



IMPACT OF DIGITAL FINANCIAL LITERACY ON ADOPTION OF FINTECH SERVICES AMONG URBAN CONSUMERS IN INDIA

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ABSTRACT

The accelerated development of the digital technologies has influenced the financial system significantly, and the massive introduction of the FinTech services into the Indian market has become a reality. The research will look at how urban consumers' level of digital financial literacy affects their utilization of FinTech services. To collect primary data, the study used a quantitative research strategy and a structured questionnaire with 50 participants. Descriptive and inferential statistical methods, including correlation analysis, standard deviation, and mean, were used to examine the data. Researchers found that although digital financial literacy positively affects FinTech adoption, awareness, digital skills, and knowledge were more important in determining whether or not people used these tools. The findings also indicate that the simpler services like digital wallets and mobile banking are more accepted than the more complex services like peer-to-peer lending and online investment services. The study indicates that to make increased and effective use of FinTech services in cities in India, there is need to improve digital financial literacy by means of focused educational programs and policy actions.

Keywords: Digital Financial Literacy, FinTech Adoption, Urban Consumers, Financial Technology, Digital Payments, Mobile Banking, Financial Inclusion, Consumer Behavior

1. INTRODUCTION

The Indian financial environment has experienced a radical shift in the last decade, which was mainly caused by the breakneck popularity of the digital world and the rising internet adoption rates. Accessing, delivering, and utilizing financial services have all been revolutionized by financial technology (FinTech). Many examples of the technological advancements that comprise FinTech include digital wallets, online lending platforms, robo-advisory services, mobile banking, and blockchain-based financial systems. In the urban areas of India, where the system of technologies and digital access are relatively well-developed, FinTech

services are now a constituent of the everyday financial operations. This digital transformation has increased convenience and efficiency in addition to decreasing reliance on the conventional banking systems.

One of the most crucial factors in determining the effective adoption of FinTech services, despite their abundance, is the level of digital financial literacy among customers. Digital financial literacy, which includes both financial literacy and digital abilities, is the capacity to efficiently manage one's financial resources through the use of technology. It involves the knowledge of online transaction, cyber security, online payment system, and online financial decision-making. In cities, where digital infrastructure is more widespread, the differences in literacy levels have a substantial impact on the attitude of people towards and consumption of FinTech services. The difficulties that consumers who are not highly digital financially literate can encounter include a lack of trust, fear of fraud, and navigational issues on the digital platform.

Digital financial inclusion has been actively encouraged by the Government of India and other financial institutions using such programs as Digital India, Unified Payments Interface (UPI) or Jan Dhan Yojana. Digital financial services, especially in urban areas, have seen a surge in use due to these initiatives. Nevertheless, the access to digital platforms does not necessarily mean that they are implemented successfully. The access to the adoption gap is commonly caused by a lack of awareness, the lack of skills, and the behavioral resistance among the users. Thus, the digital financial literacy level increases in importance as one of the factors that should guarantee the success of those individuals who are able to take advantage of the digital financial ecosystem to the full extent.

In this context, it is vital to understand the connection between digital financial literacy and the utilization of FinTech. Although urban consumers have better access to technology, their level of financial literacy and digital competency determines the path of adoption. The study's overarching goal is to learn how urban Indian consumers' familiarity with digital financial tools influences their use of these tools when making purchases. The study aims to shed light on the ways in which consumers' literacy levels affect their behavior and on the specific actions that can increase the success rate of FinTech adoption based on the results of this connection analysis.

2. LITERATURE REVIEW

Gautam et al. (2022) investigated the impact of financial technology on digital literacy in the Indian setting, with particular attention to the role that socio-economic status had in shaping adoption rates. The research also indicated that the disparity between the supply and demand for FinTech services was significantly

impacted by digital financial literacy. It was discovered that more literate people had more opportunities to use and receive digital financial services, and people with low literacy had obstacles in the form of lack of awareness and technological fear. Poverty was also identified as a mediating feature, suggesting that economic traits may influence the beneficial effect of digital literacy on FinTech adoption.

Vyas and Jain (2021) investigated how the digital economy and adoption of technology can facilitate financial inclusion in India. According to the study, perceived usefulness, ease of use, and self-efficacy were identified to have a positive impact on the adoption of digital financial services. It was noted that, although digital infrastructure enhanced access, user awareness and ability, which is connected to digital financial literacy were key elements to successful utilization. The research also highlighted that the improvement of digital capabilities in users could boost their interest in the use of FinTech services.

Pandey et al. (2022) examined how financial literacy and financial inclusion drivers affect sustainable growth in North India. The research found that financial literacy also increased the confidence and readiness of users towards using digital financial services. It also revealed that government efforts were more successful when backed by proper financial awareness especially the urban consumers. Also, the researchers indicated that higher literacy was associated with better financial management decisions and financial security.

Paddalwar (2021) investigated the conditions of consumer FinTech adaptation in India. The study determined perceived risk, trust, ease of use and technological awareness as the important determinants of adoption. As was discovered, the absence of digital financial literacy was a hindrance, whereas an increased awareness enhanced user confidence and use of FinTech. The research also drew attention to the significance of user education to decrease the perceived threats and increase the confidence towards digital financial platforms.

3. RESEARCH METHODOLOGY

Carefully and thoroughly, this study has investigated how digital financial literacy affects the uptake of FinTech services by urban Indian customers. The quantitative methodology was used to make sure that the connection between the key variables could be measured and analyzed objectively. The study's design centered on gathering primary data from participants and analyzing their answers in order to understand digital financial literacy and FinTech usage trends, linkages, and behaviors. The methodology was designed in a way that ensures reliability, validity, and consistency of data collection and interpretation.

3.1 Research Design

This research made use of both qualitative and quantitative approaches. The study's descriptive and analytical sections aimed to define urban consumers' current level of digital financial literacy and FinTech adoption, with the latter section primarily focusing on the relationships between the two. The design was deemed to be suitable because it enabled the researcher to describe the characteristics of consumers and conduct statistical analysis on the effects of literacy on adoption behavior.

3.2 Sample Size and Population

Urban Indian customers with access to digital financial services made up the study population. Because 50 respondents could be contacted using a convenience sample, which was determined by taking into account both the time available and the data that was readily available, this study used a convenience sampling strategy. They were taken as the sample with the representation of different age ranges, education levels, and professions to make the responses varied. The sample size was not that large, but it was sufficient to conduct the exploratory analysis and extract some primary tendencies of consumer behavior.

3.3 Data Collection

The research was based on first hand data through primary data collection to get information at first hand by conducting interviews on the respondents. An online survey was used to gather data by means of platforms like Google Forms that allowed distribution with ease and collection of responses in a short time. The respondents were contacted via social media and email and individuals who have experience in digital environments were addressed. The collection of the data was done within a given period in order to ensure consistency and minimize the temporal bias.

3.4 Data Collection Tools and Instruments

The first research tool was a structured questionnaire. The questionnaire had two major sections. Questions pertaining to age, gender, and degree of education made up the bulk of the first section of the questionnaire. In Section 2, we presented the statements regarding digital financial literacy and FinTech adoption using a 5-point Likert scale. On one end of the scale, we have Strongly Agree, and on the other end, we have Strongly Disagree. The questions were well tailored to evaluate knowledge, skills, awareness and usage behavior of the respondents in terms of digital financial services. The questionnaire spoke directly to the aims of the study and was easy to understand and complete.

3.5 Data Analysis

We used descriptive and inferential statistics to look at the data that we got. We employed descriptive statistics including percentage analysis, mean, standard deviation, and frequency distribution to summarize and analyze the respondents' characteristics and responses. To determine if there was a link between digital financial literacy and the adoption of FinTech, a kind of inferential statistics called correlation analysis was used. The analysis assisted in establishing the strength and direction of variables association, hence giving significant information on the research problem.

4. RESULTS AND DISCUSSION

The findings from the analysis and interpretation of the data collected from fifty urban respondents are presented below. The major objective was to investigate the correlation between usage of FinTech services and digital financial literacy. Descriptive and inferential statistics were used to come up with meaningful insights. These results are tabulated with well formatted tables and then the results are discussed by elaborating on them.

Table 1 and the figure thereof show the demographics of the respondents who participated in the study. It gives details about the major attributes like gender, age category and educational status and percentages of the same. The figure provides a graphical display of the distribution of respondents in these demographic groups to have a better comparison.

Table 1: Demographic Profile of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	27	54%
	Female	23	46%
Age Group	18–25	21	42%
	26–35	17	34%
	36–45	12	24%
Education	Graduate	29	58%

	Postgraduate	21	42%
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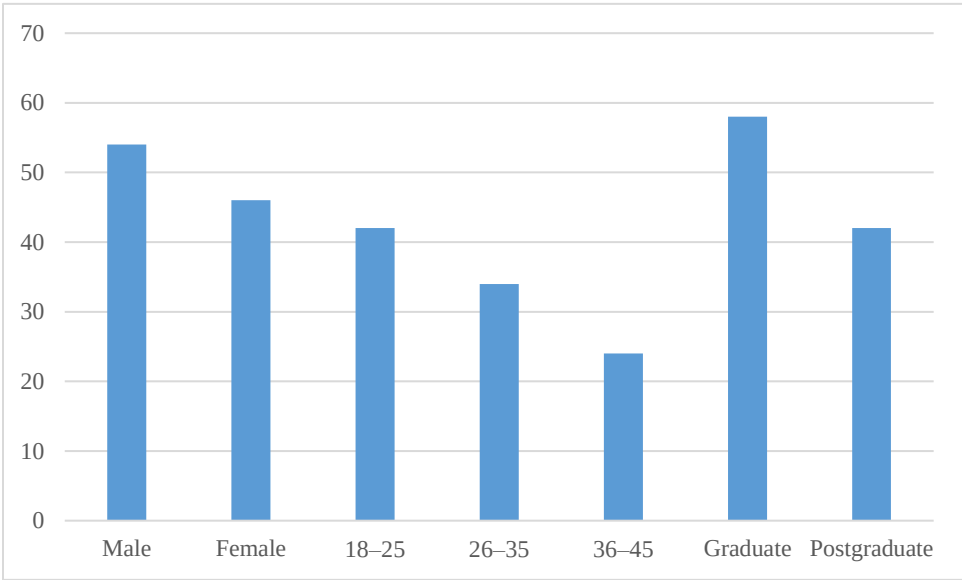


Figure 1: Visual Representation of Demographic Profile of Respondents

The findings show that most of the respondents are male regarded (54%), and females form 46 percent of the sample. As per the age structure, the greatest percentage of the respondents is that of 18-25 (42%), 26-35 (34%), and 36-45 (24%) years, indicating that younger people make the majority of the sample. In terms of education, majority of the respondents are graduates (58%), and 42% are postgraduates. These findings are also supported visually and indicate that the sample is probably exposed to digital technologies and financial services as a significant number of the sample is younger and educated.

Table 2 and its respective figure show the descriptive statistics of digital financial literacy among the respondents. The main dimensions embraced in it are the awareness of the digital payment systems, the possibility to operate mobile banking applications, the knowledge of cyber security risks, and the knowledge of different FinTech services. To further comprehend the variables, we can look at the table for their averages and standard deviations, and we can see a graph of the statistical measures in the figure.

Table 2: Descriptive Statistics of Digital Financial Literacy

Variable	Mean	Std. Deviation
Awareness of digital payment systems	4.20	0.76

Ability to use mobile banking applications	4.05	0.81
Understanding of cybersecurity risks	3.72	0.89
Knowledge of various FinTech services	3.88	0.84

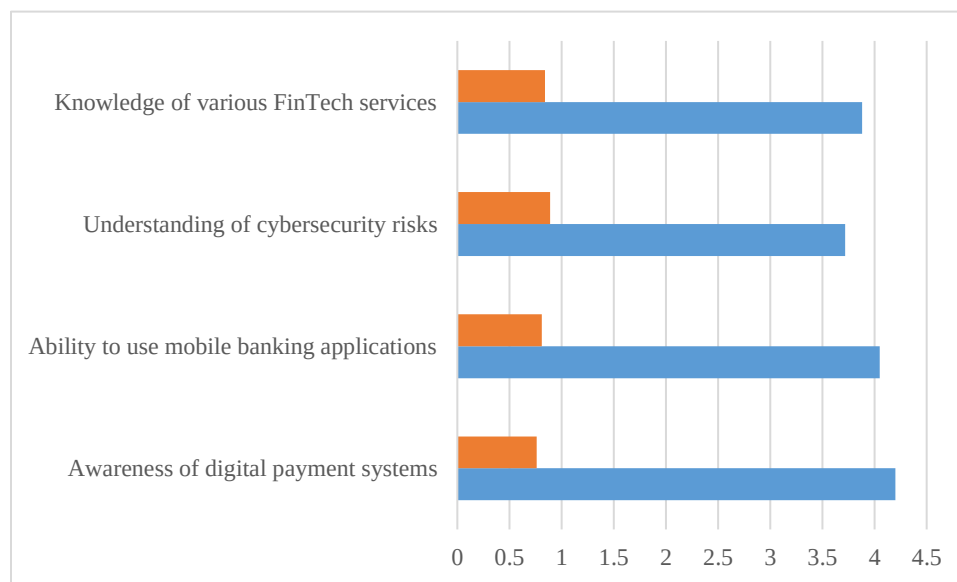


Figure 2: Visual Representation of Descriptive Statistics of Digital Financial Literacy

The results indicate that the participants have a decent grasp of financial concepts when it comes to digital platforms. The digital payment systems awareness level is the highest (4.20), and then the possibility to utilize mobile banking applications (4.05) means a strong level of familiarity and practical application skills. The awareness of different FinTech services exhibits an average level of knowledge (3.88), and cyber security risk awareness has the least mean score (3.72) which indicates relatively low awareness of this particular subject. The results of the standard deviation values constitute moderate variability of responses. These findings are supported by the figure in terms of easily demonstrating higher awareness and ability to use the technology in contrast to cyber security knowledge.

Table 3 and its associated figure show the breakdown and figure of respondents in regards to their adoption of different FinTech services. With percentages and frequencies included, it details the use of digital wallets, mobile banking, online investing platforms, and peer-to-peer lending. These levels of adoption are visualized in the figure, which allows making a comparison of these services of FinTech easier.

Table 3: Adoption of FinTech Services among Respondents

FinTech Service	Users (Frequency)	Percentage
Digital Wallets	42	84%
Mobile Banking	39	78%
Online Investment Platforms	24	48%
Peer-to-Peer Lending	11	22%

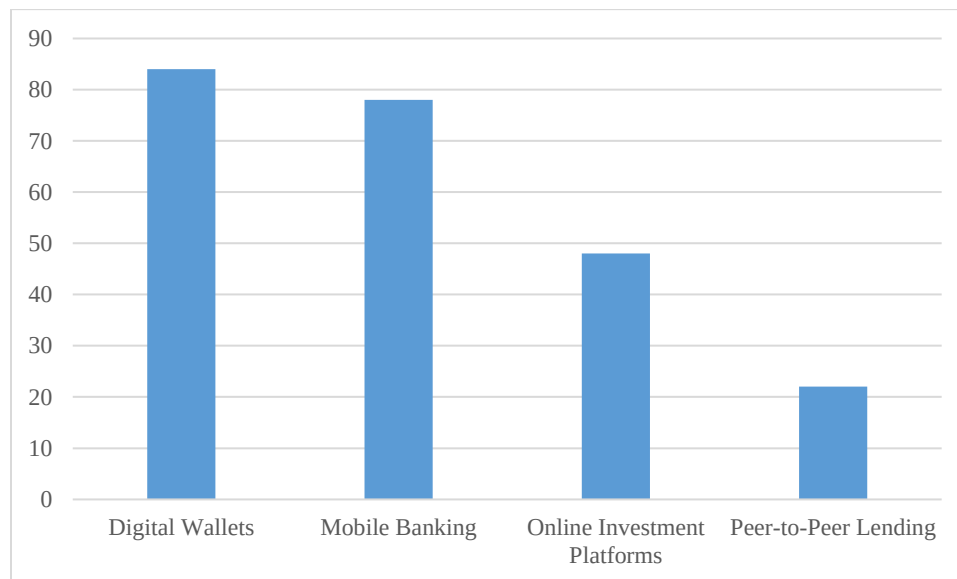
**Figure 3:** Visual Representation of Adoption of FinTech Services among Respondents

Table 3 and its graphical image show that digital wallets are the most popular FinTech service, as 84% of respondents use them, third is mobile banking (78%). Online investment platforms are moderate with 48% of people using it, and peer-to-peer lending is the least with 22% of people using it. These findings are evidently supported by the figure as they graphically illustrate the superiority of basic types of digital financial services compared to more elaborate ones. This indicates that city customers are more comfortable with convenient and easily available financial technologies, at the same time less often using sophisticated or risky platforms.

Financial technology adoption is correlated with several aspects of digital financial literacy, as shown in Table 4. These dimensions include digital payment awareness (DFL1), proficiency with mobile applications (DFL2), perception of cyber security (DFL3), and awareness of FinTech services (DFL4). The table presents the correlation coefficients of all variables with each other which reveal the extent of association between the variables. The diagonal values are the self-correlation, and the off diagonal values are the strength and direction of correlation between various variables.

Table 4: Correlation Matrix between Digital Financial Literacy and FinTech Adoption

Variables	DFL1	DFL2	DFL3	DFL4	FinTech Adoption
DFL1: Awareness of Digital Payments	1.00	0.58	0.46	0.55	0.65
DFL2: Ability to Use Mobile Apps	0.58	1.00	0.52	0.63	0.69
DFL3: Understanding of Cybersecurity	0.46	0.52	1.00	0.49	0.61
DFL4: Knowledge of FinTech Services	0.55	0.63	0.49	1.00	0.73
FinTech Adoption	0.65	0.69	0.61	0.73	1.00

Note: indicates significance at 0.01 level

All indicators of digital financial literacy were positively associated with FinTech adoption, according to the results of the correlation analysis. Of the variables, knowledge of FinTech services (DFL4) has the strongest correlation with adoption ($r = 0.73$), then they are ability to use mobile applications (DFL2) ($r = 0.69$) and awareness of digital payments (DFL1) ($r = 0.65$). Cyber security understanding (DFL3) also shows a positive correlation ($r = 0.61$), but in a relatively lower way. Also, there exist moderate positive relationships between the literacy dimensions in themselves, which implies that these variables have an interrelationship. This study provides solid evidence that the level of digital financial literacy has a beneficial impact on the adoption of FinTech services by urban customers.

The correlation between several dimensions of FinTech adoption and digital financial literacy among urban consumers is illustrated graphically in Figure 4. The association between digital payment expertise, mobile application abilities, cyber security knowledge, and FinTech service understanding and the level of financial technology adoption is robustly demonstrated graphically.

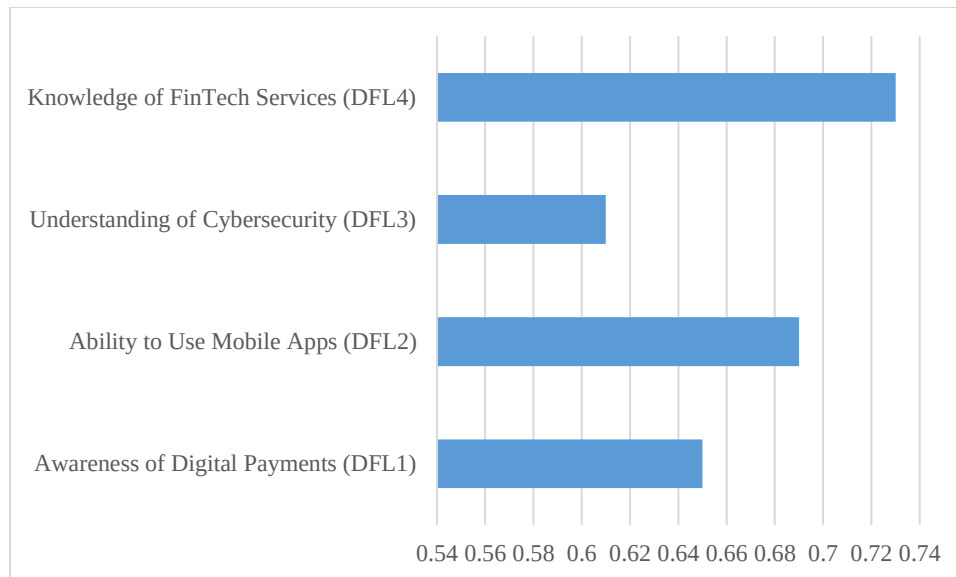


Figure 4:Correlation of Digital Financial Literacy Dimensions with FinTech Adoption

Figure 4 suggests that the adoption of FinTech is positively connected with all of the dimensions of digital financial literacy. Knowledge of FinTech services has the highest correlation among the variables, as well as the possibility to use mobile applications and awareness of digital payments. There is a strong positive link between relative levels of cyber security knowledge and the results shown in Table 4. It follows that if we want more people to use FinTech, we need to raise their level of digital financial literacy.

5. CONCLUSION

The study found that the amount of digital financial literacy has a positive effect on the adoption of FinTech services by urban Indian consumers. The results demonstrate that people with greater awareness, digital capabilities, as well as familiarity with financial technologies, have a higher probability of adopting and successfully utilizing FinTech services. Although simple services, including digital wallets and mobile banking, have gained a massive adoption, more advanced services are not widely adopted, meaning that more awareness and confidence should be provided to users. There is a strong correlation between digital financial literacy and the acceptability of FinTech; thus, there should be policy-related interventions, awareness campaigns, and focused educational programs to increase digital literacy and financial literacy. In light of this, it stands to reason that educating the public about digital money management could eventually lead to better financial decisions, more inclusion, and the expansion of India's urban digital financial ecosystem.

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