

## Impact of Financial Literacy, Banking Access and Inclusion on Fintech Adoption in India: An Empirical Analysis in the Indian Emerging Settings

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### Abstract

The swift advancement in financial technology (FinTech) has considerably revolutionized the financial ecology within a developing economy like India. This research explores the influence of financial knowledge, banking services and financial inclusion on FinTech implementation. With the rise in digitalization, FinTech models like mobile banking, digital wallets, and neo-banks have boosted ease of access and productivity in banking services. Nevertheless, differences in banking information and entry to banking network carry on with influencing the adoption rates. The study emphasizes that financial literacy plays an essential role in allowing people to comprehend and use FinTech services constructively, whilst financial services confirm larger contribution among all socio-economic groups. Additionally, technological evolution like blockchain and virtual payment models have rapid integration but also faced issues related to trust, security and consciousness. The results recommend that enhancing banking knowledge and uplifting comprehensive financial models are necessary to augment the advantages of FinTech in India's developing financial environment. A sample of 309 was collected to find the result of the study. The factors studying Impact of Financial Literacy, Banking Access and Inclusion on Fintech Adoption in India are Financial Literacy, Trust and security, Technology Readiness and Innovation Awareness. The study concludes that there is significant impact of Financial Literacy, Trust and security, Technology Readiness and Innovation Awareness on fintech adoption.

**Keywords:** Financial, Adoption, enhancing, technological, productivity

### Introduction

The monetary ecosystem in India has gone through a notable revolution with the growth in financial technology (FinTech), primarily modifying the way individuals access and handle financial services. Conventionally, financial organizations showed a pivotal role in stimulating financial knowledge and inclusion via services like savings accounts, credit facilities, and insurance. Nevertheless, the swift advancement in virtual tools has resulted in the growth of FinTech responses which offer swift, productive and extremely accessible banking services, resulting in restructuring the traditional financial landscape (Lee & Shin, 2024).

Financial literacy is globally considered as a pivotal factor among people's capability to take knowledgeable monetary decisions. It comprises the knowledge, skills and confidence needed to productively utilize banking products and services. The absence of financial literacy mostly restricts a person's contribution in the official

monetary systems and minimizes their capability to implement virtual banking models. Research conducted by Lusardi et al., (2023) points out that enhanced banking knowledge remarkably uplifts customer's loyalty and interaction with FinTech platforms, specifically within the growing economy.

On the other hand, financial inclusion emphasizes on making sure that financial services are easy to access and afford among every section of the society, specially the weaker section and oppressed populations. Within India, the digital ecosystem advancement focused on enlarging the financial access. In accordance with the study conducted by Demirgüç-Kunt et al. (2024), shows that the expansion of online payment model and mobile banking has played a significant role in augmenting financial inclusion, especially in the emerging economies.

The incorporation of FinTech advancements like mobile banking, Unified Payments Interface (UPI), blockchain technology, and neo-banking has moreover augmented the financial inclusion by limiting reliance on offline banking system. These tools allow active transactions, boost ease of access and reduce transaction prices, making banking services more available to the larger group of people. In addition, progression in artificial intelligence and data analytics have facilitated financial services, improvising user experience and management productivity (Lee & Shin, 2024).

Inspite of the digital evolution, there are various shortcomings that constantly delay the global implementation of FinTech like lack of online knowledge, absence of trust on digital mode, privacy issues, and lack of infrastructure continue to be important blocks, especially in rural and semi-urban places. Study shows that socio-economic changes like income, education and gender notably affect the implementation and utilization of digital financial services (Klapper & Sulla, 2025). Moreover, Morgan and Trinh (2023) point out that without enough economic literacy, people might grasp to get complete facility from FinTech advances, restricting their efficacy in encouraging financial inclusion.

In the past few years, the idea of digital financial literacy has received fame as an essential factor for sustainable FinTech implementation. It ranges beyond the conventional economical literacy to incorporate the capability to utilize digital models carefully and productively. The OECD (2026) which focuses on improving the virtual economical literacy is needed for making sure users are protected and the trust is built on the online financial landscape.

With respect to this, the research focuses on examining the influence of financial literacy, banking access and financial inclusion on the implementation of FinTech in India. By examining these correlated elements, the research points out the ways governing bodies and banking organizations are able to boost virtual banking contribution and uplift comprehensive economic progression.

### **Literature Review**

Banking industry in India is the support for financial literacy, it has transformed in the last few decades, earlier it contributed to financial literacy through advertising and promotion (Gupta & Mittal, 2008; 2012). Gradually the satisfaction of customers established the fact that customers connected with banking industry to a large extent (Paul et al., 2016). Most of this connection was related to saving accounts, loans and other basic services. Investment, on the other hand, is a process that aims to provide banking services such as savings accounts, credit institutions, and insurance products to the poorest members of society. On the other hand, the focus is on the provision of financial services (banking, insurance, and primary market services) and timely and adequate credit to all sectors of society and the economy (Park & Mercado, 2018). According to Mindraet *al.*, (2017), people's inability to access a variety of financial services is hampered by a lack of basic education and financial literacy. They do not know the value of various financial assets such as bank accounts, check resources, bank loans or overdrafts, and insurance. Financial literacy increases the use of many financial products by the various economic agents such as Media Entrepreneurs, NGOs and MFIs, among others.

According to Anarfoet *al.*, (2019), assessing the level of investment in various countries or regions within a country from time to time, which is strong and requires an all-inclusive investment rate. Proxies of investments

may not accurately reflect the relationship between investment and economic progress. In effective policy making, many aspects of investment must be considered. Raza *et al.*, (2019) states that "Funding is a process for major institutional players who cater to all sections of the community, including vulnerable communities such as weak sections and low-income groups, with adequate products and services at affordable and transparent prices." The goal of Financial Inclusion (FI) is to give the world's poorest people easy access to financial services. It is an effort to achieve inclusive social growth by making financial services available to the poorest members of society. For the poorest and most neglected sections of the public to benefit from financial services, the Indian government has taken several measures. According to Koti (2019), women's financial freedom is often treated as a second requirement for women's development and is widespread throughout India, especially in rural areas, emphasizing the need to push financial literacy programs. A host of other programs aimed at empowering women, as well as the assassination of other campaigns aimed at helping 'the investment of the "Sheroes"' is crucial to economic growth and can only be achieved through strong financial literacy programs. Individual financial management will improve due to increased financial understanding. In addition, with greater access to economic services such as insurance, banking, and other investment tools, women have the opportunity to gain economic independence with their domestic finances and seek legal credit from financial institutions to secure their future.

According to Kumari *et al.*, (2020), financial independence is no longer a viable option in today's world. To protect themselves from unforeseen circumstances such as needs arising due to health issues, accidental death, or injuries caused by natural or man-made disasters, women should distance themselves from the financial dependence of family and friends. To help women gain financial independence, public and private organizations offer a variety of investment decisions, such as schemes of health insurance, insurance products flexible loans, and so on.

According to Potrich *et al.*, (2018), in a complex situation where the role of government and corporations is reduced and the responsibility for managing one's finances falls entirely on the shoulders of the people, it is important for them to be financially sound and able to take care of themselves. It is important to consider the circumstances and make the best decisions. Global competition is fierce, and the economy offers a wide range of financial tools. If they do not have sufficient financial knowledge, women are more likely to be influenced by various financial products as consumers. For this reason, it is important to identify barriers to growth and suggest remedies. Older people have a lower level of financial literacy. Financial literacy skills are poor among people, according to research conducted by researchers around the world, and PISA has found that they do not make good use of the financial services and instruments offered in the market. People spend less money on their future, make worse decisions, and have more debt. This type of behaviour is very common among teenagers and students.

According to Rai *et al.*, (2019), financial knowledge is defined as 'a combination of knowledge, knowledge, ability, attitude and behaviour required to make sound financial decisions and ultimately determine the financial health of each individual,' according to OECD INFE, 2011. Individual financial knowledge is influenced by social factors, according to Agarwalla. *et al.* (2013) Gender, age, marital status, financial decision-making process, expenditure budget, family participation (family structure), maternal education, and family financial status were among the items examined and the relationships identified (Sharma and Jyoti, 2009). It was also observed that triple bottom line and marketing 3.0 helps in reshaping the banking and financial services (Srivastav & Mittal, 2021). The findings were like those of previous studies showing how socio-economic factors influence people's financial literacy. Gender, age, race, and social status, as well as the numbers of children under the age of 18 living at home, monthly income, employment status, assets and liabilities, were found to be appropriate variations in the financial literacy study. However, because property information is difficult to obtain, the question asked is whether the respondent has a home. Whether or not a person filed a tax return in the previous year was a matter of great importance to the study (Min Zhan *et al.*) (2006). Men learn more financially than women, according to a study by Lucardi and Tufano (2009).

Fintech is now spreading worldwide that's why it creates big trouble for all the banking sectors because it creates shadow banking that means all the work which is basically done by the banking sectors are now easily done by the fintech technology. Especially in payment related things the fintech is now spread worldwide (Wilamowicz, 2019). People are also very much dependable in this fintech rather than the banking sectors. Also, some e-banks

are grown up and give a good percentage of interest than the other banks. People are investing in these e-banks so that the market of the normal bank goes down. Online banking was the first step towards Fintech (Bhattacharya, 2017; Srivastav & Mittal, 2016).

In the fintech technology block chain is a main thing which helps the fintech to grow rapidly, it creates a big chain system-based marketing system (Boustani, 2020). In this system the each and every participant of the business get benefitted, when a business partner successfully able to join a participant from the businessman's side then the person will be benefitted from the company. Because if a person joins from a businessman reference, then the person will get an amount from the company as a commission. In this way the block- chain type business is growing nowadays (Sowmiyaa, et. Al, 2020). As per the development of technology, the block chain system helps the fintech technology to grow up. Basically, the bit coin and all other crypto currency are also helping this Fintech to grow like in Bit coin the percentage of profit is much higher than the any other currency. The most selling crypto currency in the present time is the bit coin. This currency is highly demandable in the present time every single person who are now eager to invest in such highly profitable currency is this one (Alam, & Zameni, 2021).

One survey was taken between Bangalore and Bhubaneswar. Crypto currency has cryptographic mechanism that helps the person to keep secret his transaction and also makes a good security gateway of transaction that restricts the intruders to enter in the system. Mobile banking is the new way of business in the present market in this way a person can easily get access to the bank facilities without go to the banking sectors (El Amri, et. Al, 2021).

Mobile banking is now a most discussed topic in this present time because it has its verse time and plenty of advantages so that people are very much indeed to use this kind of things in their daily life. Also, there is a new banking facility named as neo banks which provide us a banking facility without any physical banking branch. Nowadays the most popular neo bank name is Paytm. Paytm is now providing its facilities worldwide and the percentage of interest in this neo bank is much higher than any other normal banks (Goldstein, et. Al, 2019). Also, in the other banks there are many terms and conditions which you have to fulfill if you want to get a loan from the bank but in the neo banks the terms and conditions are limited to get a loan or any other money taking purposes. Also, the money return policy in those banks is very much user friendly. The interest amount in loan purpose is lower than the other banking sectors who are physically present. This is so much reliable that the virtual banks capability is greater than the physical banks. The main and for most things in this policy is to please the investors, the amount which is basically given to the investors that should be enough for them (Palmié, et. Al, 2020). It has been known from a survey that the type of the investors is basically divided based upon their age, income, education, marital status.

According to their life-circumstances the value of their investments is fluctuating. Also, in the physical banking sectors if a person wants to transfer a huge amount of money from his banking account, then the person should be informing this thing to the bank manager then the person has to issue a cheque for this whole transaction phenomenon (Kitamura, 2020). In the other hand if a person wants to send a huge amount of money from the person's bank account, then only, the person has to use this mobile for a UPI transaction and the person can easily send the money from their home to the any other places of the earth (Anagnostopoulos, 2018). Though this kind of banks are neo banks that means they don't have any physical appearance so that there is no manager of the bank is present there, no other cheque issues are happened in this online platform and the very important thing is that these whole things are totally government certified. The number of physical things is started decreasing slowly and the number of the virtual things is increasing rapidly. So, the number of virtual banks is also increasing it means that there will be no physical banking agent are present to publish or sanction your scheme there will be an agent which is basically figured out by A.I. Also, the mistakes or any somewhat grieving is only done by a physical banking agent but it is not possible for the virtual banking agents (Baporikar, 2021). The virtual banking agents are programmed in such a way that you can access their appearance 24\*7 but it is not possible for a physical banking company to serve a person 24\*7. In the government adopted banking sectors or any other offices have their own holidays. But, in the virtual banking sectors there are no such days which are called holidays because the banks are totally controlled by the virtual bots and machines doesn't need any rest or holidays, they don't even know what is a holiday called in such way they are programmed (Sangwan, et. Al, 2019).

Today’s world needs everything online and easy way so the neo banks are creating this way for the customers so that it is now a popular way of money transfer as well as the fintech. Fintech is a well-known technology which is popular worldwide. The transparency and sustainability of these fintech is really appreciable it means that the work which is done by the fintech is working so well and it will be done within a minute or second (Walker, 2017).

The basic thing which is mostly noticed in this fintech is block chain and crypto currencies though all the crypto currency are not legal in most of the countries but peoples are fond of using this crypto currency. Many of the foreign countries are started adopting this Fintech because in the fintech the main helpful thing is the online transaction which is helpful for the people (Mehrotra, & Menon, 2021). Now also the investors are investing in some other foreign currencies like bit coin and all those things. The neo banks also have some terms and conditions for the customers. The interest rates of the DA, TA, and HRA are lower than the respect to the all-other banks. Middle-class families cannot invest in those banking sectors because the rate of those insurance banks is too much high. The other insurance banks are also there whose rate are not so good for these high-rate banks, their market is running in loss. So, the company is talking to the investors and to keep their business profit they increase the recurring amount a little bit and it would be beneficial for both ends (Karachun, et. Al, 2019).

**Objective**

1. To know the factors that determines the role of Financial Literacy, Banking Access and Inclusion on Fintech Adoption in India”

**Methodology**

309 participants were surveyed from different city type. The method of sampling was “Random sampling” for collection of data and examination was done by “Explanatory Factor Analysis” for results.

**Findings**

Table 1 demonstrates demographic details, it shows that 55.66% are Male, 44.34% are female. Looking at the age, 34.63% are between 22 to 28 years of age, 31.39% are between 28 to 33 years of age, and 33.98% are above 33 years of age. With regards to City Type, 34.37% are Tier I cities, 33.75% are Tier II cities, and 31.88% are Tier III cities.

**Table. 1 Respondent’s Details**

<b>Variables</b>	<b>Participants</b>	<b>Percentage</b>
<b>Gender</b>		
Male	172	55.66%
Female	137	44.34%
<b>Total</b>	<b>309</b>	<b>100</b>
<b>Ages in years</b>		
22 to 28	107	34.63%
28 to 33	97	31.39%
Above 33	105	33.98%
<b>Total</b>	<b>309</b>	<b>100</b>

City type		
Tier I cities	101	34.37%
Tier II cities	83	33.75%
Tier III cities	125	31.88%
<b>Total</b>	<b>309</b>	<b>100</b>

**“Factor Analysis”**

**“KMO and Bartlett's Test”**

**Table 2 “Kaiser-Meyer-Olkin Measure of Sampling Adequacy”**

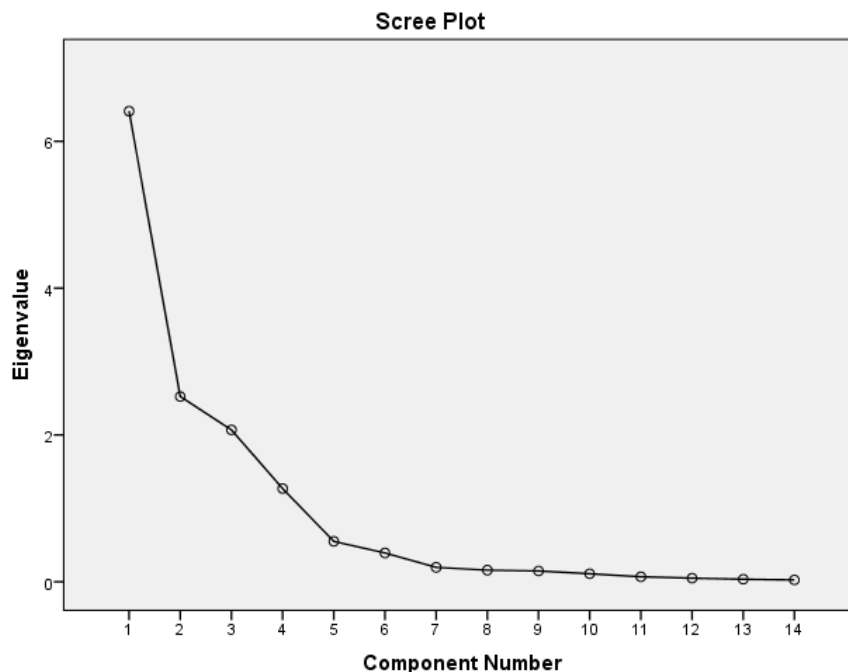
“Kaiser-Meyer-Olkin Measure of Sampling Adequacy”		.766
“Bartlett's Test of Sphericity”	“Approx. Chi-Square”	5500.776
	df	91
	Significance	.000

“KMO and Bartlett's Test”, value of KMO is .766 (Table 2).

**Table 3 “Total Variance Explained”**

“Component”	“Initial Eigenvalues”			“Rotation Sums of Squared Loadings”		
	“Total”	“% Of Variance”	“Cumulative %”	“Total”	“% Of Variance”	“Cumulative %”
1.	6.411	45.790	45.790	3.887	27.762	27.762
2.	2.523	18.018	63.808	3.631	25.934	53.696
3.	2.069	14.779	78.587	2.404	17.172	70.869
4.	1.270	9.070	87.657	2.350	16.788	87.657
5.	.550	3.930	91.587			
6.	.393	2.804	94.391			
7.	.196	1.400	95.791			
8.	.158	1.130	96.921			
9.	.147	1.049	97.969			
10.	.109	.779	98.748			
11.	.068	.482	99.230			
12.	.049	.350	99.580			
13.	.034	.243	99.824			
14.	.025	.176	100.000			

The four factors contribute towards explaining total 87.680% of variance. Variance explained by Financial Literacy is 27.762%, Trust and security is 25.934%, Technology Readiness is 17.172%, and Innovation Awareness is 16.788%. (Table 3).



“Scree Plot”

Table. 4 “Rotated Component Matrix”

S. No.	Statements	Factor Loading	Factor Reliability
	<b>Financial Literacy</b>		<b>.949</b>
1.	Adequate knowledge of basic financial concept helps in adoption of FinTech	.954	
2.	Financial literacy makes confident in financial decisions using digital platform	.910	
3.	It helps in identifying secure and reliable digital payment platform	.845	
4.	Financial knowledge helps in using digital financial services efficiently	.836	
	<b>Trust and security</b>		<b>.962</b>
1.	It makes users feel safe while using FinTech platforms	.961	
2.	Security concerns do not prevent from using FinTech platform	.902	

3.	Users trust the technology behind digital transactions	.896	
4.	It ensures that personal and financial information is secure	.874	
	<b>Technology Readiness</b>		<b>.867</b>
1.	Users are eager to try new financial technologies	.915	
2.	Technology readiness helps in getting adapted to technology changes	.856	
3.	Make user confident in troubleshooting basic technical issues	.732	
	<b>Innovation Awareness</b>		<b>.842</b>
1.	Make individual aware about new financial FinTech services and innovations	.930	
2.	Actively explore new digital financial tools	.928	
3.	Awareness of new technologies influence adoption decisions	.664	

**Factors of the study and its related variables**

The first factor of the study is Financial Literacy, the variables it includes are Adequate knowledge of basic financial concept helps in adoption of FinTech, Financial literacy makes confident in financial decisions using digital platform, it helps in identifying secure and reliable digital payment platform and financial knowledge helps in using digital financial services efficiently. Trust and security are the second factor, its variables are It makes users feel safe while using FinTech platforms, Security concerns do not prevent from using FinTech platform, Users trust the technology behind digital transactions and it ensures that personal and financial information is secure. Third factor is Technology Readiness, it includes variables like Users are eager to try new financial technologies, Technology readiness helps in getting adapted to technology changes, make user confident in troubleshooting basic technical issues. Last and fourth factor is Innovation Awareness its variables are Make individual aware about new financial FinTech services and innovations, actively explore new digital financial tools and Awareness of new technologies influence adoption decisions.

**Table 5 “Reliability Statistics”**

“Cronbach's Alpha”	“Number of Items”
.898	14

Total reliability of 14 items that includes variables for Factors exploring the “Impact of Financial Literacy, Banking Access and Inclusion on Fintech Adoption in India” 0.898 (Table 5).

**“Table 6 Model Summary”**

“Model”	“R”	“R Square”	“Adjusted R Square”	“Std. Error of the Estimate”
1	.857 <sup>a</sup>	.734	.730	.39882
Predictors: (Constant), Financial Literacy, Trust and security, Technology Readiness, and Innovation Awareness				

The adjusted R-squared value is 0.730 with approximately 73% of the variation.

**“Table 7 ANOVA”**

“Model”	“Sum of Squares”	“df”	“Mean Square”	“F”	“Sig.”	
1	“Regression”	133.322	4	33.330	209.545	.000 <sup>b</sup>
	Residual	48.355	304	.159		
	Total	181.676	308			
a. Dependent Variable: Overall impact of Financial Literacy, Banking Access and Inclusion on Fintech Adoption						
b. Predictors: (Constant), Financial Literacy, Trust and security, Technology Readiness, and Innovation Awareness						

Value under significant column indicates a significant relationship between “Financial Literacy, Trust and security, Technology Readiness, and Innovation Awareness” and Fintech Adoption.

**“Table 8 Coefficients”**

“Model”	“Un standardized Coefficients”		“Standardized Coefficients”	“t”	“Sig.”
	“B”	“Std. Error”	“Beta”		
(Constant)	3.968	.023		174.876	.000
Financial Literacy	.327	.023	.426	14.389	.000
Trust and security	.060	.023	.078	2.624	.009
Technology Readiness	.249	.023	.325	10.977	.000
Innovation Awareness	.510	.023	.664	22.445	.000
DV: Overall impact of Financial Literacy, Banking Access and Inclusion on Fintech Adoption					

All the factors Financial Literacy, Trust and security, Technology Readiness, and Innovation Awareness are showing significant impact on fintech adoption. Highest impact is shown by Innovation Awareness with beta value .664 followed by Financial Literacy (.426), Technology Readiness (.325), and Trust and security (.078).

### Conclusion

The research emphasizes the significant role in economical knowledge, access to banking and financial inclusion in forcing FinTech implementation in India. As virtual financial services keep on growing, people with extra knowledge on finances are capable to understand, believe and implement these tools successfully. Financial inclusion also makes sure that disadvantaged group and oppressed are also included within the facilities of the virtual financial services.

The results demonstrate that whilst FinTech has notably progressed accessibility, competence, and availability in financial markets, discrepancies in knowledge and access continue to pose critical constraints to universal uptake. Technological developments like blockchain, mobile banking, and neo-banking have transformed the economic environment, still issues with respect to virtual consciousness, organization and safety should be responded.

To increase the capability of FinTech, there is significant necessity for large campaigns on financial knowledge, strong virtual infrastructure and helpful governing structures. Governing bodies and financial institutions should team up to provide motivation towards virtual financial literacy and make sure comprehensive access to economical services. By considering these issues, India can implement FinTech as a strong tool for attaining balanced financial upliftment and economic growth. The factors studying Impact of Financial Literacy, Banking Access and Inclusion on Fintech Adoption in India are Financial Literacy, Trust and security, Technology Readiness and Innovation Awareness. The study concludes that there is significant impact of Financial Literacy, Trust and security, Technology Readiness and Innovation Awareness on fintech adoption.

### References:

- [1] Alam, N., & Zamani, A. P. (2021). Central Banks and Financial Authorities: Towards the Advancement of I-Fintech. In *Islamic FinTech* (pp. 59-72). Palgrave Macmillan, Cham.
- [2] Anagnostopoulos, I. (2018). Fintech and regtech: Impact on regulators and banks. *Journal of Economics and Business, 100*, 7-25.
- [3] Anarfo, E. B., Abor, J. Y., Osei, K. A., Gyeke-Dako, A. (2019). Financial inclusion and financial sector development in Sub-Saharan Africa: A panel VAR approach. *International Journal of Managerial Finance, 15*(3).
- [4] Baporikar, N. (2021). Fintech Challenges and Outlook in India. In *Innovative Strategies for Implementing FinTech in Banking* (pp. 136-153). IGI Global.
- [5] Bhattacharya, U. (2017). Fintech: Observations of a skeptic. *Available at SSRN 2966612*.
- [6] Boustani, N. M. (2020). Traditional Banks and Fintech: Survival, Future and Threats. In *ICT for an Inclusive World* (pp. 345-359). Springer, Cham.
- [7] El Amri, M. C., Mohammed, M. O., & Bakr, A. M. (2021). Enhancing Financial Inclusion Using FinTech-Based Payment System. In *Islamic FinTech* (pp. 191-207). Palgrave Macmillan, Cham.
- [8] Gupta, S., & Mittal, A. (2008). Comparative Study of Promotional Strategies Adopted by Public and Private Sector Banks in India. *Asia Pacific Business Review, 4*(3), 87-93. doi: 10.1177/097324700800400310
- [9] Gupta, S., & Mittal, A. (2012). Paired Comparison of Promotional Methods in Context of Banking Services: An Application of Multidimensional Scaling. *IIMS Journal of Management Science, 3*(2), 131. doi: 10.5958/j.0976-030x.3.2.002
- [10] Iqbal, B. A. & Sami, S. (2017). Role of banks in financial inclusion in India. *Contaduria y Administracion, 62*(2).
- [11] Karachun, I., Korotkevich, A., & Marushka, D. (2019). FinTech and Commercial Banking Development in Belarus. In *Modeling Economic Growth in Contemporary Belarus*. Emerald Publishing Limited.
- [12] Khaki, A. R. & Sangmi, M. U. D. (2017). Does access to finance alleviate poverty? A case study of SGSY beneficiaries in Kashmir Valley. *International Journal of Social Economics, 44*(8)
- [13] Kitamura, K. (2020). The Future of Fintech in the Context of the Japanese Main Bank System. In *Transforming Japanese Business* (pp. 247-260). Springer, Singapore.
- [14] Koti, K., (2019). Financial Literacy and its impact on the Investment Decisions of Working Women. *Humanities & Social Sciences Reviews, 7*(6), 554-561.

- [15] Kumari, D.A.T., Ferdous, A.S.M. and Klalidah, S., (2020). The impact of Financial Literacy on Women's Economic Empowerment in Developing Countries: A study among the rural poor women in Sri Lanka. *Asian Social Science*, 16(2),31-44.
- [16] Mehrotra, A., & Menon, S. (2021, January). Second Round of FinTech-Trends and Challenges. In *2021 2nd International Conference on Computation, Automation and Knowledge Management (ICCAKM)* (pp. 243-248). IEEE.
- [17] Mindra, R., Moya, M., Zuze, L. T.& Kodongo, O. (2017). Financial self-efficacy: A determinant of financial inclusion. *International Journal of Bank Marketing*, 35(3), 338–353.
- [18] Palmié, M., Wincent, J., Parida, V., & Caglar, U. (2020). The evolution of the financial technology ecosystem: an introduction and agenda for future research on disruptive innovations in ecosystems. *Technological Forecasting and Social Change*, 151, 119779.
- [19] Park, C.-Y., & Mercado, R. (2018). Financial inclusion, poverty, and income inequality. *The Singapore Economic Review*, 63(01), 185–206.
- [20] Potrich, A.C.G., Vieira, K.M. and Kirch, G., (2018). How well do women do when it comes to financial literacy? Proposition of an indicator and analysis of gender differences. *Journal of Behavioral and Experimental Finance*, 17,28-41.
- [21] Rai, K., Dua, S. and Yadav, M., (2019). Association of Financial Attitude, Financial Behaviour and Financial Knowledge towards Financial Literacy: A structural equation modeling approach. *FIIB Business Review*, 8(1),51-60.
- [22] Raza, M. S., Tang, J., Rubab, S., &Wen, X. (2019). Determining the nexus between financial inclusion and economic development in Pakistan, *Journal of Money Laundering Control*, Vol. 22(36).
- [23] Sangwan, V., Prakash, P., & Singh, S. (2019). Financial technology: a review of extant literature. *Studies in Economics and Finance*.
- [24] Sowmiyaa, S., Lavanya, S. M., Mahendran, K., & Hemalatha, S. (2020). Fintech: A promising future? *International Journal of Education and Management Studies*, 10(4), 466-470.
- [25] Srivastav, G., & Mittal, A. (2016). Impact of Internet Banking on Customer Satisfaction in Private and Public Sector Banks. *Indian Journal of Marketing*, 46(2), 36-49. doi: 10.17010/ijom/2016/v46/i2/87252
- [26] Srivastav, G., & Mittal, A. (2021). Modelling value-based banking and customers' banking choices in the era of Marketing 3.0: an empirical study with logistic ordinal regression approach. *Global Business and Economics Review*, 25(1), 51-67. doi: 10.1504/gber.2021.116644
- [27] Walker, G. (2017). Financial Technology Law—A New Beginning and a New Future. *The International Lawyer*, 50(1), 137-216.
- [28] Wilamowicz, A. (2019). The great FinTech disruption: Insur-Tech. *Banking & Finance Law Review*, 34(2), 215-238.
- [29] Lusardi, A., Samek, A., Kapteyn, A., Glinert, L., Hung, A., & Heinberg, A. (2023). Visual tools and narratives: New ways to improve financial literacy. *Journal of Pension Economics & Finance*, 22(1), 1–23.
- [30] Morgan, P. J., & Trinh, L. Q. (2023). FinTech and financial literacy in emerging economies. *Asian Development Review*, 40(1), 1–30.
- [31] Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2024). *The Global Findex Database 2024: Financial Inclusion, Digital Payments, and Resilience in the Age of FinTech*. World Bank.
- [32] Lee, I., & Shin, Y. J. (2024). FinTech: Ecosystem, business models, and implications for financial services. *Business Horizons*, 67(2), 123–135.
- [33] Klapper, L., & Sulla, V. (2025). The role of digital financial services in inclusive growth. *World Bank Policy Research Working Paper*.
- [34] OECD (2026). *Digital Financial Literacy and Consumer Protection Report*. Organisation for Economic Co-operation and Development.