) were first deployed as a solitary customer support channel in the 1960s (Alt and Puschmann, 2016). Two customer support channels were used when electronic stock trading and new bank data recording systems were implemented in the 1970s and 1980s, while several customer support channels were used when e-commerce and online brokering were introduced in the 1990s. Many hybrid IT solutions were used

after 2010 in areas where business process outsourcing had begun (Patel and Patel, 2018). There is no widely agreed-upon definition of fintech. Fintech, according to Ernst & Young (2015), is a development in financial services made possible by technological methods. A hardware- and software-based business paradigm is used to deliver financial services (Lee and Teo, 2015). With more technology entrepreneurs entering the market and changing it to satisfy social demands, the word "fintech" is a broad one that is constantly growing (zavolokina et al., 2016).

*2.2 Financial needs of small businesses*

As per Statista research 2021, the demand for small business loans through official channels has been greater than the supply even before the coronavirus (COVID-19) outbreak. During the epidemic, this pattern was more pronounced. As a result, several MSME (micro, small, and medium-sized companies) turned to neighbourhood traditional finance, risking interest rates of up to 30%. A number of alternative financing options, including microlending and digital lending, have also surfaced in recent years, encouraging the growth of non-banking financial firms (NBFCs) in the worldwide (Adeyele, 2018; Pavón, 2021). Additionally, even if a MSME has a strong cash flow, it could still need loans for expansion or financing (Lekovic and Micic, 2018). This circumstance can be used to the advantage of financial technology (Fintech) and improvements in conventional business structures (Sheng, 2021). By addressing market flaws in the MSME sector including information asymmetry and high transaction costs, fintech promotes financial inclusion (Anagnostopoulos, 2018). Because they offer a good variety of functionality and features, have services available around-the-clock, and are simple to set up, operate, and use, MSMEs in various markets prefer FinTech solutions (EY global Fintech adoption index, 2019). Affordable credit and simple access to it are essential components of creating prospects for the expansion of the Micro, Small and Medium Enterprises (MSME) market, which is a direct evolution from basic banking (Baber, 2019). According to Statista estimates, MSMEs' In the area of digital payments, the total transaction value is estimated to reach $8.49 trillion in 2022 and by 2027, it is predicted that the entire transaction value will have increased by a total of 12.31% each year (CAGR 2022-2027), totalling US$15.17 trillion.

*2.3 Adoption of Fintech by Small business*

Many behavioural factors, including those discussed in the "Unified Theory of Acceptance and Use of Technology (UTAUT)" by Venkatesh et al. (2003), the "Technology Acceptance Model (TAM)" by Davis (1989), the "Theory of Planned Behaviour (TPB)" by Ajzen (1991), and the "Innovation Diffusion Theory (IDT)" by, could have an impact on the adoption of Fintech specifically in (Rogers, 1976) where, owners and managers can be divided into three groups based on their distinctive traits and varied technological adoption behaviours. "Tech non-adopters," "tech aspirers," and "moderate tech-adopters" are those people. Several investigations have previously utilised this notion (Ryu, 2018). There are various factors which are studied in past studies that can impact the decision of MSMEs for adopting any new technology in business. The detailed description and implication with respect to small business of variables has been given in table below:

| Variables | Description | Authors | Implication on Small Business |
|---|---|---|---|
| Risk Management | Risk is the likelihood of suffering a major financial loss or other negative effects (Sonfield and Lussier, 1997). | EY global fintech adoption index, 2019 | In the subject of entrepreneurship, the idea of risk propensity is significant. The tendency of entre preneurs to take risks has received a lot of attention in the past literature. Small Owner -managers with greater risk appetites are more motivated to implement new technology in their business. |
| Use of technology | Owners/managers decision to use technology in their business is important as in small businesses, owners/managers has to plays different role to run their business. | | Willingness to adopt technology in business by management of small business plays an important role. |
| Financial needs | Financial needs are the foremost requirement of any business in the development process. | | MSME development is severely hampered by a lack of sufficient financial resources. |
| Perceived ease of use | Users are more likely to adopt an application that is considered to be easy to use than another depending on how much they believe using a particular available technology would be painless (Davis, 1989). | Davis, 1989 | According to the TAM model, "perceived usefulness" and "perceived ease of use" have the highest impact on behavioral intention. |
| Perceived usefulness | A person's belief that using a particular technology will boost his or her work performance or the performance of his or her organisation is known as perceived usefulness (Davis, 1989). | | |

**Table 1.**
Variables significant for MSMEs in past studies

| | | | |
|---|---|---|---|
| Trust | One of the most important factors affecting user behaviour and the effectiveness of technology adoption is trust (Yang et al., 2009). Trust is the degree to which a person believes that adopting various fintech platforms is secure and involves no privacy risks. | Shin, 2013 | In prior research, there have been several extended versions of the TAM model that have been examined, and in these models, user behaviour and the success of technology adoption are heavil y influenced by user satisfaction and trust (Chen and Barnes, 2007) |
| Satisfaction | Satisfaction refers to user satisfaction that results from both positive and negative technological adoption experiences. Satisfaction is an effective customer condition, according to a global assessment of all the factors that go into a user relationship (Zameer et al, 2015). | Xu and Du, 2018 | |
| Government support | One of the variables highlighted in the body of research as limiting the development of MSME technology is government support (Chundakkadan and Sasidharan, 2020). Lack of government support is one of the factors preventing businesses from using innovation and technology in their business (Flanagan and Uyarra, 2016). | Chatterjee et al, 2021; Rita et al, 2021 | The government, especially the local government, is likely to pay special attention to MSMEs. Lack of government assistance is one of the factors preventing businesses from using innovation (Flanagan and Uyarra, 2016). One of the factors cited in the body of research as impeding the development of MSME technology is government backing (Chundakkadan and Sasidharan, 2020). |

**Source:** Author Compilation

*2.4 Firm Growth*

Financial services organisations used to offer a variety of services under one roof until recently. These services covered a wide range of things, from conventional banking operations to mortgage and trading services (Abbasi et al, 2021). Fintech companies unbundles these services into separate offerings in its most basic form and offered more effective products at reduced transaction costs by combining technology with solutions that are simplified (Milian et al, 2019).

The word "disruption" best captures how many fintech innovations have changed traditional trading, banking, financial advice, and products. Financial services and products that were previously only available through branches, salespeople, and desktop computers are now available through mobile devices or simply move away from powerful, entrenched institutions (Johnson et al, 2018). For instance, the mobile-only stock trading app Robinhood does not

charge commissions for trades, and peer-to-peer lending platforms like Prosper Marketplace, Lending Club, and OnDeck guarantee that rates will drop by exposing the lending industry to competitive pressures. Companies that offer business loans, such Funding Circle, Kabbage, and Lendio (among others), give new and existing companies simple, quick ways to get working capital. These advancement and innovation have resulted in positive impact in firm performance (Jafari-Sadeghi et al, 2021). A direct and positive relationship between technology use and firm performance has been demonstrated in the past literature (Oliveira and Martins, 2011). Products, processes, organisations, and infrastructures have all undergone substantial modifications as a result of technology use. These adjustments have impacted firm performance (Porter and Millar 1985).

**3.Reserch Objectives**

As a result, the current work has the following research questions given the mushrooming involvement of these recent changes in small and medium-sized industries.

R1. Determine the positions of the MSME sector on risk management, financial requirements, and the usage of technology in business.

R2. Determine the factors impacting intention of the MSME sector in terms of financial technology acceptance.

R3. To determine the impact of financial technology adoption on business growth.

The following hypotheses were formed to find out the impact of financial technology adoption on business growth:

Ha1- The use of fintech has a positive impact on turnover.

Ha2- The use of fintech has a positive impact on profitability.

Ha3- The use of fintech has a positive impact on market share.

Ha4- The use of fintech has a positive impact on productivity.

**4. Research Framework**

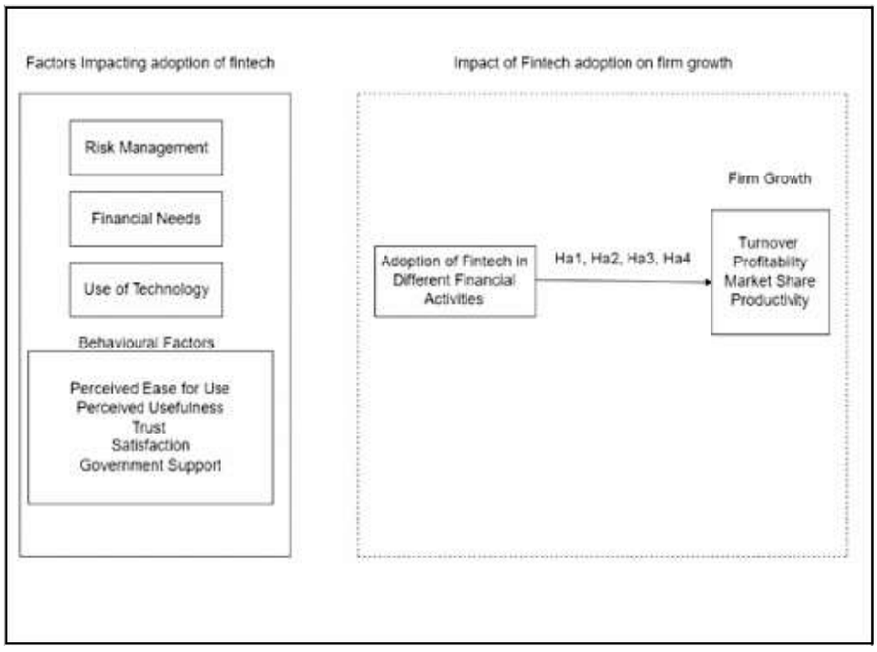


**Figure 1.**
Conceptual Framework

## 3. Research Methodology

*5.1 Instrument Development*

In order to gather data, the researchers used a questionnaire. To make sure the questionnaire was appropriate for its intended purpose, Gillham (2008)'s guidelines were followed when creating it. The measuring items in the questionnaire were modified from past studies carried out in underdeveloped nations. 34 questions total, broken down into three sections, make up the questionnaire. The respondent's age, gender, level of education, and work experience in the current industry are just a few examples of the demographic and socioeconomic factors included in the first section.

Using a five-point Likert scale, the second section identifies questions about risk management, financial needs, technology use in business, adoption of fintech services in various company activities, and various causes for adoption of fintech services. The final section examines how Fintech adoption affects business growth.

| Variables | Source |
|---|---|
| Risk management | EY global fintech adoption index, 2019 |
| Financial needs | |
| Use of technology in business | |
| Perceived ease of use | Davis, 1989 |
| Perceived usefulness | |
| Trust | Shin, 2013 |
| Satisfaction | Xu and Du, 2018 |
| Government support | Chatterjee et al, 2021; Rita et al, 2021 |
| Usage of Financial technology in different financial activity | Ivashchenko et al, 2018, GPFI, 2020 |
| Firm Growth | Sefiani et al, 2018 |

**Table 2.** Source of the Instrument

**Source:** Author Compilation

*5.2 Sampling and data collection*

Primary data have been gathered in Delhi's Northwest Industrial area. The Northwest Industrial Region, which comprises Mangolpuri, Shahzada Bagh, and Wazirpur Industrial Area, was chosen because it is one of the largest and oldest industrial zones (Labour Commissioner, 2019). These industrial regions are among the 24 recognised industrial areas in Delhi, according to the Labour Commissioner (Labour Commissioner, 2019). According to the Udyog Aadhaar MSME registration dashboard, the population of the Northwest Industrial region is 26125. (MSME district wise Udyam registration details, 2022). According to (Kotrlik and Higgins, 2001), when alpha is.01, t is 2.58, and the margin of error is.03, the proper sample size is determined. Given that there are 26125 registered MSME units, a sample size of greater than 209 should be used for populations greater than 10,000. 250 valid responses were gathered by the researchers for the study. Owners and managers of MSMEs completed questionnaires to provide the data for this study. The timeframe from which responses were gathered was from December 2020 to February 2021. The snowball sampling approach, a non-random sample technique, has been used to acquire data. Because the first respondents presented more key informants who participated and were introduced to other respondents, snowball sampling was used. A google form is used to exchange the questionnaire.

## 6. Data Analysis And Results

*6.1 Data Reliability and validity*

The data collected through google form has been tested for threshold test i.e., missing value analysis. MVA is above 10% and chi-square value is more than 0.05. Thus, there is no pattern in missing value, outliners detection (Using frequency distribution Mean, Maximum and Minimum value is generated. The data has no outliners), and multicollinearity (Multi-

collinearity is tested by calculating VIF values. VIF of all constructs less than 3). The data is free from all the abnormalities and fit for further data analysis.

*6.2 Reliability of the Instrument*

*Cronbach Alpha*

The questionnaire was also tested for reliability using Cronbach's alpha. The results of Cronbach's alpha indicate an instrument is reliable if alpha values are above 0.70. There are 34 items in the questionnaire. The alpha value of items is in the range of .773 to.869, which indicates that the instrument is reliable.

| Variables | Items | Statements | Cronbach Alpha |
|---|---|---|---|
| Risk management | RM1 | Owners/Managers are like to take the financial risk | .773 |
| | RM2 | Owners/managers here like to put plans in place only ifthey are positive, they will work. | |
| Financial needs | FN1 | The financial goods and services offered to me are insufficient to suit the needs of my organization. | .703 |
| | FN2 | Traditional banks and insurers, in the general, do not satisfy the needs of my organization. | |
| Use of technology in business | UT1 | When faced with new regulations, my company prefers to use technology whenever possible. | .885 |
| | UT2 | My organization analyses its technological tools and software on a regular basis to verify that theyare still the best fit for us | |
| | UT3 | I believe using technology is vital for Business Financial needs | |
| Perceived ease of use | PE1 | Using Financial Technology for the financial activity I can meet my business needs easily | .838 |
| | PE2 | Using Financial Technology for financial activity improves the efficiency of the business, as to access information about different platforms is faster | |
| | PE3 | It is simple to do financial transactions on fintech apps/websites. | |
| Perceived usefulness | PU1 | It reduces the time of transaction | .773 |
| | PU2 | It is simple to do financial transactions in a digital format. | |
| | PU3 | Financial products offered digitally (Fintech Platforms) have lower transaction fees | |
| Trust | TR1 | I believe my business financial information is safe if I acquire finance through digital mode | .841 |
| | TR2 | I believe my money is safe in e-wallets | |

The following diagram shows the coefficients extracted in the nonstandard mode.

| | | | |
|---|---|---|---|
| Satisfaction | ST1 | Digital financial providers provide fair/reasonable services and products | .839 |
| | ST2 | I believe acquiring financial products digitally, provides better decision-making for my business | |
| | ST3 | I am satisfied doing financial activities digitally for my business | |
| Government support | GS1 | I believe the government has introduced favourable legislation and regulations in recent years as IT Act, 2008 | .837 |
| | GS2 | I believe the government is active in setting up new infrastructure such as the infrastructure telecom network, which has a positive role in promoting Mobile Phones for financial activity | |
| Firm Growth | Using different financial technology platforms for business activities has a significant impact on turnover of business | | .869 |
| | Using different financial technology platforms for business activities has a significant impact on profitability of business | | |
| | Using different financial technology platforms for business activities has a significant impact on market share of business | | |
| | Using different financial technology platforms for business activities has a significant impact on productivity of business | | |

**Table 3.** Reliability of the Instrument

**Source:** Author Compilation

**Factor Analysis**

Factor analysis is a technique for condensing a large number of variables into a smaller number of factors. This method pulls the largest common variance from all variables and converts it into a single score. It should be emphasised that the initial goal of this research was to impose an experimental model. The purpose of exploratory factor analysis is to identify the fewest number of interpretable factors that sufficiently explain the relationships between a set of variables. Factor analysis was conducted and interpreted using KMO and bartlett's test, total variance explained and rotated component matrix.The KMO assesses sampling adequacy (whether or not the replies provided with the sample are adequate) and should be close to 0.5 for satisfactory factor analysis to occur. Kaiser (1974) recommends 0.5 (number for KMO) as a bare minimum (acceptable), values between 0.7 and 0.8 as good, and values over 0.9 as excellent. According to the table below, the KMO measure is 0.945, which is excellent.

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .945 |
| Bartlett's Test of Sphericity | Approx. Chi -Square | 10089.946 |
| | df | 351 |
| | Sig. | .000 |

**Table 4.** KMO and Bartlett's Test

**Source:** Author calculation

For analysis and interpretation, we are primarily interested in Initial Eigenvalues and Extracted Sums of Squared Loadings. The presence of eigenvalues greater than one is required to determine the number of components or factors stated by selected variables. According to Table V, the first component has a value of 7.751 > 1; the second component has a value of 3.178 > 1; the third component has a value of 1.9131 > 1; the fourth component has a value of 1.743>1; and the fifth component has a value of 1.014>1. Furthermore, the extracted sum of the squared holding percentage of variation of the first five variables is 70.985%. As a result, five components are adequate for accurately capturing all of the features or elements highlighted by the eight variables listed above.

**Table 5.**
Total Variance Explained

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 7.751 | 35.230 | 35.230 | 7.751 | 35.230 | 35.230 | 4.369 | 19.861 | 19.861 |
| 2 | 3.178 | 14.444 | 49.674 | 3.178 | 14.444 | 49.674 | 3.870 | 17.590 | 37.451 |
| 3 | 1.931 | 8.778 | 58.452 | 1.931 | 8.778 | 58.452 | 3.408 | 15.493 | 52.944 |
| 4 | 1.743 | 7.921 | 66.374 | 1.743 | 7.921 | 66.374 | 2.134 | 9.701 | 62.645 |
| 5 | 1.014 | 4.611 | 70.985 | 1.014 | 4.611 | 70.985 | 1.835 | 8.340 | 70.985 |
| 6 | .822 | 3.738 | 74.723 | | | | | | |
| 7 | .723 | 3.288 | 78.011 | | | | | | |
| 8 | .650 | 2.956 | 80.967 | | | | | | |
| 9 | .582 | 2.644 | 83.611 | | | | | | |
| 10 | .473 | 2.149 | 85.760 | | | | | | |
| 11 | .431 | 1.961 | 87.722 | | | | | | |
| 12 | .400 | 1.818 | 89.540 | | | | | | |
| 13 | .375 | 1.705 | 91.245 | | | | | | |
| 14 | .340 | 1.546 | 92.791 | | | | | | |
| 15 | .326 | 1.483 | 94.274 | | | | | | |
| 16 | .268 | 1.220 | 95.494 | | | | | | |
| 17 | .211 | .957 | 96.451 | | | | | | |
| 18 | .191 | .868 | 97.319 | | | | | | |
| 19 | .178 | .809 | 98.128 | | | | | | |
| 20 | .152 | .689 | 98.817 | | | | | | |
| 21 | .140 | .636 | 99.453 | | | | | | |
| 22 | .120 | .547 | 100.000 | | | | | | |
| Extraction Method: Principal Component Analysis. | | | | | | | | | |

**Source:** Author calculation

The goal of rotation is to limit the number of factors with strong loadings on the variables under consideration. The rotation has no effect on the analysis but simplifies its interpretation. The rotated component matrix, often known as the loadings, is the primary output of principal components analysis. It includes estimated correlations between each variable and the calculated components. Our results shows that loading of all the variables are above 0.6, which shows moderate to strong correlation among the variables. Thus, all the variables are retained and used for further analysis.

| | Component | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| RM1 | | | | .673 | |
| RM2 | | | | .900 | |
| FN1 | | | | .850 | |
| FN2 | | | .805 | | |
| T1 | | | .861 | | |
| T2 | | | .865 | | |
| T3 | | | .739 | | |
| PE1 | | .866 | | | |
| PE2 | | .851 | | | |
| PE3 | | .779 | | | |
| PE4 | | .650 | | | |
| PU1 | | | | | |
| PU2 | | .563 | | | |
| PU3 | | .740 | | | |
| T1 | .709 | | | | |
| T2 | .855 | | | | |
| T3 | .833 | | | | |
| S1 | .874 | | | | |
| S2 | .834 | | | | |
| S3 | .691 | | | | |
| GS1 | | | | | .759 |
| GS2 | | | | | .811 |
| Extraction Method: Principal Component Analysis.<br>Rotation Method: Varimax with Kaiser Normalization. | | | | | |
| a. Rotation converged in 6 iterations. | | | | | |

**Source:** Author Compilation

**Table 6.**
Rotated Component Matrix

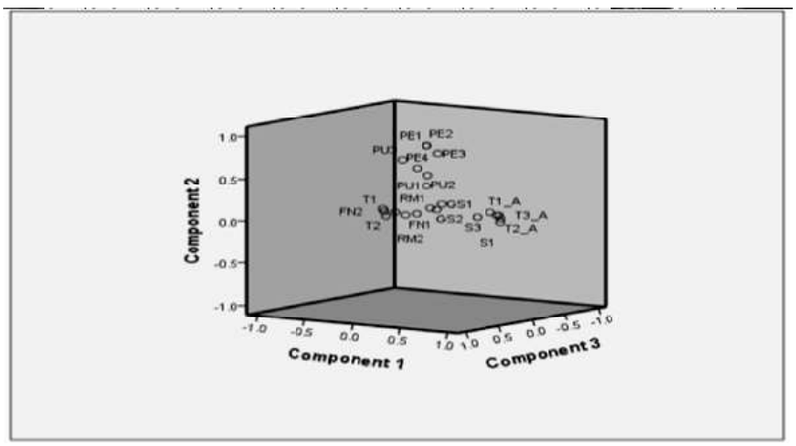


**Figure 2.**
Component Plot in rotated space

*6.3:Analysis of the Demographic Profile of the Respondents*

In Table VII, the demographic profile of respondents is given, which includes age, gender, education, experience in current business, classification of business, industry, and level of their financial technology knowledge. Maximum respondents are male in the age bracket of 31-40 years and have experience of 9-12 years. Respondents were also asked to rate their understanding of financial technologies. It's critical to evaluate if MSMEs are competent to understand the meaning of financial technology and are aware enough to do financial

transactions through different Fintech platforms, in the context of quick changes and constant advances in the financial industry.13.2% have very low knowledge, 10.8 percent have low knowledge, 34% have basic knowledge, 26.4% have high knowledge, and 15.6% have very high knowledge. The theory of innovation diffusion (Rogers, 1976) is used to analyze the behavior of respondents when adopting any new technology in business, where 4.4% consider themselves non-adopters, 46.4 % consider themselves moderate adopters, and the remaining 49.2% are early adopters.

| Characteristics | Value | Number | Percentage (%) |
|---|---|---|---|
| Gender | Female | 50 | 20 |
| | Male | 200 | 80 |
| Age | 20-30 years | 10 | 4 |
| | 31-40 years | 98 | 39.2 |
| | 41-50 years | 89 | 35.6 |
| | 51-60 years | 35 | 14 |
| | 61 or more | 18 | 7.2 |
| Education level | No formal education | 14 | 5.6 |
| | Senior secondary graduate | 110 | 44 |
| | Vocational diploma | 12 | 4.8 |
| | Postgraduate | 110 | 44 |
| | Ph.D. | 4 | 1.6 |
| Experience | Less than 3 years | 14 | 5.6 |
| | 3-6 years | 31 | 12.4 |
| | 6-9 years | 70 | 28 |
| | 9-12 years | 71 | 28.4 |
| | 12 or more | 64 | 25.6 |
| Classification of Business | Manufacturing | 200 | 80.0 |
| | Service | 33 | 13.2 |
| | Mixed | 17 | 6.8 |
| Industry | Communication services | 17 | 6.8 |
| | Construction materials | 10 | 4.0 |
| | Consumer goods | 41 | 16.4 |
| | Food and agro based goods | 15 | 6.0 |
| | Information technology | 07 | 2.8 |
| | Machinery | 32 | 12.8 |
| | Miscellaneous Services | 16 | 6.4 |
| | Miscellaneous Manufacturing | 18 | 7.2 |
| | Plastic Products | 29 | 11.6 |
| | Textile | 04 | 1.6 |
| | Trading | 52 | 20.8 |
| | Transport Service | 9 | 3.6 |
| Level of financial technology knowledge | Very low | 33 | 13.2 |
| | Low | 27 | 10.8 |
| | Basic | 85 | 34 |
| | High | 66 | 26.4 |
| | Very high | 39 | 15.6 |
| Behaviour for adopting any new technology in business | Non-adopter | 11 | 4.4 |
| | Moderate adopter | 116 | 46.4 |
| | Early adopter | 123 | 49.2 |
| | | | |

**Table 7.** Respondents' characteristics

**Source:** Author Compilation

*6.4 Analysis of views on risk management, financial needs, and use of technology by the MSME sector*

Respondents were questioned about their viewpoints on risk management, financial needs, and use of technology in business. To record the MSME preference, logical statements (using a 5-point Likert scale where, five denotes highly agreed, while 1 denotes very highly disagreed) are recorded and tabulated using percentage and mean rating evaluation. The statements were formed based on prior literature on risk management (Watkins, 2012; Falkner and Hiebl, 2015); financial needs (Agyei, 2018), and use of technology (Gopalakrishnan and Damanpour, 1997). Some of the items are modified to better fit the current research context. In addition, the following criteria are used for the analysis:

- The mean score between 1.00 - 1.80 means "very strongly disagreed",
- The mean score between 1.80 - 2.60 means Disagreed with the,
- The mean score between 2.60 - 3.40 means neutral,
- The mean score between 3.40 - 4.20 means agreed.
- The mean score between 4.20 - 5.00 means strongly agreed (Motwani et al, 2014; Streijl et al, 2016)

**Risk Management:**Respondents' attitudes towards risk were analyzed. Two statements were analyzed using risk aversion (Brunette et al, 2017) parameters. Overall, the respondents are neutral while taking financial risks in business (3.26) and when implementing any new plan (3.09). Also, only 8.4 percent of early adopters and 6.4 percent of moderate adopters are likely to implement a new plan only if they are certain that it will work.

**Financial Needs:** Most respondents are unsatisfied with the services offered by traditional banks and insurance companies (3.2% non-adopters, 29.2 percent early-adopters, and 29.6 percent moderate-adopters). They believe that the financial products and services available to them are insufficient to suit the needs of their firm (2.4% non-adopters, 9.6% early-adopters, and 7.2%) moderate-adopters).

**Use of technology:**Most of the respondents are in favour of using technological solutions wherever it is possible, i.e., 28.8% of early adopters and 25.2 % of moderate adopters, and even 2.8 % of non-adopters also agreed that technology is vital for their business. In addition, 28.4 percent of early adopters and 29.6 percent of moderate adopters review their technological tools and software regularly. Further, 0.8 % of non-adopters, 18.8 % of early adopters, and 18.4 % of moderate adopters strongly agreed that using technology is vital for business financial needs.

| Variables | Statements | Types of Adopters | 1 | 2 | 3 | 4 | 5 | Mean |
|---|---|---|---|---|---|---|---|---|
| **Risk Management** | RM1 | Non-Adopters | 0.4 | 0 | 1.2 | 2.8 | 0 | 3.26 |
| | | Early-Adopters | 0.8 | 0 | 32.8 | 4.8 | 0.8 | |
| | | Moderate-Adopters | 0.8 | 0 | 34.4 | 9.2 | 3.6 | |
| | RM2 | Non-Adopters | 0.8 | 0 | 1.6 | 2 | 0 | 3.09 |
| | | Early-Adopters | 0.4 | 0.4 | 37.2 | 8.4 | 0 | |
| | | Moderate-Adopters | 2.4 | 0.4 | 40 | 6.4 | 0 | |
| **Financial Needs** | FN1 | Non-Adopters | 0.8 | 0 | 1.2 | 2.4 | 0 | 3.14 |
| | | Early-Adopters | 0.4 | 0 | 36 | 9.6 | 0.4 | |
| | | Moderate-Adopters | 2.4 | 0 | 39.2 | 7.2 | 0.4 | |
| | FN2 | Non-Adopters | 0 | 0 | 0.4 | 3.2 | 0.8 | 4.24 |
| | | Early-Adopters | 0 | 0 | 3.6 | 29.2 | 34 | |
| | | Moderate-Adopters | 0.4 | 0 | 2.4 | 29.6 | 42 | |
| **Use of technology** | UT1 | Non-Adopters | 0.4 | 0 | 0.4 | 2.8 | 0.8 | 4.30 |
| | | Early-Adopters | 0 | 0 | 2 | 28.8 | 15.6 | |
| | | Moderate-Adopters | 0.8 | 0 | 1.6 | 25.2 | 21.6 | |
| | UT2 | Non-Adopters | 0 | 0 | 0.4 | 3.2 | 0.8 | 4.28 |
| | | Early-Adopters | 0 | 0 | 2.4 | 28.4 | 15.6 | |
| | | Moderate-Adopters | 0.4 | 0 | 2 | 29.6 | 17.2 | |
| | UT3 | Non-Adopters | 0.4 | 0 | 0.4 | 2.8 | 0.8 | 4.26 |
| | | Early-Adopters | 0 | 0 | 3.2 | 24.4 | 18.8 | |
| | | Moderate-Adopters | 1.6 | 0 | 2.8 | 26.4 | 18.4 | |

**Table 8.**
Viewpoints of respondents regarding Risk management, Financial needs, and Use of technology

**Source:** Author calculation

*6.5 Analysis of Intention for adopting fintech services*

Five variables have been identified from various previous literatures (Cheung and Vogel, 2013; Kim et al, 2015; Jünger and Mietzner, 2020) to analyze the behavioral intention of customers/users to adopt any new technology in their business. The explanation of each variable is as follows:

**Perceived ease of use:** In this study respondents were asked whether doing financing activity through fintech apps/websites is easy to use and does it improve business efficiency or not. Respondents agree that financial technology meets their business needs easily (82.4%), using technology for financial activity improves the efficiency of business (79.2%), Further, respondents agree that fintech apps/website is easy to use (60.4%).

**Perceived usefulness:** This includes the belief of the respondents that the service would be useful. It has an indirect effect from the experience of using fintech services (Venkatesh and Davis, 1996). In this study questions were asked does fintech products are offered at a faster rate of approval, lower transaction cost, and to what extent their paperwork is reduced. Respondents strongly agreed that fintech products have a faster rate of approval (34.8%), lower transaction costs (38.8%), and less paperwork (26.8%).

**Trust:** This includes initial trust belief and initial trust attitude toward the fintech service providers (Mer and Virdi 2021). Respondents were asked about the safety of their personal information and money. Respondents agree that their personal information (49.6%) and money (62.4%) are safe while using fintech services.

**Satisfaction:** This includes a "post-consumption" experience in which the perceived quality of the product is compared to the intended quality (Zameer et al, 2015). In this study, participants were asked whether Fintech platforms offer fair and reasonable services and products, which results in better decision-making. Further, 37.2 percent of respondents strongly agreed that they experienced customer satisfaction after using fintech services.

**Government Support:** Introduction of favorable legislation/regulations and improved infrastructure. These two variables are named government support for this study. Respondents agree that favorable legislation (57.2%) and improved infrastructure increase their intention to use fintech services (53.2%).

As per respondents perceived ease of use is the most important factor to accept fintech services in business, followed by perceived usefulness and government support.

| Motives | Statement | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean |
|---|---|---|---|---|---|---|---|
| **Perceived Ease for Use** | PE1 | 0 | 0 | 4.8 | 82.4 | 12.8 | 4.08 |
| | PE2 | 0 | 0 | 3.2 | 79.2 | 17.6 | 4.14 |
| | PE3 | 0 | 0 | 3.2 | 73.6 | 23.2 | 4.20 |
| | PE4 | 0 | 0 | 2.4 | 60.4 | 37.2 | 4.35 |
| **Perceived Usefulness** | PU1 | .8 | 0 | 4.8 | 59.6 | 34.8 | 4.28 |
| | PU2 | 0 | 0 | 4.8 | 56.4 | 38.8 | 4.34 |
| | PU3 | 0 | 0 | 3.2 | 70.0 | 26.8 | 4.24 |
| **Trust** | T1 | .8 | 0 | 16.0 | 49.6 | 33.6 | 4.15 |
| | T2 | 0 | 0 | 8.8 | 62.4 | 28.8 | 4.20 |
| | T3 | 0 | 0 | 8.0 | 57.6 | 34.4 | 4.26 |
| **Satisfaction** | S1 | 0 | 0 | 6.4 | 69.2 | 24.4 | 4.18 |
| | S2 | .8 | 0 | 7.2 | 60.8 | 31.2 | 4.22 |
| | S3 | 0 | 0 | 4.0 | 58.8 | 37.2 | 4.33 |
| **Government Support** | GS1 | 0 | 0 | 8.8 | 57.2 | 34.0 | 4.25 |
| | GS2 | 0 | 0 | 10.8 | 53.2 | 36.0 | 4.25 |

**Source:** Author Calculation

**Table 9.** Percentage of Respondents, Mean Score, Interpretation, and Recommendation

*6.6 Analysis of the impact of financial technology adoption on firm growth*

We grouped FinTech services into five broad categories: receipts & payments, borrowings, savings & investments, insurance, and financial planning. These categories have been used for both developed and developing nations in previous literature (EY global fintech adoption index, 2019; Ivashchenko et al, 2018; Takeda and Ito, 2021; Abbasi et al, 2021). We looked at FinTech services specifically used by MSMEs, such as mPOS machines and invoice finance solutions, which can differ from those used by consumers. FinTech adoption (independent variable) is measured by using five statements (Table VII). Respondents are asked to rate the adoption of given financial activities in their business through Fintech with a five-point Likert scale, where 1 is the least used and 5 is the most used in business. In addition, the criteria described by (Motwani et al, 2014; Streijl et al, 2016) are used for the below analysis. Also, Multinominal Logistic Regression was conducted to analyze the impact of Financial technology adoption on respondents' Turnover, Profitability, Market Share, and Productivity (dependent variables). Multinomial logistic regression is the most optimum technique to use as per the data collected. All the assumptions of multinominal logistic regression are fulfilled i.e., dependent variables i.e., Turnover, Profitability, Market share, and Productivity are nominal in nature, independent variable i.e., Fintech adoption is ordinal in nature and there is the independent of observations where the dependent variable has mutually exclusive and exhaustive categories.

To measure the growth of MSMEs, researchers examined a variety of factors (Sefiani et al, 2018) such as Turnover, Profitability, Market Share, and Productivity. Five outcomes are specified for the dependent variable: (1) Increased by 10% per year, (2) 10 to 20% per year, (3) More than 20% per year, (4) No growth, and (5) Reduced by 10% per year. The result of the Multinominal Logistic Regression is given in Table X.

**Table 10.**
Adoption of Financial Technology in different financial activities

| Financial Activities | Least Used (1) | (2) | (3) | (4) | Most Used (5) | Mean |
|---|---|---|---|---|---|---|
| Receipts and Payments (Externally) | 1.2 | 2.0 | 8.0 | 63.2 | 25.6 | 4.10 |
| Borrowings | 2.8 | 2.8 | 13.6 | 49.2 | 31.6 | 4.04 |
| Savings and Investment | 0 | 4.4 | 14.0 | 52.8 | 28.8 | 4.06 |
| Insurance | .4 | 3.6 | 16.4 | 41.6 | 38.0 | 4.13 |
| Financial Planning | 1.6 | 4.0 | 19.2 | 36.4 | 38.8 | 4.07 |

**Source:** Author calculation

According to respondents, financial planning (38.8 percent) is the most used financing activity through fintech websites/applications, followed by payments and receivables (25.6 percent) are transferred digitally between business-to-business and business-to-customer transactions. Also, 38 percent of respondents chose insurance with the help of Fintech. 31.6 percent of respondents are borrowing, and 28.8 percent are investing through various fintech platforms. The above results show that MSMEs are choosing financial technology for different financial activities over traditional banks. These digital transactions leave a digital trail of MSMEs business. FinTech companies are combining this digital transaction data with other alternative data sources (mobile phone call records, utility bill payments, and so on) to create new credit risk models and algorithms that better assess an MSME's ability to pay any loan which is changing the ecosystem of Indian MSMEs as well as the Indian banking sector, because of this new credit risk model and algorithms many MSMEs are eligible for working capital and short-term loans. After the computation of the five statements related to Fintech service adoption, these statements were then combined, and a scale score was formed to accept or reject the hypothesis formulated.

| Growth Variable | Beta | Sig | R square | -2 log-likelihood | Chi-Square | Correct Classification |
|---|---|---|---|---|---|---|
| **Turnover** | | | | | | |
| Increased by 10% per year | .194 | .479 | .165 | 120.580 | 30.385 | 38.8% |
| 10 to 20% per year | 1.053 | **.001** | | | | |
| More than 20% per year | 2.119 | **.000** | | | | |
| No growth | .111 | .760 | | | | |
| **Profitability** | | | | | | |
| Increased by 10% per year | .686 | .095 | .250 | 167.393 | 58.147 | 42.4% |
| 10 to 20% per year | 1.516 | **.001** | | | | |
| More than 20% per year | 2.875 | **.000** | | | | |
| No growth | -.322 | .475 | | | | |
| **Market Share** | | | | | | |
| Increased by 10% per year | .712 | **.016** | .104 | 112.108 | 45.729 | 45.6% |
| 10 to 20% per year | .744 | **.038** | | | | |
| More than 20% per year | 1.052 | **.017** | | | | |
| No growth | -.370 | .229 | | | | |
| **Productivity** | | | | | | |
| Increased by 10% per year | .418 | .144 | .203 | 136.651 | 40.001 | 37.2% |
| 10 to 20% per year | 1.502 | **.000** | | | | |
| More than 20% per year | 2.352 | **.000** | | | | |

**Table 11.**
Impact of Fintech adoption on firm growth

**Source:** Author calculation

Reduced by 10% per year is the reference category, which is arbitrarily selected. The significance value that is either higher or lower than 0.05 is used to accept or reject the alternate hypothesis. According to the above table, respondents' use of financial technology has a substantial impact on their turnover, profitability, market share, and productivity. The model fit test is based on the difference between twice the log of likelihood (-2LL) for the model with no independent variables and the full model is significant ($p=0.000<0.005$). The data also shows that the overall average proportion of correctly classified cases was 41%, suggesting that the model is capable of correctly classifying observations. It is a widely used metric for determining the model's overall fit (Press and Wilson, 1978). The chi-square values in the table indicate that the model has high explanatory power. The Nagelkerke R square value is not zero in all cases, which shows that there is some variation due to the independent variable on the dependent variable.

We accept the alternative hypothesis (Ha1), (Ha2), and (Ha4) because the coefficient of turnover, profitability, and productivity is positive and statistically significant at the 5% level in the two categories, i.e., increased between 10 to 20% per year and more than 20% per year. This shows respondents agreed that adopting financial technology in business has increased their turnover, profitability, and productivity at least by 20%. In the case of market share, the coefficient is positive and statistically significant at the 5% level in both categories,

i.e., increased by 10% per year, increased by 10 to 20% per year, and increased by more than 20% per year, confirming the alternate hypothesis (Ha3). Thus, the market share has increased by 10 to 20% if, financial technology is adopted.

## 7. Findings

Fintech has the ability to alter the financial sector by offering a wide range of financial solutions at reasonable prices (Deloitte, 2017). Financial technology services are not restricted to loan approval; fintech firms assist MSME owners/managers in completing their and their employees' tax returns, assist in financial planning, and provide investing and liquidity services. These advanced tools and algorithms are powerful enough to help anyone design complex financial strategies. The following are the study's key conclusions after analysing the data and putting the hypotheses to the test: Financial technology adoption among MSMEs is high, with 49.2% of respondents classifying themselves as Early Adopters. MSMEs believe that the financial goods and services available through traditional banks do not adequately fulfil their business's needs (6% non-adopters, 24% early-adopters, and 18% moderate-adopters), emphasising the need for alternative finance. Furthermore, 47% of early adopters, 47% of moderate adopters, and 2% of non-adopters strongly believed that employing technology is critical for Business Financial needs. Findings of the research clearly shows that financial technology has potential to fill the financing gap specifically in case of MSME sector. Further, variables identified impacting the intention of MSME sector to adopt financial technology in business such as perceived ease for use, perceived usefulness, trust, satisfaction, and government support has positive influence on MSME sector behaviour. Financial technology service providers should explore variables related to perceived ease of use and perceived usefulness to attract MSMEs to use fintech services. Fintech providers can help MSMEs by making their website/application more user-friendly. The findings indicated that MSMEs are concerned about a lack of consumer protection and financial losses caused by system or process failures or security breaches, regardless of how innovative the service providers are. To attract more fintech users, fintech companies must strengthen their reputation by proving the dependability and trustworthiness of their system.

Financial technology has the ability to transform the way financial institutions work by improving product distribution and access while also increasing efficiency and engagement through technology and user experience. MSME entrepreneurs can apply for a business loan online by visiting a financial technology website or their app and determining their eligibility for a business loan. If they are eligible for a business loan, they can proceed with the application procedure and submit the required papers. Within 24 hours, the funds will be digitally deposited to their account. This financial inclusion provided by financial technology companies to MSME sector has significantly improved there turnover, profitability, market share and productivity which is shown in our study also.

## 8. Conclusion And Implication

### *8.1 Managerial Implication*

The study has some significant management and practical implications. First, as India is a developing country and an emerging market for the fintech sector, Indian MSMEs are rapidly integrating fintech solutions into their operations. MSMEs will be more likely to employ fintech services if they begin to trust the providers more. As a result, Fintech service providers had to take the initiative to inform potential MSME clients through a variety of marketing initiatives.

The basic TAM variables, perceived usefulness and ease of use, have a positive effect on MSMEs' behaviour, according to the research data. To get more MSMEs to use their services, fintech service providers should consider elements relating to perceived utility and simplicity of usage. Fintech companies may facilitate ideas for MSMEs by making their websites and applications user-friendly. Third, according to earlier research (World Payment Report, 2022), fintech companies must innovate their front ends and develop their back offices in order to offer B2C services, but B2B services see less innovation. In order to increase the acceptance of their products, fintech companies should maintain a client-centred approach by offering profile-based or personalised services, particularly to MSMEs.

Finally, regulatory authorities' assistance is required to increase the level of Fintech adoption in MSMEs through enhanced internet infrastructure and skill-development initiatives.

Regulatory agencies can aid in raising MSMEs' awareness of various financial technology platforms. Young fintech startups also require the backing of legislators.

*8.2 Conclusion*

Fintech has the ability to completely change the financial industry by offering a wide range of financial goods at low prices (Deloitte, 2017). Financial technology companies offer more than just loan approval; they also assist MSME owners and managers with tax preparation for themselves and their staff members, assist with financial planning, and offer services for investment and liquidity. Anyone who wants to create cutting-edge financial plans can do so thanks to these sophisticated tools and algorithms. According to Rosavina et al. (2019), these tactics enable MSMEs work more effectively internally and externally, which is supported by the empirical findings of the study.

## 9. Limitation And Future Research

The sample size can be increased, or a new type and size of sample can be used to confirm the results in subsequent studies in order to provide a more accurate picture of the MSME sector. Second, while the research provides a broad overview of financial technology and the intentions of the MSME sector, future studies can incorporate control factors to provide a more intricate framework and a more thorough analysis. Thirdly, future studies can incorporate innovative lending models used by Indian MSME sector through financial technology adoption as non-bank crowd financing, microlending, and non-secured SME lending. Lastly, future studies can include fintech-related variables like perceived risk, efficiency, and security.

## References

Ajzen, I., 1991. The theory of planned behavior. Organizational behavior and human decision processes, 50(2), pp.179-211.

Abbasi, K., Alam, A., Du, M.A. and Huynh, T.L.D., 2021. FinTech, SME efficiency and national culture: evidence from OECD countries. Technological Forecasting and Social Change, 163, p.120454.

Agyei, S.K., 2018. Culture, financial literacy, and SME performance in Ghana. Cogent Economics & Finance, 6(1), p.1463813.

Adeyele, J.S., 2018. Financial institutions' criteria and mechanisms in financing small and medium enterprises in Plateau state, Nigeria. Ekonomski horizonti, 20(2), pp.109-125.

Anagnostopoulos, I., 2018. Fintech and regtech: Impact on regulators and banks. Journal of Economics and Business, 100, pp.7-25.

Aggarwal, R. and Stein, P., 2016. The complex regulatory landscape for fintech: an uncertain future for small and medium-sized enterprise lending. In World Economic Forum White Paper (Vol. 170816, pp. 1-35).

Alt, R. and Puschmann, T., 2016. Digitalisierung der Finanzindustrie. Berlin, Heidelberg: Springer Berlin Heidelberg.

Baber, H., 2019. Fintech, Crowdfunding and Customer Retention in Islamic Banks. Vision, 1–19.

Brunette, M., Foncel, J. and Kéré, E.N., 2017. Attitude towards risk and production decision: an empirical analysis on French private forest owners. Environmental Modeling & Assessment, 22(6), pp.563-576.

Chatterjee, S., Bhattacharjee, K.K., Tsai, C.W. and Agrawal, A.K., 2021. Impact of peer influence and government support for successful adoption of technology for vocational education: A quantitative study using PLS-SEM technique. Quality & Quantity, 55(6), pp.2041-2064.

Chundakkadan, R. and Sasidharan, S., 2020. Financial constraints, government support, and firm innovation: empirical evidence from developing economies. Innovation and Development, 10(3), pp.279-301.

Davis, F.D., 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS quarterly, pp.319-340.

Deb, R. and Baruah, D., 2022. Working Capital Financing for MSMEs in the Pandemic Era: Challenges and Opportunities. SEDME (Small Enterprises Development, Management & Extension Journal), p.09708464221097224.

Deloitte., 2017. A tale of 44 cities. Connecting global FinTech: Interim hub review 2017.Retrieved from www2.deloitte.com/content/dam/Deloitte/uk/Documents/ Innovation/deloitte-uk-connecting-global-fintech-hub-federation-innotribe-innovatefinance.pdf., 2021.

Ernst and Young., 2015. Building the Bank of 2030 and Beyond [online] https://www.ey.com/Publication/vwLUAssets/EY_.

EY Global Fintech Adoption Index., 2019. As Fintech Becomes the Norm, You Need to Stand Out from the Crowd. EY.

Falkner, E.M. and Hiebl, M.R.W., 2015. "Risk management in SMEs: a systematic review of available evidence", Journal of Risk Finance, 16(2), pp.122-144.

Flanagan, K. and Uyarra, E., 2016. Four dangers in innovation policy studies–and how to avoid them. Industry and Innovation, 23(2), pp.177-188.

Gopalakrishnan, S. and Damanpour, F., 1997. A review of innovation research in economics, sociology and technology management. Omega, 25(1), pp.15-28.

GPFI., 2020. Promoting digital and innovative sme financing,World Bank Group. Retrieved from https://www.gpfi.org/publications/promoting-digital-and-innovative-sme-financing.

Gillham, B., 2008. Developing a questionnaire. A&C Black.

Hasan, M.M., Yajuan, L. and Mahmud, A., 2020. Regional development of China's inclusive finance through financial technology. Sage Open, 10(1), p.2158244019901252.

Husaini, D. H., & Lean, H. H., 2022. Digitalization and Energy Sustainability in ASEAN. Resources, Conservation and Recycling, 184(9), pp.106377.

IFC., 2017, "IFC enterprise finance gap database", available at:www.smefinanceforum.org/data-sites/ifc-enterprise-finance-gap.

Ivashchenko, A., Britchenko, I., Dyba, M., Polishchuk, Y., Sybirianska, Y. and Vasylyshen, Y., 2018. Fintech platforms in SME's financing: EU experience and ways of their application in Ukraine. Investment Management & Financial Innovations, 15(3), p.83.

Jafari-Sadeghi, V., Garcia-Perez, A., Candelo, E. and Couturier, J., 2021. Exploring the impact of digital transformation on technology entrepreneurship and technological market expansion: The role of technology readiness, exploration and exploitation. Journal of Business Research, 124, pp.100-111.

Johnson, V.L., Kiser, A., Washington, R. and Torres, R., 2018. Limitations to the rapid adoption of M-payment services: Understanding the impact of privacy risk on M-Payment services. Computers in Human Behavior, 79, pp.111-122.

Jünger, M. and Mietzner, M., 2020. Banking goes digital: The adoption of FinTech services by German households. Finance Research Letters, 34, p.101260.

Kim, Y., Park, Y.J., Choi, J. and Yeon, J., 2015. An empirical study on the adoption of "Fintech" service: Focused on mobile payment services. Advanced Science and Technology Letters, 114(26), pp.136-140.

Kotrlik, J.W.K.J.W. and Higgins, C.C.H.C.C., 2001. Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. Information technology, learning, and performance journal, 19(1), p.43.

Labour Commissioner., 2019. List of approved industrial areas in NCT of Delhi. https://labour.delhi.gov.in/content/list-approved-industrial-areas-nct-delhi.

Lekovic, V. and Micic, V., 2013. Needs, effectiveness and limitations of the industrial policy of Serbia. Industrija, 41(1).

Lee, D.K.C. and Teo, E.G., 2015. Emergence of FinTech and the LASIC Principles. Journal of Financial Perspectives, 3(3).

Milian, E.Z., Spinola, M.D.M. and de Carvalho, M.M., 2019. Fintechs: A literature review and research agenda. Electronic Commerce Research and Applications, 34, p.100833.

Ministry of Micro, Small and Medium Enterprises., 2022. District Wise Udyam Registration Details. MSME Dashboard. https://dashboard.msme.gov.in/udyam_dist_wise.aspx?stid=7.

Morse, E.A. and Raval, V., 2008. PCI DSS: Payment card industry data security standards in context. Computer Law & Security Review, 24(6), pp.540-554.

Motwani, D., Shrimali, D. and Agarwal, K., 2014. Customer's attitude towards social media marketing. Journal of Business Management & Social Sciences Research (JBM&SSR), 3(4).

Mer, A. and Virdi, A.S., 2021. Modeling Millennials' Adoption Intentions of E-banking: Extending UTAUT with Perceived Risk and Trust. FIIB Business Review, p.23197145211052614.

Oliveira, T. and Martins, M.F., 2011. Literature review of information technology adoption models at firm level. Electronic Journal of Information Systems Evaluation, 14(1), pp.110-121.

Porter, M.E. and Millar, V.E., 1985. How information gives you competitive advantage.

Pavón, C.L.I., 2021. Financial inclusion as a pillar of sustainable growth: international experience. Ekonomski horizonti, 23(2), pp.107-121.

Panos, G.A. and Wilson, J.O., 2020. Financial literacy and responsible finance in the FinTech era: capabilities and challenges. The European Journal of Finance, 26(4-5), pp.297-301.

Patel, K.J. and Patel, H.J., 2018. Adoption of internet banking services in Gujarat: An extension of TAM with perceived security and social influence. International Journal of Bank Marketing, 36(1), pp.147-169.

Press, S.J. and Wilson, S., 1978. Choosing between logistic regression and discriminant analysis. Journal of the American Statistical Association, 73(364), pp.699-705.

Rita, M.R., Widi, N.Y. and Budi, K.A., 2021. Peer-to-Peer lending, financial bootstrapping and government support: The role of innovation mediation on MSME performance. Ekonomski horizonti, 23(3), pp.247-261.

Riemer, K., Hafermalz, E., Roosen, A., Boussand, N., El Aoufi, H., Mo, D. and Kosheliev, A., 2017. The Fintech Advantage: Harnessing digital technology, keeping the customer in focus.

Rogers, E.M., 1976. New product adoption and diffusion. Journal of consumer Research, 2(4), pp.290-301.

Rosavina, M., Rahadi, R.A., Kitri, M.L., Nuraeni, S. and Mayangsari, L., 2019. P2P lending adoption by SMEs in Indonesia. Qualitative Research in Financial Markets, 11(2), pp.260-279.

Ryu, H.S., 2018. What makes users willing or hesitant to use Fintech?: the moderating effect of user type. Industrial Management & Data Systems, 118(3), pp.541-569.

Shrivastava, A.K., Rana, S., Mohapatra, A.K., & Ram, M. eds., 2019. Advances in Management Research: Innovation and Technology. CRC Press.

Sefiani, Y., Davies, B.J., Bown, R. and Kite, N., 2018. "Performance of SMEs in Tangier: the interface of networking and wasta", EuroMed Journal of Business, 13(1), pp.20-43. https://doi.org/10.1108/EMJB-06-2016-0016

Sonfield, M.C. and Lussier, R.N., 1997. The entrepreneurial strategy matrix: A model for new and ongoing ventures. Business Horizons, 40(3), pp.73-78.

Shin, D.H., 2013. User experience in social commerce: in friends we trust. Behaviour & information technology, 32(1), pp.52-67.

Sheng, T., 2021. The effect of fintech on banks' credit provision to SMEs: Evidence from China. Finance Research Letters, 39, p.101558.

Soni, G., Kumar, S., Mahto, R.V., Mangla, S.K., Mittal, M.L. and Lim, W.M., 2022. A decision-making framework for Industry 4.0 technology implementation: The case of FinTech and sustainable supply chain finance for SMEs. Technological Forecasting and Social Change, 180, p.121686.

Streijl, R.C., Winkler, S. and Hands, D.S., 2016. Mean opinion score (MOS) revisited: methods and applications, limitations and alternatives. Multimedia Systems, 22(2), pp.213-227.

Singh, S.K. and Gaur, S.S., 2018. "Entrepreneurship and innovation management in emerging economies", Management Decision, 56(1), pp.2-5. https://doi.org/10.1108/MD-11-2017-1131

Takeda, A. and Ito, Y., 2021. A review of FinTech research. International Journal of Technology Management, 86(1), pp.67-88.

Venkatesh, V. and Davis, F.D., 1996. A model of the antecedents of perceived ease of use: Development and test. Decision sciences, 27(3), pp.451-481.

Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D., 2003. User acceptance of information technology: Toward a unified view. MIS quarterly, pp.425-478.

Watkins, J. A., 2012. A literature review of small and medium enterprises (SME) risk management practices in South Africa. African journal of business management, 6(21), pp.6324-6330.

World Report Series Payments., 2022. Winning with SMBs Optimizing Technology and Data to drive deep engagement. World Payment Report.

Xu, F. and Du, J.T., 2018. Factors influencing users' satisfaction and loyalty to digital libraries in Chinese universities. Computers in Human Behavior, 83, pp.64-72.

Yang, M.H., Lin, B., Chandlrees, N. and Chao, H.Y., 2009. The effect of perceived ethical performance of shopping websites on consumer trust. Journal of computer information systems, 50(1), pp.15-24.

Zameer, H., Tara, A., Kausar, U. and Mohsin, A., 2015. Impact of service quality, corporate image and customer satisfaction towards customers' perceived value in the banking sector in Pakistan. International journal of bank marketing, 33(4), pp.442-456.

Zavolokina, L., Dolata, M. and Schwabe, G., 2016. The FinTech phenomenon: antecedents of financial innovation perceived by the popular press. Financial Innovation, 2(1), pp.1-16.