

Fintech Adoption Drivers for Innovation among SMEs in Pakistan

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Abstract

The adoption of technology-driven financial services has brought about significant changes in the way customers interact with SMEs, particularly in developing countries such as Pakistan. Therefore, this study is undertaken to examine the drivers of Fintech adoption for innovation among SMEs in Pakistan. It further scrutinizes the mediating effects of perceived ease of use (PEU) and Fintech adoption mediated by perceived usefulness (PU). It also examines the financial literacy significantly mediated with FinTech intention adoption. The target population was Pakistani people who are 18 years of age or older and having a bank account. Survey questionnaire method was employed, and data were collected from 383 bank account holders respectively by using purposive sampling techniques. PLS-SEM was used for statistical analysis. Findings revealed that the perceived ease of use, financial literacy, and trust in driving fintech adoption, particularly among Small and Medium-sized Enterprises (SMEs). The study revealed that user perceptions of ease of use and trust play crucial roles in influencing adoption, while financial literacy and user innovativeness also contribute to the adoption decision, with perceived usefulness acting as a mediator.

Keywords: Effort Expectancy, Adopt FinTech, Perceived Benefit, Perceived Risk, Perceived Trust and User Innovation.

Introduction

The global financial industry has undergone a significant transformation in recent years with the emergence of Fintech, an innovative technology that brings together finance and technology. The rise of Fintech adoption is a global trend that has been witnessed in many countries, including Pakistan (Khan et al., 2023). Financial inclusion has become a global agenda in recent years, with increasing attention being paid to the link between financial inclusion and economic development (Zhang et al., 2023). The World Bank, the International Monetary Fund (IMF), and other organizations have been working to expand financial inclusion through digitalization and other means. The benefits of financial inclusion and inclusive growth are well-established, including the potential to reduce poverty, inequality, and promote economic growth (Khera, 2023). In fact, financial inclusion has a significantly positive impact on the world's economic growth. Digital financial inclusion has been recognized as a gateway to sustainable development, with the potential to mitigate the economic and social impacts of the COVID-19 pandemic. Overall, global awareness to improve financial inclusion has shown a positive impact on economic growth and development (Tay, Tai, & Tan, 2022).

Individuals and businesses have access to useful and affordable financial products and services that meet their needs transactions, payments, savings, credit, and insurance delivered in a

responsible and sustainable way. Financial inclusion has been identified as an enabler for 7 of the 17 Sustainable Development Goals (Moussaoui & Tagrerout, 2023). Since 2010, more than 55 countries have made commitments to financial inclusion, and more than 60 have either launched or are developing a national strategy. Countries that have achieved the most progress toward financial inclusion have policies delivered at scale, such as universal digital ID, and have taken a strategic approach by developing a national financial inclusion strategy (NFIS) which brings together diverse stakeholders including financial regulators, telecommunications, competition, and education ministries (Pandey, Kiran, & Sharma, 2022). Financial literacy, infrastructure, financial tools that enhance security protection, and local government support are crucial for developing countries to ensure their nation to be financially included (Zaman, 2023). Mobile financial services remain the most effective contributor to global financial inclusion initiatives and, particularly in developing countries, remain a key driver of economic growth by creating employment, driving business productivity and entrepreneurship, and helping to formalize the economy. Despite this success, many countries still face challenges in reaching large segments of their unbanked populations (Amit, Kafy, & Barua, 2022).

SMEs in Pakistan have faced challenges in adopting Fintech during the COVID-19 pandemic. The pandemic has hit SMEs hard in Pakistan, and they have struggled with issues such as lack of capital, lack of satisfactory business plans, and poverty (Mishrif & Khan, 2023). However, technology adoption has been recognized as a survival strategy for SMEs during the pandemic, and studies have assessed the technological transformations and the impact of technological factors on SMEs (Umar & Danlami, 2022). Fintech companies have also played a role in helping workers, entrepreneurs, and entire economies during the pandemic. Therefore, while SMEs in Pakistan have faced challenges in adopting Fintech during the pandemic, technology adoption has been recognized as a survival strategy, and Fintech companies have played a role in mitigating the economic and social impacts of the pandemic (Umar & Danlami, 2022).

SMEs in Pakistan face challenges in adopting Fintech due to factors such as perceived ease of use, perceived usefulness, financial literacy, user innovativeness, and trust (Malokani, 2023). The purpose of this article is to examine the drivers of Fintech adoption for innovation among SMEs in Pakistan. This article focusses on the determinants of Fintech adoption in Pakistan, the impact of financial literacy on the adoption of banking.

Literature Review and Proposed Hypotheses

The existing literature on topic is reviewed, and the research has contributed to the field by providing insights into the potential of Fintech to improve the financial situation of SMEs in Pakistan. The review has also examined the existing literature on the determinants of Fintech adoption in Pakistan. The impact of financial literacy on the adoption of banking, and the role of Fintech in combating the aftershocks of COVID-19. Based on the literature review, the following hypotheses are proposed:

Perceived Ease of Use (PEU)

Perceived ease of use refers to the extent to which individuals believe that using a technology will be free of effort or complexity (Laksamana, Suharyanto, & Cahaya, 2023). It encompasses factors such as the user interface, usability, and the learning curve associated with the technology. In the case of FinTech adoption, perceived ease of use might include factors like user-friendly interfaces, intuitive navigation, and simple processes that require minimal effort for individuals to engage with FinTech platforms (Camilleri & Falzon, 2021). Perceived ease of use is another important construct within the Technology Acceptance Model (TAM) that refers to an individual's perception of how easy or difficult it is to use a particular technology. It reflects the subjective assessment of the effort required to understand, learn, and interact with the technology (Natasia, Wiranti, & Parastika, 2022). Studies have shown that the ease of use of Fintech services is a critical factor in determining the adoption of Fintech by SMEs (Majid & Mawaddah, 2022). The easier it is for SMEs to use Fintech services, the more likely they are to adopt them. Therefore, it is essential to design Fintech services that are user-

friendly and easy to use for SMEs in Pakistan. The proposed hypothesis that perceived ease of use positively influences Fintech adoption among SMEs in Pakistan is supported by the existing literature (Majid & Mawaddah, 2022).

Hypothesis 1a (H1a). Perceived ease of use positively influences Fintech adoption among SMEs in Pakistan.

Hypothesis 1b (H1b). Perceived ease of use (PEU) positively influences between and Fintech adoption mediated by perceived usefulness (PU).

Perceived Usefulness (PU)

Perceived usefulness refers to people's belief that using technology has make it easier to accomplish tasks (Aburbeian, Owda, & Owda, 2022). It also hypothesizes that the impact of external variables on conduct goal, such as plan qualities, will be mitigated by apparent helpfulness and observed usability (Rehman et al., 2023). These studies tried to focus on the intentions and behavior of the consumers in the adoption of technology (Zamora-Pérez, 2021). Perceived usefulness is another significant factor that positively influences Fintech adoption among SMEs in Pakistan. Studies have shown that the usefulness of Fintech services is a critical factor in determining the adoption of Fintech by SMEs (Hasyim, Hanif, & Anggraeni, 2023) (Hasyim, Hanif, & Anggraeni, 2023). The more useful SMEs perceive Fintech services to be, the more likely they are to adopt them. Therefore, it is essential to design Fintech services that are useful and meet the needs of SMEs in Pakistan. The proposed hypothesis that perceived usefulness positively influences Fintech adoption among SMEs in Pakistan is supported by the existing literature.

Hypothesis 2 (H2). Perceived usefulness positively influences Fintech adoption among SMEs in Pakistan.

Financial Literacy (FL)

The ability to comprehend and use information about personal finances to make decisions is referred to as financial literacy (Huston, 2010). Namahoot and Rattanawiboonsom (2022) study also found that financial literacy played a mediating role in the relationship between perceived ease of use and adoption intention. Financial literacy is a significant factor that positively influences Fintech adoption among SMEs in Pakistan (Rasheed & Siddiqui, 2022). Studies have shown that financial literacy is a critical factor in determining the adoption of Fintech by SMEs (Mahmud, Joarder, & Muheymin-Us-Sakib, 2022). The more financially literate SMEs are, the more likely they are to adopt Fintech services. Therefore, it is essential to improve the financial literacy of SMEs in Pakistan to increase their adoption of Fintech services. The proposed hypothesis that financial literacy positively influences Fintech adoption among SMEs in Pakistan is supported by the existing literature.

Hypothesis 3a (H3a). Financial literacy positively influences Fintech adoption among SMEs in Pakistan.

Hypothesis 3b (H3b). Financial literacy (FL) positively influences Fintech adoption mediated by user innovativeness (UI).

User Innovativeness (UI)

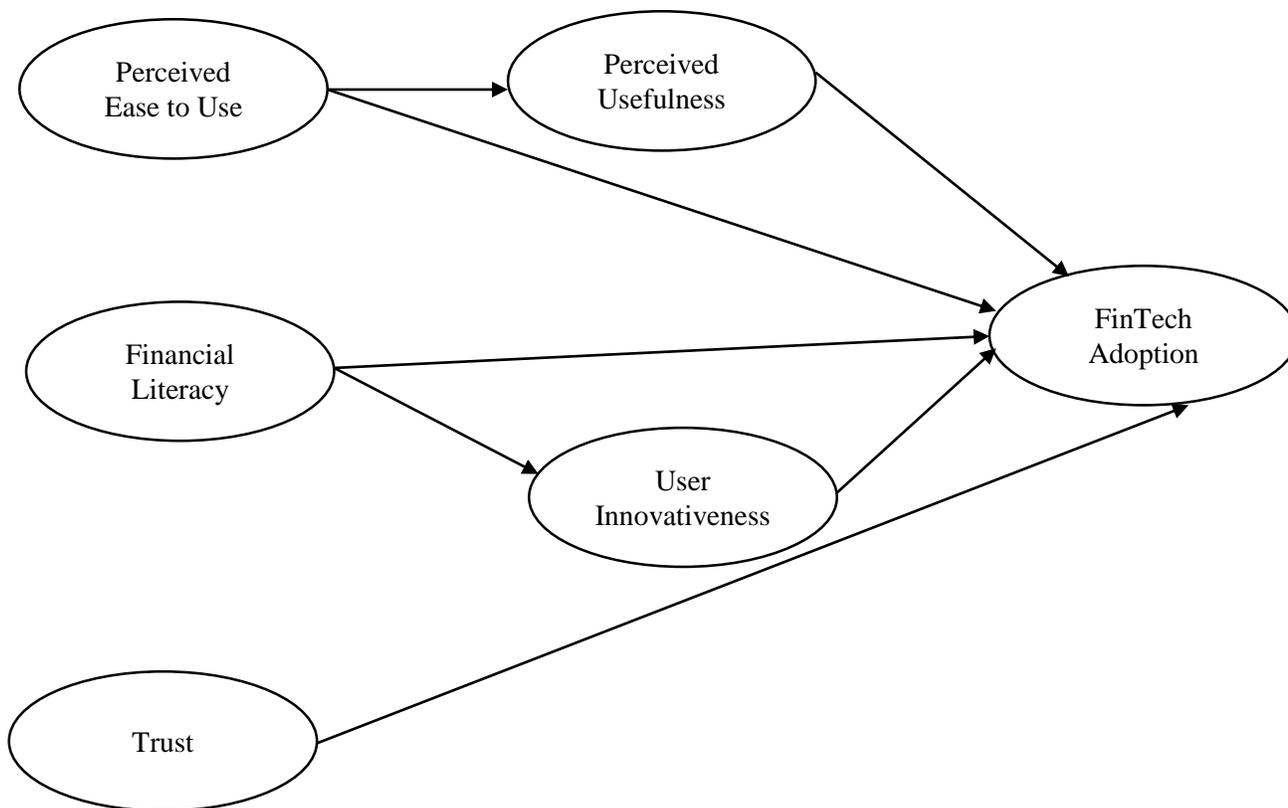
User Innovativeness (UI) is a concept that relates to the degree to which individuals or users exhibit innovative behavior or tendencies in a particular context (Mahmud, Joarder, & Muheymin-Us-Sakib, 2022). User innovativeness is a factor that positively influences Fintech adoption among SMEs in Pakistan (Malokani, 2023). Studies have shown that user innovativeness is a critical factor in determining the adoption of Fintech by SMEs. The more innovative SMEs are, the more likely they are to adopt Fintech services (Shahzad et al., 2022) (Alfarizi & Ngatindriatun, 2023). Therefore, it is essential to encourage and support user innovativeness among SMEs in Pakistan to increase their adoption of Fintech services. The proposed hypothesis that user innovativeness positively influences Fintech adoption among SMEs in Pakistan is supported by the existing literature.

Hypothesis 4 (H4). User innovativeness positively influences Fintech adoption among SMEs in Pakistan.

Trust (TR)

Trust is referred in fintech platforms is paramount (Aldboush & Ferdous, 2023). Trust is a significant factor that positively influences Fintech adoption among SMEs in Pakistan (Firmansyah et al., 2022). Studies have shown that trust is a critical factor in determining the adoption of Fintech by SMEs. The more trust SMEs have in Fintech services, the more likely they are to adopt them (Firmansyah et al., 2022) (Hassan et al., 2022). Therefore, it is essential to build trust in Fintech services among SMEs in Pakistan to increase their adoption of Fintech services. The proposed hypothesis that trust positively influences Fintech adoption among SMEs in Pakistan is supported by the existing literature.

Hypothesis 5 (H5). Trust positively influences Fintech adoption among SMEs in Pakistan.



Methodology

The purpose of the current study is to analyze the drivers influencing the adoption intention towards mobile fintech services in the emerging Pakistani market. The drivers influencing the adoption intention regarding the fintech adoption is being analyzed by considering the different parameters like perceived trust, perceived benefit, perceived expectancy and perceived risk. This study was quantitative and cross-sectional. Purposive sampling techniques was used in this research, questionnaires were distributed in person and online (Goggle Form) in order to collect as many replies.

Data Collection

The data collection, research questionnaire instrument is being developed in line with the previous studies to get the reliable responses. The data collection was done with questionnaire. The questionnaire distribution done by personal distribution as well as the distribution using online (google form) because many of the consumers do not have time to response the questionnaire physically. The questionnaire draws inspiration from previous studies in the field, adapting their

proven constructs to the specific context of FinTech adoption within Pakistan's banking sector. The questionnaire has been tailored to encapsulate key dimensions such as consumer perceptions of risk, benefits, trust, and various expectations associated with FinTech usage. The distribution of the questionnaire has been strategically devised to maximize participation and gather insights from a diverse spectrum of respondents. Two primary distribution methods were employed: personal distribution and online distribution via Google Forms. The questionnaire instrument is divided into different sections. One of the sections includes the cover letter which describe briefly the research and its purpose while the other section includes the respondent's demographical information and the final section includes the questions to be responded for the purpose of the analysis. Likert scale is being used in the questionnaire where value 1 is counted for strongly agree through value 5 depicting strongly disagree for any of the questions. The questions in the instruments are closed ended and one last question is open ended to describe the views of the respondents towards the Fintech adoption. Before conducting the actual survey, a pilot testing phase was carried out to ensure the validity and reliability of the questionnaire. The pilot test involved a small sample of respondents (around 30) who were similar to the target population. The purpose of the pilot test was to identify any potential issues with the questionnaire, such as unclear or ambiguous questions, and to assess the overall feasibility of the survey.

Data Analysis

Partial Least Squares Structural Equation Modeling, a second-generation method from the Statistical Package for Social Science (SPSS) version 25, was used to evaluate the data for this study (PLS-SEM). The first step in the statistical analysis is to assess the sample characteristics using descriptive statistics. This involves calculating means, standard deviations, and frequencies of the variables to provide a clear overview of the data. Next, the relationships between the constructs are examined using PLS-SEM. The research model, consisting of the constructs and their hypothesized relationships, is tested for validity and reliability. Validity is assessed through measures such as convergent validity and discriminant validity, which ensure that the constructs and items are measuring what they are intended to measure. Reliability is evaluated using measures such as internal consistency reliability (e.g., Cronbach's alpha) to assess the consistency of responses. After confirming the validity and reliability of the measurement model, the structural model is analyzed to test the research hypotheses.

Results and Findings

Table 1. Demographic Information of Respondent

Variable	N	%
Gender		
Male	285	74.4%
Female	98	25.6%
Age		
Up to 25	133	34.7%
26-45	218	56.9%
46-55	20	5.2%
56+	12	3.1%
Education		
Bachelor's	93	24.3%
Master's	112	29.2%
MPhil	134	35.0%
Other	43	11.2%
Bachelor's	1	0.3%
Using Bank Account Since		
Up to 1 year	178	46.5%

2-5 year	102	26.6%
5-10 year	70	18.3%
10 years +	33	8.6%
Using FinTech Since		
Up to 1 year	167	43.6%
2-5 year	133	34.7%
5-10 year	59	15.4%
10 years +	24	6.3%

The demographic information of the respondents reveals a predominantly male representation at 74.4%, with females comprising the remaining 25.6%. In terms of age, the majority falls within the 26-45 age range (56.9%), followed by those up to 25 years old (34.7%). Education-wise, a significant portion holds an MPhil degree (35.0%), while others have Master's (29.2%) and Bachelor's (24.3%) degrees. Regarding banking and FinTech usage, a notable proportion has been using their bank account and FinTech services for up to 1 year (46.5% and 43.6%, respectively), indicating a relatively recent adoption, while smaller percentages have longer usage durations, providing a comprehensive snapshot of the respondent demographics in the study.

Measurement Model

Table 2. Construct reliability and validity values.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
EA	0.65	0.752	0.807	0.587
FL	0.892	0.893	0.933	0.823
PEU	0.752	0.846	0.862	0.687
PT	0.646	0.664	0.811	0.592
PU	0.334	0.657	0.581	0.409
UI	0.546	0.781	0.757	0.56

The table presents the construct reliability and validity measures for various constructs in the study. Overall, the constructs demonstrate satisfactory internal consistency, as evidenced by Cronbach's Alpha values ranging from 0.334 to 0.892. The rho A values, which account for non-normality in the data, further support the reliability of the constructs, with values ranging from 0.657 to 0.893. Composite Reliability scores, assessing the consistency of latent constructs, are robust, ranging from 0.581 to 0.933. The constructs also exhibit acceptable Average Variance Extracted (AVE) values, ranging from 0.409 to 0.823, indicating good convergent validity. Notably, "Financial Literacy" stands out with high values across all measures, indicating strong reliability and validity. Conversely, "Perceived Usefulness" shows comparatively lower scores, suggesting potential issues that may require further investigation or refinement in the measurement model. These findings collectively enhance confidence in the reliability and validity of the measurement instruments, laying a solid foundation for the study's analyses and conclusions.

Table 3. Discriminant Validity and Fornell-Lacker Criteria Average Variance Extracted (AVE).

	EE	IAF	PB	PR	PT	UI
EE	0.814					
IAF	0.509	0.907				
PB	0.605	0.604	0.827			
PR	0.324	0.2	0.243	0.763		
PT	0.522	0.423	0.513	0.24	0.645	
UI	0.613	0.507	0.588	0.111	0.364	0.747

Note: EE = Effort Expectancy, IAF = Adopt FinTech, PB = Perceived Benefit, Perceived Risk = PR, PT = Perceived Trust and UI = User Innovation.

Table 3 presents the discriminant validity and Fornell-Larcker criteria based on the Average Variance

Extracted (AVE) for the studied constructs. The diagonal values, representing the square root of the AVE for each construct, are higher than the off-diagonal values, indicating satisfactory discriminant validity. Each construct is more strongly correlated with itself than with other constructs, meeting the Fornell-Larcker criterion. Specifically, the AVE values for "Effort Expectancy" (EE), "Intention to Adopt FinTech" (IAF), "Perceived Benefit" (PB), "Perceived Risk" (PR), "Perceived Trust" (PT), and "User Innovation" (UI) are 0.814, 0.907, 0.827, 0.763, 0.645, and 0.747, respectively. These results suggest that the constructs are distinct from each other and contribute to the overall validity of the measurement model. However, it's important to note that if any off-diagonal values were to approach or exceed the diagonal values, it might indicate potential issues with discriminant validity, requiring further scrutiny and refinement in the measurement model.

Table 4. Discriminant validity and heterotrait-monotrait (HTMT) value

	EE	IAF	PB	PR	PT	UI
EE						
IAF	0.62					
PB	0.814	0.748				
PR	0.468	0.252	0.345			
PT	0.771	0.682	0.851	0.523		
UI	0.857	0.647	0.815	0.18	0.787	

Note: EE = Effort Expectancy, IAF = Adopt FinTech, PB = Perceived Benefit, Perceived Risk = PR, PT = Perceived Trust and UI = User Innovation.

The structural model Assessment

The structural model assessment in partial least squares structural equation modeling (PLS-SEM) involves evaluating the significance and relevance of path coefficients, as well as assessing multicollinearity among the constructs. The Variance Inflation Factor (VIF) is used to evaluate multicollinearity, with a common threshold being that VIF values should be less than 5 to indicate no multicollinearity (Dianty & Faturohman, 2023). VIF measures the amount of multicollinearity in a set of multiple regression variables, and a VIF greater than 10 is considered a sign of significant multicollinearity that needs to be addressed (Piyanda & Aluthge, 2022). The path coefficients in a structural equation model are interpreted as the strength and sign of the effect from a causal variable to an endogenous or outcome variable. Therefore, the VIF values being less than 5, as indicated in Table 5, suggest that there is no significant multicollinearity among the constructs in the structural model used in the study.

Table 5. Values of variance information (VIF).

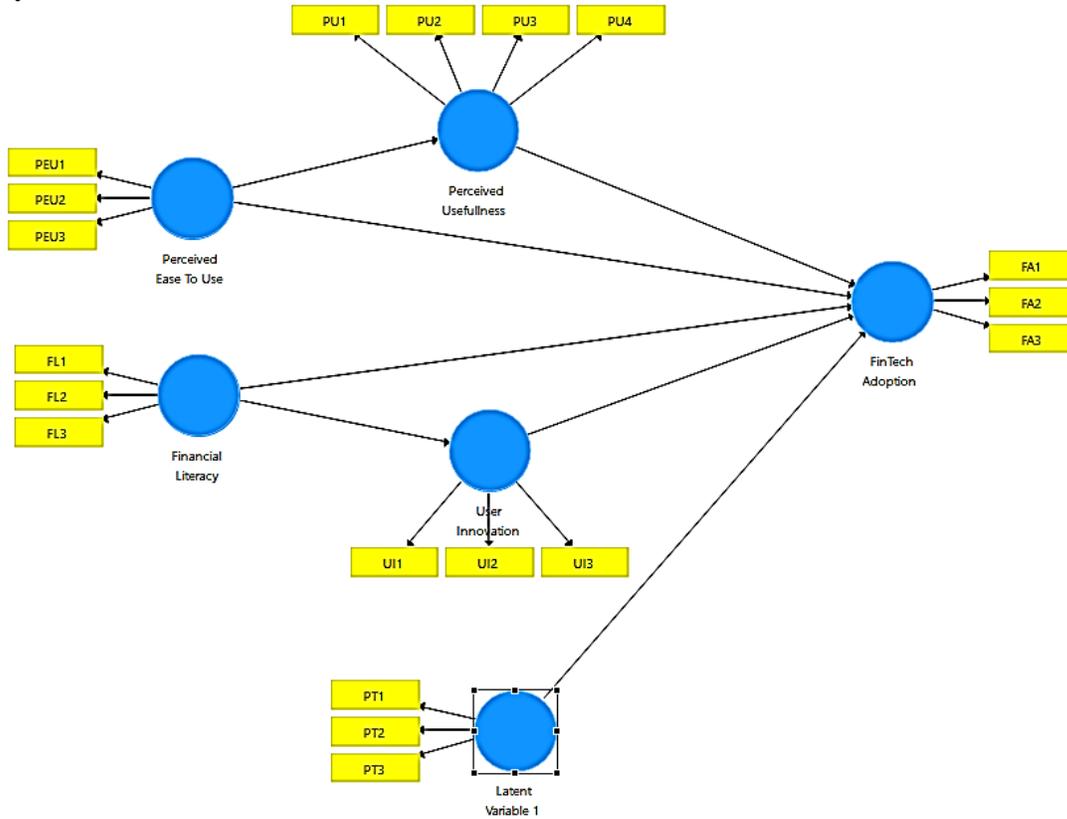
	VIF
EE	1.653
IAF	1.982
PB	1.083
PR	1.435
PT	1.612

Note: EE = Effort Expectancy, IAF = Adopt FinTech, PB = Perceived Benefit, Perceived Risk = PR and PT = Perceived Trust.

Structural Model Assessment

The structural model assessment in partial least squares structural equation modeling (PLS-SEM) involves evaluating the significance and relevance of path coefficients, as well as assessing multicollinearity among the constructs. The Variance Inflation Factor (VIF) is used to evaluate multicollinearity, with a common threshold being that VIF values should be less than 5 to indicate no multicollinearity. VIF measures the amount of multicollinearity in a set of multiple regression

variables, and a VIF greater than 10 is considered a sign of significant multicollinearity that needs to be addressed. The path coefficients in a structural equation model are interpreted as the strength and sign of the effect from a causal variable to an endogenous or outcome variable. Therefore, the VIF values being less than 5, as indicated in Table 5, suggest that there is no significant multicollinearity among the constructs in the structural model used in the study. The proliferation of mobile fintech services in Pakistan is evident from the significant growth of mobile financial services (MFS) in the country.



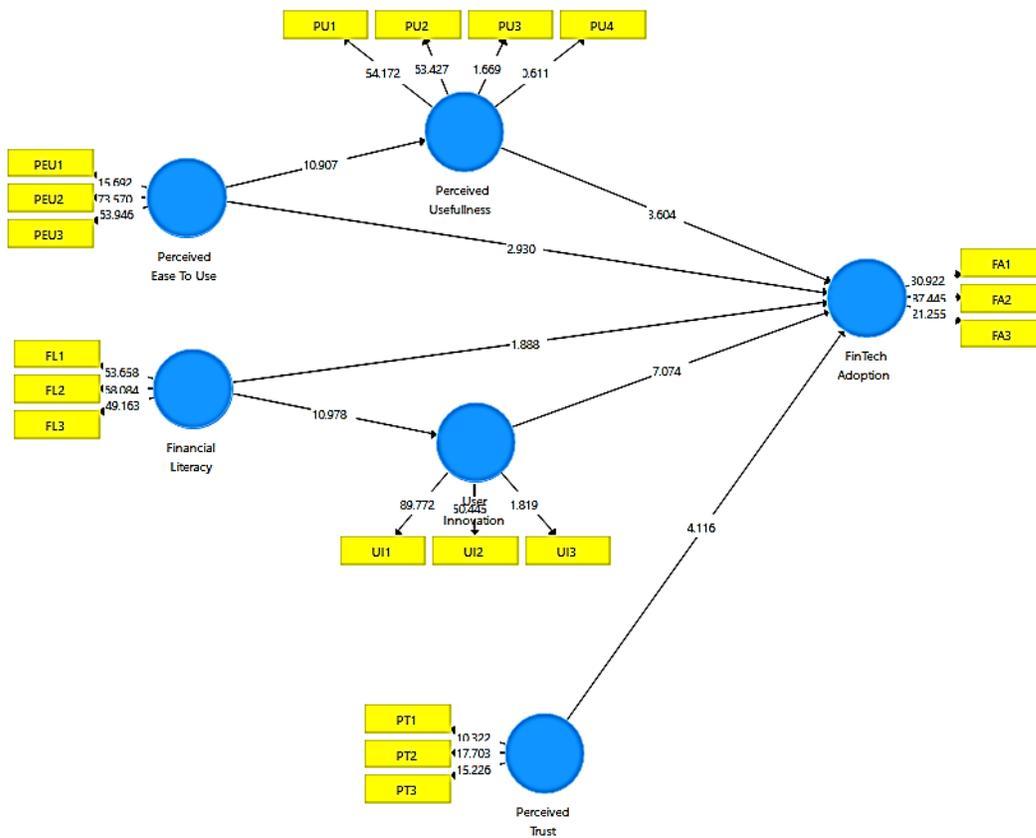


Figure 2. Path coefficient (T-values) results from SmartPLS.

Table 6. Path coefficient values.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
FL -> FA	0.338	0.335	0.061	5.555	0
PEU -> FA	0.217	0.218	0.069	3.168	0.002
PT -> FA	0.226	0.229	0.05	4.54	0
PEU -> PUF-> FA	0.226	0.229	0.05	4.54	0
FL -> UI->FA	0.162	0.163	0.047	3.404	0.001

Note: EE = Effort Expectancy, IAF = Adopt FinTech, PB = Perceived Benefit, Perceived Risk = PR, PT = Perceived Trust and UI = User Innovation.

Table 6 displays the path coefficient values for the relationships between various constructs in the study. In the original sample, "Financial Literacy" (FL) exhibits a significant positive influence on "FinTech Adoption" (FA) with a path coefficient of 0.338, indicating that higher levels of financial literacy are associated with an increased likelihood of adopting FinTech. Similarly, "Perceived Ease of Use" (PEU) and "Perceived Trust" (PT) also significantly impact FinTech adoption, with path coefficients of 0.217 and 0.226, respectively. The path coefficient of 0.226 between "Perceived Ease of Use" and "Perceived Usefulness" (PUF) indicates a significant positive influence. Moreover, the indirect relationship from "Financial Literacy" to "User Innovation" (UI) to "FinTech Adoption" is also significant, emphasizing the role of user innovation as a mediator in the relationship between financial literacy and FinTech adoption. The T Statistics values, all considerably larger than 2, and the corresponding P values (all being less than 0.05) further support the statistical significance of

these relationships, highlighting the nuanced interplay between financial literacy, user perceptions, and the adoption of financial technology in the study.

Table 8. Summary of hypotheses results.

Hypothesis		Results
H1a:	Perceived ease of use (PEU) has a direct positive effect on SMEs adopting Fintech services.	Supported
H1b:	There is an indirect positive impact between perceived ease of use (PEU) and Fintech adoption mediated by perceived usefulness (PU).	Supported
H2a:	Financial literacy (FL) has a direct positive effect on Fintech adoption.	Supported
H2b:	Financial literacy (FL) positively influences Fintech adoption mediated by user innovativeness (UI).	Supported
H3:	Trust (T) has a direct positive effect on Fintech adoption.	Supported

Discussion

Finding Fintech Adoption for SMEs

The study's findings provide valuable insights into the factors influencing Fintech adoption, particularly for Small and Medium-sized Enterprises (SMEs) in the emerging Pakistani market. The analysis of the structural model and hypothesis testing has revealed several key findings:

Perceived ease of use and Fintech Adoption

The results indicate that SMEs are more likely to adopt Fintech services when they perceive them as easy to use. This underscores the importance of user-friendly interfaces and seamless interactions in driving Fintech adoption among SMEs. Fintech providers should focus on enhancing the simplicity and ease of their platforms to encourage greater acceptance among SMEs. Rehman et al. (2023) investigated the adoption of Financial Technology (FinTech) in Small and Medium Enterprises (SMEs) easy to use easy to use or understand. The research insight the FinTech adoption and access to credit for these businesses in Pakistan. This intersection sheds light on how technological advancements in financial services influence the borrowing capabilities of SMEs within the manufacturing sector. This research contributes to the understanding of how FinTech is shaping the financial landscape for SMEs, particularly in terms of credit accessibility, which is crucial for their growth and sustainability.

The study reveals that the positive influence of perceived ease of use on Fintech adoption is partially mediated by perceived usefulness. This suggests that SMEs not only value the simplicity of Fintech solutions but also assess their overall utility. Fintech providers should emphasize both ease of use and the tangible benefits offered by their services to enhance adoption among SMEs. Sakthi and Balamurugan (2023) explored that the impact of perceived usefulness and perceived ease of use on customer perception towards Financial Technology (FinTech) companies in Tamil Nadu. The study, conducted among FinTech customers in Chennai, reveals a significant influence of perceived usefulness and perceived ease of use on customer perception. The findings highlight the importance of these factors in shaping how customers perceive FinTech services, emphasizing the need for firms to focus on enhancing the usability and utility of their offerings to improve customer perception. The study's insights provide valuable guidance for FinTech companies looking to develop strategies that positively influence customer perception through improved usability and perceived usefulness of their services.

Financial Literacy and Fintech Adoption

The findings highlight the role of financial literacy in driving Fintech adoption among SMEs. Businesses with higher levels of financial literacy are more inclined to adopt Fintech solutions. This emphasizes the importance of educational initiatives to enhance financial literacy among SMEs,

potentially increasing their openness to adopting innovative financial technologies. Siddik, Rahman and Yong (2023) investigated that the whether FinTech adoption and financial literacy enhance corporate sustainability performance, considering the mediating role of access to finance. Their work highlights the significance of both FinTech adoption and financial literacy in improving corporate sustainability, suggesting that access to finance plays a vital intermediary role in this process. The authors propose that FinTech integration promotes sustainability performance when implemented across the entire supply chain, leading to increased sustainability orientation, corporate social responsibility, and green practices. The research utilizes structural equation modeling (SEM) to analyze data and confirms the positive impacts of FinTech adoption and financial literacy on corporate sustainability performance, with access to finance serving as a critical mediator

User Innovativeness, Financial Literacy and Fintech Adoption

The study suggests that user innovativeness plays a mediating role in the relationship between financial literacy and Fintech adoption. SMEs with higher financial literacy levels are more likely to exhibit innovativeness, which, in turn, positively influences their adoption of Fintech solutions. Fintech providers should consider targeting education and awareness initiatives to enhance both financial literacy and user innovativeness among SMEs. Irimia-Diéguez, Velicia-Martín and Aguayo-Camacho (2023) predicted that the adoption of FinTech innovation by examining the mediator role of social norms and attitudes. The findings underscore the importance of understanding these behavioral factors in shaping the adoption of FinTech innovations, offering valuable insights for banks, FinTech companies, and organizational performance management in developing effective marketing strategies.

Trust influencing Fintech adoption among SMEs

Trust emerges as a critical factor influencing Fintech adoption among SMEs. Businesses that perceive higher levels of trust in Fintech services are more willing to adopt them. Fintech providers should prioritize building and maintaining trust through transparent communication, robust security measures, and reliable service delivery to foster adoption among SMEs. Jafri et al. (2024) delve that the crucial role of trust and security in the adoption of Financial Technology (FinTech) within the banking sector. The study highlights the mediating and moderating effects of trust and perceived risk on FinTech adoption determinants. The study not only fills research gaps but also offers recommendations for future studies using the TCCM framework, providing valuable insights for FinTech companies and regulatory authorities to enhance the adoption of FinTech services within the banking sector.

Conclusions, Implications, Limitations, and Recommendations

Conclusions

The study aimed to analyze the drivers influencing the adoption intention towards mobile fintech services in the emerging Pakistani market, with a specific focus on factors such as effort expectancy, adopt fintech, perceived benefit, perceived risk, perceived trust and user innovation. The quantitative, cross-sectional research employed purposive sampling. The research data was collected from 383 bank account holders respectively distributing questionnaires both in person and online, and utilized Partial Least Squares Structural Equation Modeling (PLS-SEM) for data analysis. The findings support the significance of perceived ease of use, financial literacy, and trust in driving fintech adoption, particularly among Small and Medium-sized Enterprises (SMEs). The study revealed that user perceptions of ease of use and trust play crucial roles in influencing adoption, while financial literacy and user innovativeness also contribute to the adoption decision, with perceived usefulness acting as a mediator.

Implications

The implications of this study are substantial for various stakeholders, including fintech providers, policymakers, and researchers. The study underscores the importance of prioritizing user-friendly interfaces, building trust through transparent communication and robust security measures, and

considering the financial literacy levels of their target audience. Fintech providers can tailor their strategies to address these factors, potentially enhancing adoption rates, especially among SMEs. Policymakers can leverage the findings to design initiatives aimed at improving financial literacy among businesses. Additionally, creating a regulatory environment that fosters trust in fintech services can further encourage adoption. Policymakers should work collaboratively with industry stakeholders to ensure a conducive ecosystem for fintech growth. The study contributes to the academic understanding of fintech adoption by exploring the nuanced relationships between various factors. Future research can delve deeper into specific industry sectors, regional variations, and evolving technological landscapes to provide a more comprehensive understanding of fintech adoption dynamics.

Limitations and Recommendations

This study explores Fintech adoption drivers of SME users in Pakistan, and further research could be extended to other countries that may produce different results. The use of purposive sampling may introduce bias, as respondents self-select to participate. This could affect the generalizability of the findings to the broader population. The study adopts a cross-sectional design, capturing a snapshot of data at a single point in time. Longitudinal studies could provide a more dynamic understanding of fintech adoption over time. The reliance on self-reported data through questionnaires may introduce social desirability bias, as respondents may provide answers, they believe are socially acceptable rather than reflecting their true opinions or behaviors. Future research could benefit from employing diverse sampling strategies, such as random sampling, to enhance the generalizability of the findings. Researchers could consider longitudinal studies to track the evolution of fintech adoption patterns over time, providing a more comprehensive understanding of its dynamics. Replicating the study in different cultural and economic contexts could validate the generalizability of the findings and uncover region-specific nuances in fintech adoption.

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