

Factors Influencing The Intention To Adopt Fintech By Pakistani Microfinance Banks

Mian Aftab Sadiq¹, Dr. Arif Hussain², Dr. Muhammad Tahir Khan³, Dr. Sanam Wagma Khattak⁴

Abstract

This study looks at the main variables affecting Pakistani microfinance bank's adoption of FinTech, with an emphasis on the importance of technological proficiency. The study examines the relationships between perceived ease of use, perceived usefulness, service quality, trust, costs, and FinTech adoption, both directly and through the mediating role of technological competency, using quantitative research methods to analyze data gathered from various microfinance institutions. The results show that perceived trust, perceived utility, and simplicity of use all have a large and favorable impact on the adoption of FinTech, making them the main motivators. Adoption is favorably impacted by service quality as well, but less so. On the other hand, expenses are found to have a considerable negative impact, suggesting that FinTech adoption is discouraged by greater prices. The study also finds that, although it does not substantially mediate the association between costs and adoption, technological skill is a crucial mediator in the correlations between perceived utility, perceived ease of use, service quality, trust, and FinTech adoption. Among the helpful recommendations include improving the FinTech solutions' perceived value and usefulness, improving the quality of services, building and maintaining trust, efficiently managing costs, and providing funding for user training to enhance technical expertise. The report also offers recommendations for future research, including the examination of novel elements, the conduct of longitudinal studies, and the execution of cross-regional comparisons, in order to understand the dynamics of FinTech adoption. This research adds significant knowledge to the field of financial technology by giving financial institutions that want to implement FinTech solutions helpful advice and laying the groundwork for future scholarly investigations into the variables influencing FinTech adoption in emerging nations.

Keywords: FinTech Adoption, Technology Competency, Perceived Usefulness, Service Quality, Trust, Costs.

Introduction:

FinTech, or financial technology, has drastically changed the worldwide financial scene by providing creative solutions that improve accessibility, inclusivity, and efficiency in a variety of industries (McAuley et al., 2015; Hernández-Solís, 2016). FinTech technologies, such as block chain technology and mobile payments, have not only accelerated financial

¹Ms Scholar, Department of Accounting and Finance, Institute of Business Studies and Leadership, Abdul Wali Khan University Mardan. Email: aftabsadiq1999@gmail.com

²Associate Professor, Department of Accounting and Finance, Institute of Business Studies & Leadership, Abdul Wali Khan University Mardan. Email: arifhussain@awkum.edu.pk

³Lecturer, Department of Accounting and Finance, Institute of Business Studies & Leadership, Abdul Wali Khan University Mardan. Email: mtahir@awkum.edu.pk

⁴Lecturer, Department of Economics, University of Peshawar. Email: sanamah@uop.edu.pk

inclusion but also expedited traditional banking procedures, especially helping marginalized groups and emerging markets.

FinTech holds significant potential to transform service delivery in Pakistan, where microfinance banks (MFBs) are essential in offering financial services to under banked and low-income populations (Kim & Park, 2015; Munch, 2015). Despite this potential, Pakistani MFBs have been comparatively sluggish to implement FinTech, leaving a large gap between technology improvements and operational integration within these institutions.

FinTech integration with MFB operations is expected to improve service productivity via digital channels, providing economical and effective substitutes for conventional banking practices (Hernández-Solís, 2016). Nonetheless, a number of obstacles prevent its broad use in Pakistan. These are the major barriers that have impeded the digital financial services, opinions about the reliability of the services, goal of this research is to determine the factors that impact Pakistan's MFBs' plan to implement FinTech, understanding directly perceived traits. The initial study will analyze the views of the institutions' personnel as compared to the customers. Given the findings of the study, it is hypothesized that the successful adoption of mobile payment technologies and other related FinTech products and services through the broader digitization of the MFIs would favorably and positively affect their profit positions. Furthermore, new learnings in this area should help to identify the characteristics of Microfinance organizations that are best adopting the innovative technology. Sympathetically observing improvement in both MFIs profit and low-cost labor market, reflected by their lower technological expenses, the benefits would trickle down to the local community. The suggestions will also be helpful in helping MFBs and legislators optimize their FinTech integration plans. The study's findings will not only increase understanding of the unique challenges and opportunities associated with FinTech adoption in Pakistan, but they will also provide helpful advice for MFBs wishing to leverage FinTech to advance more extensive financial inclusion programs and improve the provision of financial services. By bridging the theoretical and practical application gaps, this research aims to promote positive change within Pakistan's microfinance sector, ultimately supporting sustainable economic development and expanding financial services accessibility for the impoverished.

The objective of this research is to identify the variables that impact these banks' plans to implement FinTech, with a focus on perceived utility, affordability, service quality, trust, and simplicity of use.(Kim & Park, 2015).

By examining the intricate relationships between these variables and the adoption of FinTech in the context of Pakistani microfinance banks, the study seeks to close a significant research gap. The FinTech adoption in the particular context of Pakistani microfinance institutions is the study's emphasis, filling a large research vacuum. The study intends to increase academic understanding in this field because there isn't much literature available on this subject. According to,(McAuley, 2015) FinTech has the ability to completely transform the financial industry. Therefore, it is critical for microfinance institutions in Pakistan to understand the factors that will determine whether or not it is adopted. Therefore, the goal of this study is to provide insightful information that will help microfinance institutions better equip their employees with technology.

Literature Review:

FinTech, an industry that blends technology with finance, uses mobile-focused information technology to increase the efficiency of the financial system. (Kim & Park, 2015) defined FinTech as the industrial revolutions that occur when IT and financial services are combined. FinTech, then, refers to businesses that employ technology to simplify or make financial services available. FinTech delivers innovative financial services by utilizing cutting-edge technology like social media, mobile, and IT. One such method is the mobile-

based payment and settlement system used in Korea. In terms of the industry, this refers to the application of cutting-edge technology by a non-financial company in the provision of services; examples include the use of remittance, investment, and payment and settlement services without the involvement of a financial company, such as the use of Apple Pay and AliPay. (Bardai, 2020)

FinTech is a thriving subset at the intersection of technology and finance services. It includes new entrants into the industry with a technological focus as well as established organizations that are changing the goods and services that established financial services providers now offer (PWC, 2016).

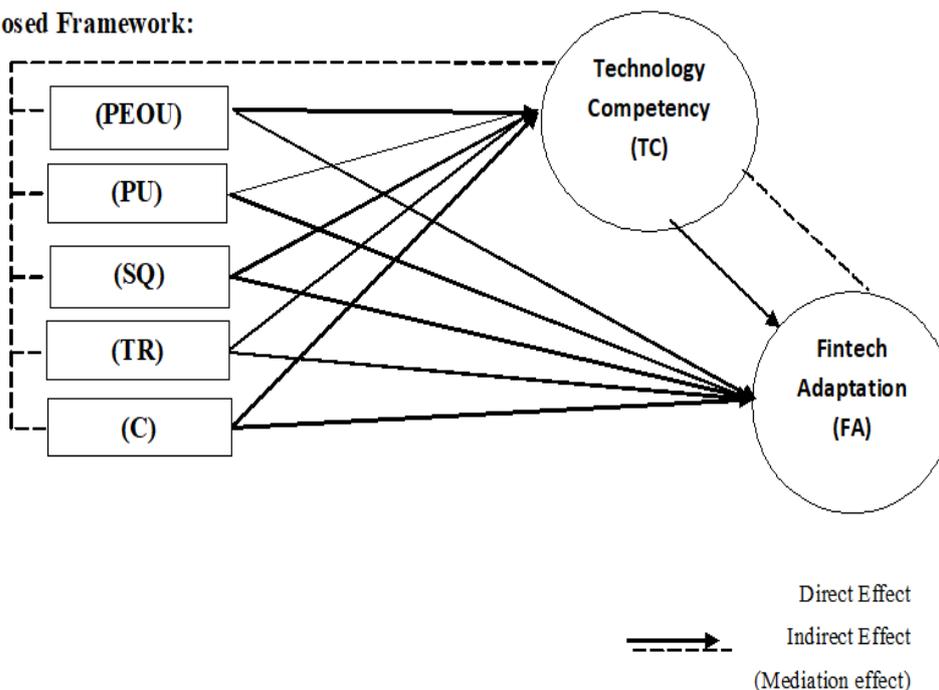
FinTech is a thriving subset at the intersection of technology and finance services. It includes new entrants into the industry with a technological focus as well as established organizations that are changing the goods and services that established financial services providers now offer.(Ateik, 2020).

Additionally, these tech-focused start-ups are developing financial goods and services for digital platforms that are better, more accessible, and simpler to use.

FinTech, or financial technology, is another name for these technological solutions. This study examines how microfinance firms, which provide their clients with financial services including payday loans and quick check cashing, are implementing FinTech.

The fact that a large body of prior research—some of which added additional constructs to TAM—provided empirical support for TAM. Moreover, TAM has yielded reliable outcomes across many demographic groups, situations, and technological environments. One of the criteria has been added to the TAM: prior experience. Along with computer self-efficacy (Higgins, 1995) motivation (Davis et al., 1992; Igbaria et al., 1995). FinTech (Henderson & Divett, 2003), web uses (Xiao-Yu, 2003) wireless Internet (Yu et al., 2003), and online banking (Wang, 2003) are a few of the scenarios where TAM has been utilized.

Proposed Framework:



Research Methodology:

This study will use and adapt quantitative research approach in order to meet its objectives. Furthermore, as per Rahman et al. (2022), a sample is a subset of the whole data set obtained by surveys or thorough conclusions in quantitative research.

This approach involves the purposeful experimental assessment of observable events by the use of mathematical, statistical, or computational techniques expressed in numerical form, such as statistics, percentages, and so on. The process of collecting data, also known as primary data, will be finished before the data are examined and transformed into statistical information. Primary data are details on a study question's variables that are gathered by researchers, or under their direction or supervision.

Instrument Method:

Research instruments are the techniques required to gather data and information for studies. The acceptance of fintech by employees of microfinance banks in Pakistan is the main source of data needed for this study. To accomplish the study's goal, the questionnaire from the earlier study will be used in this one with some adaptations. In addition, the data will be measured by the questionnaire using a "five-point Likert scale." Convenience in obtaining data from a sizable sample at a minimal expense is crucial in quantitative research. The results from the questionnaire will be analyzed in this study using the SPSS software.

As previously stated, the questionnaire used in this survey will be adopted from the one used in the prior research study. However, because it depends on the respondents' emotions and free time, questionnaires typically take longer to collect data. There will be two sections to the questionnaire: section A and section B. The questions that are stated in Table 3.2 for section A include gender, age, educational background, designation, and monthly income.

The questions in each of the seven subsections that make up Section B will establish a connection between the desire of microfinance bank staff to adopt fintech and all the relevant factors, including perceived utility, perceived simplicity of use, service quality, trust, and cost. Every question will have its data measured using the "five-point Likert scale." The initial subsection of the survey focuses on the dependent variable, which is the adoption of fintech.

Population:

In order to meet the study's purpose, microfinance banks that want to implement fintech regardless of whether they currently use it or not—will also be included in the sample. The Microfinance banks cover around 73% of GLP. As of September 20, 2021, the Pakistan Credit Rating Agency Limited says. Along with the primary data for the study, random sampling with stratification will be used to ensure representation from a variety of staff levels inside microfinance companies.

Employees from each of the 11 microfinance institutions in the area make up the total population. These workers offer a thorough picture of the intention to use fintech in this industry, despite differences in their jobs, responsibilities, and interactions with fintech solutions. This group was chosen because employee adoption of fintech can have a big impact on how these technologies are implemented generally and how successful they are in the microfinance industry.

It is unknown how many people work for each of the 11 microfinance banks. Nonetheless, the study attempts to offer insights that can be applied to the larger population of workers in the microfinance industry by concentrating on a subset of 8 banks. The sample size was established using Cochran's method, which ensures the statistical correctness and reliability of the results.

The study looks at workers' aspirations to adopt fintech in an effort to identify important elements influencing this adoption and offer suggestions for improving fintech implementation in microfinance institutions.

The sample size will be decided depending on the size of the population, with a five percent margin of error and a ninety-five percent confidence level.

A methodical survey questionnaire will be applied to collect quantitative data. The questionnaire contains questions regarding perceived utility, ease of use, costs, technological know-how, service quality, confidence, and FinTech adoption.

SAMPLE DESIGN:

When determining the sample size for the data, the following formula is typically recommended by Cochran (1977):

$$n^{\circ} = [t^2 \times s^2] \div d^2 \dots \dots \dots \text{eq (i)}$$

$$n^{\circ} = [1.96 \times 1.25 \times 2] / (0.15)^2 = (3.84) (1.56) / (0.0225) = 5.99 / (0.0225) = 266.22$$

Consequently, 266 customers are anticipated to make up the study's sample size. Therefore, 266 is the final allowable sample size. Increasing the sample size can only slightly enhance the results, which may not be significant even though a higher sample size yields more accurate results (Creswell, 2009). This study's overall sample size, 390, is deemed sufficient for its purposes (Pallant, 2016; Malhotra & Peterson, 2006).

The sample size includes the employee within these 8 microfinance banks of Pakistan the following Microfinance Banks were taken:

- NRSP M-Finance Bank LTD.
- Khushhali Bank Limited.
- Tameer M-Finance Bank Ltd.
- APNA M-Finance Bank Ltd
- Mobilink M-Finance Bank Ltd.
- Pak Oman Micro Finance Bank Ltd.
- Sindh M-F Bank Ltd.
- The First Micro Finance Bank Ltd.

Reliability and Validity:

The assessment of the validity and reliability in this study will be conducted through at. The assessment of Realibility and Validity of the measuring instrument is the way we will evaluate the study. Validity is an assessment of a measurement tool's accuracy in identifying the traits or patterns of behavior that it is having a vision for. Also, the measure of reliability is a dynamic tool for one to realize how effective one's approach is. The Cronbach Alpha Coefficient, compiled by Cronbach in 1951, is the most frequently employed method of implementing A+ (Sum of the products of the standardized items of the two variables) to the Researches to check them for the reliability and the validity.

Data Analysis:

Analysis of SEM to investigate the connections between the dependent variable and the independent as well as the mediating function of technological competency. Factor of Variance Inflation (VIF) to identify and deal with the independent variables' multicollinearity.

Results And Discussion:

Table 1 Descriptive Statistics:

Variables	Mean	Std.D	Skewness	Kurtosis
Fintech Adaptation	4.570940	0.328515	-0.498103	2.905577
Perceived Usefulness				

	4.646154	0.347399	-0.545501	2.060783
Perceived ease of use	4.650000	0.422610	-0.842509	2.549939
Trust	4.413462	0.373931	-0.633134	3.527386
Cost	1.000000	1.000000	0.000000	0.000000
Service quality	4.382051	0.321854	0.202344	2.226719
Technology Competency	4.576282	0.327776	-0.541559	2.329492

Table 4.3 indicates that, in terms of S.D, values should fall within the range of ± 2.0 in order for the data to be considered regularly distributed (Brace, 2016). Table 4.3 shows that all standard deviation values were determined to fall within the range of ± 2.0 .

Table 2 Correlation Matrix Test Result:

Variables	fa	Tc	Tru	sq	c	pu	Peu
Fa	1.0000	0.3127	0.3684	0.2252	0.1798	0.3457	0.4709
Tc	0.3127	1.0000	0.1877	0.6185	0.8231	0.7964	0.1190
Tru	0.3684	0.1877	1.0000	0.0654	0.0474	0.2254	0.3223
Sq	0.2252	0.6185	0.0654	1.0000	0.5836	0.5965	0.0255
C	0.1798	0.8231	0.0474	0.5836	1.0000	0.7361	0.0840
Pu	0.3457	0.7964	0.2254	0.5965	0.7361	1.0000	0.1086
Peu	0.4709	0.1190	0.3223	0.0255	0.0840	0.1086	1.0000

The correlation coefficients indicate the direction and strength of the relationships between the dependent variable (fa) and independent variables (tc, tru, sq, c, pu, peu). All inter-item correlation values exceed the acceptable threshold of .3 for convergent validity, and item-total correlation values exceed 0.5 for criterion validity. The correlation results are as follows: fa and tc (0.3127), fa and tru (0.3684), fa and sq (0.2252), fa and c (0.1798), fa and pu (0.3457), and fa and peu (0.4709). These results demonstrate that the constructs are significantly correlated, indicating a valid and reliable research instrument. Despite a few weaker correlations, the overall analysis confirms the adequacy and consistency of the data.

STRUCTURAL EQUATION MODELING:

Direct Effect:

Analysis was performed to test the direct relationships hypothesized in the study. The results for the direct relationships are presented in Table 4.11.

Table 3 Results for Direct Relationships:

Variable	Coefficient	Standard error	z-Value	p-Value	Confidence interval 95%

fa <- peu	.3117879	.0336301	9.27	0.000	[0.2459, 0.3777]
fa <- pu	.2862212	.0620172	4.62	0.000	[0.1647, 0.4078]
fa <- sq	.14438	.0539204	2.68	0.007	[0.0387, 0.2501]
fa <- tru	.1489566	.0391785	3.80	0.000	[0.0722, 0.2257]
fa <- c	-.1188247	.0449627	-2.64	0.008	[-0.2069, -0.0307]
fa <- tc	.1850176	.0844428	2.19	0.028	[.0195128 .3505223]
Intercept (_cons)	1.055948	.2619967	4.03	0.000	[0.5424, 1.5695]
Variance of Error Term (e.fa)	.0691363	.2619967			[0.0601, 0.0796]

The results show that peu, pu, sq, and tru have positive and statistically significant effects on the intention to adopt FinTech (fa), with p-values less than 0.05. This indicates that these factors are significant predictors of FinTech adoption. On the other hand, the cost (c) has a negative effect on FinTech adoption, also statistically significant with a p-value less than 0.05. The constant term is positive and significant, suggesting a baseline level of intention to adopt FinTech. The analysis suggests that Technology Competency (tc) has a statistically significant positive effect on the intention to adopt FinTech (fa). Specifically, for each unit increase in Technology Competency, the intention to adopt FinTech increases by approximately 0.185. This effect is statistically significant, as evidenced by the p-value of 0.028 and the confidence interval which does not include zero.

The variance of the error term (e.fa) is 0.0691, which indicates the level of unexplained variance in the intention to adopt FinTech.

The likelihood ratio (LR) test of the model versus a saturated model results in a chi-squared value of 0.00 with a p-value of 1.00, suggesting that the model fits the data well without additional parameters.

Table 4 Mediation Analysis Results:

Hypothesis	Mediator	Path	Coefficient	SE	95% CI
H7	(TC)	PEU -> TC -> FA	0.1128	0.0436	[0.0267, 0.1996]
H8	(TC)	PU -> TC -> FA	0.1572	0.0461	[0.0665, 0.2478]

Hypothesis	Mediator	Path	Coefficient	SE	95% CI
H9	(TC)	SQ -> TC -> FA	0.0861	0.0348	[0.0205, 0.1517]
H10	(TC)	TRU -> TC -> FA	0.0957	0.0402	[0.0166, 0.1748]
H11	(TC)	C -> TC -> FA	0.0381	0.0350	[-0.0314, 0.1075]

In mediation analysis, Technology Competency is a mediator between FinTech Adoption (FA) & various factors. For Perceived Ease of Use (PEU), TC significantly mediates its effect on FA, indicating that higher Technology Competency enhances the positive impact of PEU on FA. Similarly, TC powerfully mediates the relationship between Perceived Usefulness (PU) and FA, suggesting that greater Technology Competency amplifies the influence of PU on FA. TC also mediates the relationship between Service Quality (SQ) and FA, though a lesser extent, showing a positive but smaller effect. The mediation effect of TC between Trust (TRU) and FA is significant, highlighting that higher Technology Competency strengthens the impact of Trust on FA. However, the mediation of TC between Cost (C) and FA is weak and not statistically significant, indicating that TC does not notably influence the relationship between Cost and FA.

Conclusion:

Research conducted in the field of FinTech Adoption (FA) has shown that PEU has a significant positive effect on it of .3118 ($p < .001$). This confirms the first hypothesis that states the simplicity of use is the major factor affecting FinTech acceptance. Hypothesis 2 is supported by the considerable influence of Perceived Usefulness (PU) on FinTech Adoption which is specious by a coefficient of 0.2862 ($p < 0.001$). This indicates that the use of FinTech technology is among the primary factors that certainly drives individuals to adopt such technologies. Hypothesis 3 is also valid which the higher the rate of adoption the better the quality of service provided. Hypothesis 3 is proven by the fact that there is a high (0.1444, $p = (0.007)$) positive relationship between FinTech Adoption and Service Quality (SQ). The theory that Trust (TRU) has a considerable positive relation with FinTech Adoption gets more favorable weight from the fact that the value of its coefficient is 0.1490 ($p < 0.001$). Supporting hypothesis 5 is the fact that costs (C) with a coefficient of -0.1188 ($p = 0.008$) were proven to have a negative effect on the FinTech adoption. Along with FinTech Adoption, Technology Competence (TC) was positively related to the result of 0.1850 ($p = 0.028$), just like the case in FinTech Adoption (Hypothesis 6).

The direct associations between the perceived ease of use and adoption of fintech (hypothesis 7), the perceived usefulness and adoption of fintech (hypothesis 8), the service quality and adoption of fintech (hypothesis 9), and trust and adoption of fintech (hypothesis 10) were mediated by them. However, it had no significant moderating effect on the association between FinTech Adoption and Costs (Hypothesis 11). The regression analysis indicated that the primary factors contributing to the adoption of fintech are the perceived ease of use, the perceived usefulness, and the trust, with the costs and service quality playing smaller roles. The results of the moderation analysis indicated that, despite the fact that it plays a secondary function in the acceptance of fintech, technological competency functions as a moderator of multiple important factors on Fintech adoption especially costs as a determinant.

To sum up, this inquiry highlights the various relevant microfinance institutions' intentions to use FinTech. The work also teaches that technology competency is essential and mediates that relationship. The conclusions are the way the research will go soon, and the results will allow the practitioners and the scholars nice insights on bettering FinTech adoption.

References:

- [1] Ahmed T. Al Ajlouni. (2018). The impact of digital financial services on financial inclusion in developing countries. *Journal of Business Research*, 89, 407-411.
- [2] Hernández-Solís, M. (2016). Financial technology: An overview of pros and cons. *Journal of Systems Science and Systems Engineering*, 25(3), 345-365.
- [3] Kim, D., & Park, Y. (2015). Determinants of digital financial service adoption in developing countries: A case of mobile money. *Journal of Business Research*, 68(2), 182-191.
- [4] McAuley, D., et al. (2015). Digital financial services and the 'end of poverty': The challenges of FinTech in microfinance. *Journal of International Development*, 27(5), 705-728.
- [5] Munch, J. (2015). The impact of FinTech on financial services. *International Journal of Business and Management*, 10(1), 88-102.
- [6] Nicoletti, M. (2017). The evolution of financial services: From ATMs to FinTech. *Journal of Financial Perspectives*,
- [7] Alt, R., & Puschmann, T. (2012). The rise of customer-oriented banking - electronic markets are paving the way for change in the financial industry. *Electronic Markets*, 22(4), 203-215. <http://dx.doi.org/10.1007/s12525-012-0106-2>
- [8] Fong, V. (2016). The Emergence of Fintech: Where does Malaysia stand? *Fintech Singapore*. Retrieved from <http://fintechnews.sg/5370/malaysia/the-emergence-of-fintech-where-does-malaysia-stand>
- [9] Gomber, P., Koch, J.-A., & Siering, M. (2017). Digital Finance and FinTech: Current Research and Future Research Directions. *Journal of Business Economics*, 87(5), 537-580.
- [10] Kim, Y., Choi, J., Park, Y., & Yeon, J. (2016). The adoption of mobile payment services for "Fintech". *International Journal of Applied Engineering Research*, 11(2), 1058-1061.
- [11] Nakaso, H. (2016, November 18). FinTech - its impacts on finance, economics and central banking. [Transcript]. Retrieved from https://www.boj.or.jp/en/announcements/press/koen_2016/data/ko161118a.pdf
- [12] Ahmed T.Al Ajlouni, M. A.-h. (2018). Financial Technology in Banking Industry: Challenges and Opportunities. *International Conference on Economics and Administrative Sciences ICEAS2018* .
- [13] Bureshaid, N. K. (2021). An Investigation into Factors Enabling the Diffusion and Adoption Intention. *Education and Healthcare, Studies in* .
- [14] Carter, J., K.S., C., Monczka, R., & and Zelinski, T. (1988). Education and training for succesful EDI Implementation. *EDI Forum* , 89-95.
- [15] Cheng, T., Lam, D., & Yeung, A. (2007). Adoption of Internet Banking: An Empirical Study in Hong Kong. *Decis. Support Syst.* , 1558–1572.
- [16] Chong, A., Ooi, K., Lin, B., & Tan, B. (2010). Online Banking Adoption: An Empirical Analysis. *Int. J. Bank Mark* , 267–287.
- [17] DeLone, W. .. (2003). The DeLone and McLean model of information system success. *Journal of Management Inormation System* , 9-30.
- [18] Ferguson, D. a. (1988). The state of U.S. EDI in 1988. *EDI Forum*, I, 21-29.
- [19] Geebren, A. J. (2021). Examining The role of Customer Satisfaction within mobile-eco-system. *Evidence from Mobile Banking Service. Comuters in Human Behavior* , 114.
- [20] Gefen, D. (2022). Nurturing Clients' Trust to encourage engagement success during customization pf ERP system. *Omega*, 30(4) , 287-299.
- [21] Gu, B. K. (2007). Competeition among virtual communities and user valuation: the case of investing- related communities . *Informations systems Research* , 68-85.
- [22] Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014, 26). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *Eur. Bus. Rev.* , 106-121.
- [23] Harris, L. C. (2010). Online seivicescape, trust, and purchase intention . *Journal of Services Marketing* , 230-243.
- [24] Huh, H., Kim, T., & Law, R. (2009). A Comparison of Competing Theoretical Models for Understanding Acceptance Behavior of Information Systems in Upscale Hotels. *Int. J. Hosp. Manag* , 121–134.
- [25] Kim, Y., & Park, Y.-J. (2015). An Empirical Study on the Adoption of “Fintech”. *Advanced Science and Technology Letters* .
- [26] Lockett, A., & Littler, D. (1997). The Adoption of Direct Banking Services. 791–811.

- [27] Marakarkandy, B., Yajnik, N., & Dasgupta, C. (2017). Enabling internet banking adoption: An empirical examination with an augmented technology acceptance model (TAM). *J. Enterp. Inf. Manag.* , 30, 263–294. [Google Scholar] [CrossRef] .
- [28] McAuley, B. (2015). The Development of K elopment of Key Performance Indicat formance Indicators to Monit o Monitor Early or Early.
- [29] Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS'* ,.
- [30] Patel, K., & Patel, H. (2017). Adoption of internet banking services in Gujarat: An extension of TAM with perceived security and social influence. *Int. J. Bank Mark.* , 36, 147–169. [Google Scholar] [CrossRef] .
- [31] Rogers, E. (1983). *Diffusion of Innovation*. New yark the free press .
- [32] Sánchez-Torres, J., Canada, F., Sandoval, A., & Alzate, J. (2018). E-Banking in Colombia: Factors Favouing its Acceptance, Online Trust and Government Support. *Int. J. Bank Mark* , 170–183.
- [33] Sun, J. Y. (2015). Rethinking e-commerce service quality. Does website quality still Sufficent? *Journal of Computer information system* , 62-72.