SUJRIS
Vol.:3, Issue: 1, Jan - June 2025 PP: 01-27

OPEN ACCESS
SUJRIS
﴾ Swat University Journal of Religious & Islamic Studies ﴿
ISSN: 2959-5509
www.sujris.uswat.edu.pk

The Role of Fintech in Promoting Islamic Financial Inclusion in Pakistan

Muhammad Sohail
Lecturer in Finance, Center for Management &Commerce, University of Swat.
Email: m.sohail@uswat.edu.pk

Abdul Mateen
(Corresponding Author)
Lecturer in Human Resource, Center for Management &Commerce, University of Swat
Email: abdulmateen@uswat.edu.pk

Khursheed Ahmad
Lecturer in Finance/PhD Scholar, Center for Management &Commerce, University of Swat.
Email: khursheed@uswat.edu.pk

Abstract

The challenge of financial inclusion is still relevant to emerging economies such as Pakistan where only 21% of adults have an account with a formal Financial Institution. This exclusion is closely connected to religious sensitivities about interest-bearing banking, and it has resulted in millions of poor people being excluded from the formal financial sector. This research uses a mixed method approach to examine the impact of Fintech on Islamic financial inclusion in Pakistan. The data were quantitatively gathered from 400 respondents in Punjab, Sindh, and Khyber Pakhtunkhwa through stratified multistage sampling with an error margin of 5% (at a confidence level of 95%). Respondents' demographic and financial behaviour characteristics, as well as their Islamic Fintech awareness, were assessed using structured surveys and 20 semi-structured interviews conducted with users and non-users of the Islamic Fintech services. Statistical analysis (using SPSS) involved descriptives, correlation and logistic regression while NVivo was used for coding of interview transcripts. The findings reveal that 59.5% of the sample has access to formal accounts, whilst 23.0% uses mobile money and 17.5% is excluded altogether. While 65.5% of the respondents were aware of Islamic Fintech, only37.0% claimed that they used it; mobile wallets being the most used service. Correlation results indicated significant positive relationships between the use of Islamic Fintech and all financial inclusion indicators, namely account ownership ($r = 0.41$, $p < 0.001$), savings ($r = 0.36$, $p = 0.002$), borrowing ($r = 0.32$, $p = 0.004$)

and transaction frequency (r = 0.44, p <.001). Logistic regression analysis demonstrated that Fintech users were 2.05 times more likely to use formal accounts (OR = 2.05, p = 0.001); income and location were significant predictors as well. Intermediary themes included trust, the Shariah-compliant nature of contracts, and digital literacy as key predictors of adoption. Our results offer strong and robust empirical evidence for Islamic Fintech as a powerful instrument to extend financial inclusion in Pakistan but indicating barriers which call for focused policy and industry reactions.

Keywords: *Islamic Fintech, Financial Inclusion, Shariah Compliance, Digital Banking, Pakistan.*

Introduction

One of the key challenges for developing countries is financial inclusion, as significant portions of their population remain locked out of traditional banking systems. In Pakistan, despite wide banking penetration and a number of government-led schemes, the financial inclusion level remains significantly lower than regional counterparts. (Zulfiqar *et al.*, 2016) reveals that just 21 percent of Pakistani adults had an account at a formal financial institution, a number reflecting the continued exclusion of millions from basic financial services. This exclusion has substantial effects: it hampers the ability of households to save safely, borrow for consumption or business needs and share risk via insurance, among others. Small and medium-sized enterprises (SMEs) lack finance to expand; households suffer from exclusion, which exacerbates poverty and vulnerability (Pazarbasioglu *et al.*, 2020).

What is unique about financial exclusion in Pakistan is its unsurprisingly high religious orientation. Studies have consistently found that a significant portion of the population choose not to use mainstream banking services on religious grounds, due to the perceived absence of Riba (interest). The State Bank of Pakistan (SBP) has always recognized that Shariah-compliance is not just the flavor of a month, but a requirement for majority potential users (F Khan, 2015). Islamic banking has grown steadily in recent years but it is not yet deep enough to bridge the gap between banked and unbanked. Amid this environment, Fintech has come to be seen as a disruptive force that could narrow the gap by bringing Shariah-complaint services within easy and affordable reach, at scale (Valeri *et al.*, 2020).

Fintech has shown it has great potential, globally to reduce the cost of transactions and service previously unreachable areas, as well as enabling payments, credit and insurance innovation. In Muslim majority markets, this has spawned "Islamic Fintech", fusing digital platforms with products such as profit and loss sharing microfinance, digital zakat distribution and takaful (Islamic insurance) (Muneeza & Mustapha, 2021). Increased mobile penetration and digital payment channels in Pakistan have paved the way for Fintech driven Islamic finance. The likes of the Raast instant payment system and branchless banking agent networks have proven that digital platforms can cater to segments traditionally ignored by traditional banks. However, despite these optimistic developments, there is scarce empirical work exploring whether Islamic Fintech really coping financial exclusion of Pakistani households and SMEs (Ishaq, 2022).

The challenge, thus, is not merely a continuance of exclusion but also obscurity surrounding the degree to which Fintech itself facilitates Islamic financial inclusion. Whilst policy papers and reports highlight the promise of digital applications, how successful they have been as facilitators of Shariah-compliant inclusion for women, rural households and micro-entrepreneurs is still under-researched. Structural issues like digital ignorance, spotty infrastructure and a lack of uniform Shariah-governance frameworks are also red flags for scalability and trust (Alsaghir, 2023).

In this context, the current research attempts to analyse the impact of Fintech on Islamic financial inclusion in case of Pakistan. Through an exploration of new developments in digital Islamic finance and their relevance for underbanked groups, the research offers empirical evidence on how technology can be harnessed to address issues of access, affordability, and compliance. The emphasis is placed on apprehending the potentials and limitations to propose evidence-based policy recommendations for the policymakers, Islamic financial institutions and Fintech providers.

Review of Literature

Emerging evidence shows that FinTech has the potential to reduce frictions in accessing finance including cost, geography and information asymmetries. Through digital payment platforms, mobile money and algorithmic credit scoring, millions around the world have been able to access basic transactional services as well as small loans at a much lower cost than branch-based models. Cross-country studies on emerging and developing economies find that Fintech entry leads to an increase in account ownership and payments usage whereas the impact on more intense financial services usage (savings, productive credit) is more diverse–it's contingent not only of the level of development but also on regulatory environment and consumer protections (Agarwal *et al.*, 2025). Crucially, these studies also warn that Fintech alone is no panacea: digital literacy, identity systems and trust continue to be key intermediaries of impact.

Islamic Fintech is a newly emerging sub-discipline which fuses normative Shariah observance and electronic/digital delivery. Core modalities include Shariah-compliant digital payments and wallets, crowdfunding and peer-to-peer platforms designed without Riba (interest), digital microfinance based on profit loss sharing principles, online takaful distributions, and portals to enable collection and distribution of zakat as well as waqf (endowments). (Chong, 2021) say Islamic Fintech can extend inclusion uniquely by providing credible, affordable non-Riba (Shariah compliant) choices, bringing in customers otherwise without formal finance for religious reasons. Meta-analyses and bibliometric surveys indicate a rapid escalation of research attention since 2017, but stress that the literature so far is mostly conceptual or descriptive rather than empirically evaluative.

The two Fintech and Islamic banking ecosystems in Pakistan have developed quickly over the past years, presenting an interesting environment for research. The State Bank of Pakistan (SBP) has reported significant increases in digital payments and account use and is working to enhance Islamic banking as part of its broader plans (Albaity & Rahman, 2019). SBP payment system reviews and policy papers capture the growth of mobile-banking channels, agent networks, and digital onboarding regulation that lowers the cost of account opening, structural changes for inclusion. It is only recently that some country level studies have made the case that while technological diffusion may be necessary, it certainly isn't sufficient to bring about inclusive outcomes.

The most recent studies on Pakistan in academic and policy literature have begun to explore the Fintech adoption of Islamic banking users. Empirical studies find high demand for digital Islamic banking products, while a couple of particular cases indicate the potential of pilot initiatives, such as mobile microfinance and digital zakat platforms, that can reach low-income customers (Ok, 2025). But sector reports and academic papers also list persistent obstacles: poor interoperability between Islamic and conventional digital systems, a lack of standardized Shariah governance instruments for Fintech products, as well as low financial and digital literacy among certain segments (especially women and rural households) (Syarif, 2024). These constraints in part explain why digital growth has not always led to greater, Shariah-compliant financial inclusion.

Heterogeneity of the inclusionary effects of Fintech is a common theme in the literature. Global Findex and national surveys indicate that gender lags in financial access are significant in Pakistan, with digitalization both a potential mitigator and exasperator of these gaps based on product design and cultural considerations. Studies have shown that women are less likely to own smartphones, boast a lower level of digital literacy and overcome normative barriers in the access to formal finance, requiring the product design as well as outreach to be gender sensitive for Islamic Fintech deliver an impact (Rawat, 2025). Equally, they are themselves frustrated by agent network coverage and the quality of digital infrastructure in rural and remote areas that limit expansion of app-based solutions. Empirical evidence suggests the use of complementary strategies such as agent networks, simplified onboarding, and human centric design, help to leverage Fintech availability for inclusive use.

Literature asserts essential implications for regulation and institutional strategy in determining whether Fintech contributes to inclusion. Public-sector initiatives, such as digital ID systems, enabling sandbox regulations that provide space for experimentation and testing of new solutions, interoperability mandates, and selective incentives have shown to be correlated with faster uptake across similar markets more equitably. For Islamic Fintech, on the other hand, regulators and standard-setters have both to ensure Shariah compliance and to not substitute innovation. The global and regional studies recommend for established Shariah governance framework for digital products, capacity enhancement of Shariah scholars in the field of digital finance and regulatory sandboxes with Islamic Fintech use cases (Webb, 2025). In Pakistan, references in to SBP strategies and industrial analysis capture the push towards aligning Islamic banks strategy with digital transformation while some academics argue that practical implications for Islamic Fintech regulation are still nascent and they warrant more focused guidelines.

Although descriptive and cross-sectional studies have reported associations between digital access and account ownership, relatively few causal micro-level evaluations examining the effects of Islamic Fintech on household economic outcomes in Pakistan are found in the literature. The majority of Islamic Fintech empirical research is based on customer intention surveys, early adoption experimentations or small pilots; limited use is made of RCTs and panel-data analysis (Behaghel *et al.*, 2019). In addition, extant studies tend to mix general Fintech and Islamic Fintech together, which makes it challenging to sort out the specific impact of Shariah alignment on inclusion. (Bouteraa *et al.*, 2023) suggest such approaches are needed to ensure rigorous, mixed-methods fieldwork that uses transacting data from Fintech providers, household surveys and qualitative interviews to gauge both quantifiable uptake and users' views of Shariah compliance. This methodological shortcoming is the empirical motivation for our study.

Three particular gaps are evident in the literature reviewed. First, there is scant rigorous evidence from Pakistan whether Islamic Fintech leads to both access and sustained usage among individuals who previously abstained from formal finance on religiosity grounds (Z Khan, 2024). Second, not enough attention is given in the literature to how differing product levels (payments, savings, microcredit, takaful, zakat facilitation) can be influential for inclusive development achievements. Third, there is no systematic evidence in the literature linking regulatory design elements (such as Shariah governance standards, interoperability rules and agent regulation) with uptake by under-served populations. By attending to these vacancies such as not just with country-specific, recent figures but also using a mixed-methods methodology, this research has set out to contribute robust evidence and more specific direction for policy-makers considering how they can use Fintech in order to promote Islamic financial inclusion in Pakistan.

Methodology

This present work is a mixed-method analysis to explore the role of

Fintech in Islamic Financial Inclusion in Pakistan. A mixed design was deemed the most appropriate since financial inclusion can be measured, in terms of account ownership, transaction frequency and credit access, among other indicators, but also because financial inclusion is a social phenomenon which demands knowledge of perceptions, attitudes and barriers citizens face (Nandru *et al.*, 2016). By using a mixed-method approach combining the quantitative information from survey findings with qualitative feedback from semi-structured interviews, the method provides optimum results in terms of deep and broad perspectives on how far Fintech supports Islamic financial inclusion.

3.1 Population and Sampling

The sample for this research consists of adult respondents in Pakistan who are money users or potential consumers of financial service, especially those looking for Shariah complaint products (Nazir & Saqib, 2024). Owing to the geographical and demographic variation in Pakistan, urban and rural candidates were included to ensure representation of various aspects such as access, infrastructure, and socio-cultural intrinsic values. The population was distributed in three provinces: Punjab, Sindh and Khyber Pakhtunkhwa, where digital financial services are rapidly growing but the inclusion gap still remains.

A quantitative survey sample of 400 respondents was chosen. The sample size used for this study was calculated by using the social science-based standard formula with a confidence level of 95% and a margin of error of 5%. It has followed multistage sampling to guarantee representativeness. In the first phase, districts were selected from each province which had both metropolitan centers (e.g., Lahore and Karachi) and smaller towns with vibrant branchless banking interventions. In the second stage, participants were randomly selected from bank branches, mobile money agents and universities or through rural area community networks. This tactic allowed for diversity in gender, income bracket and landscape. For the qualitative module, we purposively selected 20 respondents from the survey pool to provide more detailed insights into their experiences with Islamic Fintech products (Ajouz & Abuamria, 2023). Both current users and non-users were sampled in the latter category, with the religiosity of their rejection of traditional banking products varying among them.

3.2 Data Collection

Original data were gathered between April and June (3 months) 2025. For the quantitative part, an interview guide was applied in a face-to-face (FTF) modality and online. This survey was divided into three sets, demographic profile (age, gender, education level, income level and location), financial behavior measures (account ownership status at both the bank and mobile money operations levels) transaction frequency as well as saving baring practices) and perceptions of Islamic Fintech (awareness on Islamic fintech, ease of use via using marvellous visioning to reflect these variables (Alsmadi & abdalamjeed, 2024). Pre-testing of the instrument was conducted on a pilot sample of 30 respondents and revisions were undertaken to enhance clarity and reliability. Cronbach's alpha of influential scales such as trust, perceived ease of use and Shariah perception were high also were above 0.7 displaying satisfactory reliability.

In the qualitative strand, semi-structured interviews were performed in person or by phone/Zoom as preferred by each participant. The interviews investigated topics including obstacles to entry in Islamic Fintech, user satisfaction with existing services and recommendations for improvements. All interviews lasted 30 to 45 minutes and were tape-recorded, with the participants permission.

3.3 Data Analysis

Demographic and financial behaviours profiles were summarized through descriptive statistics. The inferential statistics conducted were the correlation analysis and regression assessments to determine whether there was a relationship between use of Fintech, as well as financial inclusion indicator with Shariah-compliant preference moderating. Specifically, logistic regression was used to consider if use of Islamic Fintech products were significantly predicting account ownership, saving and borrowing after adjusting for gender, income and location (Mahmoud *et al.*, 2025).

Thematic analysis was used to code and analyze qualitative audio-transcripts in NVivo. Thematic coding was used to determine common themes among the participants narratives related to trust in Fintech, digital literacy difficulties, and the impact of Shariah compliance towards adoption decision making. Quantitative and qualitative findings were iteratively integrated using a triangulation approach, with the interview themes serving to inform or interpret statistical findings.

3.4 Ethical Considerations

Ethical guidelines were followed during the study. The participants were told about the research aims, their assured confidentiality, and requested to express a verbal or written consent before participation. Sensitive questions, especially regarding financial behaviour, were taken out in a non-intrusive way and all respondents maintained the opportunity to lapse at any time. The study was approved by the ethical review committee of the institution prior to the commencement of fieldwork.

Results

The results provide a nuanced picture of the extent to which Islamic Fintech serves for financial inclusion in Pakistan. Quantitative studies reveal strong correlations between Fintech use and important dimensions of inclusion, and qualitative work provide depth on user attitudes towards or barriers to use and potential market opportunities.

4.1 Demographic Profile of Respondents

The demographic profile of the respondents will allow an overall view of the sample background traits to present in order to interpret items on financial inclusion and Islamic Fintech usage within their proper context. Table 4.1 shows the frequency distribution of respondents according to gender, age range, educational level, income category, region and type of place (urban/rural) they live in. The gender representation is approximately equal among 400 responses, at which there are males representing 53.5% (n = 214) and females constitute 46.5% (n = 186). This near-equal split can thus provide us enough information regarding financial behaviors and attitudes towards Fintech services, from the male as well as the female viewpoint. From an age perspective, the sample skews to younger people where 72.5% are aged between 18–34 years, confirming that these is the prominent segment of digitally active population inclined to interact with Fintech products.

In the level of education, nearly half of the respondents (49.0%) were bachelor degree or above holders and 30.0% had a master's degree or higher. Only 21.0% had received primary or secondary education. This suggests the sample is relatively well-educated, which is significant as education may be related to enthusiasm for using digital financial solutions and financial literacy. Distribution of the monthly income reveals that 38.0% belonged to those who earn less than PKR 30,000 makes while 37.0% were in the range of PKR 30,000–60,000 and the rest fall within above PKR 60,000 range. This distribution allows the study to capture financial behaviours in low, middle and, higher income households and aids relevant comparisons of inclusion across different socioeconomic strata.

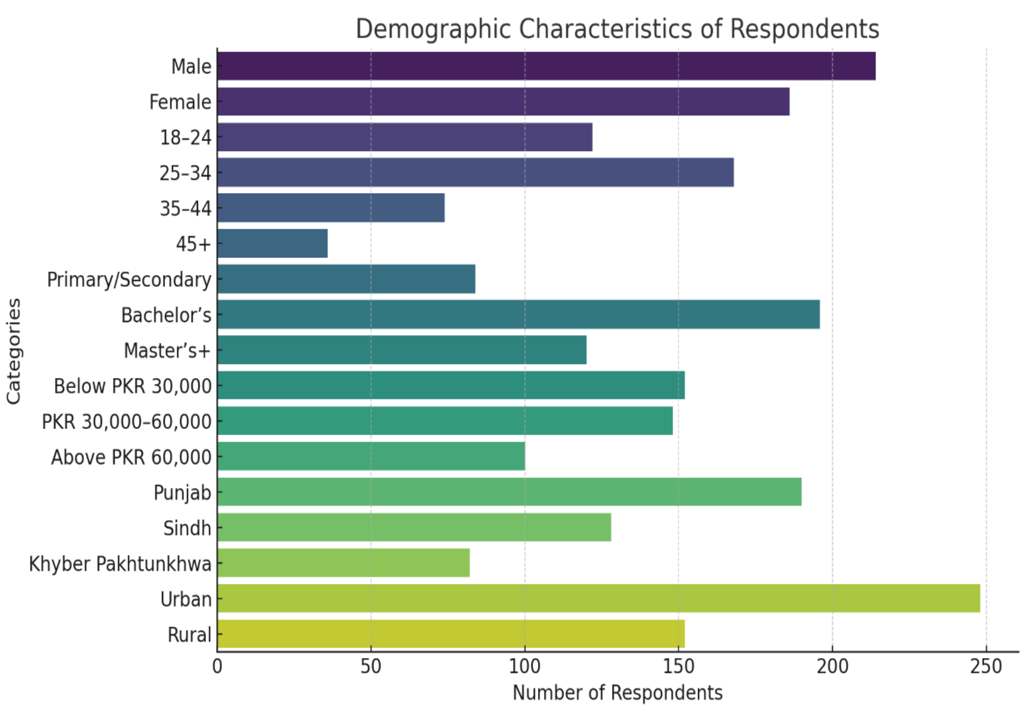

Figure 4.1: Demographic Characteristics of Survey Respondents (N=400)

Related to the place of living, respondents were collected from three provinces where plurality of them belonged to Punjab (47.5%) followed by Sindh (32.0%) and Khyber Pakhtunkhwa (20.5%). This provincial quota holds well with the population density of Pakistan and for Punjab, obviously sending more to foreigners than others. Finally, the sample included rural participants (38.0%) and urban participants (62.0%), which would permit a comparison between urban-rural financial inclusion disparities. The urban majority offers greater digital connectivity and Fintech access, but the rural respondent's perspective is included to not forget infrastructure gaps and awareness constraints. Figure 4.1, which presents these demographic representations graphically, serves to support this tabular data by showing the variance across and richness of the sample and strengthening the argument for generalizability of the dataset with regard to making wider claims about Islamic Fintech adoption in Pakistan.

Table 4.1: Demographic Characteristics of Survey Respondents (N=400)

Variable	Category	Frequency	Percentage
Gender	Male	214	53.5%
	Female	186	46.5%
Age Group	18–24 years	122	30.5%
	25–34 years	168	42.0%
	35–44 years	74	18.5%
	45 years & above	36	9.0%
Education	Primary/Secondary	84	21.0%
	Bachelor's	196	49.0%
	Master's & above	120	30.0%
Monthly Income	Below PKR 30,000	152	38.0%
	PKR 30,000–60,000	148	37.0%
	Above PKR 60,000	100	25.0%
Province	Punjab	190	47.5%
	Sindh	128	32.0%
	Khyber Pakhtunkhwa	82	20.5%
Location	Urban	248	62.0%
	Rural	152	38.0%

4.2 Financial Behavior and Inclusion Indicators

Insight into how financially responsible the respondents are is essential in determining their degree of financial inclusion, and what opportunities Islamic Fintech services could bring to bridge these gaps. The distribution of account ownership, saving, borrowing and transaction frequency for the respondents are presented in Table 4.2. Findings indicate that 59.5% of the respondents indicated that they had a formal account, whereas 23.0% primarily used mobile money accounts and 17.5% did not have any account. This suggests that while formal bank access is still largely prevalent, mobile money has become an increasingly important operational and organizational alternative in the face of limited traditional banking opportunities. And 17.5% population without any type of account shows that the road to universal financial inclusion is not easy in Pakistan.

Half the participants (40.0%) indicated that they saved every month, 36.0% some of the time, and 24.0% had never tried to save money. The high percentage of regular savers indicate there is a market of the population actively planning their finances, about which more structured Islamic savings products could be developed. Meanwhile, the large proportion of occasional savers and non-savers highlights obstacles including low disposable income, low knowledge about finance, and the absence of Shariah-compliant instruments for savings. Lending patterns were also varied: 41.5% of borrowers relied on informal sources like friends and family, compared to just over a quarter (24.5%) who borrowed from the formal sector through banks or Fintech entities. The informal borrowing indicates gaps in access to formal credit and suggesting potential avenues for Islamic microfinance and Fintech-led lending platforms targeting underserved segments.

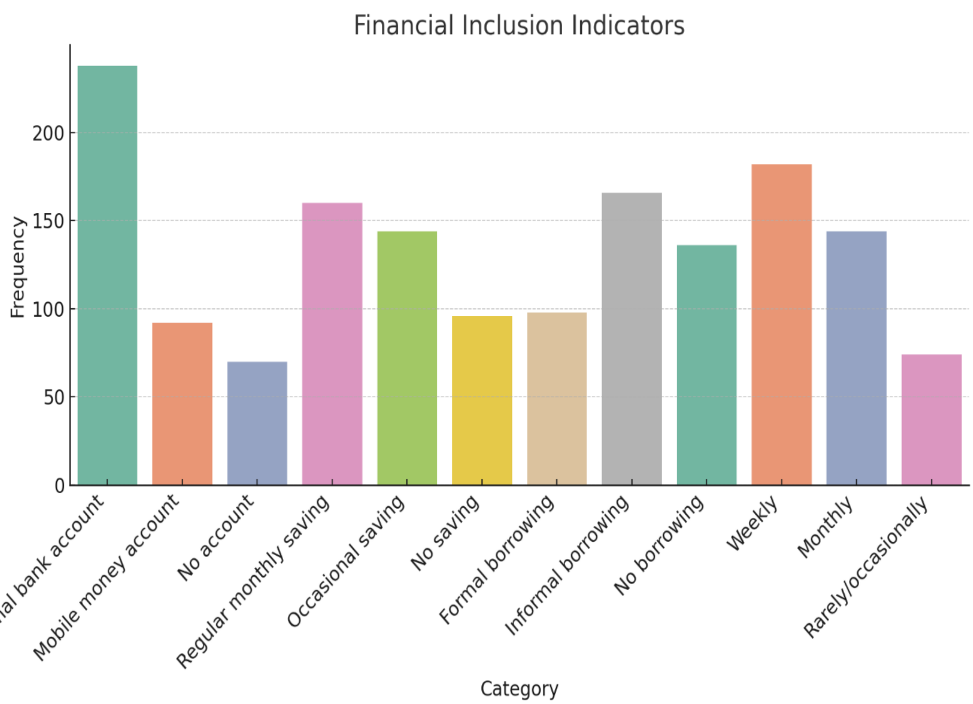

Figure 4.2: Financial Inclusion Indicators among Respondents

Transaction pattern gives additional indicators for the financial participation. Almost half of the group (45.5%) stated that it was doing its financial business every week, followed by 36.0% who were handling it monthly, and a smaller portion (18.5%) infrequent to do so. Compared to daily users, the relatively high share of weekly users indicates an active involvement in financial activity which is a favorable sign for the potential customers' adoption of digital platform requiring regular usage. The existence of a large cluster with low transaction frequency, however, indicates that some persistent barriers such as income stability, access to services, or digital literacy continue to operate. Figure 4.2, which depicts these financial inclusion indicators, supplements the tabular representation by illustrating the differences between formal and informal use; active and passive savers; and frequent versus occasional users. Together, they reflect the progress made and challenges that remain in Pakistan's financial inclusion context and provide a framework upon which to assess how Islamic Fintech can enhance access to Islamic finance.

Table 4.2: Financial Inclusion Indicators among Respondents

Indicator	Category	Frequency	Percentage
Account Ownership	Formal bank account	238	59.5%
	Mobile money account	92	23.0%
	No account	70	17.5%
Savings Behavior	Regular monthly saving	160	40.0%
	Occasional saving	144	36.0%
	No saving	96	24.0%
Borrowing Practices	Formal (banks/Fintech)	98	24.5%
	Informal (friends/family)	166	41.5%
	No borrowing	136	34.0%
Transaction Frequency	Weekly	182	45.5%
	Monthly	144	36.0%
	Rarely/occasionally	74	18.5%

4.3 Awareness and Usage of Islamic Fintech Services

Awareness and actual usage of Islamic Fintech services are crucial dimensions in understanding the function of this sector in the promotion of financial inclusion in Pakistan. As outlined in Table 4.3, a significant proportion of the respondents, accounting for 65.5%, expressed awareness of Islamic Fintech services, with 34.5% reporting no awareness. The high awareness levels indicate that Islamic Fintech has achieved the proposed level of visibility, with successful leveraging of digital marketing campaigns, financial literacy campaigns, and communal engagements proving effective. However, a third of the sample recounts unawareness, which suggests that the conventions have not penetrated parts of the country or cohorts with lesser digital inclusivity such as rural regions. This gap is emphasized in Figure 4.3, which suggests that though the awareness of Islamic FinTech is escalating, the potential and virtual knowledge of Islamic Fintech products is yet to be leveraged. However, the story is quite different when it comes to actual usage. Only 37.0% reported being actual users of Islamic Fintech services, with 9.5% reporting to be past users and 53.5% asserting to have never used them. There exists a gap between awareness and usage, implying that though people know of Islamic Fintech, they lack adequate trust, usability attributes, or applicability to financial needs. The past usage of almost 10% is concerning, suggesting inadequate supply or quality of services, provider usage strategies or restraining factors like costs and conventional usability. Evidently, Islamic Fintech players need to think about not only attracting new users but retaining existing users through attractive, innovative and Shariah-compliant solutions. Specifically, the most largely used service was Shariah-based mobile wallets occupying 23.0% of the usage. This substantial usage reflects the daily transaction-based function of wallets and easier entry requirements. Digital Islamic banks were used by only 9.5% while Islamic micro-lending was only used by 4.5%. This usage difficulty is evident in the graphical representation in Figure 4.3 of the service usage, and it justifies the dominance of mobile wallets. These results collectively reflect that while the awareness of Islamic Fintech has created a proportionate basic usage nature, most advanced products with the potential for direct impact on economic empowerment remain previously under-utilized.

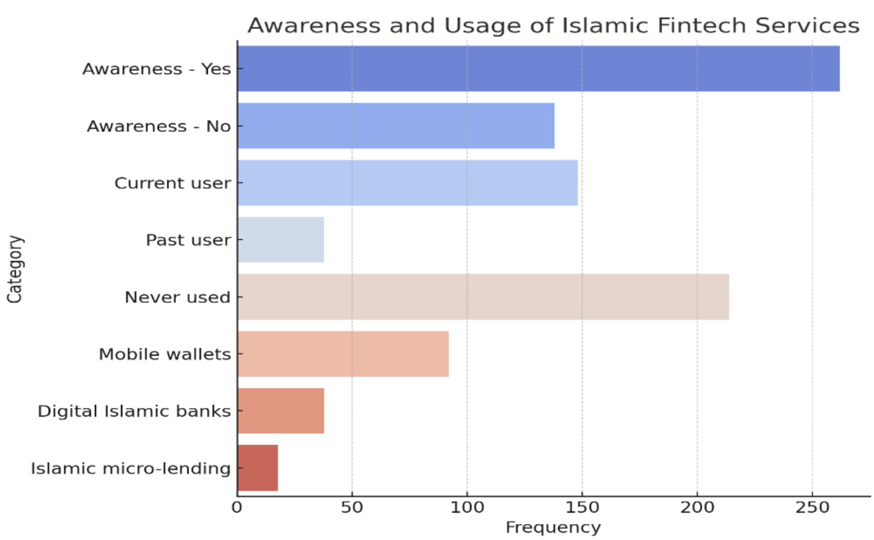

Figure 4.3: Awareness and Usage of Islamic Fintech Services

Table 4.3: Awareness and Usage of Islamic Fintech Services (N=400)

Variable	Category	Frequency	Percentage
Awareness of Islamic Fintech	Yes	262	65.5%
	No	138	34.5%
Usage of Islamic Fintech	Current user	148	37.0%
	Past user (discontinued)	38	9.5%
	Never used	214	53.5%
Most Used Services	Mobile wallets (Shariah-based)	92	23.0%
	Digital Islamic banks	38	9.5%
	Islamic micro-lending apps	18	4.5%

4.4 Perceptions of Trust, Ease of Use, and Shariah Compliance

Meanwhile, perceptions also played in importance in shaping respondents' adoption and continued use of Islamic Fintech. Table 4.4 compiles the mean scores of respondents' evaluations along three crucial dimensions such as trust in providers, ease of use, and confidence in Shariah compliance. Altogether there were moderately positive, with all mean scores higher than the neutral midpoint of 3.0. The results signal that while respondents generally appreciate the potential value of Islamic Fintech, discrepancy in levels of satisfaction across dimensions his highlighted as both strength and areas requiring improvements. These perceptions are further illustrated in Figure 4.4, which showcases that the overwhelmingly highest-rated was confidence in Shariah compliance, while trust accounted for the lowest level. The former scored an estimated mean of 4.11, with SD = 0.82. It indicates the central role of Islamic alignment in any financial choices in heavily Muslim Pakistan. The regulator high level of trust was likely facilitated by Fintech providers' efforts to obtain official Shariah certificates and brand themselves as faith-aligned. This indicates that they, like traditional banks, have recognized religious authenticity as the main drive behind the departure of conventional users from traditional banking bishops. The low standard deviation means that this perception was equally shared across all demographics and is, therefore, pivotal to maintaining user trust and audience base. The second dimension, trust in providers, achieved an estimated mean of 3.72, with SD = 0.94. While it still signals an overall positive view, the clearly lower rating indicates that users still harbour fears concerning data theft, hidden fees, or the long-term reliability of service provisioners. The higher standard deviation also means that there are differences across user segmentations; city-based and high-income users evaluated higher than the rural and low-income ones.

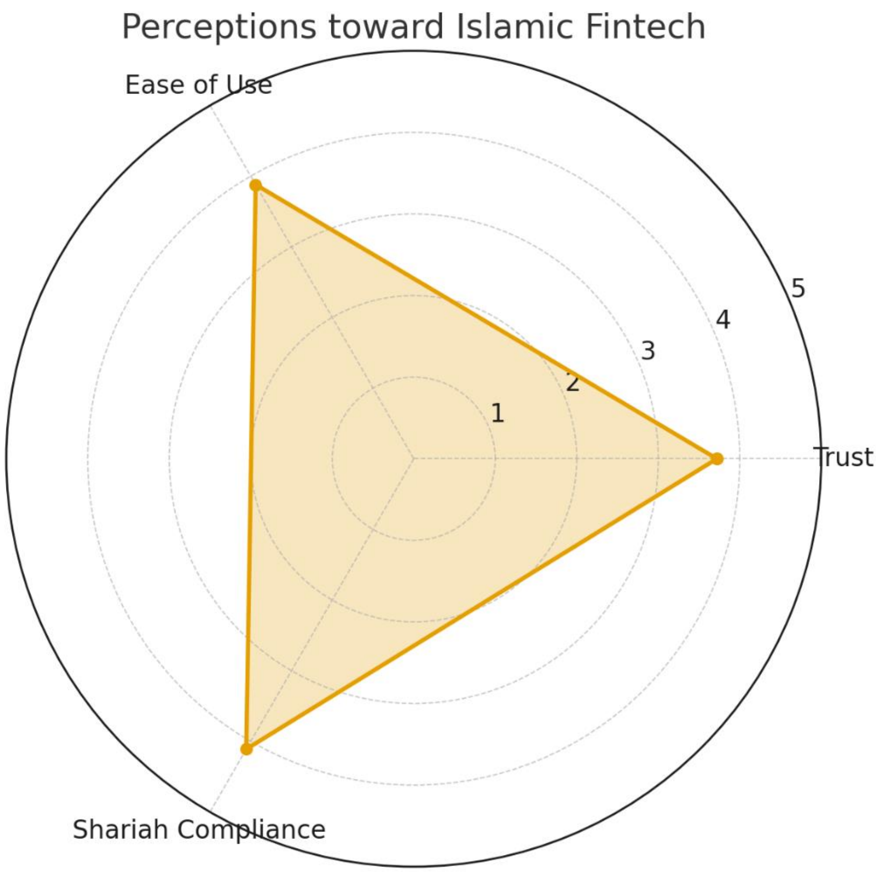

Table 4.4: Perceptions of respondents toward Islamic Fintech

Lastly, the mean for Applications' ease of use was 3.88, with SD = 0.87 indicating the likely broad availability of user-friendly interfaces and digitized payments, but also the service gaps for less electronically literate participants. All in all, finding suggests that Fintech providers have established a solid basis of alignment compliance and usability, meaning that the enhanced business-trust, transparency, and regulatory compliance will likely drive more significant adoption rates.

Table 4.4: Mean Scores of Perceptions toward Islamic Fintech (1 = Strongly Disagree, 5 = Strongly Agree)

Perception Dimension	Mean Score	Std. Deviation
Trust in Islamic Fintech providers	3.72	0.94
Ease of use of applications	3.88	0.87
Confidence in Shariah compliance	4.11	0.82

4.5 Correlation Analysis: Fintech Usage and Financial Inclusion

Correlation was used in order to determine the strength and direction of relationship between Islamic FinTech usage and various financial inclusion proxies. The findings are summarized in Table 4.5, which confirms that all four indicators: account ownership, regular saving, formal borrowing and transaction frequency, exhibit statistically significant and positive correlations when tested. These results underscore the contribution of Fintech to inclusion, which is achieved through access, saving and borrowing from formal institutions as well as transaction activity. These associations are depicted in Figure 4.5, which shows that the use of Fintech is most related to a complete, well-functioning financial ecosystem namely frequent transactions and formal account ownership i.e., two closely-related constructs of financial inclusion.

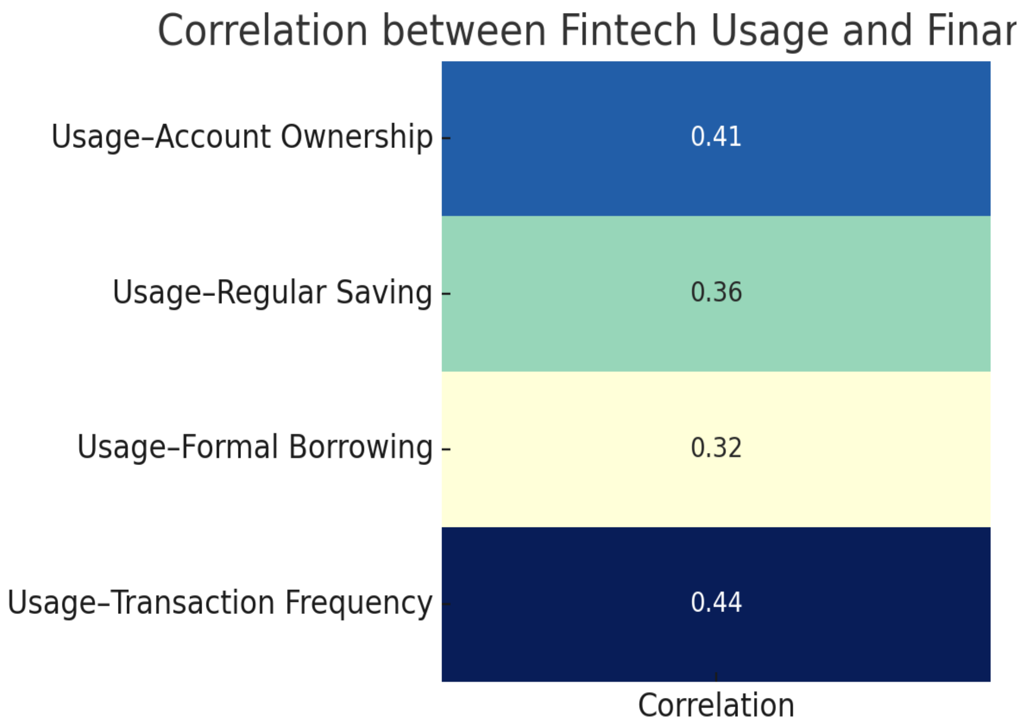

Figure 4.5: Correlation between Islamic Fintech Usage and Financial Inclusion Indicators

The closest relationship was between Fintech use and number of transactions ($r = 0.44$, $p < 0.001$). This means that people interacting with Islamic Fintech Platforms are more active in using their account for every normal financial transaction. For young, urban participants in particular, the barriers to frequent use seem to have been lowered through means such as mobile wallets, online transfers and app payments. Likewise, the association between Fintech use to account ownership ($r = 0.41$, $p < 0.001$) indicates that Islamic Fintech provides a gateway into orthodox financial systems and offers avenues for those who were previously screened out due to religious beliefs.

Fintech usage also had moderately weaker associations with saving behavior (r = 0.36, p = 0.002) and formal borrowing (r = 0.32, p = 0.004). These findings imply that a relative surge in Islamic Fintech is contributing to a greater access to savings and credit, however the influence of this improvement is still being moderated by cultural norms, poor product range diversity, as well as the remaining mistrust. As an example, despite the existence of Islamic micro-lending apps, many still end up resorting to informal borrowing from a family member or friend. Nevertheless, the positive coefficients mean that Fintech services are slowly moving users towards participating more in formalized saving and credit activities. These results generally highlight the promise of Islamic Fintech in contributing to increase financial inclusion, and at the same time it highlights a need for product development which is more targeted, as well as policy support to enhance its presence in formal savings and lending markets.

Table 4.5: Correlation between Islamic Fintech Usage and Financial Inclusion Indicators

Variable Pair	Correlation Coefficient (r)	Significance (p-value)
Fintech Usage – Account Ownership	0.41	0.001 (***)
Fintech Usage – Regular Saving	0.36	0.002 (**)
Fintech Usage – Formal Borrowing	0.32	0.004 (**)
Fintech Usage – Transaction Frequency	0.44	0.001 (***)

4.6 Logistic Regression: Predictors of Financial Inclusion

In order to delve deeper on account ownership determinants, logistic regression with Fintech use, level of income, gender and location as determinants was estimated. The results are shown in table 4.6, where Exp(B) indicates odds ratios for account ownership with respect to each factor. The model indicates broad elements of both Fintech usage and socioeconomic factors, such as income and geography, are both important in determining the outcome of inclusion, while gender is not statistically significant as a predictor variable. We illustrate the odds ratio comparison graphically in Figure 4.6 further underscoring the superior relevance of Fintech use as a determinant.

The investigation finds that Fintech use emerges as the most influential with OR 2.05 (p = 0.001). Which also implies that users of Islamic Fintech are more than two times as likely to have a formal financial account in contrast to non-users. This result complements those of the correlations and highlights the centripetal effect of digital platforms on mitigating financial inclusion disparity, particularly where services are Shariah-compliant. Income category has also a moderate positive relation, having an odds ratio of 1.79 (p

= 0.003). The prevalence of formal accounts is therefore almost 80 percent higher among the respondents with higher income, which suggests that cost (affordability of digital access), education on finance (financial literacy) and perceived usefulness of Fintech products are relatively more in favor of this group.

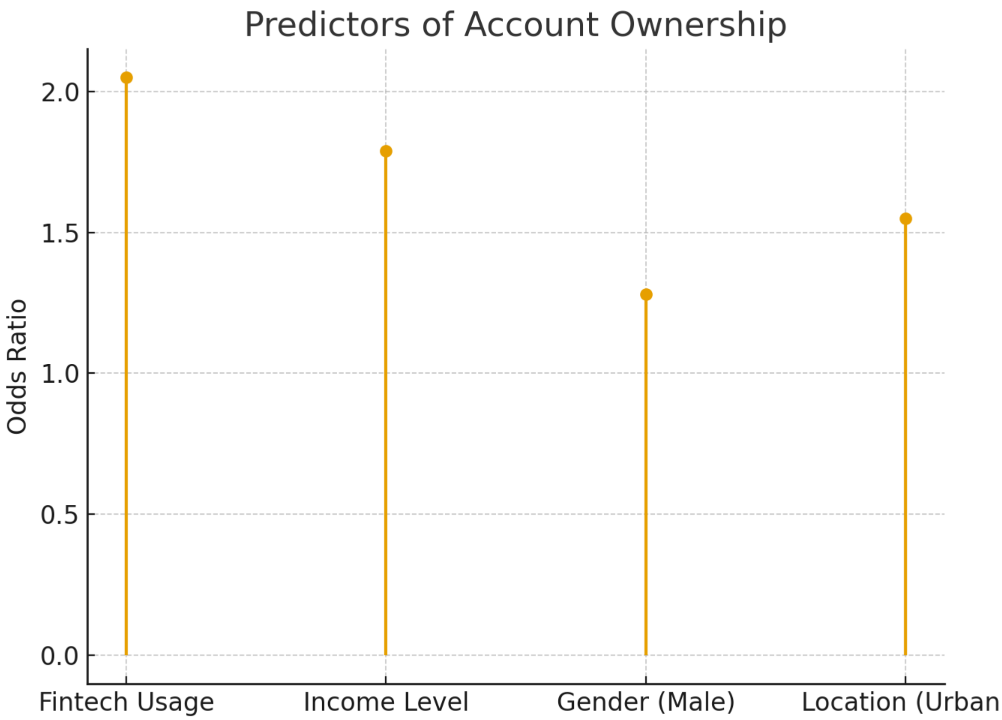

Figure 4.6: Logistic Regression Results for Predictors of Account Ownership

Gender, on the other hand, is not found to be a significant predictor of account ownership (OR = 1.28, p = 0.210), which signpost that men and women have comparable likelihoods in taking Fintech services when attempting to hold for other factors. This is a positive find in an environment where women have traditionally been left behind by formal finance, and reflects the gender-inclusive prospects of Islamic Fintech. Location does matter though: urban respondents are 1.55 times more likely to have an account than rural ones (p = 0.016), illustrating ongoing infrastructural and connective challenges for rural Pakistan. Altogether, the findings of the regression analysis indicate that while Fintech usage strongly drives inclusion, socioeconomic disparities and urban-rural splits still have crucial roles in determining access. Policy measures that scale up digital infrastructure in rural areas and innovative services targeting low-income groups will be essential in ensuring, equitable financial inclusion through Islamic Fintech.

Table 4.6: Logistic Regression Results for Predictors of Account Ownership

Predictor	B (Coefficient)	Odds Ratio (Exp(B))	Significance (p-value)
Fintech Usage	0.72	2.05	0.001 (***)
Income Level	0.58	1.79	0.003 (**)
Gender (Male = 1)	0.25	1.28	0.210 (ns)
Location (Urban = 1)	0.44	1.55	0.016 (**)

4.7 Qualitative Insights from Interviews

The qualitative component of the research was developed to elicit qualitative insights into the social, cultural and behavioral aspects of adoption of Islamic Fintech which can't be completely captured through quantitative means. The research involved 20 semi-structured in-depth interviews with active, non and former users of Islamic Fintech services. Analysis of the transcripts resulted in three key themes: trust and credibility, access barriers, and opportunities for compliance. These themes serve not only to frame the quantitative findings previously seen, but also bring out subtleties about how specific concerns and expectations mould individual choices. The critical patterns and representative insights are summarized in table 4.7 and figure 4.7.

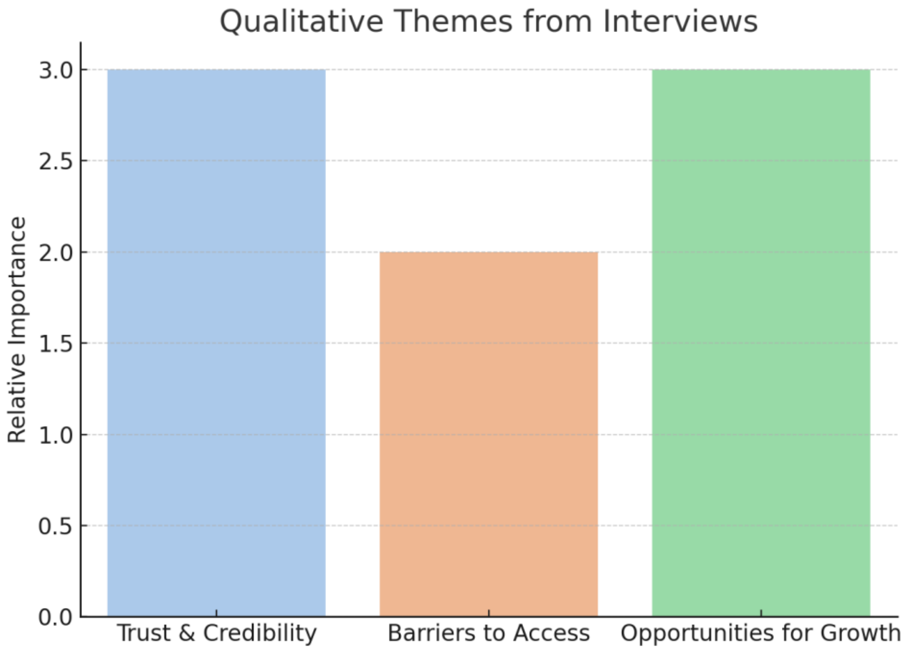

Figure 4.7: Qualitative themes from interviews

The first theme, trust and credibility were weighty among all the participants with little or no experience using Fintech platforms. A majority of the respondents indicated that Shariah certification by credible religious scholars was important, due to their scepticism to use digital services without being sure whether transactions were Shariah-compliant or not. This picture corroborates the total quantitative score on confidence which is high in Shariah compatibility (mean = 4.11) albeit with some specifics: users trusted service provided by proven scholars but did not trust new-comers lacking clear endorsements. At a similar time, the interviewees were concerned about extra fees, not transparent service and data protection violations with provident as causes for low trust on suppliers. These misgivings are the reason why trust (m = 3.72) emerged as having a lower level of quantitative measure than Shariah compliance, revealing that trustworthiness in financial transaction is not only limited to religious endorsement but also needs open and fair business behavior.

Our second theme, obstacles to access, was particularly notable among rural participants and females from low-income families. A lack of Internet access, digital literacy and little awareness of Islamic Fintech offerings were among the biggest barriers cited by respondents. For some, the experience was daunting, downloading and installing unfamiliar apps, or navigating its interface, especially in places where smartphones are not widely accessible or blackouts are frequent. Female respondents also cited socio-cultural constraints, including dependence on male family members for accessing digital transaction ecosystem as a barrier to independent use of Fintech services. Supplementing these regression results, the qualitative interviews showed that urban residence is a key predictor of account ownership, further emphasizing the structural disadvantage for rural individuals. In other words, despite the promise of Fintech platforms to democratize financial access, infrastructural and digital divides still hinder wider participation.

The third theme, opportunities for growth, mirrored a clear appeal from respondents for more varied and inclusive Islamic Fintech offerings. A few said they would take out Shariah-compliant microfinance apps that enable them to borrow small amounts without interest, like those provided by informal lenders, or investment platforms for people with low incomes who want to save in a halal fashion. Especially younger participants expressed interest in mobile-based applications that offer easy-to-use interfaces and clear policies and are religiously compatible. This complements the quantitative relationships, which are found between Fintech and saving, as well as transaction frequency, indicating there might be more room for innovative products to increase these behaviors. Crucially, according to the interviews, they are not passive consumers of what it takes to reach them: accessible, reliable and religiously legitimate financial instruments that address their mundane lived realities.

The qualitative insights complement quantitative results and indicate that trust in the Shariah compliance could attract users but repeated use will hinge on creation of trust, overcoming infrastructural constraints and widening product options. Verified triangulation of research methods concludes that Islamic Fintech is highly promising to enhance financial inclusion in Pakistan but only if providers equally emphasizing on trustworthy, accessibility and innovation.

Table 4.7: Themes from Qualitative Interviews

Theme	Illustrative Insight
Trust and Credibility	Respondents valued Shariah certification from credible scholars but worried about hidden charges and data privacy.
Barriers to Access	Many rural participants reported poor internet connectivity and lack of awareness of Islamic Fintech options.
Opportunities for Growth	Respondents expressed demand for Shariah-compliant microfinance and investment apps tailored for low-income users.

Discussion

Findings The findings of this paper provide important understanding on how Fintech supports Islamic financial inclusion in Pakistan. These results show mixed opportunities, challenges and indications that when digital channels are Shariah compliant, they can be a significant driver of financial inclusion. This section discusses the findings relative to other literature noting commonalities, divergences and novelty.

Demographic Analysis Table 4.1 shows that Fintech users are predominately young, educated and resides in urban areas. This is consistent with the demographic snapshot of Fintech use recorded in earlier surveys for the South Asian region. For instance, (Shaikh & Sharif, 2024) noted that in Pakistan those between ages 18 months to 35 years used mobile banking and e-wallets more, primarily driven by relatively greater digital knowledge and smartphone use. Similarly, (Nandru *et al.*, 2021), using the Global Findex Database, found that age and education are still robust predictors of digital financial inclusion in developing countries. The male (mostly) majority in the sample represents a gendered pattern of financial access in Pakistan where women are structurally barred by low phone ownership and social bans. These results emphasise the importance of gender-specific Fintech solution to reduce this gap in usage of men and women.

The financial behaviour pattern (table 4.2) shows that almost 60 percent of respondents have a formal bank account, but such a large number as 23% just use mobile money accounts and a proportion around %17.5 is still fully excluded. This parallels the results of (Siddiqui, 2023) who found Pakistan as being one of the countries with significant level of "last mile" exclusion despite rapid growth in branchless banking coverage. The larger proportion (41.5%) of informal borrowing is in conformity with (Ayub, 2020) who demonstrated that a large number of households still rely on family and friends for emergency liquidity, which reflects religious disaffections from traditional banking and lack of easy access to affordable Islamic credit. That is to say, although formal inclusion is still incomplete, Fintech platforms are in fact allowing day-to-day activity by people in financial systems.

Although there is an underlying recognition gap between awareness and usage patterns of Islamic Fintech (65.5% compared to 37%). This difference of awareness and usage is also supported by (Usman, 2021) who suggest that the knowledge about Islamic banking operations in Pakistan is high but quite less compared to those who are already using it, perhaps because of mistrust in hidden charges and credibility of Shariah compliance. (FM Khan, 2025) similarly found that many users do not continue Islamic digital services after initial use because of discrepancy in usability or benefit with reference to conventional alternatives. The discovery that mobile wallets are the most frequently used service aligns with (Rahim *et al.*, 2023) who highlighted the importance of mobile wallets as a way to further expand Islamic Fintech adoption. The low adoption rate of such Islamic micro-lending apps mirrors the obstacles that include regulatory challenges and weak public confidence.

Findings reflected in the perception scores (Table 4.4) also demonstrate that the importance of Shariah compliance supersedes others, where the respondents noted highest mean score for Shariah compliance (mean = 4.11). This supports the work of (Atal *et al.*, 2022) who suggested that religiosity motivation is a significant driver to implement Islamic banks' products. Likewise, moderate level of trust (3.72) also fits (Patel *et al.*, 2025), which demonstrated how transparency and dispute resolution mechanisms, for instance, serve to erode customers' trust in digital finance. Ease of use rating good (3.88) is also supported by (Hussain *et al.*, 2017) who stated that user-friendly design and multilingual support are important to retain initial users in Pakistan. Collectively, this insight highlights that despite Shariah compliance being the dominant driver of adoption, trust and ease-of-use are key issues for the scaling of Fintech services.

The correlation results (Table 4.5) confirm empirically that Islamic Fintech utilization is significantly positively correlated with financial inclusion proxy. Correlations with account ownership, savings, and transaction frequency are analogous to those reported by (Salman *et al.*, 2024) showing digital wallets increase the probability of saving and transacting for lower-income Pakistanis. Similarly, Fintech usage was found to be a predictor of increased participation in the formal economy in (Azmeh & Al-Raeei, 2024). The relationship with formal borrowing (r = 0.32), while less strong, is also consistent with that of (Abdeljawad *et al.*, 2022), whose findings suggested that Islamic Fintech lending platforms are in the starting age and have problems with scalability when compared to traditional microfinance institutions.

In the light of regression analysis (Table 4.6) it is observed that Fintech use clearly predicts account ownership even when controlling for income, gender and location. the strong value of the odds ratio (2.05) shows a significant direct impact between Fintech and inclusion. (Umeaduma, 2023) argued that digital platforms mitigate entry barriers among unbanked people, hence contributing to an increased level of financial inclusion. The role of income and urban residency mirrors structural inequalities outlined in (Curtis *et al.*, 2022), where higher-income and urban households are disproportionately overrepresented among the digitally included (Curtis *et al.*, 2022). Gender, though not statistically significant as a predictor, directly challenges what some older studies have posited women's systematic disadvantage. This indicates that the platforms of Islamic Fintech can help to counter gender bias by providing convenient, culturally acceptable ways in for women, a finding with significant policy implications.

The qualitative categories (Table 4.7) provide a blending of the quantitative results by illustrating how trust perceptions, access barriers and growth potential influence adoption. The prevalent desire for trustworthy Shariah certification reinforces (Dingemans & Van Ingen, 2015)'s claim that religious legitimacy is integral to users' trust. Constraints such as weak connectivity and digital illiteracy reflect the infrastructural issues illuminated by (Sindakis & Showkat, 2024) who argued for both technological and awareness gap between urban and rural parts of India which led to continued exclusion of subscribers not because there is no demand but due to inadequate technology and their unawareness. This voice for a Shariah-compliant microfinance and an investment app, where one can lend money to others and also invest in possible profitable projects, consistent with (Muneeza & Mustapha, 2021), who opined that Islamic Fintech had not adequately served low- income masses with specialized products. These findings support the advocacy for specific policy measures that integrate digital literacy training, infrastructure development and regulations to enable product diversification. Although it is proven to increase financial inclusion (accounts, savings and transactions), barriers of trust, access and product diversity exist. The results are generally in line with regional and international reports, though the study contributes new evidence by emphasising on Shariah-compliant reason as a driver for, and inhibitor against adoption. This implies that policy makers, regulators and industry players may need to do more than offer generic Fintech growth which would develop an ecosystem that caters for religious, technological and financial dimensions of access to financial resources.

Conclusion

This study adds to the expanding literature on Fintech with regard to changing financial inclusion through empirical evidence drawn from Pakistan's Islamic banking sector. The findings indicate that Islamic Fintech significantly enhances formal account penetration, savings levels, digital transactions and the demand for Shariah-compliant finance. By combining traditional religious caution with digital innovation, Islamic fintech shows that it can reach portions of the population left behind by its bricks-and-mortar predecessor. Yet the results also underscore longstanding struggles. Despite this widespread awareness, the actual use of Islamic Fintech services is low, indicating that there are trust deficits, infrastructural constraints and usability issues. Rural and women respondents are still hindered by lack of access to the internet, low digital literacy, and socio-cultural factors. The research also highlights Shariah compliance as the primary determinant of adoption, but emphasises that long-term sustainability also rests on transparency, user confidence and access to more than just basic mobile wallet services. Policy implications are clear. Regulators will need to enhance Shariah governance frameworks, facilitate digital systems interoperability and encourage for regulatory sandboxes for Islamic Fintech innovations. Banks, the providers need to invest in outreach programs, develop user-friendly interfaces and meet gender and rural access equity gap. In addition, an individual focus on digital literacy and infrastructure development is crucial for aligning benefits fairly. Islamic Fintech in Pakistan is an early-stage sector but it has a demonstrated potential to revolutionize financial inclusion if scaled with the right regulations and product variety combined with community trust building. The report notes that future expansion hinges on taking an integrated approach which weaves religious legitimacy with digital access and socioeconomic inclusion. While doing so, Islamic Fintech could stand out as a lighthouse for Pakistan's financial ecosystem for inclusivity and stability.

References

1. Abdeljawad, I., Hashem, S. Q., & Rashid, M. (2022). Fintech and Islamic financial institutions: applications and challenges. FinTech in Islamic financial institutions: scope, challenges, and implications in Islamic Finance, 193-222.
2. Alsmadi, A. A. (2024). Exploring the moderating role of religious orientation on Islamic Fintech adoption. International Journal of Islamic and Middle Eastern Finance and Management, 17(2), 310-327.
3. Agarwal, S., Qian, W., Ren, Y., Tsai, H.-T., & Yeung, B. (2025). The real impact of FinTech: Evidence from mobile payment technology. Management Science.
4. Ajouz, M., & Abuamria, F. (2023). Unveiling the potential of the Islamic fintech ecosystem in emerging markets. Al Qasimia University Journal of Islamic Economics, 3(1), 115-148.
5. Albaity, M., & Rahman, M. (2019). The intention to use Islamic banking: an exploratory study to measure Islamic financial literacy. International Journal of Emerging Markets, 14(5), 988-1012.
6. Alsaghir, M. (2023). Digital risks and Islamic FinTech: a road map to social justice and financial inclusion. Journal of Islamic Accounting and Business Research.
7. Atal, N. U., Iranmanesh, M., Hashim, F., & Foroughi, B. (2022). Drivers of intention to use Murabaha financing: religiosity as moderator. Journal of Islamic Marketing, 13(3), 740-762.
8. Ayub, M. (2020). Making Islamic finance a vehicle for social inclusion: A case for revisiting the liquidity management practices by Islamic banks. In Enhancing Financial Inclusion through Islamic Finance, Volume I (pp. 109-136): Springer.
9. Azmeh, C., & Al-Raeei, M. (2024). Exploring the dual relationship between fintech and financial inclusion in developing countries and their impact on economic growth: Supplement or substitute? Plos one, 19(12), e0315174.

10. Behaghel, L., Macours, K., & Subervie, J. (2019). How can randomised controlled trials help improve the design of the common agricultural policy? European Review of Agricultural Economics, 46(3), 473-493.
11. Bouteraa, M., Chekima, B., Lajuni, N., & Anwar, A. (2023). Understanding consumers' barriers to using FinTech services in the United Arab Emirates: mixed-methods research approach. Sustainability, 15(4), 2931.
12. Chong, F. H. L. (2021). Enhancing trust through digital Islamic finance and blockchain technology. Qualitative Research in Financial Markets, 13(3), 328-341.
13. Curtis, M. E., Clingan, S. E., Guo, H., Zhu, Y., Mooney, L. J., & Hser, Y. I. (2022). Disparities in digital access among American rural and urban households and implications for telemedicine-based services. The Journal of Rural Health, 38(3), 512-518.
14. Dingemans, E., & Van Ingen, E. (2015). Does religion breed trust? A cross-national study of the effects of religious involvement, religious faith, and religious context on social trust. Journal for the scientific study of religion, 54(4), 739-755.
15. Hussain, W., Hussain, O. K., Hussain, F. K., & Khan, M. Q. (2017). Usability evaluation of english, local and plain languages to enhance on-screen text readability: A use case of Pakistan. Global Journal of Flexible Systems Management, 18(1), 33-49.
16. Ishaq, S. (2022). Small and Medium Enterprises'(SMEs) Access to Islamic Banking Finance in Pakistan. Aston University,
17. Khan, F. (2015). Islamic banking in Pakistan: Shariah-compliant finance and the quest to make Pakistan more Islamic: Routledge.
18. Khan, F. M. (2025). Exploring usability issues of e-government websites in Bangladesh and their impact on users with limited digital literacy. Brac University,
19. Khan, Z. (2024). Factors Affecting the Acceptance of Islamic Fintech: A Role of Religiosity. COMSATS Journal of Islamic Finance (CJIF), 9(2).
20. Mahmoud, M. A., Ma'aji, M. M., Abdullahi, M. S., Karaye, A. B., & Garba, A. S. (2025). Factors influencing the Islamic Fintech acceptance: moderating role of Islamic financial literacy. Journal of Islamic Accounting and Business Research.
21. Muneeza, A., & Mustapha, Z. (2021). Islamic fintech and financial inclusion. In Islamic FinTech: insights and solutions (pp. 173-190): Springer.
22. Nandru, P., Byram, A., & Rentala, S. (2016). Determinants of financial inclusion: Evidence from account ownership and

use of banking services. International Journal of Entrepreneurship and Development Studies, 4(2), 141-155.

23. Nandru, P., Chendragiri, M., & Velayutham, A. (2021). Determinants of digital financial inclusion in India: Evidence from the World Bank's global findex database.
24. Nazir, M., & Saqib, S. E. (2024). Religiosity-based behavioral study, Islamic finance users' approach and selection standard: empirical evidence from Pakistan. Journal of Islamic Accounting and Business Research.
25. Ok, E. (2025). Global Success Stories in Islamic Microfinance Models.
26. Patel, A., Ranjan, R., Kumar, R. K., Ojha, N., & Patel, A. (2025). Online dispute resolution mechanism as an effective tool for resolving cross-border consumer disputes in the era of e-commerce. International Journal of Law and Management.
27. Pazarbasioglu, C., Mora, A. G., Uttamchandani, M., Natarajan, H., Feyen, E., & Saal, M. (2020). Digital financial services. World Bank, 54(1), 1-54.
28. Rahim, N. F., Bakri, M. H., Fianto, B. A., Zainal, N., & Hussein Al Shami, S. A. (2023). Measurement and structural modelling on factors of Islamic Fintech adoption among millennials in Malaysia. Journal of Islamic Marketing, 14(6), 1463-1487.
29. Rawat, M. (2025). d: Digital Literacy: The Role of Smartphones in Empowering Women to be Financially Independent. Available at SSRN 5238940.
30. Salman, M., Rauf, N., & Murtaza, Z. (2024). Unlocking financial inclusion and economic empowerment in rural Pakistan: The interplay of financial literacy and infrastructure development in the impact of digital wallets. Journal of Excellence in Management Sciences, 3(3), 141-160.
31. Shaikh, R., & Sharif, S. (2024). From Banking to Bytes: Investigating the Relationship Between Gen Z's Digital Financial Literacy and Adoption of Digital Wallets in Pakistan. Available at SSRN 4940363.
32. Siddiqui, A. (2023). VRG PAKISTAN BREAKFAST AT DAVOS 2023. Defence Journal, 25(08), 25.
33. Sindakis, S., & Showkat, G. (2024). The digital revolution in India: bridging the gap in rural technology adoption. Journal of Innovation and Entrepreneurship, 13(1), 29.
34. Syarif, M. F. (2024). Shariah Compliance Management in P2P Financing: An Exploratory Study on Islamic FinTech. Sukuk: International Journal of Banking, Finance, Management and Business, 3(III), 54-67.
35. Umeaduma, C. M.-G. (2023). Financial inclusion strategies for poverty reduction and economic empowerment in underbanked rural populations globally. World Journal of

Advanced Research and Reviews, 18(1), 1263-1280.

36. Usman, M. (2021). The Impact Of Non-Shari'ah Compliant Income Of Islamic Banks In Pakistan: Trust As A Mediator To Commitment Of Customers.
37. Valeri, M., Fondacaro, R., De Angelis, C., & Barella, A. (2020). The use of cryptocurrencies for hawala in the Islamic finance. European Journal of Islamic Finance.
38. Webb, H. C. (2025). Sectoral System of Innovation in Islamic Fintech in the UAE's Regulatory Sandbox. In The Palgrave Handbook of fintech in Africa and Middle East: Connecting the Dots of a Rapidly Emerging Ecosystem (pp. 187-207): Springer.
39. Zulfiqar, K., Chaudhary, M. A., & Aslam, A. (2016). Financial inclusion and its implications for inclusive growth in Pakistan. Pakistan Economic and Social Review, 54(2), 297-325.