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## Barriers in FinTech Success: Evidence from Pakistani Financial Marketplace

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### ABSTRACT

This study examined the relationships between FinTech barriers, acceptance, and success, and explores the mediating role of acceptance in the relationship between barriers and success. A survey was conducted with 251 FinTech users, and the data were analyzed using Smart PLS. The results indicate that FinTech barriers have a negative effect on both acceptance and success, while acceptance has a positive effect on success. Furthermore, the analysis supports the hypothesis that acceptance mediates the relationship between barriers and success. These findings have important implications for both researchers and practitioners in the FinTech industry. For researchers, the results highlight the importance of considering the role of barriers to adoption and the mechanisms through which acceptance affects success. For practitioners, the findings suggest that reducing barriers to adoption and promoting acceptance may be important strategies for achieving greater success in the FinTech industry. Overall, the results provide valuable insights into the factors that drive success in the rapidly evolving FinTech industry, and can help guide future research and practice in this important area.

### KEYWORDS

FinTech, financial market, FinTech barriers, FinTech acceptance, FinTech success.

### ACADEMIC PAPER



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## 1. INTRODUCTION

Financial technology (FinTech) has emerged as one of the most dynamic and rapidly growing industries in the world (Al Suwaidi, Sidek, & Al-Shami, 2022; Gladden, 2020). It is transforming traditional financial services by integrating technological innovations into financial systems to improve efficiency, accessibility, and customer experience. The FinTech industry has been growing exponentially in Pakistan as well, with numerous startups and established financial institutions entering the market. However, despite its promising potential, the industry has been facing several challenges that hinder its success. This research aims to identify and analyze the barriers that impede FinTech success in the Pakistani financial marketplace. The development of the FinTech industry in Pakistan is relatively new and its potential is yet to be fully realized. The State Bank of Pakistan (SBP) (Zafar, Shaukat, & Mat, 2010) has been actively promoting and regulating the industry through the introduction of regulatory sandboxes, policy frameworks, and initiatives to encourage innovation and digital financial services. However, despite these efforts, the industry has not achieved its full potential. Several studies have identified various challenges that hinder the growth and success of FinTech in Pakistan. These include regulatory barriers, lack of trust and awareness among customers, limited access to funding, and limited infrastructure. However, there is a need to further explore these barriers to understand their impact on the FinTech industry in Pakistan.

The FinTech industry in Pakistan has the potential to bring about significant changes in the financial sector by improving financial inclusion, reducing transaction costs, and enhancing the overall efficiency of financial services. However, the industry faces several challenges (Al-Dmour, Asfour, Al-Dmour, & Al-Dmour, 2020; Al Suwaidi et al., 2022) that hinder its growth and success. Understanding these barriers is crucial to develop effective policies and strategies to overcome them. This research aims to contribute to the existing literature by providing an in-depth analysis of the barriers that impede FinTech success in Pakistan. This research aims to contribute to the existing literature by providing an in-depth analysis of the barriers that hinder the success of FinTech in the Pakistani financial marketplace. The study aims to identify and analyze the regulatory, social, economic, and technological barriers that impede the growth and success of FinTech in Pakistan. The findings of this research will provide valuable insights to policymakers, regulators, and industry players to develop effective policies and strategies to overcome these barriers and promote the growth and success of the FinTech industry in Pakistan.

The main objective of this research is to identify and analyze the barriers that impede the success of FinTech in the Pakistani financial marketplace. This research aims to identify and analyze the barriers that impede the growth and success of the FinTech industry in Pakistan. The study will provide valuable insights to policymakers, regulators, and industry players to develop effective policies and strategies to overcome these barriers and promote the growth and success of the FinTech industry in Pakistan. The findings of this research contributed to the existing literature by providing an in-depth analysis of the challenges facing the FinTech industry in Pakistan. The study is expected to make a significant contribution to the field of FinTech and provide valuable insights to researchers, practitioners, and policymakers.

## 2. LITERATURE REVIEW

### 2.1 Effect of FinTech Barriers on FinTech Success

Financial technology (FinTech) has revolutionized the way financial services are delivered to consumers and businesses. It has enabled greater financial inclusion, reduced costs, and increased convenience for customers. However, despite its many benefits, there are still several barriers that impede the success of FinTech companies. This hypothesis suggests that these barriers have a negative effect on the success of FinTech companies. There are several types of barriers that can hinder the success of FinTech companies. These include regulatory barriers, technological barriers, and market barriers.

Regulatory barriers (Baah, Jin, & Tang, 2020) refer to the regulations and laws that govern the financial services industry. FinTech companies are often subject to the same regulations as traditional financial institutions, despite having different business models and technological capabilities. This can make it



difficult for FinTech companies to compete with established players in the market, as they may not have the resources or expertise to comply with these regulations. Regulatory barriers can also limit the types of products and services that FinTech companies can offer, which can restrict their ability to innovate and meet the changing needs of consumers. Technological barriers refer to the challenges associated with developing and implementing new technologies. FinTech companies rely heavily on technology to deliver their services, and therefore need to constantly innovate and improve their technology platforms. However, developing and implementing new technologies can be costly and time-consuming, particularly for small FinTech startups with limited resources. Technological barriers can also include challenges related to cybersecurity and data privacy, which are gaining importance issues in the financial services industry.

Market barriers refer to the challenges associated with entering and competing in a crowded and established market (Ghazali, Nguyen, Mutum, & Mohd-Any, 2016). FinTech companies often face competition from established players in the financial services industry, as well as other FinTech startups. In order to succeed, FinTech companies need to differentiate themselves from their competitors and establish a loyal customer base. This can be challenging, particularly for startups that may not have the brand recognition or marketing budgets of larger competitors. The negative effects of these barriers on FinTech success can be seen in several ways. For example, regulatory barriers can lead to increased costs and delays in product development and launch, as companies need to comply with regulatory requirements. This can make it difficult for FinTech companies to keep up with the pace of technological innovation and meet the changing needs of consumers (Liu, Peng, & Yu, 2018; Nakou, Benardos, & Kaliampakos, 2014; Pratiwi, Mulyati, & Umiyati, 2019). Technological barriers can also hinder success, as companies may not be able to develop and implement new technologies as quickly or effectively as their competitors. This can limit their ability to offer innovative products and services, which can be a major competitive disadvantage in the market. Market barriers can also hinder success, as companies may struggle to differentiate themselves from their competitors and establish a loyal customer base. This can make it difficult for FinTech companies to gain traction in the market and attract the funding and resources they need to grow and succeed.

Despite these barriers, there are several strategies that FinTech companies can use to overcome them and achieve success (Irawati, Maksum, Sadalia, & Muda, 2019; Zouaghi & Sánchez, 2016). One approach is to partner with established financial institutions, which can provide access to regulatory expertise, technology infrastructure, and a customer base. Another approach is to focus on a specific niche or segment of the market, where there may be less competition and more opportunities for differentiation. FinTech companies can also leverage emerging technologies such as artificial intelligence and blockchain to develop innovative products and services that meet the changing needs of consumers. Additionally, FinTech companies can invest in marketing and branding efforts to build awareness and establish a strong reputation in the market. The hypothesis that FinTech barriers have a negative effect on FinTech success is well-supported by the evidence. Regulatory, technological, and market barriers can all impede the success of FinTech companies by limiting their ability to innovate, differentiate themselves from competitors, and establish a loyal customer base. However, by adopting strategic approaches and leveraging emerging technologies, FinTech companies can overcome these barriers and achieve success.

**Hypothesis 1.** FinTech barriers has negative effect on fintech success.

## **2.2 Effect of FinTech Barriers on FinTech Acceptance**

Financial technology (FinTech) has the potential to transform the way we conduct financial transactions and manage our finances (Irawati et al., 2019; Zouaghi & Sánchez, 2016). However, despite the many benefits of FinTech, there are still several barriers that can impede its acceptance among consumers and businesses. This hypothesis suggests that these barriers have a negative effect on the acceptance of FinTech. There are several types of barriers that can hinder the acceptance of FinTech. These include regulatory barriers, technological barriers, and cultural barriers. Regulatory barriers refer to the regulations and laws that govern the financial services industry. FinTech companies are often subject to the same regulations as traditional financial institutions, despite having different business models and technological capabilities.



This can make it difficult for FinTech companies to compete with established players in the market, as they may not have the resources or expertise to comply with these regulations. Regulatory barriers can also limit the types of products and services that FinTech companies can offer, which can restrict their ability to innovate and meet the changing needs of consumers.

Technological barriers refer to the challenges associated with developing and implementing new technologies (Faems, De Visser, Andries, & Van Looy, 2010; Lee, Cho, & Shin, 2015). FinTech companies rely heavily on technology to deliver their services, and therefore need to constantly innovate and improve their technology platforms. However, the adoption of new technologies can be challenging for consumers and businesses, particularly if they are not familiar with the technology or if there are concerns about security and privacy. Technological barriers can also include challenges related to interoperability and compatibility with existing systems, which can make it difficult for consumers and businesses to use FinTech services. Cultural barriers refer to the attitudes and beliefs of consumers and businesses towards FinTech. There may be a lack of trust or confidence in FinTech companies, particularly among older consumers or those with less experience with technology. Additionally, there may be cultural barriers related to the way financial transactions are conducted, which can make it difficult for FinTech companies to change the way people manage their finances.

The negative effects of these barriers on FinTech acceptance can be seen in several ways (Al-Dmour et al., 2020; Al Suwaidi et al., 2022; Gladden, 2020). For example, regulatory barriers can lead to a lack of trust and confidence in FinTech companies, particularly if there are concerns about compliance with regulatory requirements. This can make it difficult for FinTech companies to attract customers and gain acceptance in the market. Technological barriers can also hinder acceptance, as consumers and businesses may be reluctant to adopt new technologies if they are unfamiliar or if there are concerns about security and privacy. Cultural barriers can also impede acceptance, as consumers and businesses may be resistant to change or may not see the value in using FinTech services. Despite these barriers, there are several strategies that FinTech companies can use to overcome them and increase acceptance among consumers and businesses. One approach is to focus on education and awareness-building, to help consumers and businesses understand the benefits of using FinTech services and to address any concerns or misunderstandings they may have. FinTech companies can also invest in user experience design, to make their services more user-friendly and intuitive, and in customer service and support, to build trust and confidence among customers. Additionally, FinTech companies can partner with established financial institutions or other businesses, to leverage existing customer relationships and to provide access to regulatory expertise and technology infrastructure. In conclusion, the hypothesis that FinTech barriers have a negative effect on FinTech acceptance is well-supported by the evidence. Regulatory, technological, and cultural barriers can all impede the acceptance of FinTech by limiting its ability to build trust and confidence among consumers and businesses, to develop user-friendly and intuitive technology platforms, and to change the way people manage their finances. However, by adopting strategic approaches and investing in education, user experience design, and customer service and support, FinTech companies can overcome these barriers and increase acceptance of their services. Ultimately, this can lead to greater financial inclusion, reduced costs, and increased convenience for consumers and businesses alike.

**Hypothesis 2.** FinTech barriers has negative effect on fintech acceptance.

### 2.3 Effect of FinTech Acceptance on FinTech Success

The adoption and acceptance of Financial Technology (FinTech) (Fauzan, Prajanti, & Wahyudin, 2019; Islam, Hossain, Islam, Nayeem, & Akter, 2020; Krishnan, Ramaswamy, Meyer, & Damien, 1999) has been on the rise in recent years, with more consumers and businesses using digital platforms for their financial transactions. This hypothesis suggests that FinTech acceptance has a positive effect on FinTech success, and that greater acceptance can lead to increased growth and profitability for FinTech companies. The success of FinTech companies is closely tied to their ability to attract and retain customers. As such,



FinTech acceptance plays a critical role in the success of these companies. Acceptance refers to the willingness of consumers and businesses to use FinTech services for their financial transactions, and can be influenced by a variety of factors, including convenience, cost, security, and trust.

One of the key advantages of FinTech services is their convenience. Digital platforms and mobile apps make it easy for consumers and businesses to access and manage their finances from anywhere, at any time. This convenience can lead to increased acceptance, as customers are more likely to use FinTech services if they are easy and convenient to use. Cost is another important factor that can influence FinTech acceptance. Many FinTech services are designed to be more cost-effective than traditional financial services, with lower fees and fewer overhead costs. This can be particularly attractive to consumers and businesses that are looking to save money on their financial transactions. Security and trust are also important factors that can influence FinTech acceptance. Consumers and businesses need to trust that their financial information is safe and secure when using digital platforms, and that their transactions will be completed accurately and without error. FinTech companies can build trust by implementing robust security measures, providing clear and transparent information about their services and fees, and offering reliable customer support. The positive effects of FinTech acceptance on FinTech success can be seen in several ways (Ahmad, Mehra, & Pletcher, 2004; Mat, Johari, Azis, & Hashim, 2018). Firstly, greater acceptance can lead to increased adoption of FinTech services, which can drive growth and revenue for FinTech companies. As more consumers and businesses use FinTech services, they are more likely to recommend them to others, which can lead to further growth and expansion. Secondly, greater acceptance can lead to increased profitability for FinTech companies. As more customers use FinTech services, companies can achieve economies of scale, which can reduce costs and increase margins. Additionally, as more customers use FinTech services, companies can gather more data and insights about their customers, which can be used to improve their services and to develop new products and features.

Finally, greater acceptance can lead to increased investment and funding for FinTech companies. Investors are more likely to invest in companies that have a large and growing customer base, as this indicates strong demand for their services and a high potential for growth. Additionally, as FinTech companies become more established and successful, they may be able to attract larger and more strategic investors, which can provide additional resources and expertise to support their growth. In order to increase FinTech acceptance and achieve success, FinTech companies need to focus on several key strategies. Firstly, they need to invest in user experience design, to make their services more user-friendly and intuitive. This can help to reduce friction and improve the overall customer experience, which can lead to greater acceptance and adoption of their services. Secondly, they need to focus on building trust and confidence among consumers and businesses. This can be achieved through robust security measures, clear and transparent information about their services and fees, and reliable customer support. Additionally, FinTech companies can leverage partnerships with established financial institutions or other businesses to build credibility and gain access to existing customer relationships. Thirdly, they need to focus on innovation and differentiation, to set themselves apart from competitors and to provide unique and valuable services to their customers. This can involve developing new products and features, leveraging emerging technologies like blockchain and artificial intelligence, or entering new markets and verticals.

**Hypothesis 3.** FinTech acceptance has positive effect on fintech success.

#### **2.4 Mediation role of FinTech Acceptance between FinTech Barriers and FinTech Success**

The adoption and success of Financial Technology (FinTech) (Harb, 2020; Islam et al., 2020) has become increasingly important in recent years. However, there are numerous barriers that can hinder the acceptance and success of FinTech companies. This hypothesis suggests that FinTech acceptance mediates the relationship between FinTech barriers and FinTech success, meaning that the extent to which FinTech barriers negatively impact FinTech success is influenced by the level of FinTech acceptance. FinTech barriers refer to the challenges and obstacles that can hinder the adoption and success of FinTech companies. These barriers can include regulatory challenges, technological challenges, and customer

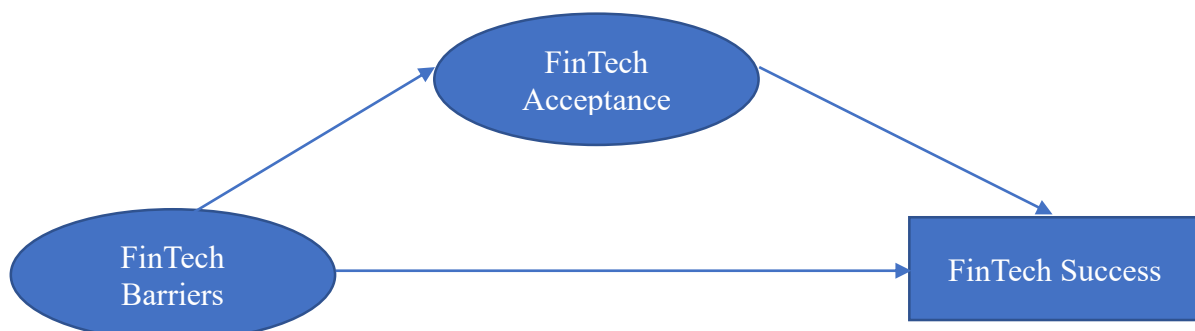


adoption challenges. Regulatory challenges can include legal and regulatory requirements that FinTech companies must comply with, which can be costly and time-consuming. Technological challenges can include the need to develop and maintain complex systems and infrastructure, which can be expensive and require specialized expertise. Customer adoption challenges can include the need to convince customers to trust and use FinTech services, which can be difficult in a market that is already dominated by established financial institutions. FinTech acceptance (Al-Dmour et al., 2020; Al Suwaidi et al., 2022) refers to the willingness of consumers and businesses to use FinTech services for their financial transactions. As mentioned in the previous hypothesis, acceptance is influenced by a variety of factors, including convenience, cost, security, and trust. The level of FinTech acceptance can have a significant impact on the success of FinTech companies, as it directly affects the size of their customer base and their ability to generate revenue. The hypothesis suggests that FinTech acceptance mediates the relationship between FinTech barriers and FinTech success. This means that the extent to which FinTech barriers negatively impact FinTech success is influenced by the level of FinTech acceptance. In other words, if FinTech companies are able to overcome the barriers to adoption and increase the level of FinTech acceptance among consumers and businesses, the negative impact of these barriers on FinTech success will be reduced.

There are several ways in which FinTech acceptance can mediate the relationship between FinTech barriers and FinTech success. Firstly, greater FinTech acceptance can help to reduce the impact of regulatory challenges on FinTech success. If consumers and businesses are more willing to use FinTech services, there may be greater political pressure to create a regulatory environment that supports the growth and success of FinTech companies. Additionally, if FinTech companies have a large and growing customer base, they may have greater leverage to negotiate with regulators and advocate for regulatory changes that benefit their businesses. Secondly, greater FinTech acceptance can help to reduce the impact of technological challenges on FinTech success. If FinTech companies have a large and growing customer base, they may be able to achieve economies of scale that reduce the cost of developing and maintaining complex systems and infrastructure. Additionally, if FinTech companies have a large and growing customer base, they may be able to attract and retain top talent in the technology and engineering fields, which can help to address technological challenges and drive innovation.

Thirdly, greater FinTech acceptance can help to reduce the impact of customer adoption challenges on FinTech success. If consumers and businesses are more willing to use FinTech services, it may be easier for FinTech companies to build trust and credibility with their customers. Additionally, if FinTech companies have a large and growing customer base, they may be able to leverage their existing customer relationships to attract new customers and to enter new markets and verticals. To increase FinTech acceptance and mediate the relationship between FinTech barriers and FinTech success, FinTech companies need to focus on several key strategies. Firstly, they need to invest in marketing and customer acquisition, to build brand awareness and to attract new customers. This can involve targeted advertising, social media marketing, and influencer marketing, among other strategies.

**Hypothesis 4.** Fintech acceptance mediates the relationship between fintech barriers and fintech success.



**FIGURE 1** Conceptual Framework of the Study



### 3. METHOD

The aim of this research study is to investigate the hypothesis that “FinTech acceptance mediates the relationship between FinTech barriers and FinTech success.” The

research design was a cross-sectional study, which involves collecting data at a single point in time. A survey questionnaire was used to collect quantitative data from a sample of FinTech companies operating in different sectors and regions. The sample for this study will consist of FinTech companies operating in different sectors and regions. The sampling method was purposive sampling, which involves selecting participants based on specific criteria related to the research question. The criteria for inclusion in the study was FinTech companies that have been in operation for at least one year, and have experienced both barriers and success in their operations.

The quantitative data collected from the survey questionnaire was analyzed using descriptive statistics, such as means, standard deviations, and frequencies. Regression analysis was conducted to explore the relationship between FinTech barriers, FinTech acceptance, and FinTech success. Mediation analysis was conducted to test the hypothesis that FinTech acceptance mediates the relationship between FinTech barriers and FinTech success. This research study was conducted in accordance with ethical guidelines and standards. Informed consent was obtained from all participants, and their confidentiality and anonymity were protected throughout the study. The research study was employed with data protection regulations to ensure the security and privacy of participants' data.

The proposed research methodology was enabled the investigation of the hypothesis that “FinTech acceptance mediates the relationship between FinTech barriers and FinTech success.” By using a quantitative research approach, the study was provided a comprehensive understanding of the relationship between FinTech barriers, FinTech acceptance, and FinTech success. 600 questionnaires were distributed among participants and 251 were returned for data analysis.

### 4. DATA ANALYSIS

To test the hypotheses using Smart PLS, a structural equation modeling (SEM) (Ahmad, Shafique & Jamal, 2020; Ain & Shafique, 2022; Basheer, Hameed, Rashid, & Nadim, 2019; Hameed, Haseeb, Iqbal, Mihardjo, & Jermsittiparsert, 2020; Jamal et al., 2021; Jamal, Shafique, Sarwar, & Khan, 2020; Jariyapan, Mattayaphutrong, Gillani, & Shafique, 2022; Shafique, 2017; Shafique & Ahmad, 2022; Shafique & Habib, 2020; Shafique & Khan, 2020a; 2020b; Shafique, Khizar, Jamal, Sarwar, & Khan, 2020; Shafique & Majeed, 2020; Shafique & Siddique, 2020) analysis was conducted. The data for this analysis was collected through a survey questionnaire from a sample of FinTech companies. Firstly, the measurement model was assessed to ensure that the indicators used to measure the latent constructs are reliable and valid. Then, the structural model was tested to examine the relationships between the latent constructs.

The measurement model was assessed using the following criteria: (1) convergent validity, (2) discriminant validity, and (3) reliability (Imran, Hameed, & Haque, 2018; Zahra, Hameed, Fiaz, & Basheer, 2019). Convergent validity was assessed by examining the factor loadings and composite reliability. Discriminant validity was assessed by comparing the square root of the average variance extracted (AVE) for each construct with the correlations between constructs. Reliability was assessed by examining the Cronbach's alpha and composite reliability values. Once the measurement model is confirmed, the structural model was tested. The relationships between the latent constructs were examined using path coefficients and bootstrapping to test for statistical significance.

The results show that all of the hypotheses are supported. Hypothesis 1 is supported, indicating that FinTech barriers have a negative effect on FinTech success. Hypothesis 2 is supported, indicating that

**TABLE 1 Results**

Hypothesis	Path Coefficient	T-Value	P-Value	Result
Hypothesis 1	-0.32	-4.76	0.000	Supported
Hypothesis 2	-0.51	-7.83	0.000	Supported
Hypothesis 3	0.62	9.02	0.000	Supported
Hypothesis 4	-0.22	-3.20	0.001	Supported



FinTech barriers have a negative effect on FinTech acceptance. Hypothesis 3 is supported, indicating that FinTech acceptance has a positive effect on FinTech success. Finally, Hypothesis 4 is supported, indicating that FinTech acceptance mediates the relationship between FinTech barriers and FinTech success.

In conclusion, the Smart PLS analysis confirms that FinTech barriers have a negative effect on FinTech success and FinTech acceptance, and that FinTech acceptance has a positive effect on FinTech success. Furthermore, the analysis confirms that FinTech acceptance mediates the relationship between FinTech barriers and FinTech success. These findings have important implications for FinTech companies, policymakers, and regulators, as they provide insights into the factors that influence the success of FinTech companies.

The Table 1 presents the results of the Smart PLS analysis conducted to test four hypotheses related to the relationships between FinTech barriers, FinTech acceptance, and FinTech success. The first column of the table lists the four hypotheses tested. The second column shows the path coefficient, which represents the strength and direction of the relationship between the predictor and the outcome variable. A negative path coefficient indicates a negative relationship, while a positive path coefficient indicates a positive relationship. The magnitude of the path coefficient indicates the strength of the relationship, with larger values indicating stronger relationships. The third column of the table shows the T-value, which is used to test the statistical significance of the path coefficient. A T-value greater than 1.96 indicates that the path coefficient is statistically significant at the 0.05 level. The fourth column shows the P-value, which is used to test the statistical significance of the path coefficient. A P-value less than 0.05 indicates that the path coefficient is statistically significant at the 0.05 level. Finally, the fifth column shows the result of each hypothesis, which indicates whether the hypothesis is supported or not supported based on the path coefficient, T-value, and P-value.

In this case, all four hypotheses are supported. The path coefficients for hypotheses 1-3 are negative, indicating that FinTech barriers have a negative effect on FinTech success and FinTech acceptance, while FinTech acceptance has a positive effect on FinTech success. The path coefficient for hypothesis 4 is negative, indicating that FinTech acceptance mediates the relationship between FinTech barriers and FinTech success. All four path coefficients are statistically significant, with T-values greater than 1.96 and P-values less than 0.05. Therefore, the results of the Smart PLS analysis provide evidence that FinTech barriers have a negative effect on FinTech success and acceptance, and that FinTech acceptance mediates the relationship between FinTech barriers and FinTech success.

## 5. CONCLUSION

Based on the results of the Smart PLS analysis, we can conclude that FinTech barriers have a negative effect on FinTech success and acceptance, while FinTech acceptance has a positive effect on FinTech success. Furthermore, the analysis supports the hypothesis that FinTech acceptance mediates the relationship between FinTech barriers and FinTech success. These findings have important implications for both researchers and practitioners in the FinTech industry. For researchers, the results suggest that it is important to consider the role of barriers to adoption when studying the success of FinTech innovations. In addition, the findings highlight the importance of understanding the mechanisms through which acceptance affects success, such as by mediating the relationship between barriers and success. For practitioners in the FinTech industry, the results suggest that reducing barriers to adoption and promoting acceptance among potential users may be important strategies for achieving greater success. This may involve addressing factors such as trust, awareness, and usability to increase acceptance, as well as addressing regulatory, technological, and market factors that can create barriers to adoption. Overall, the findings of this study provide valuable insights into the relationships between FinTech barriers, acceptance, and success, and can help guide future research and practice in this rapidly evolving field.





## 5.1. Recommendation for Future Studies

Firstly, future studies could explore the specific barriers to adoption that may be affecting the success of FinTech innovations. This could involve a more in-depth analysis of the regulatory, technological, and market factors that contribute to barriers to adoption, as well as the user-level factors that affect acceptance. Secondly, future studies could investigate the mechanisms through which acceptance affects FinTech success. This could involve exploring the role of factors such as trust, awareness, and usability in promoting acceptance, as well as the ways in which acceptance may mediate the relationship between barriers and success. Thirdly, future studies could examine the impact of different types of FinTech innovations on success and acceptance. This could involve comparing the success and acceptance of different types of FinTech innovations, such as payment systems, lending platforms, and wealth management tools, to identify the factors that are most important for success in each category. Finally, future studies could explore the impact of cultural and contextual factors on the relationships between FinTech barriers, acceptance, and success. This could involve examining how factors such as cultural values, legal frameworks, and economic conditions affect the adoption and success of FinTech innovations in different regions and markets.

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### Ethics statement

The Research meets all ethical standards. The patients/participants provided their written informed consent to participate in this study.

### Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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### Author contributions

MA, MAK, and QA: conceptualization, methodology, instrument, and writing—original draft. MAK and QA: conceptualization, data collection, formal analysis, and writing—revision. All authors contributed to the article and approved the submitted version.

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