

**Islamic financial technology acceptance: An empirical study in Jordan****Ibrahim Radwan Alnsour<sup>a</sup>, Mohammad Yousef Alghadi<sup>a</sup>, Ahmad Bani Ahmad<sup>b</sup>, Mohammad Haider Alibraheem<sup>c</sup>, Said Mohamad Altahat<sup>c</sup>, Raed Walid Al-Smadi<sup>d\*</sup> and Khaled Y Alshboul<sup>d</sup>**<sup>a</sup>*Department Of Finance and Banking Science, Irbid National University, Jordan*<sup>b</sup>*Associate Prof. in Department of Financial and Accounting Science, Middle East University, Jordan*<sup>c</sup>*Accounting Information System Department, Irbid National University, Jordan*<sup>d</sup>*Department Of Finance, Amman Arab University, Jordan***CHRONICLE***Article history:*

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**ABSTRACT**

The present research endeavors to comprehend the determinants that impact the inclination to utilize financial technology within the context of Islamic banking clientele. The study undertakes an examination of various determinants that may exert an influence on the consumer's intention. These determinants encompass financial risk, legal risk, security risk, operational risk, consumer innovativeness, perceived ease of use, and perceived usefulness. The technology acceptance model is employed as the theoretical framework for the research. The requisite data for hypothesis testing is collected through the administration of an online survey to consumers of Islamic banks who possess a high degree of adaptability and proficiency in utilizing financial technology. The study employs the methodology of structural equation modelling with partial least squares to assess the proposed relationships among a sample of 399 participants. The results indicate that the acceptance of Islamic Financial technology services is contingent upon the perceived ease of use, perceived usefulness, and consumer innovativeness. In contrast, it is observed that various other factors, namely financial risk, legal risk, security risk, and operational risk, do not hold significant sway in shaping the level of acceptance of Islamic Financial technology among users of Islamic banking services. The concept of Technology Acceptance Model (TAM) is expanded within the realm of Islamic financial technology, and it is utilized to examine the impact of a novel factor, specifically consumer innovativeness. The untested nature of consumer innovativeness makes this paper a valuable resource for policymakers, academics, and researchers in the future.

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**1. Introduction**

The term “financial technology” has been in use since the 1990s. The term in question has gained significant traction in contemporary times due to the substantial advancements in financial technology worldwide. According to Bhat et al. (2023), financial technology is intended to influence the trajectory of the financial sector in the future. According to Lontchi et al. (2023), the financial technology ecosystem encompasses advancements in fundamental services, commercial infrastructure, and constituents. This ecosystem generates a beneficial supplementary mechanism by means of collaboration, which involves the reconfiguration, integration, re-perceived usefulness posing, and redirection of financial services among significant market participants. It is anticipated that financial technology will offer novel value additions and services at a reduced expense compared to conventional technology. Estrin et al. (2018) assert that the financial technology revolution is poised to impact

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existing financial service operations by enhancing their efficacy, customer-oriented nature, and transparency. According to Milian et al. (2019), “financial technology refers to the utilization of technology platforms and mobile devices to access transaction notifications, bank account and credit information, as well as debit alerts, through perceived usefulness notifications via short message service, applications, or other notification methods”. The financial system is undergoing a transformation due to technological advancements. The technological advancements in the finance industry have led to the emergence of novel financing modes, such as e-financing and mobile technology. This has caused a paradigm shift in the finance industry, which is now more technology-driven. As a result, Khuong et al. (2022) noted that the industry is rich with both opportunities and challenges. The utilization of financial technology services is subject to the impact caused by customers' risk perception, wherein financial risks, legal risks, and activity risks are observed to have substantial impacts. Conversely, security risk does not significantly impact the intention to employ financial technology, as evidenced by studies conducted by Gomber et al. (2018) and Miskam et al. (2019). Tang et al. (2020) conducted a study that investigated the utilization of smartphone applications in the management of fishermen's financial affairs. The findings of this study indicate that males exhibit a greater propensity for assimilating novel technological advancements compared to their female counterparts. The study conducted by Ryu (2018) utilized survey data from 244 individuals in financial technology. The findings indicate that legal risks have a substantial negative impact, whereas convenience has a significant positive influence on the intention to use financial technology. The objective of this research is to furnish empirical substantiation and evaluate the Technology Acceptance Model (TAM) as a fundamental theory through a comprehensive analysis of prior literature and studies, if any, that have contributed to the identification of factors that exert a significant impact on the acceptance of financial technology. In recent years, the financial sector in Jordan has undergone notable transformations, with financial technology playing a crucial role in this evolution. The advent of financial technology has caused a significant disruption in the conventional financial services sector in Jordan, resulting in the emergence of novel business models, inventive solutions, and enhanced customer experiences. This has been documented in various studies, including those conducted by Ali et al. (2020), Alsoboa (2022), and Alkhawaldeh et al. (2023). The implementation of financial technology has enabled financial institutions in Jordan to provide expedited, cost-effective, and expedient services to their clientele, resulting in enhanced financial efficacy. The implementation of financial technology has facilitated the provision of a diverse array of services by financial institutions in Jordan that were previously unattainable. Mobile banking services enable customers to conveniently access banking services remotely without the necessity of physically visiting a branch, thereby providing 24/7 accessibility (Ghaith & Ghaith, 2022). The implementation of this technology has resulted in enhanced accessibility and convenience of banking services for customers, thereby contributing to a rise in their satisfaction levels and fostering their loyalty towards the banking institution. Furthermore, the implementation of financial technology has facilitated financial institutions' delivery of customized and focused services to their clientele. According to Alsmadi et al. (2023), financial institutions in Jordan have the capability to gather and evaluate customer data to comprehend their demands, inclinations, and conduct. This enables them to customize their services to cater to necessities. Because of this development, there has been a notable enhancement in customer contentment, leading to a rise in both loyalty and retention rates. As far as the authors are aware, there are only a limited number of empirical investigations that have been carried out on the determinants of Islamic financial technology adoption. Additionally, the present investigation will integrate a range of variables, including financial risk, legal risk, security risk, operational risk, and consumer innovativeness, into the framework of the Technology Acceptance Model (TAM), alongside other variables such as perceived ease of use and perceived usefulness. Moreover, the variables will be examined to identify the factors that underlie the utilization of Islamic financial technology services in Jordan, with the aim of addressing the study's deficit. Prior research on usage behavior has explored the application of various theoretical frameworks, including the Theory of Planned Behavior, the Diffusion of Innovation Theory, the Decomposed Theory of Planned Behavior, and the Theory of Interpersonal Behavior. However, to date, no empirical investigation has been conducted to validate and test these theories within the context of Islamic financial technology services. Thus, the present study aims to bridge the existing research gap by utilizing the Technology Acceptance Model (TAM) as a fundamental framework to examine the uptake of financial technology services proffered by Islamic banking institutions. Therefore, the research paper is expected to yield significant advantages for policymakers, practitioners, managers, and academicians in the Islamic banking industry. Moreover, it will broaden the understanding of the key determinants that drive the adoption of financial technology.

## 2. Literature Review

### 2.1 Technology acceptance model

Theoretical support is required to determine an individual's willingness to adopt Islamic financial technology services. This study aims to expand the TAM to identify the factors that influence Islamic financial technology services. Davis (1989) proposed the TAM by adapting the theory of reasoned action and perceived usefulness. TAM, a cognitive model in the domain of information systems, bears resemblance to the theory of reasoned action (Fishbein & Ajzen, 1977). Davis (1989) posits that the TAM surpasses prior models by incorporating additional variables, specifically perceived ease of use and perceived usefulness, which influence behavior and ultimately determine usage intention. The outcome of this intention can be either positive or negative. Subsequently, Davis (1989) proposed the exclusion of the attitude construct from the original TAM after conducting experiments on its previous version. Therefore, the endorsement of behavioral intention forecast solely by two fundamental constructs, namely perceived ease of use and perceived usefulness, is a reliable determinant for intention

prediction. In the context of the TAM proposed by Davis in 1989, it is observed that the perceived ease of use and perceived usefulness are indicative of an individual's intentions. Furthermore, the TAM is widely regarded by scholars as a framework capable of elucidating intricate human behavior and facilitating deeper examination of the determinants that influence such behavior with respect to the adoption of systems. Likewise, TAM has demonstrated efficacy in cultivating diverse forms of user acceptance within the realm of information systems. According to this statement, several alterations were made to the initial TAM, some of which were proposed by Venkatesh et al. (2003). The present study examines the efficacy of the TAM in forecasting the adoption of Islamic financial technology, and the authors have expanded upon the original TAM framework.

### 3. Theoretical Framework and Hypothesis Development

#### 3.1 Perceived ease of use

As previously discussed in the section pertaining to TAM, attitude is considered the result factor, which is assessed through perceived ease of use. This construct is a modified version of perceived complexity. According to Gillenson et al. (2002), complexity should be considered the antithesis of perceived ease of use within the constructs that are linked to the TAM. Thus, it is apparent that the theoretical foundations of DOI theory are to some extent supported by the presence of TAM. In the context of innovation, complexity is considered a usability factor that has been discussed in relation to its impact on the perceived ease of use (Chin et al., 2005). According to Davis (1989), the concept of "perceived ease of use" pertains to an individual's belief regarding the level of effortlessness associated with utilizing a specific system. Empirical research has been conducted to validate the correlation between behavioral intention and perceived ease of use. The study conducted by Estrin et al. (2018) aimed to explore the determinants of e-bill payment intention among students. The findings of the study revealed a significant association between the intention for e-bill payment and the perceived ease of use. The study conducted by Gopi and Ramayah (2007) examines the utilization of wireless technology for financial transactions among individuals residing in the Netherlands. The research also delves into the impact of perceived ease of use on the intention to use such technology. Thus, the results indicate that the variable of perceived ease of use has an impact on the intention of individuals who express a willingness to engage in wireless financing. In the context of exploring the determinants of internet usage, Lontchi et al. (2023) discovered that the perceived ease of use is a crucial factor that is positively associated with the initial adoption of internet usage. Hence, a hypothesis can be formulated in the following way:

**H<sub>1</sub>:** *The ease of use has a direct impact on Islamic Financial technology adoption.*

#### 3.2 Perceived usefulness

According to the findings of Alzoubi et al. (2014), during the pre-adoption phase, both the perceived usefulness or relative advantage (instrumentality) and non-instrumentality values have an impact on attitude. However, in the post-adoption phase, only image and mechanism values are found to influence attitude. Despite the distinct theoretical foundations of the TAM in comparison to the theories of reasoned action and diffusion of innovation, commonalities in the fundamental developments have been acknowledged. As has been previously stated, the concept of relative advantage, as posited by the diffusion of innovation theory, is often utilized synonymously with the notion of perceived usefulness. The study conducted by Alzoubi and Alzoubi (2019) utilized a web-based questionnaire to investigate the intention of internet users to engage in e-shopping. The results revealed that a significant level of perceived usefulness was positively associated with a favorable attitude towards e-shopping. Chin et al. (2005) conducted a study to examine the impact of trust on technology usage, specifically in the context of internet banking. Their findings indicate that the construct of perceived usefulness is statistically significant and has a positive effect on customers' attitudes towards using the technology. A study conducted by Amin et al. (2014) found that the intentions of online waqf participants are influenced by their perceived usefulness. Drawing from the studies, one may posit the following hypothesis: As previously mentioned in the section on the TAM, perceived ease of use, a modified manifestation of perceived complexity, is considered the resultant variable. According to Gillenson et al. (2002), complexity should be regarded as the antithesis of perceived ease of use within the constructs that are linked to the Technology Acceptance Model (TAM). Thus, it is apparent that the theoretical foundations of DOI theory are to some extent supported by the presence of TAM. In the context of innovation, complexity is considered a usability factor that has been studied by Chin et al. (2005) and found to have a negative impact on the perceived ease of use. According to Davis (1989), the concept of "perceived ease of use" pertains to an individual's belief regarding the level of effort required to operate a given system. Empirical research has been conducted to validate the correlation between behavioral intention and perceived ease of use. The study conducted by Estrin et al. (2018) in Malaysia aims to explore the determinants of e-bill payment intention among students. The findings reveal a significant association between the intention for e-bill payment and the perceived ease of use. The study conducted by Gopi and Ramayah (2007) examines the utilization of wireless technology for financial transactions among individuals residing in the Netherlands. The research also delves into the impact of perceived ease of use on the intention to use such technology. Thus, the results indicate that the variable of perceived ease of use has a significant impact on the intention of individuals who express a willingness to engage in wireless financing. In a study conducted by Lontchi et al. (2023) on the determinants of internet use, it was observed that the perceived ease of use has a significant association with the initial usage of the internet. Thus, a hypothesis can be formulated based on the aforementioned information.

**H<sub>2</sub>:** *The Perceived usefulness has a direct impact on Islamic financial technology adoption.*

### 3.3 Consumer innovativeness

According to Rogers (1995), the concept of consumer innovativeness pertains to the extent to which an individual tends to adopt an innovation earlier than other members of their system. Rogers posits that the diffusion of innovations occurs through a communicative channel within a specific time frame among individuals in a social system. Consumer innovativeness has been defined by some scholars as the inclination to purchase novel and distinct products and brands as opposed to adhering to prior choices and consumption behaviors. Furthermore, individuals or customers who possess innovative tendencies are likely to seek out ideas and evidence pertaining to product innovation. Therefore, it is pertinent to identify the potential early adopters of an innovative product (Rogers, 1995). It is noteworthy to mention that there is limited literature available on the adoption of Islamic financial technology services by innovative consumers. According to the works of Lee et al. (2007), Fauziah et al. (2008), and Shaikh et al. (2018), several research studies have reported significant results regarding the predictive role of consumer innovativeness. All these investigations have identified the confidence interval (consumer innovativeness) as a significant determinant for the adoption and acceptance of particular systems by customers. According to Lee et al. (2007), the level of innovativeness may have an impact on customers' intentions to travel. Additionally, the study examined how consumer innovativeness moderates the relationship between attitude towards search, perceived usefulness, and purchase intention. The perceived usefulness, perceived compatibility, and perceived ease of use of the characteristics of innovation are all factors that affect consumer innovativeness, as demonstrated by Shaikh et al.'s (2018) study. Drawing from the previously mentioned studies, one may posit the hypothesis that:

**H<sub>3</sub>:** *The consumer innovativeness has a direct impact on Islamic Financial technology adoption.*

### 3.4 Risk of financial technology

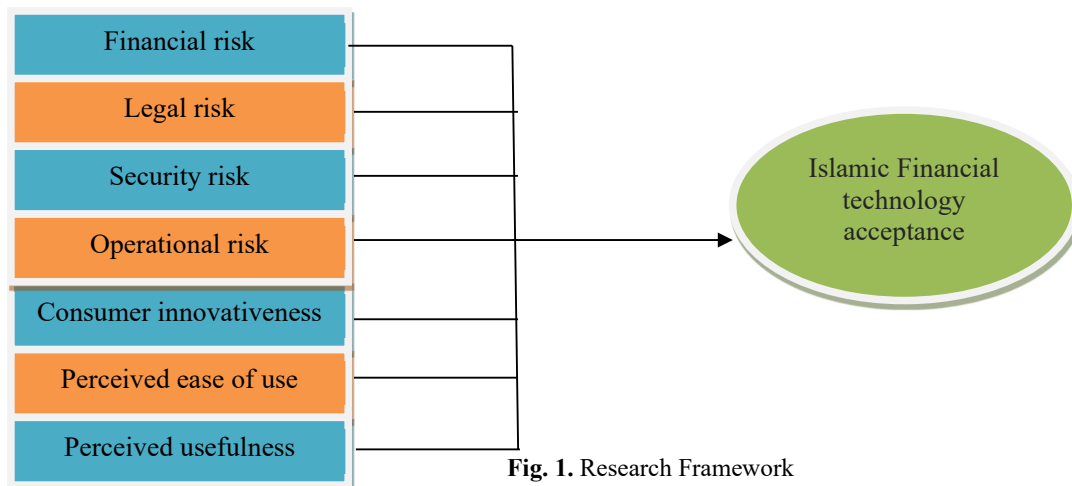
In the realm of financial technology, there are four primary categories of risk: financial risks, legal risks, security risks, and operational risks. According to Derbaix's (1983) definition, perceived risk refers to the possibility of experiencing a negative financial outcome. As defined by Lee (2009), financial risk refers to the possibility of incurring losses because of trading errors and the misuse of bank accounts. As per the findings of Khuong et al. (2022), a considerable number of customers exhibit apprehension towards potential financial losses while engaging in online transactions and money transfers. In the context of Maignan and Lukas' study, the concept of legal risk pertains to the sense of vulnerability associated with the use of online credit cards (Maignan & Bryan, 1997). As stated by Ali et al. (2020), there is an inherent security risk that consumers perceive when utilizing financial technology. Instances of fraud and unauthorized access by hackers result in financial losses for users and breach their privacy. In the study by Schierz et al. (2010), consumers reported that their personal information is susceptible to theft when utilizing online banking services. Operational risk pertains to the financial losses incurred because of deficiencies or malfunctions in e-commerce platforms. Furthermore, customers express apprehension regarding potential losses that may arise from the Internet connection server, as noted by Alsmadi et al. (2023). Ahmad and colleagues (2023) investigated the impact of perceived risk factors on individuals' inclination to utilize financial technology. The findings indicate that among the four identified risks, namely financial risk, legal risk, operational risk, and security risk, three risks, namely financial risk, legal risk, and operational risk, exert a statistically important effect on the intention to adopt financial technology. However, it is noteworthy that security risk does not exhibit a statistically significant negative impact on the intention to use financial technology. Drawing from the previously mentioned research, one may posit the hypothesis that:

**H<sub>4</sub>:** *The financial risk has a direct impact on Islamic Financial technology adoption.*

**H<sub>5</sub>:** *The legal risk has a direct impact on Islamic Financial technology adoption.*

**H<sub>6</sub>:** *The operational risk has a direct impact on Islamic Financial technology adoption.*

**H<sub>7</sub>:** *The security risk has a direct impact on Islamic Financial technology adoption.*



**Fig. 1.** Research Framework

The present study has formulated a model for examining the adoption of Islamic financial technology services. The model relies on the concepts adapted from TAM proposed by Davis (1989). Additionally, the model incorporates constructs related to consumer innovativeness and the risk associated with financial technology services. The graphical representation of the framework is presented in Fig. 1. Likewise, the Technology Acceptance Model (TAM) is extensively employed within the realm of information and communication technology (Alzoubi & Alzoubi, 2019).

#### 4. Methodology

The study report used a quantitative research approach to examine the variables that influence users of Islamic banks' intentions to use financial technology.

There were 520 questionnaires issued in all, 450 of which were returned and 51 of which were not complete. As a result, only 399 responses—or 76.73 percent of the total—were suitable for analysis. As a result, according to earlier research, the response rate is sufficient for the study. For the study, the researchers used a convenience sample technique to gather study participants. The respondents were chosen for the poll based on their willingness to take part in it, and it was performed online. Only respondents who were at least 18 years old and had used one financial technology service in the previous year were included in the sample. The questionnaire's content validity was pre-tested, and it was created based on pertinent research. On a 5-point Likert scale, the respondents were asked to indicate how much they agreed with the assertions. Arabic was used to conduct the poll. Structural Equation Modelling (SEM) was used to analyze the data that had been gathered. This approach was selected because it can manage small sample sizes and is appropriate for analyzing complicated interactions between several variables. SmartPLS 3 software was used by the researchers to carry out the study. There were two primary phases to the study. The validity and reliability of the measuring device were evaluated using the measurement model. The structural model was employed to investigate the theories and look at the variables affecting the uptake of financial technology. Additionally, the construct validity and content validity of the survey instrument were evaluated by the researchers. The survey questions' relevance and thoroughness were assured by consultation with subject-matter specialists. Utilizing Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE), the measuring tool's dependability was evaluated. The research followed ethical guidelines, and before performing the poll, the researchers got the respondents' informed permission. The respondents received assurances of confidentiality and the privacy of their personal data.

#### 5. Results

The findings presented were built on the findings from the structural equation model and the study's goals. When a respondent does not reply to one or more survey questions, there may be missing data. For every single measurement item, frequency and missing value analyses were performed to make sure the data was error-free. Only a small amount of missing data was found after the data were screened, and this missing data was filled in using the median factor answers for every single measurement element. Outliers are observations of a single variable that exhibit unusual values (Hair et al., 2021). Along with the study of histograms and boxplots, each variable's standardized (z) value was checked for univariate disclosure. A case is regarded as an outlier in Hair et al. (2021) if its standard score is 4.0 or above. As a result, an outlier is any Z-score that is either higher than 4 or lower than -4.

##### 5.1 Measurements Model

Several tests were carried out to make sure the measurements employed in this research were valid and trustworthy. By assessing the composite reliability (CR) values, the internal consistency procedure was used to assess the measures' dependability. The CR scores demonstrated the degree to which the items consistently assessed a latent concept. The variables used in the research all obtained composite reliability ratings over 0.7, which is considered appropriate in the social sciences (Table 1).

**Table 1**  
Measurement Model

Factors	Loading	CA	CR	AVE
Financial risk		0.915	0.923	0.717
F1	0.801			
F2	0.841			
F3	0.819			
Legal risk		0.852	0.837	0.636
L1	0.716			
L2	0.762			
L3	0.745			
Security risk		0.930	0.942	0.711
S1	0.689			
S2	0.698			
S3	0.678			

**Table 1**  
Measurement Model (Continued)

Factors	Loading	CA	CR	AVE
Operational risk		0.781	0.801	0.754
O1	0.814			
O2	0.871			
O3	0.798			
Consumer innovativeness		0.897	0.884	0.665
C1	0.677			
C2	0.710			
C3	0.689			
C4	0.695			
Perceived ease of use		0.918	0.937	0.712
E1	0.613			
E2	0.688			
E3	0.641			
E4	0.679			
Perceived usefulness		0.901	0.912	0.687
U1	0.824			
U2	0.867			
U3	0.847			
U4	0.874			
U5	0.866			
Financial technology acceptance		0.922	0.931	0.943
FT1	0.752			
FT2	0.741			
FT3	0.753			
FT4	0.729			
FT5	0.735			

All the elements' loading by factors was assessed, with a threshold of 0.6 being deemed suitable. A further sign of internal consistency is a Cronbach alpha (CA) value above 0.7 (Chiu & Nguyen, 2022; Bhat et al., 2023). The Average Variance Extracted (AVE) values were determined to assess the convergent validity of the measurements, with values higher than 0.5 being appropriate. The construct's variance capture rate in relation to measurement error is shown by the AVE coefficients. In this investigation, all AVE values were greater than 0.5 (Table 1), showing high convergent validity. Utilizing the Fornell-Larcker test and Heterotrait analysis, discriminant validity was evaluated. The Fornell-Larcker test contrasts the correlation between the latent variables with the square root of the AVE for each latent variable. According to the study's findings, each latent variable's square root of the AVE was higher than its association with other factors, demonstrating discriminant validity (Table 2). In Heterotrait analysis, the correlation between two constructs is compared to the correlation of each construct with itself. There can be an issue with discriminant validity if the correlation between two constructs is greater than their correlation with each other. The measures used in this research, however, seem to have passed the reliability and validity tests, and the data gathered was adequate for analysis.

**Table 2**  
Discriminant validity

	FR	LR	SR	OR	CI	EOU	Perceived usefulness	FT
FR	0.742							
LR	0.833	0.779						
SR	0.855	0.771	0.847					
OR	0.866	0.720	0.723	0.717				
CI	0.814	0.709	0.828	0.760	0.756			
EOU	0.715	0.763	0.847	0.737	0.767	0.767		
Perceived usefulness	0.825	0.733	0.823	0.770	0.654	0.758	0.861	
FT	0.821	0.711	0.808	0.837	0.710	0.745	0.832	0.719

### 5.2 Common Method Bias (CMB)

The studies that utilize self-reported measurements may experience Practical Method Bias (CMB), which happens when the common variance between determined establishes is caused by the approach to measurement rather than the components themselves and causes an overestimation or underestimation of the true relationships between the constructs. Harman's single factor test, a commonly used method to ascertain if a single component explains most of the variation in a dataset, suggesting the existence of CMB, was used in this research to evaluate the probability of CMB. However, if the first component only explains less than 50% of the variation, CMB may not be a significant issue (Podsakoff et al., 2003). The probability of CMB in the research was also assessed using a common latent factor (CLF) analysis. The CLF analysis entails including an identifiable latent variable in the framework to account for the measurement-related variation that all the factors share (Podsakoff et al., 2003; Harris et al., 2022). If including the common variable does not result in an improvement in model fit, CMB may not be a severe problem. The first component in this research explained 45.530% of the variation, which is below the 50%

level and suggests that CMB is not a serious worry, according to Harman's single factor test results. Additionally, proving the lack of CMB in the research, the CLF analysis showed that adding a common factor did not enhance model fit. Consequently, CMB has little effect on the study's findings (Table 3).

**Table 3**  
CMB Result

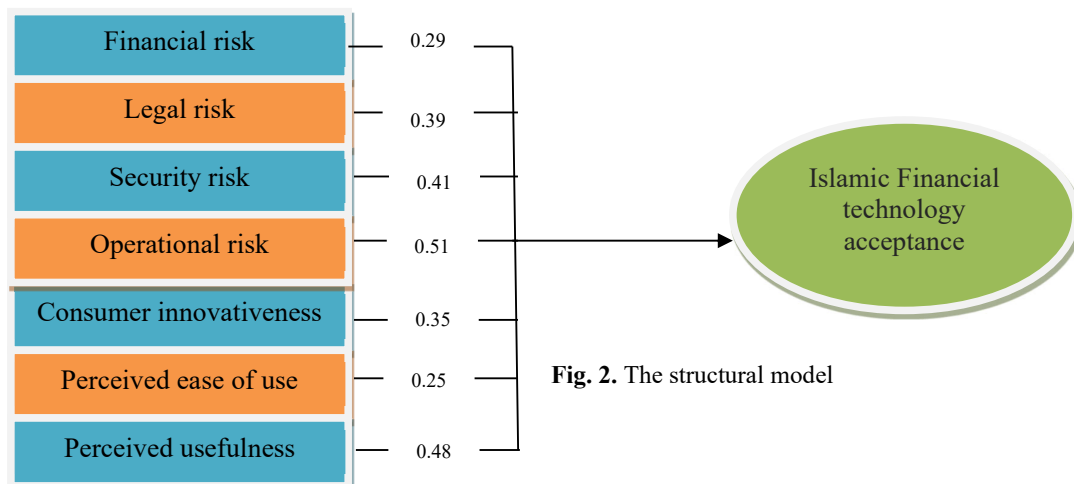
Component	Total Variance Explained					
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.023	44.677	44.677	11.023	44.677	44.677

### 5.3 Hypothesis testing

The PLS software tool is used to assess hypotheses. A number of indices, including  $\chi^2/df$ , CFI, RMSEA, and PNFI, are used to assess how well the data comply with the model. The fitting statistics for the model are as follows:  $\chi^2=19.523$ ,  $df=11$ ,  $\chi^2/df=1.796$ ,  $p=0.051$ , CFI=0.885, PNFI=0.509, and RMSEA=0.044. A framework fits the data well if the index  $\chi^2/df$  ratio is below the threshold level of 3 and the p value is higher than 0.05. Our CFI rating of 0.885 is most useful since the model can only be considered great if it is above 0.8. (1990, Bentler). Our results (PNFI = 0.509) above the threshold at which the model is considered to be outstanding. The sample discrepancy function is modified by the fit statistic RMSEA dependent on the degree of freedom. Referring to the RMSEA, one of the most insightful SEM criteria, values of 0.05 or less suggest an acceptable fit; our model (RMSEA = 0.044) fits well by this standard. It may be inferred from these fit statistics that the model as a whole displays a fair fit. A strong structural equation model needs both a great measurement model and a structure that fits the model well. The conceptual framework is shown in Figure 4, and the resultant squared multiple correlations ( $R^2$ ) value of 0.71 identifies that consumer innovation, perceived ease of use, and perceived usefulness collectively account for 70% of the variance in acceptance of Islamic financial technology. Determining the degree to which endogenous and external factors are correlated. Findings between the factors that are independent are shown in Table 4, including financial risk, legal risk, security risk, operational risk, consumer innovativeness, perceived ease of use, and perceived utility in terms of adoption of Islamic financial technology. The findings for usability show that it significantly increases the adoption of Islamic financial technology ( $b = 0.411$ ,  $r 0.000$ ). H1 is thus accepted. Additionally, the results show that perceived utility significantly influences whether or not Islamic financial technology is accepted ( $b = 0.335$ ,  $r 0.000$ ). H2 is therefore accepted. According to the findings, consumer ingenuity significantly increases the acceptability of Islamic financial technology ( $b = 0.365$ ,  $r 0.000$ ). H3 is thus also accepted. The results show that financial risk is not a significant positive predictor ( $b = 0.203$ ,  $r > 0.05$ ). H4 is thus not accepted. Additionally, there is no discernible relationship between legal risk and the acceptability of Islamic financial technology ( $b = 0.245$ ,  $r > 0.05$ ). H5 is thus not accepted. The results show that operational risk is not a significant positive predictor ( $b = 0.251$ ,  $r > 0.05$ ). H6 is thus not supported. Furthermore, the acceptability of Islamic financial technology, which is ( $b = 0.215$ ,  $r > 0.05$ ), is not significantly impacted by security risk. H7 is therefore not accepted. As a result, H1, H2, and H3 are accepted, whereas H4, H5, H6, and H7 are not.

**Table 4**  
Regression weights for hypotheses testing

Hypothesis	$\beta$	SE	C.R.	P
H1	0.266	0.068	5.138	0.000
H2	0.288	0.062	5.247	0.000
H3	0.335	0.057	6.012	0.000
H4	0.378	0.053	6.019	0.757
H5	0.354	0.075	2.578	0.582
H6	0.198	0.055	3.541	0.765
H7	0.187	0.072	2.879	0.071



**Fig. 2.** The structural model

## 6. Discussion and conclusion

The present research's perceived usefulness goal was to investigate Jordanians' adoption of Islamic financial technology, which is made available by providers of local services, as well as the factors that influence whether a person chooses to utilize it. This study adds to the growth of the theoretical framework about its theoretical implications. The suggested framework may also be used in behavior research, which is conducted to find out if a person accepts digital goods and services. This research also establishes a novel link between consumer innovation and the acceptability of Islamic financial technologies. Theoretically, this study expands the body of knowledge on Islamic financial technology by introducing a model founded on TAM and including a new component, namely consumer innovativeness. The study approach is based on TAM, an innovative attempt to apply the theory to the adoption of Islamic financial technology. Therefore, this research attempts to add to the little literature on Islamic financial technology based on actual evidence. To increase the predictability of acceptance variables, the TAM-modified framework is used in the context of Islamic finance. In the context of Islamic house finance, the impacts of the variables are notably weak. According to the literature, there have only been a few studies on the adoption of Islamic financial technology; hence, the present study aims to propose the causes of this adoption. Every one of the factors employed in this research, such as perceived consumer innovation, perceived usability, and perceived simplicity of use, may be able to explain acceptance more effectively. The results indicate that consumer innovation, as shown in Table 4, is the factor that has the greatest influence on whether Islamic financial technology will be accepted. The TAM hypothesis proved successful in predicting the adoption of Islamic financial technologies. A clear grasp of the relationships between elements and the particular impacts that these factors have on acceptance may be gained by separating out the unique determinants that influence Islamic financial technology, such as consumer innovation, perceived utility, and simplicity of use. The research's results are thus applicable to practitioners. The results are consistent with those of other studies that looked at consumer innovativeness, perceived ease of use, and perceived utility with regard to adoption of financial technology (Zhang & Qi, 2021; Van et al., 2020; Zhao et al., 2022; Singh et al., 2023; Bhat, AlQahtani, & Nekovee, 2023). Brief implications may also be discussed. It has been discovered that consumer innovation has a substantial influence on the acceptability of Islamic financial technology. Therefore, it is crucial for policymakers to consider the way novel technology-driven platforms might be utilized by their users. In a similar vein, bank management could need to know which of their customers might be willing to use new, creative goods in order to project the demand for such novel items developed utilizing a financial technology platform. While the acceptability of Islamic financial technology is greatly influenced by its simplicity of use, Perceived utility has a big impact on how well financial technology is accepted. Given the findings of this research, it is predicted that regulators and management of Islamic banks will address the aspects of consumer innovation, usability, and perceived utility that have a substantial impact on the acceptability of Islamic financial technology. Users are less likely to continue using financial technology if they perceive risk, which includes operational risk, security risk, legal risk, and financial risk. Perceived risk has an adverse effect on this intention. Frequent faults in technological platforms may thwart intentions to continue transactions, leading to psychological unease if crucial transactions must be conducted. The findings of several investigations, including those by Kuisma et al. (2007), Benlian and Hess (2011), and Kim et al. (2008), agree with this. As a result of several information breaches that have seriously harmed the financial sector, there is also a psychological dread of disclosing personal information, particularly financial information. This conclusion agrees with those of Littler and Melanthiou (2006) and Schierz et al. (2010) as well. Most financial technology businesses' policies for managing financial risk do not guarantee the interests of their customers. Financial technology transactions often have low values since risk management in situations involving funding is highly delayed, frequently takes a long time, and sometimes is not resolved. Although the government has applicable regulations in the situation of dispersed perceived usefulness, it is also a new area, the code is not truly full, and not many people have accessed it. Additionally, the sample technique employed in the present study, like earlier studies, has limitations and only includes a portion of Islamic banks. There is a need for more research in other areas with a high perception of utility. Furthermore, other variables may have contributed to the popularity of Islamic financial technology; as a result, the application of known theories, upon which TAM has relied, is constrained in this study. The unified theory of acceptance and use of technology (UTAUT1 and UTAUT2), among others, may be used in future research because of this. Even if there are just a few banks that have used financial technology platforms, financial technology is still in its infancy in Jordan. Additionally, the authors contend that certain adjustments in regulation may be necessary to win over customers of Islamic banks to Islamic financial technology. To encourage their clients to utilize the services of Islamic financial technology, policymakers of the Islamic bank may also need to take variables from the present research into consideration.

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