

DOI: [10.71317/jgst.2.8\(s\).2026.467](https://doi.org/10.71317/jgst.2.8(s).2026.467)**Journal of Global Social Transformation**Journal homepage: <https://rjsaonline.org/index.php/JGST>

## Determinants of Islamic Fintech Adoption among Young Consumers in Pakistan: The Moderating Role of Shariah Compliance Awareness

Khawaja Masood Raza<sup>1</sup>, Imran Abdul Aziz<sup>2</sup>, Salman Sarwat<sup>3</sup>, Hiba Syed<sup>4</sup>, Kaleem Mustafa<sup>5</sup><sup>1</sup> Al-Kawthar University, KarachiEmail: [dr.khawajamasood@alkawthar.edu.pk](mailto:dr.khawajamasood@alkawthar.edu.pk)<sup>2</sup> Visiting Faculty, KSBL/IoBM<sup>3</sup> Benazir Bhutto Shaheed University, Lyari, Karachi<sup>4</sup> University of Karachi<sup>5</sup> NUML University, Karachi Campus**ARTICLE INFO****ABSTRACT****Submission:**

July 08, 2026

**Revised:**

July 24, 2026

**Accepted:**

August 09, 2026

**Available Online:**

August 23, 2026

**Keywords:**

*Islamic fintech; Shariah compliance awareness; Perceived Shariah transparency; Trust; Adoption intention*

The present study, based on integrative technology acceptance, risk-trust and Shariah-signalling theories, explored the factors influencing the intention to adopt Islamic finance technologies by young consumers in Pakistan. The study was conducted on 462 respondents using data collected from PLS-SEM to evaluate the direct, mediating, moderating and predictive relationships. Among the factors influencing adoption intention, there was a significant increase in the factors of trust (performance expectancy, effort expectancy and social influence) and a significant decrease in trust (perceived risk). Perceived Shariah transparency had a positive influence on trust, which was the best predictor of adoption intention, thereby moderating the influence of perceived risk and Shariah transparency. The level of awareness about Shariah compliance greatly enhanced the correlation between the perceived transparency of Shariah and trust in Shariah. The model also explained and predicted well. The results pointed to the combined role of technological advantages, trust and communication of Shariah in an open way, and consumer awareness.

**Corresponding author:****Khawaja Masood Raza****Email:**[dr.khawajamasood@alkawthar.edu.pk](mailto:dr.khawajamasood@alkawthar.edu.pk)**Introduction**

Financial technology has essentially revolutionized payments, transfers, financing, savings, investment, and other financial services, allowing consumers to use technologically mediated channels to facilitate their delivery and usage. Geographical and temporal barriers to financial transactions have diminished, access has become easier and more convenient, and mobile applications, digital wallets, branchless banking and platform-based financial services had diffused. Similarly, fintech-adoption studies were transitioning from merely access to the technological, psychological, institutional and social processes that shaped consumers' adoption decisions in relation to digital financial services (Durak et al., 2024; Idrees & Ullah, 2024). In recent years, perceived utility, ease of use, trust and social influence have been identified as key aspects of fintech adoption (Durak et al., 2024).

In Islamic finance, this shift has created a new class of technologically-enabled financial services, where both conventional and Islamic requirements for technology have coexisted. Islamic fintech had brought together digital financial innovation with the stipulation that products, contracts, transactions and institutional practices are in line with Islamic financial principles. A systematic literature review conducted by Maniam (2024) indicated that research on the adoption of Islamic fintech had grown significantly, with adaptations of the instruments TAM and UTAUT/UTAUT2 being the most widely adopted instruments, while the determinants of adoption – including trust, perceived risk, religiosity, awareness, perceived usefulness, and ease of use – were prevalent. Likewise, Irimia-Diéguez et al. (2024) showed that trust and risk were still significant in determining whether to use the Paytech services among the customers of an Islamic bank.

The setting in Pakistan was particularly relevant for the investigation of these issues, as it coincided with the digitalization of payments at a swift pace and significant expansion of the Islamic banking sector. In Q1 FY2025–26, the number of retail-payment transactions made in Pakistan was around 2.8 billion, with digital channels accounting for around 90% of the total retail-payment volume (State Bank of Pakistan [SBP], 2025a). However, Islamic banking has seen significant growth as well: By December 2025, Islamic banking institutions had almost 22.9% of the total banking-sector assets, and 27.8% of total deposits (Government of Pakistan, 2026). These parallel developments had enhanced the relevance of the study from a practical point of view by examining if the financially oriented consumers in Pakistan would accept the financial technologies positioned as Shariah-compliant.

These perceptions around Shariah had also been strengthened by the institutional environment. State Bank of Pakistan has updated its Shariah Governance Framework for Islamic Banking Institutions to incorporate necessary enhancements in governance arrangements and maximize Islamic banking practices based on the developments in the market and international standards (SBP, 2024). The framework had already strongly highlighted that robust Shariah-compliance systems were fundamental for the preservation of public confidence in the Shariah conformity of Islamic financial institutions' products and services (SBP, 2024). Concurrently, cross-country evidence in recent years has correlated Shariah governance mechanisms with transparency in Islamic banking, which suggests that there are information effects of governance mechanisms for market parties (Quttainah & BenSaid, 2024).

However, young consumers had been a central group in this context, as financial transactions were increasingly made with application-based services, social networks, mobile platforms and digital. Previous studies on Islamic financial technologies indicated that younger and digitally literate consumers were an important potential market for Islamic digital financial solutions (Irimia-Diéguez et al., 2024), while a recent study in Pakistan found that the four constructs, namely, performance expectancy, effort expectancy, social influence, and facilitating conditions, were relevant to understanding the behaviours of consumers towards fintech use (Idrees & Ullah, 2024). However, familiarity with technology did not necessarily mean adoption, as fintech decisions had been influenced by the evaluation of usefulness, ease of use, risk, provider credibility and institutional trust (Ali et al., 2021; Durak et al., 2024; Samsudeen et al., 2026).

Existing evidence from Pakistan had, however, been inadequate to provide insights into the Islamic element of fintech adoption. For instance, Idrees and Ullah (2024) had compared Islamic and conventional banking customers, and had extended UTAUT2 by education level in Pakistan. While their research proved that performance expectancy, effort expectancy, social influence, and facilitating conditions had significant effects on behavioural intention, the research did not investigate how consumers perceived the evidence of Shariah legitimacy of fintech services that they could see. The answer to this important question remained a mystery: what made the information of the provider regarding Shariah to consumer confidence and to the intention of consumption?

The question gained significance due to the mixed reports from recent studies on the compliance of Shariah. Jamshed and Uluyol (2024) had discovered that in their Islamic banking context, there was no significant influence of Shariah compliance on the adoption, while convenience and Islamic values had been influential. On the contrary, Suhartanto et al. (2026) had demonstrated that perceived Shariah compliance had a significant impact on satisfaction and brand preference in the context of Islamic digital banking. These results had indicated that there could have been a differential behavioral impact of Shariah-based attributes on consumers and contexts. Rather, their impact was possible to be based on the ability of consumers to interpret and assess the information that communicated Shariah legitimacy.

Prior to this, some recent studies had already identified that consumer knowledge could impact the adoption processes of Islamic fintech. In their study, Mahmoud et al., (2025) had found that the moderating effect of Islamic financial literacy between the selected relationships of perceived usefulness and trust in the acceptance of Islamic fintech. But Islamic financial literacy had been

a relatively wide concept that involved financial and Islamic-finance knowledge. Thus, the present study aimed at the narrower concept of Shariah compliance awareness, which was to depict the consumers' awareness about the criteria and governance principles to be applied to establish whether a digital financial product is indeed Shariah compliant.

The study had also introduced perceived Shariah transparency, reflecting the level of transparency consumers observed with regard to the Shariah basis of the Islamic fintech provider, in terms of being clearly presented, accessible and verifiable. Theoretically, transparency was not equated with perceived Shariah compliance. Perceived Shariah compliance had been linked to the consumer's overall judgement of whether a service was compliant with Shariah; perceived Shariah transparency had been linked to the visibility and the evaluability of the evidence for this judgement. This was supported by the evidence that highlighted the effect of the Shariah governance arrangements on organizational transparency (Quttainah & BenSaid, 2024) and also reflected SBP's focus on the governance arrangements that would keep public confidence in the organization's Shariah conformity (SBP, 2024).

The proposed framework had therefore identified perceived Shariah transparency as a signal on the provider side and Shariah awareness for interpretation as a signal on the consumer side. It was hoped that consumers with higher awareness of the concepts of *riba*, *gharar*, *maysir*, contractual structure, permissible underlying transactions and Shariah supervision were able to interpret the disclosures related to Shariah better than consumers with lower awareness. So, if the transparency of the providers were the same, the level of trust could have varied based on the consumer's capability to interpret the information provided. This logic not only continued the growing literature on Islamic-fintech literacy (Mahmoud et al., 2025), but also gives a more specific reason for the conflicting results of Shariah compliance on behaviour that have been documented in various recent studies (Jamshed & Uluyol, 2024; Suhartanto et al., 2026).

Three complementary theoretical mechanisms had therefore been integrated within the study. The technology-acceptance mechanism had accounted for the variables of trust and the technology's perceived performance expectancy, effort expectancy, and social influence; the risk-trust mechanism had interpreted the influence of perceived uncertainty on trust and trust on technology adoption; and the Shariah-signalling mechanism had interpreted how perceived Shariah transparency increased trust, which in turn increased the likelihood of technology adoption in the presence of consumers' Shariah-compliance awareness. This integration had been in response to the call for Islamic-fintech research to go beyond adding a repetitive and technology-acceptance-based extension and provide explanations grounded in the context, where technology is being adopted or not (Maniam, 2024).

The research had accomplished four main contributions. First, it had gone further than merely extending the UTAUT2 with the addition of technological utility, uncertainty reduction and Shariah signalling in a single model. Second, it had separated perceived Shariah transparency from the larger concept of perceived Shariah compliance. Third, it had rethought Shariah compliance awareness as a theoretically specified moderator instead of another direct antecedent for adoption, which expands on the previous moderation studies based on Islamic financial literacy (Mahmoud et al., 2025). Last, but not least, it was able to offer evidence from Pakistan, where the growth of digital payments alongside the growth of Islamic banking had made the interaction between technological acceptance and financial legitimacy based on Islam particularly salient (Idrees & Ullah, 2024; SBP, 2025a; Government of Pakistan, 2026).

## **Theoretical Linkage**

### **UTAUT2 and the Technology-Acceptance Mechanism**

The technology element of the framework was based on the Unified Theory of Acceptance and Use of Technology 2. Venkatesh et al. (2012) have proposed that the acceptance of consumer technology is driven by perceptions of the benefits of the expected service, the effort required, the social influences on the technology, the facilitating conditions around the technology, and other consumer-related factors, which are included in UTAUT2. In technologically mediated financial services, usefulness/performance, ease of use, trust and social influence have been shown to be continuing relevant factors in previous fintech literature (Durak et al., 2024; Idrees & Ullah, 2024; Samsudeen et al., 2026).

In the present study, the constructs of performance expectancy, effort expectancy, and social influence have been retained, while reproducing all UTAUT2 constructs was avoided. Theoretically, this mandate had been supported by recent evidence on Islamic financial technologies. In Pakistan, Idrees and Ullah (2024) had established that performance expectancy, effort expectancy, and social influence had a significant impact on fintech behavioural intention. Likewise, Samsudeen et al. (2026) found that the determinants of attitude in the form of performance expectancy, effort expectancy and social influence positively affected the

intention to use fintech by Islamic banking customers. Keeping those three constructs thus maintained the greatest technology-acceptance mechanism without an unnecessarily overfilled model.

Not accounting for habit, hedonic motivation, and price value had also enabled the study to avoid another incremental UTAUT2 replication. The results of the systematic review conducted by Maniam (2024) revealed that the dominant TAM and UTAUT-based explanations in Islamic-fintech adoption research were already present. The theoretical objective of the present study was therefore not to increase the number of UTAUT2 constructs but to merge a parsimonious technological core with theoretically independent constructs of risk-trust and Shariah-signalling.

### **Perceived Risk and Trust as an Uncertainty-Reduction Mechanism**

Quite a few types of uncertainty had been introduced into the lives of consumers through the digital financial services: financial risk, lack of transactions, privacy issues, cybersecurity concerns, and concerns about the trustworthiness of the digital financial services providers. This uncertainty had been consistently deemed significant in the field of fintech research, as consumers needed to conduct financial transactions on systems they do not fully observe or control (Ali et al., 2021; Irimia-Diéguez et al., 2024).

In Islamic fintech, Ali et al. (2021) had identified that the perceived risk had a negative impact on trust, which in turn had a strong and positive impact on Islamic-fintech adoption intention. Recently, Irimia-Diéguez et al. (2024) found the direct effect of 'trust' to be highly significant in increasing the intention to use Islamic Paytech services, and that 'perceived risk' had an important indirect effect. Samsudeen et al. (2026) have also found a significant negative relationship between perceived risk and intention to adopt fintech among the Islamic banking customers.

The results led to a model based on perceived risk, as a determinant of adoption, in part through changing confidence in the provider. This study, therefore, had sought to prevent the two factors of perceived risk and trust from being isolated predictors. Perceived risk, however, had been defined as a source of uncertainty that decreased consumers' trust, and trust was perceived as consumers' willingness to trust the provider despite unavoidable uncertainty during the technological and transactional process (Ali et al., 2021; Irimia-Diéguez et al., 2024).

### **Signalling Theory and Perceived Shariah Transparency**

Signalling theory had accounted for behaviour where one party would have information that the other party wouldn't have been able to see directly. In this scenario with information asymmetry, observable signals might help to reduce uncertainty when the signals contained credible information about attributes that are not easy to assess (Connelly et al., 2011). This theoretical framework was especially relevant for Shariah compliance, as the fintech consumers were not generally allowed to review the internal Shariah review processes, contractual frameworks, governance processes, purification processes, or the deliberations of the supervisory boards.

Islamic financial institutions had thus been dependent on governance and disclosure arrangements to project Shariah legitimacy to stakeholders. Especially, Quttainah and BenSaid (2024) have recently found that the Shariah governance mechanisms were linked to the transparency of Islamic banks, and the updated Pakistani Shariah Governance Framework had stressed the importance of effective structures that ensure Islamic financial products and services are in conformity with Sharia, thus fostering public confidence in the Islamic banks. Other evidence in digital banking dated recently also showed that consumers had substantive behavioural value on their perception of Shariah compliance (Suhartanto et al., 2026).

Perceived Shariah transparency was defined as the level of consumers' awareness that an Islamic fintech provider had communicated its Shariah compliance basis in a transparent, accessible, understandable and verifiable manner. The information relevant to this had included: the underlying contractual structure; Shariah supervisory arrangements; prohibition of riba; avoidance of excessive gharar and maysir; procedure for Shariah review; and processes for dealing with potentially non-compliant activities. Transparency had hence been defined as the extent to which the evidence of compliance had been presented, and not whether the consumers had already reached a conclusion on the provider's Shariah compliance.

This was significant as recent studies have yielded varying results with regard to Shariah compliance. Prior research by Jamshed and Uluyol (2024) had reported that there was no significant difference between the effect of Shariah compliance and adoption, while research conducted by Suhartanto et al. (2026) showed that perceived Shariah compliance had a strong influence on

important Islamic digital-banking outcomes. This variation suggested that the information produced by Shariah had behavioural implications (indirect) via intervening cognitive and relational processes in addition to a direct effect.

### **Shariah Compliance Awareness as a Signal-Interpretation Capability**

Consumers' awareness of Shariah compliance had been defined as their understanding of the basic criteria to determine if a product or practice is Shariah compliant. This knowledge had encompassed, among others, that of *riba*, excessive *gharar*, *maysir*, the allowed contractual structures, underlying transactions, and the purpose of Shariah supervision. The role of consumer knowledge and Islamic financial literacy in changing the relationships between technology acceptance had also been increasingly recognized by Islamic-fintech scholars (Mahmoud et al., 2025).

The construct had been different from religiosity since religious commitment did not necessarily mean technical knowledge of the Islamic financial structures. It had also been different from the general Islamic financial literacy as the latter covered wider financial literacy, and Shariah compliance awareness had been focused on the knowledge needed to assess compliance claims. This more limited definition had enabled the study to define exactly which point of the proposed causal chain had been affected by awareness.

The proposed moderation was to be based on a signalling logic. The uncertainty could have been reduced only to the degree that the receiver can interpret the diagnostic information in the information (Connelly et al., 2011). As such, consumers with higher Shariah compliance awareness have been anticipated to grasp the importance of information regarding Shariah boards, contractual structures, *riba* avoidance, governance processes, and Shariah review. The lack of awareness may have led consumers to see the identical disclosures, but without adequate knowledge to discern between the evidence of substantive compliance and Islamic language.

Shariah compliance awareness had therefore been conceptualized as a signal interpretation capability that would amplify the impact of perceived Shariah transparency on trust. This specification built upon the work of Mahmoud et al. (2025), who had shown that Islamic financial literacy is relevant in a broad sense, mitigating the findings of inconsistent Shariah compliance by Jamshed and Uluyol (2024) and Suhartanto et al. (2026).

## **Hypotheses Development**

### **Performance Expectancy and Islamic Fintech Adoption Intention**

In terms of performance expectancy, it had appeared that young consumers' perceptions of the convenience, speed, access and effectiveness of Islamic fintech had been shaped by the extent to which they thought it would be helpful in conducting financial transactions. Technology-adoption theory had indicated that consumers would be more accepting of a technology that provided them with useful performance gains (Venkatesh et al., 2012). Perceived utility was a key factor affecting the adoption of fintech products and services, as it was in other product and service categories (Durak et al., 2024).

There had been considerable evidence of this connection in Islamic and Pakistani contexts in recent times. The study by Idrees and Ullah (2024) had revealed that PE had a significant positive effect on fintech behavioural intention of the banking users in Pakistan. Similarly, Samuddeen et al. (2026) determined that the positive impact of performance expectancy on Islamic banking customers' fintech-adoption intention. Given the fact that young consumers had seen Islamic finance as offering better efficiency and convenience in finance, it was expected that they would have higher intentions to adopt Islamic finance.

***H1:** It was hypothesized that performance expectancy had positively influenced Islamic fintech adoption intention.*

### **Effort Expectancy and Islamic Fintech Adoption Intention**

Effort expectancy had captured the consumers' apprehensions about understanding, learning and operating Islamic fintech apps. Even if a digital financial service (DFS) provided significant functional value, it could have failed to be taken up due to over-complexity, cumbersome enrollment, unclear interfaces, etc. If a digital financial service (DFS) provided significant functional value, but enrollment was complicated, interfaces were unclear, or the service was overly complex, it could have failed to be adopted. Thus, UTAUT2 had determined that effort expectancy was an important factor affecting consumer technology acceptance (Venkatesh et al., 2012).

Fintech evidence had reinforced this expectation. Previous studies by Durak et al. (2024) had identified perceived ease of use as one of the major factors of fintech adoption, and Idrees and Ullah (2024) also reported that effort expectancy had a significant positive impact on Pakistani fintech users. A similar positive impact had been documented by Samsudeen et al. (2026) in the context of Islamic banking. Thus, perceived ease of use of Islamic fintech was expected to boost intention to use Islamic fintech.

**H2:** *It was hypothesized that effort expectancy had positively influenced Islamic fintech adoption intention.*

### **Social Influence and Islamic Fintech Adoption Intention**

Social influence was defined as the perceived support or encouragement from individuals that matter to consumers for the use of Islamic fintech. Behavioural intentions could be changed by evaluations and expectations as expressed by meaningful social referents, with this being the argument for UTAUT2 (Venkatesh et al., 2012). In fintech, this process was still applicable as consumers often used personal recommendations and shared experiences to assess new digital financial services.

This correlation had been borne out by recent evidence. However, social impact was not included by Durak et al. (2024) as one of the dimensions of fintech adoption and Idrees and Ullah (2024) had identified social influence as a significant determinant of fintech behavioural intention in Pakistan. The study conducted by Samsudeen et al. (2026) had also found the positive relationship between Islamic banking customers to be significant. Thus, positive encouragement from family members, friends, peers and other influential groups was anticipated to bolster young consumers' intention to use Islamic fintech.

**H3:** *It was hypothesized that social influence had positively influenced Islamic fintech adoption intention.*

### **Perceived Risk and Trust**

Perceived risks were the consumers' concerns about the potential negative impacts in financial, privacy, security or transactional aspects related to Islamic fintech. The nature of digital financial transactions had always been uncertain since consumers sent money and personal data via technologically mediated systems over which they had little control (Ali et al., 2021; Irimia-Diéguez et al., 2024).

Intuitively, this uncertainty had been well demonstrated to affect trust. Ali et al. (2021) had identified a significant negative correlation between the perceived risks of using Islamic fintech and trust in Islamic fintech. Irimia-Diéguez et al. (2024) had also shown that perceived risk was critical in the trust-based process that brought about Islamic Paytech usage, and Samsudeen et al. (2026) had validated the negative behavioural impacts of risk in the Islamic banking fintech context. Hence, consumers who felt the Islamic finance provider was financially, technologically, or informationally risky were expected to have lower trust in the provider.

**H4:** *It was hypothesized that perceived risk had negatively influenced trust in Islamic fintech.*

### **Perceived Shariah Transparency and Trust**

Perceived Shariah transparency was defined as the extent to which consumers considered that the Islamic fintech provider clearly and verifiably took the time to explain the Shariah foundations of its services. Shariah information on supervisory arrangements, contractual structures, riba avoidance, compliance-review arrangements, and Islamic financial principles may have helped to diminish consumers' doubts on the actual implementation of Shariah by an apparently Islamic fintech provider.

The signalling theory had indicated that when information was not available for consumers to observe about the quality of the product being advertised, trust formation would be aided by the presence of credible information that would reduce information asymmetry (Connelly et al., 2011). In Islamic finance, Quttainah and BenSaid (2024) had found a relationship between Shariah governance mechanisms and the transparency of the organizations, whereas the amended Shariah Governance Framework of Pakistan has explicitly mentioned the need for a good compliance system to ensure public trust in the Shariah conformity of organizations (SBP, 2024). Suhartanto et al. (2026) had previously found that perceived shariah compliance had significant impacts in Islamic digital banking.

This, in turn, was expected to eliminate the uncertainty over the integrity and authenticity of the Shariah provider and thus enhance consumer confidence.

**H5:** *It was hypothesized that perceived Shariah transparency had positively influenced trust in Islamic fintech.*

### **Trust and Islamic Fintech Adoption Intention**

Trust has been demonstrated to influence consumers' confidence in the reliability, competency, honesty and ability of Islamic fintech providers to safeguard consumers' interests. Trust was particularly important in relation to fintech due to the need for consumers to embrace the risk of financial transactions, personal data, cyber security and relationships mediated through technology.

The importance of trust had been consistently supported by Islamic-fintech evidence. The positive relationship between trust and the intention to use Islamic-fintech had been reported by Ali et al. (2021). A direct effect with a high level of significance was found by Irimia-Diéguez et al. (2024) between trust and the intention to use Islamic Paytech services. Trust had also been found as one of the most prominent constructs that were included in Islamic-fintech adoption studies in a recent systematic review conducted by Maniam (2024), and in the more recent Islamic-fintech acceptance framework conducted by Mahmoud et al. (2025). Higher trust, therefore, would have been expected to result in higher adoption intention.

***H6:** It was hypothesized that trust had positively influenced Islamic fintech adoption intention.*

### **Mediating Role of Trust between Perceived Risk and Adoption Intention**

The effect of the perceived risk was not necessarily direct – risk–intention. Rather, risk might have diminished consumers' trust in the provider, which would have led to decreased future intention to use. Ali et al. (2021) had proved that perceived risk had a negative impact on trust and trust had a positive impact on Islamic-fintech adoption intention. In the same way, Irimia-Diéguez et al (2024) had discovered that perceived risk had a significant indirect impact in an Islamic Paytech adoption model.

The results indicated that a mechanism of uncertainty reduction can influence trust in the service, which can result in lower willingness to use, with perceived financial risk, security risk, privacy risk, and transaction risk found to have the lowest and highest effects, respectively. Hence, it was assumed that negative behavioural outcomes of perceived risk would be passed on through trust.

***H7:** It was hypothesized that trust had mediated the relationship between perceived risk and Islamic fintech adoption intention, such that higher perceived risk had reduced trust and consequently reduced adoption intention.*

### **Mediating Role of Trust between Perceived Shariah Transparency and Adoption Intention**

It was hoped that Shariah transparency would have an impact on adoption beyond the amount of information provided; that it would generate more confidence in the provider. Shariah governance and disclosure had enabled the development of communication of otherwise hard-to-observe characteristics of Islamic financial institutions (IFCs) (Quttainah & BenSaid, 2024) and the Pakistani regulatory framework had explicitly connected effective Shariah-compliance arrangements to public confidence (SBP, 2024).

Furthermore, the evidence of Islamic digital banking in recent years has made consumers' attitudes toward Shariah compliance highly influential in a number of consumers' attitudes (Suhartanto et al., 2026). The higher the level of trust, the higher the expectation is that it will boost the intention to use Islamic fintech, which aligns with the role of trust in Islamic fintech described by Ali et al. (2021) and Irimia-Diéguez et al. (2024).

***H8:** It was hypothesized that trust had mediated the relationship between perceived Shariah transparency and Islamic fintech adoption intention, such that greater Shariah transparency had strengthened trust and consequently increased adoption intention.*

### **Moderating Role of Shariah Compliance Awareness**

The impact of Shariah transparency was expected to be influenced by the ability of the consumer to interpret the information being disclosed. The signaling theory had indicated that the signal's effectiveness was not only a function of the sending of the signal but also a function of the intended receiver(s) accepting and interpreting the signal (Connelly et al., 2011). For Islamic financial services, awareness of information on *riba*, *gharar*, contractual arrangements, Shariah supervision and governance processes had necessitated a certain level of Shariah financial knowledge.

Islamic-fintech evidence had recently shown that constructs related to knowledge could impact the adoption relationship. Mahmoud et al. (2025) had discovered that Islamic financial literacy significantly mediated some of the relationships in Islamic fintech acceptance. The present study, however, was one that had narrowed its mechanism: awareness of Shariah compliance had

increased consumers' ability to determine whether the disclosures observed constituted substantive evidence of Shariah compliance.

This distinction was especially significant since there was inconclusive evidence about Shariah compliance. Jamshed and Uluyol (2024) had not reported any adoption effect of Shariah compliance, while Suhartanto et al. (2026) had observed powerful effects in the case of Islamic digital banking. One theory that was proposed was that, the information provided about Shariah had different diagnostic value for consumers of different compliance awareness. Therefore, in situations in which consumers were provided with more knowledge of how to interpret the information, it was predicted that transparency would foster more trust.

**H9:** It was hypothesized that Shariah compliance awareness had positively moderated the relationship between perceived Shariah transparency and trust, such that the positive relationship had been stronger at higher levels of Shariah compliance awareness.

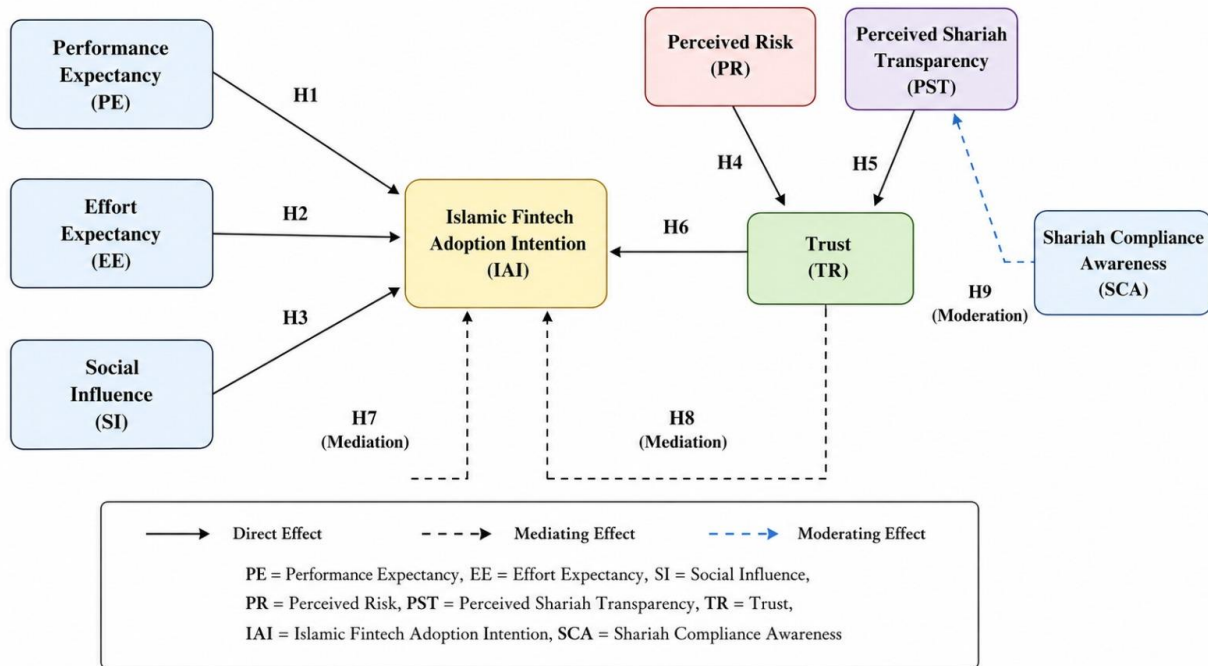


Figure 1: Conceptual model

## Methodology

### Research Design

This study was of a quantitative, cross-sectional, explanatory-predictive type of research. Primary data were collected using a structured questionnaire as the proposed relationships included latent perceptual and behavioural constructs. The direct, mediating, and moderating relationships hypothesized were tested in the explanatory component, while the predictive component involved evaluating the proposed theoretical model for out-of-sample predictive capability and predictive relevance. The orientation of the explanatory-predictive approach had been facilitating the application of PLS-SEM, which had gained increasing use in research on the adoption of fintech and Islamic-fintech, where structural relationships are more complex and involve prediction (Irimia-Diéguez et al., 2024; Samsudeen et al., 2026).

The unit of observation was the person who is consuming. Islamic fintech had been defined for the purpose of the survey as digital financial services delivered via technology and presented as being in line with Islamic and Shariah principles, such as Islamic mobile banking, Islamic sharia-compliant digital payment, digital financing, investment platforms, crowdfunding services, and similar technology-enabled Islamic financial services.

## Population and Sample

The target population consisted of young consumers who were Pakistani and had lived in Pakistan; they had experience with or were familiar with digital financial services. Participants were required to have experience with or awareness of mobile banking applications, digital wallets, branchless banking, a digital-payment platform, an online investment application, or similar financial services that use technology. The attention given to digitally savvy young consumers aligned with the growing importance of younger, technologically adept users for the adoption of Islamic digital financial services (Irimia-Diéguez et al., 2024).

The participants were drawn from urban and semi-urban areas of Karachi, Lahore, Islamabad/Rawalpindi, Faisalabad, Multan, Peshawar. Those who didn't meet the age criteria, who didn't live in Pakistan, who didn't answer the screening questions or who didn't answer completely or accurately have been removed.

## Sample Size and Sampling Technique

The sample size of the PLS-SEM was determined not by the ten-time rule but by a priori assessment by following a statistical-power procedure (Hair et al., 2022). With a small effect size of ( $f^2 = 0.05$ ), a significance level of 0.05, a sample size of 444 respondents, a maximum of seven predictors was required to be entered into the most complex regression equation with a statistical power of 0.95.

550 questionnaires were distributed to allow for partial and unusable questionnaires. The return of questionnaires was 487. After screening, 25 questionnaires were discarded due to significant missing data, response patterns, and/or not meeting eligibility criteria or implausibly short completion times. As a result, 84.0% of the questionnaires were usable (462 questionnaires were retained). The last sample had met the minimum statistical-power requirement.

The researcher had used a purposive quota-based sampling method since the sampling frame of young Islamic-fintech consumers was not available in Pakistan. Participants had been purposefully selected for their digital-finance exposure, while soft quotas had been tracked by gender 18 to 24, 25 to 29, and 30 to 35 years of age and geography. Respondents were selected via universities, professional networks, fintech communities, Islamic banking networks, consumer organisations and social-media.

## Measurement Instrument

A widely used technology-adoption, fintech, trust, risk and Islamic-finance scales were used to develop a structured self-administered questionnaire. All constructs were scored on a 7-point Likert scale from 1 = strongly disagree to 7 = strongly agree. The questionnaire contained four sections: the screening information, the technology related variables, the risk/trust/Shariah related variables, and the adoption intention together with the demographic information.

The constructs had been operationalized as follows:

**Table 1: Measurement Instrument Summary**

| Construct                            | Operational meaning                                                       | Items | Scale foundations                                                                         |
|--------------------------------------|---------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------|
| Performance expectancy (PE)          | Perceived usefulness and performance benefits of Islamic fintech          | 4     | Venkatesh et al. (2012); Idrees & Ullah (2024)                                            |
| Effort expectancy (EE)               | Perceived ease of learning and using Islamic fintech                      | 4     | Venkatesh et al. (2012); Idrees & Ullah (2024)                                            |
| Social influence (SI)                | Perceived encouragement from important social referents                   | 3     | Venkatesh et al. (2012); Durak et al. (2024)                                              |
| Perceived risk (PR)                  | Perceived financial, privacy, cybersecurity, and transaction-related risk | 4     | Ali et al. (2021); Irimia-Diéguez et al. (2024)                                           |
| Trust (TR)                           | Perceived reliability, honesty, and dependability of the provider         | 4     | Ali et al. (2021); Irimia-Diéguez et al. (2024)                                           |
| Perceived Shariah transparency (PST) | Perceived clarity and verifiability of Shariah-related information        | 5     | Jamshed & Uluyol (2024); Quttainah & BenSaid (2024); Suhartanto et al. (2026); SBP (2024) |
| Shariah awareness (SCA)              | Understanding of Shariah principles and compliance requirements           | 5     | Mahmoud et al. (2025)                                                                     |

| Construct                                | Operational meaning                                           | Items | Scale foundations                                                 |
|------------------------------------------|---------------------------------------------------------------|-------|-------------------------------------------------------------------|
| Islamic fintech adoption intention (IAI) | Intention and likelihood of adopting Islamic fintech services | 4     | Venkatesh et al. (2012); Ali et al. (2021); Mahmoud et al. (2025) |

This final instrument thus contained 33 measurement items. To avoid conceptual overlap with perceived Shariah transparency and Shariah compliance awareness, perceived risk had excluded Shariah non-compliance risk. PST was the provider-side disclosure as perceived by the consumer, while SCA was the consumer's ability to interpret that disclosure.

The questionnaire was subjected to the six experts' review and then the cognitive interviews were conducted with 12 young consumers, and the pilot study was conducted with 50 consumers. It was available in both English and Urdu through translation and back-translation techniques.

### Data Collection Procedure

Data had been gathered by means of an online questionnaire that was also widely distributed by the researchers via universities, professional networks, fintech communities, and Islamic-finance networks. The purpose of the study, eligibility criteria, and voluntary nature of the participation, as well as the confidentiality and the rights to cease participation, had been explained on the introductory survey page.

The screening questions confirmed the participants' age, living in Pakistan and their awareness of digital financial services. The screening questions confirmed the age of respondents, their living in Pakistan and awareness of digital financial services. Common-method bias was dealt with by using several procedural remedies such as anonymous participation, separation of predictor and outcome constructs, neutral question wording, and assurance that there were no objectively correct answers. The questionnaires that were missing information, showed a consistent response pattern, an inconsistent eligibility answer, or implausibly short answer times were excluded before analysis.

### Data Analysis Techniques

The data collected were initially screened and analyzed by SPSS Statistics version 23 software from IBM and subsequently estimated in the measurement model and structural model by SmartPLS 4 software. Preliminary screening tests for missing values, incomplete responses, outliers, response patterns, descriptive statistics, demographic characteristics, skewness, kurtosis, and multicollinearity were conducted. The measurement model had been assessed by the indicator loadings, Cronbach's alpha, rho\_A, composite reliability, average variance extracted (AVE), and the heterotrait-monotrait ratio (HTMT) as per the current recommendations of PLS-SEM (Hair et al., 2022). The indicator loadings had been desired to be around 0.708 or higher, the reliability of items from 0.70 to 0.95 was considered a satisfactory level and an AVE value of 0.50 or more had suggested for convergent validity. Discriminant validity had been conservatively established for HTMTs below 0.85, and conceptually related constructs below 0.90. To detect collinearity, variance inflation factor values had also been checked and discriminant validity between perceived Shariah transparency, Shariah compliance awareness and trust had been the focus of attention.

Standardized path coefficients, effect size ( $R^2$ ), adjusted ( $R^2$ ), and ( $f^2$ ) were used for evaluating the structural model, as well as bootstrapping with 10,000 resamples and 95% bootstrapped bias-corrected confidence intervals. However, while the bootstrapped specific indirect effects test had been previously used to test the trust mediation, the moderating role of perceived Shariah compliance awareness in the association between perceived Shariah transparency and trust had been tested using a two-stage interaction approach and simple-slope analysis. The main predictive assessments had been PLSpredict and the Cross-Validated Predictive Ability Test (CVPAT), with the exception of blindfolding with an omission distance of 7. The use of CVPAT had enabled statistical comparison with the out-of-sample prediction losses of the proposed model against benchmark models, which cannot be done just on the basis of explanatory measures like ( $R^2$ ) (Liengard et al., 2021; Sharma et al., 2023). Both PLSpredict and CVPAT had been run over 10 folds and 10 repetitions, and the prediction errors had been compared with a benchmark of indicator-average and a linear model. A reduction in predictive error and a much more negative predictive-loss difference compared to the benchmarks had been taken as sign of better predictive performance.

## Findings and Analysis

### Measurement Model

The quality of all measures was good, as shown in Table 2. Indicator loadings ranged from 0.825 to 0.895, which were above the recommended loading of 0.708, indicating good indicator reliability. The highest loading was for IAI2 (0.895) and the lowest loading was for SCA4 (0.825), but both were still well within acceptable limits. Cronbach's alpha and composite reliability values were also calculated and ranged from 0.848 to 0.917 and 0.908 to 0.938, respectively, which are all higher than the recommended minimum of 0.70, indicating good internal consistency reliability. Perceived Shariah Transparency had the highest Cronbach's alpha (0.917) and Social Influence had the lowest (0.848) but it was still satisfactory.

The values of AVE ranged from 0.724 to 0.791, which are significantly higher than the minimum value of 0.50; thus, there is convergent validity. Islamic Fintech Adoption Intention had the highest AVE (0.791), meaning that its indicators were able to account for a high percentage of construct variance. There was also no concern of multicollinearity because all indicator VIF values were under the conservative limit of 3.3 (range from 1.974 to 2.924). The highest VIF was found for IAI2 with a value of 2.924 and the lowest value of 1.974 was found for SI3. Generally, the results indicated that the indicators were reliable, internal consistency was reliable, and that the indicators had good levels of convergent validity and that there was no serious level of problematic multi-collinearity between the indicators, thus affirming the measurement model's suitability for further evaluation of the discriminant validity of the indicators and the structural model.

**Table 2. Measurement Model Assessment**

| Item | Loading | Construct | Alpha | CR    | AVE   | Indicator | VIF   |
|------|---------|-----------|-------|-------|-------|-----------|-------|
| EE1  | 0.885   | EE        | 0.899 | 0.929 | 0.767 | EE1       | 2.590 |
| EE2  | 0.880   | IAI       | 0.912 | 0.938 | 0.791 | EE2       | 2.609 |
| EE3  | 0.865   | PE        | 0.879 | 0.916 | 0.733 | EE3       | 2.465 |
| EE4  | 0.872   | PR        | 0.889 | 0.923 | 0.750 | EE4       | 2.362 |
| IAI1 | 0.884   | PST       | 0.917 | 0.937 | 0.750 | IAI1      | 2.693 |
| IAI2 | 0.895   | SCA       | 0.906 | 0.929 | 0.724 | IAI2      | 2.924 |
| IAI3 | 0.894   | SI        | 0.848 | 0.908 | 0.767 | IAI3      | 2.832 |
| IAI4 | 0.885   | TR        | 0.897 | 0.928 | 0.764 | IAI4      | 2.685 |
| PE1  | 0.873   |           |       |       |       | PE1       | 2.284 |
| PE2  | 0.864   |           |       |       |       | PE2       | 2.307 |
| PE3  | 0.849   |           |       |       |       | PE3       | 2.135 |
| PE4  | 0.838   |           |       |       |       | PE4       | 2.097 |
| PR1  | 0.887   |           |       |       |       | PR1       | 2.529 |
| PR2  | 0.878   |           |       |       |       | PR2       | 2.453 |
| PR3  | 0.827   |           |       |       |       | PR3       | 2.109 |
| PR4  | 0.871   |           |       |       |       | PR4       | 2.345 |
| PST1 | 0.878   |           |       |       |       | PST1      | 2.879 |
| PST2 | 0.868   |           |       |       |       | PST2      | 2.697 |
| PST3 | 0.841   |           |       |       |       | PST3      | 2.307 |
| PST4 | 0.881   |           |       |       |       | PST4      | 2.849 |
| PST5 | 0.862   |           |       |       |       | PST5      | 2.548 |
| SCA1 | 0.875   |           |       |       |       | SCA1      | 2.358 |
| SCA2 | 0.868   |           |       |       |       | SCA2      | 2.552 |
| SCA3 | 0.851   |           |       |       |       | SCA3      | 2.510 |
| SCA4 | 0.825   |           |       |       |       | SCA4      | 2.433 |

| Item | Loading | Construct | Alpha | CR | AVE | Indicator | VIF   |
|------|---------|-----------|-------|----|-----|-----------|-------|
| SCA5 | 0.834   |           |       |    |     | SCA5      | 2.346 |
| SI1  | 0.871   |           |       |    |     | SI1       | 2.088 |
| SI2  | 0.893   |           |       |    |     | SI2       | 2.111 |
| SI3  | 0.863   |           |       |    |     | SI3       | 1.974 |
| TR1  | 0.882   |           |       |    |     | TR1       | 2.565 |
| TR2  | 0.882   |           |       |    |     | TR2       | 2.556 |
| TR3  | 0.850   |           |       |    |     | TR3       | 2.232 |
| TR4  | 0.883   |           |       |    |     | TR4       | 2.613 |

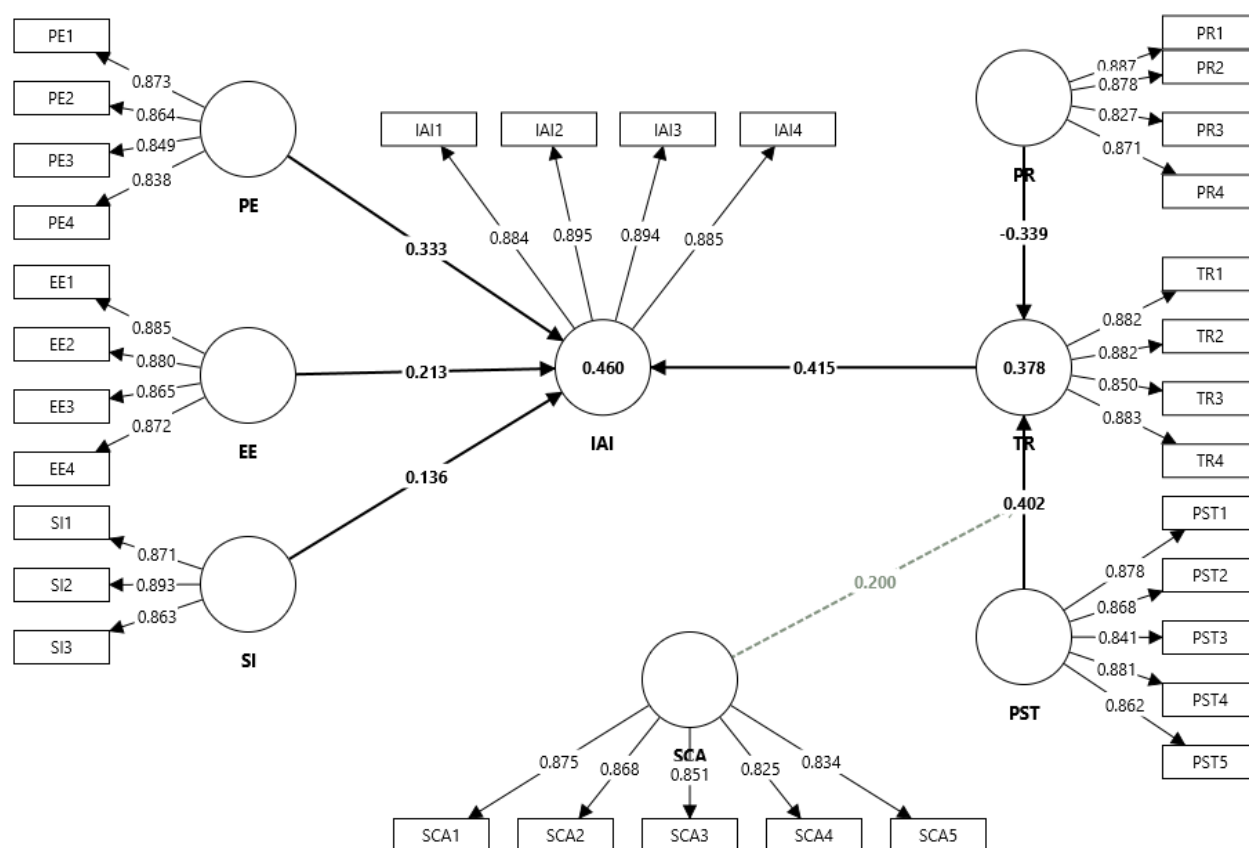


Figure. 2 Measurement Model

### Discriminant Validity

The results of Table 3 indicated that the results of the discriminant validity test between all the constructs fulfilled the criteria of being satisfactory. All the HTMT values were below the conservative value of 0.85 and varied from 0.041 to 0.533. The strongest correlation was found between perceived Shariah transparency and trust (0.533), followed by trust and intention to adopt Islamic fintech (0.508), suggesting that these are distinct constructs, but still related. The lowest association was between social influence and trust (0.041). No items on the HTMT approached the recommended cut-off, thus indicating good conceptual separation among the constructs. Thus, the results of the discriminant validity were favorable, and this justified proceeding to the assessment of the structural model.

**Table 3. Discriminant Validity (HTMT)**

| Construct | EE    | IAI   | PE    | PR    | PST   | SCA   | SI    | TR |
|-----------|-------|-------|-------|-------|-------|-------|-------|----|
| EE        | —     |       |       |       |       |       |       |    |
| IAI       | 0.429 | —     |       |       |       |       |       |    |
| PE        | 0.347 | 0.505 | —     |       |       |       |       |    |
| PR        | 0.176 | 0.311 | 0.065 | —     |       |       |       |    |
| PST       | 0.071 | 0.317 | 0.101 | 0.241 | —     |       |       |    |
| SCA       | 0.048 | 0.155 | 0.091 | 0.128 | 0.246 | —     |       |    |
| SI        | 0.268 | 0.287 | 0.224 | 0.043 | 0.058 | 0.047 | —     |    |
| TR        | 0.110 | 0.508 | 0.076 | 0.468 | 0.533 | 0.188 | 0.041 | —  |

**Structural Model****Path co-efficient**

Results of the structural model showed high support to the proposed relations. Islamic fintech adoption intention was positively influenced by performance expectancy ( $\beta = 0.333$ ,  $t = 9.286$ ,  $p < 0.001$ ), meaning that the youth consumers were more inclined to adopt Islamic fintech when they believed that it brought performance and convenience benefits. The ease of learning and using Islamic fintech had also shown a positive effect on adoption intention ( $\beta = 0.213$ ,  $t = 5.965$ ,  $p < 0.001$ ), confirming that Ease of learning and using Islamic fintech had strengthened adoption intention. However, social influence had shown a positive but smaller effect on adoption intention ( $\beta = 0.136$ ,  $t = 3.979$ ,  $p < 0.001$ ), indicating that encouragement from important social referents were found to have influenced adoption decisions.

Trust in Islamic finance providers had been significantly lowered by perceived risk ( $\beta = -0.339$ ,  $t = 9.612$ ,  $p < 0.001$ ), indicating that financial, privacy, security, and transactional concerns had negatively affected trust in Islamic fintech providers. On the other hand, perceived Shariah transparency had significantly increased trust ( $\beta = 0.402$ ,  $t = 10.697$ ,  $p < 0.001$ ). Finally, the strongest direct positive effect was on the adoption intention ( $\beta = 0.415$ ,  $t = 12.602$ ,  $p < 0.001$ ) by trust.

The moderation effect of Shariah compliance awareness was also significant ( $\beta = 0.200$ ,  $t = 5.343$ ,  $p < 0.001$ ) which meant that at higher levels of Shariah compliance awareness the positive relationship between perceived Shariah transparency and trust was stronger. Finally, the effect of perceived risk ( $\beta = -0.141$ ,  $p < 0.001$ ) and perceived Shariah transparency ( $\beta = 0.167$ ,  $p < 0.001$ ) was found to be significantly mediated by trust, thus supporting the two proposed indirect mechanisms.

**Table 4. Structural Model Results**

| Relationship   | Beta   | STDEV | T Value | P values |
|----------------|--------|-------|---------|----------|
| EE → IAI       | 0.213  | 0.036 | 5.965   | 0.000    |
| PE → IAI       | 0.333  | 0.036 | 9.286   | 0.000    |
| PR → TR        | -0.339 | 0.035 | 9.612   | 0.000    |
| PST → TR       | 0.402  | 0.038 | 10.697  | 0.000    |
| SI → IAI       | 0.136  | 0.034 | 3.979   | 0.000    |
| TR → IAI       | 0.415  | 0.033 | 12.602  | 0.000    |
| SCA × PST → TR | 0.200  | 0.037 | 5.343   | 0.000    |
| PR → TR → IAI  | -0.141 | 0.019 | 7.484   | 0.000    |
| PST → TR → IAI | 0.167  | 0.022 | 7.730   | 0.000    |

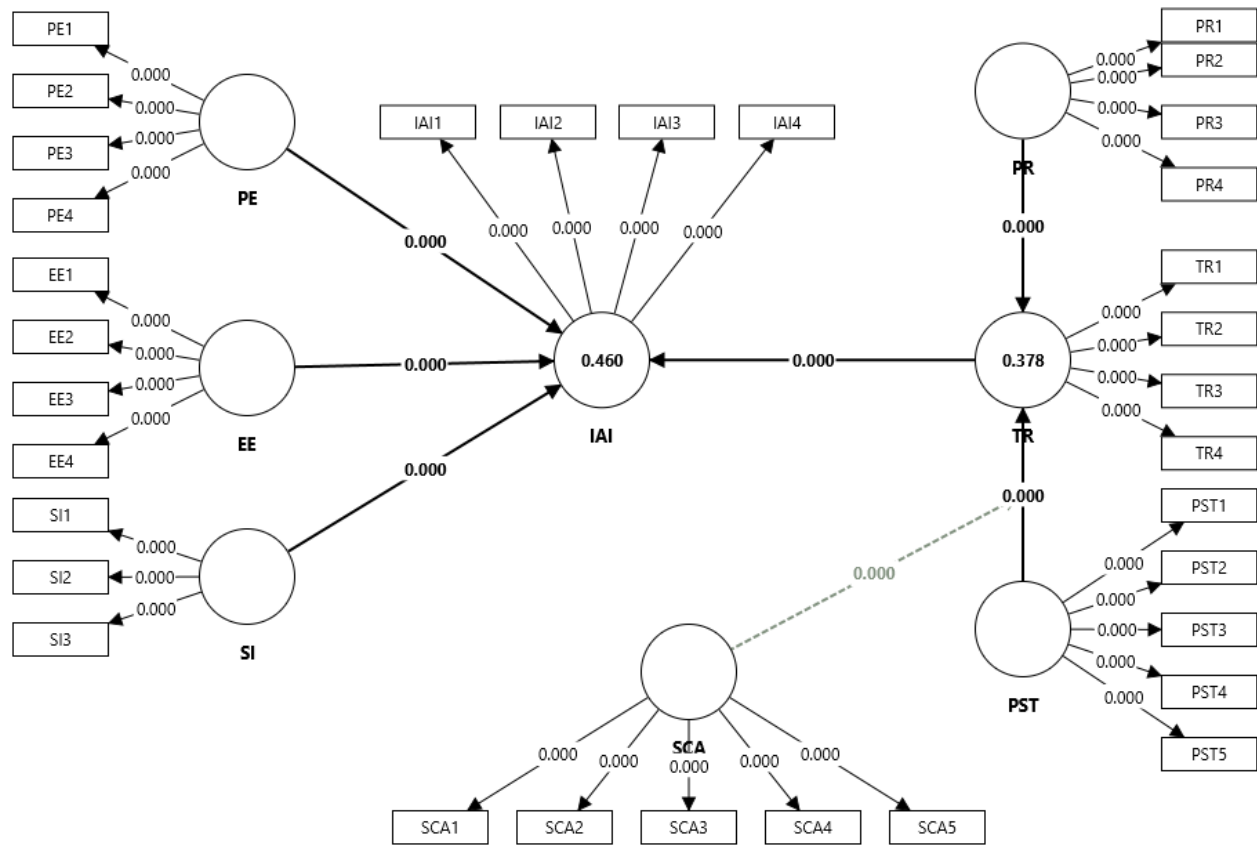


Figure 3. Structural Model

### Variance, effect size and redundancy

The structural model showed good explanatory and predictive power. The R squared value of the Islamic fintech adoption intention was 0.460 and the adjusted R-squared was 0.455, which means that the predictors accounted for about 46% of the variance. The explanatory power of Trust (TR) was moderate with an  $R^2$  of 0.378 and adjusted  $R^2$  of 0.373. As far as the effect sizes are concerned, trust was the largest predictor of IAI, followed by perceived Shariah transparency on trust ( $f^2 = 0.236$ ) and performance expectancy on IAI ( $f^2 = 0.182$ ). The effects of perceived risk were also meaningful ( $f^2 = 0.174$ ), while the effects of effort expectancy and social influence were smaller. There was little effect of SCA on trust ( $f^2 = 0.003$ ). Lastly, the  $Q^2$  values obtained for the IAI (0.359) and the TR (0.281) were greater than zero, which indicated good predictive relevance of the model.

Table 5. Structural Model Assessment:  $R^2$ ,  $f^2$ , and  $Q^2$ 

| Construct | R-square | R-square Adjusted | Relationship | f-square | SSO      | SSE      | $Q^2 (=1-SSE/SSO)$ |
|-----------|----------|-------------------|--------------|----------|----------|----------|--------------------|
| IAI       | 0.460    | 0.455             | EE → IAI     | 0.072    | 1848.000 | 1184.237 | 0.359              |
| TR        | 0.378    | 0.373             | PE → IAI     | 0.182    | 1848.000 | 1328.584 | 0.281              |
|           |          |                   | PR → TR      | 0.174    |          |          |                    |
|           |          |                   | PST → TR     | 0.236    |          |          |                    |
|           |          |                   | SCA → TR     | 0.003    |          |          |                    |
|           |          |                   | SI → IAI     | 0.032    |          |          |                    |
|           |          |                   | TR → IAI     | 0.315    |          |          |                    |

### Cross-Validated Predictive Ability Test

The CVPAT results verified high predictive capability of the proposed model in predicting out-of-sample results. Islamic fintech adoption intention (IAI) had a significant average loss difference of  $-0.904$  ( $t = 8.419$ ,  $p < 0.001$ ) with PLS loss, with the former

having a much lower value of 2.092. Similarly, trust (TR) showed a lower PLS loss (2.162) than the indicator-average loss (3.000), with a significant loss difference of  $-0.837$  ( $t = 7.917$ ,  $p < 0.001$ ). At the overall model level, the average PLS loss was 2.127, which was significantly lower than the average indicator loss of 2.998 ( $t = 10.504$ ,  $p < 0.001$ ). The results showed that the lower prediction loss was associated with superior predictive performance, which confirmed the validity of the proposed PLS-SEM model, as it is always better than the benchmark model. Thus, the model was found to have out-of-sample predictive validity for both the endogenous constructs.

**Table 6. Cross-Validated Predictive Ability Test (CVPAT)**

| Construct | PLS Loss | IA Loss | Average Loss Difference | t-value | p-value |
|-----------|----------|---------|-------------------------|---------|---------|
| IAI       | 2.092    | 2.996   | -0.904                  | 8.419   | 0.000   |
| TR        | 2.162    | 3.000   | -0.837                  | 7.917   | 0.000   |
| Overall   | 2.127    | 2.998   | -0.870                  | 10.504  | 0.000   |

## Discussion

The results supported the proposed comprehensive model of Islamic fintech adoption amongst the youth of Pakistan. Performance expectancy positively affected adoption intention and confirmed that consumers were more willing to adopt Islamic fintech if it enhanced the convenience and financial task effectiveness. This outcome had been corroborated by the previous Pakistani evidence as reported by Idrees and Ullah (2024) and the wider Islamic fintech evidence provided by Samsudeen et al. (2026). The findings further confirmed that the UTAUT2 mechanisms, such as effort expectancy and social influence, continued to be significant on the adoption intention, especially in the context of Islamic digital finance (Venkatesh et al., 2012; Durak et al., 2024).

The financial, privacy, security and transactional uncertainty of fintech providers had significantly lowered trust, which is consistent with previous research that showed such uncertainty reduced confidence in fintech providers (Ali et al., 2021; Irimia-Diéguez et al., 2024). On the other hand, the level of trust in Islamic fintech providers had significantly improved with perceived Shariah transparency, suggesting that transparency and disclosure of Shariah matters had lowered uncertainty on the legitimacy of Islamic fintech providers. This finding was consistent with other studies that correlated Shariah governance with transparency and credibility (Quttainah & BenSaid, 2024; Suhartanto et al., 2026).

In line with the behavioral models posited, trust had exerted the highest direct effects on the adoption intention and significantly mediated the perceived risk-adoption relationship, as well as the Shariah transparency-adoption relationship, thus showing that the role of trust in the conversion of uncertainty and legitimacy evaluations into adoption intentions was central. The most important finding was that with the increased awareness of Shariah compliance, the link between perceived Shariah transparency and trust was significantly reinforced. This finding would further extend Mahmoud et al. (2025) by showing that a more specific awareness of the compliance-related aspect had improved consumers' understanding of Shariah signals, which could potentially help solve the inconsistent findings of the direct effect of Shariah compliance in the literature (Jamshed & Uluyol, 2024; Suhartanto et al., 2026).

## Theoretical Implications

The study successfully added "Islamic-fintech adoption theory", which combined technology acceptance, risk-trust theory, and Shariah-signalling theory in one compact model. The model had separated perceived Shariah transparency (as a provider-side signal) from Shariah compliance awareness (as a consumer-side interpretive capability) from conventional UTAUT2 extensions. The big moderation effect had already illustrated that the information provided in Shariah had not been influencing the readers' trust uniformly, but rather had been influenced by the capabilities of the readers to assess the information provided in Shariah. Moreover, the link between risk reduction and Shariah legitimacy with adoption intention had been extended to previous Islamic-fintech trust research (Ali et al., 2021; Mahmoud et al., 2025).

## Practical Implications

Those results were indicative of the need for Islamic fintech providers to have worked on technological functionality and Shariah credibility at the same time. Useful, easy to use, and socially sanctioned applications had fostered greater intentions to adopt. Yet, privacy and cybersecurity, as well as financial and transaction-related, concerns had been found to be crucial, as a perception of

risk had tainted trust. Providers had also benefited from the clear dissemination of underlying contracts, compliance processes and mechanisms for steering clear of prohibited financial components, as well as the communication of Shariah supervision. Consumer education campaigns on Islamic financial principles may have further improved consumer awareness of the obligations of transparency and trust in the relationship, which is a factor that may have facilitated the incorporation of Islamic financial instruments into the market.

### **Managerial Implications**

The managers of Islamic fintech companies and Islamic banking institutions had been encouraged to see trust as an Islamic banking tool to adopt instead of a communication tool. Consumer confidence could have been bolstered by investments in secure platforms, transparent transaction processes, privacy protections and obvious Shariah-governance mechanisms. Shariah disclosures should have been made in an accessible language and not in mere technical terminology; especially for younger users, who might have varying degrees of understanding about Shariah compliance. Incorporating educational features on digital interfaces, such as an explanation of the concept of *riba*, *gharar*, contractual structures, and Shariah supervision, could also be included within the managers' framework. This could have made compliance more meaningful for consumers and boosted adherence intentions.

### **Limitations and Future Research**

There were some limitations to the study and areas for further research. First, its cross-sectional design put limits on causal interpretation, and it failed to measure any changes in adoption behaviour over time. Longitudinal or experimental design may be used in future studies. Second, the population-level generalizability was limited as the sampling was done by purpose and not by random sampling. External validity might then be enhanced by the use of probability-based sampling. Third, the study was conducted among young consumers, meaning that it may not be applicable to older consumers or to other Islamic financial markets. Cross-country and generational comparisons could be done in future studies, along with exploring other boundary conditions like religiosity, institutional trust, fintech experience, and objective Shariah-finance knowledge.

### **Conclusion**

The study had shown that the technological and religious considerations had been crucial in influencing the adoption of Islamic fintech among the youth of Pakistan. The results showed that the factors of performance expectancy, effort expectancy, and social influence had a positive impact on the intention to adopt, but the factor of perceived risk had a negative impact on trust. The relationships between perceived Shariah transparency, trust, and intention to adopt had become stronger, and these relationships had been mediated by risk and Shariah transparency, respectively. Importantly, transparency-trust had improved due to the strengthening of Shariah compliance awareness. The findings have demonstrated that the adoption of Islamic fintech was not driven by technological utility alone, but was also influenced by trust in the institutions and understanding of the consumers, as well as credible disclosure of Shariah principles.

### **References**

1. Ali, M., Raza, S. A., Khamis, B., Puah, C.-H., & Amin, H. (2021). How perceived risk, benefit and trust determine user FinTech adoption: A new dimension for Islamic finance. *Foresight*, 23(4), 403–420. <https://doi.org/10.1108/FS-09-2020-0095>
2. Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67.
3. Durak, İ., Çise, S. N., & Yazıcı, S. (2024). Developing a financial technology (FinTech) adoption scale: A validity and reliability study. *Research in International Business and Finance*, 70, 102344. <https://doi.org/10.1016/j.ribaf.2024.102344>
4. Government of Pakistan. (2026). *Pakistan Economic Survey 2025–26*. Finance Division, Government of Pakistan.
5. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage.

6. Idrees, M. A., & Ullah, S. (2024). Comparative analysis of FinTech adoption among Islamic and conventional banking users with moderating effect of education level: A UTAUT2 perspective. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(3), 100343. <https://doi.org/10.1016/j.joitmc.2024.100343>
7. Irimia-Diéguez, A., Albort-Morant, G., Oliver-Alfonso, M. D., & Ullah, S. (2024). Predicting the intention to use Paytech services by Islamic banking users. *International Journal of Islamic and Middle Eastern Finance and Management*, 17(1), 1–15. <https://doi.org/10.1108/IMEFM-07-2022-0298>
8. Jamshed, K. M., & Uluyol, B. (2024). What drives to adopt Islamic banking products and services: Is it Shariah compliance or convenience? *Journal of Islamic Marketing*, 15(11), 2891–2915. <https://doi.org/10.1108/JIMA-08-2023-0243>
9. Lienggaard, B. D., Sharma, P. N., Hult, G. T. M., Jensen, M. B., Sarstedt, M., Hair, J. F., & Ringle, C. M. (2021). Prediction: Coveted, yet forsaken? Introducing a cross-validated predictive ability test in partial least squares path modeling. *Decision Sciences*, 52(2), 362–392. <https://doi.org/10.1111/deci.12445>
10. 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*. <https://doi.org/10.1108/JIABR-08-2024-0322>
11. Maniam, S. (2024). Determinants of Islamic fintech adoption: A systematic literature review. *Journal of Islamic Marketing*, 15(11), 2916–2936. <https://doi.org/10.1108/JIMA-11-2023-0373>
12. Quttainah, M. A., & BenSaid, Y. (2024). Shari'ah governance and transparency: Evidence from stock price synchronicity of Islamic banks. *International Journal of Islamic and Middle Eastern Finance and Management*, 17(3), 572–598. <https://doi.org/10.1108/IMEFM-10-2023-0402>
13. Samsudeen, S. N., Mohamed Buhary, F. S., & Mohamed Riyath, M. I. (2026). Islamic banking customers' intention to adopt fintech in Sri Lanka: A triangulated approach using PLS-SEM and fsQCA. *Journal of Islamic Marketing*, 17(6), 2171–2200. <https://doi.org/10.1108/JIMA-12-2023-0386>
14. Sharma, P. N., Lienggaard, B. D., Hair, J. F., Sarstedt, M., & Ringle, C. M. (2023). Predictive model assessment and selection in composite-based modeling using PLS-SEM: Extensions and guidelines for using CVPAT. *European Journal of Marketing*, 57(6), 1662–1677. <https://doi.org/10.1108/EJM-08-2020-0636>
15. State Bank of Pakistan. (2024). *Shariah Governance Framework for Islamic Banking Institutions*. Islamic Finance Policy Department, State Bank of Pakistan.
16. State Bank of Pakistan. (2025a). *Payment Systems Quarterly Review: First Quarter FY2025–26*. State Bank of Pakistan.
17. Suhartanto, D., Setiawan, S., & Safitri, F. M. (2026). AI-enabled brand experience and Shariah compliance in Islamic digital banking. *Journal of Islamic Marketing*, 17(8), 2812–2831. <https://doi.org/10.1108/JIMA-07-2025-0411>
18. Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178.



2026 by the authors; Journal of Global Social Transformation (JGST). This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).